Sustainability Report 2020



Working with the people and their territories,

we continue to build stories of progress

Grupo·epm

Sustainability report 2020

Sustainability Report 2020

Content

Our Group

Our Group ____ 9

- About us ____ 10
- Our history ____ 22
- Comprehensive risk management ____ 31
- Our organization ____ 41
- Our supply cycle of goods and services ____ 43

Management report 2020 ____ 46

- Letter from the General Manager ____ 47
- Grupo EPM ____ 51
  - To be unconditional is to...**Cope with the pandemic by doing your best** ____ 52
  - To be unconditional is to... **Provide public services for your well-being** ____ 56
  - To be unconditional is to... **Be there for the development of territories** ____ 73
  - To be unconditional is to... **Take care of public goods by managing risks** ____ 81
  - To be unconditional is to... **Make positive energy flow together** ____ 82
  - To be unconditional is to... **Grow as one to generate value** ____ 86
- EPM ____ 91
  - To be unconditional is to... **Be part of your life to improve your days** ____ 92
  - To be unconditional is to... **Implement measures to make life easier for our Clients and users** ____ 92
  - To be unconditional is to... **Give the best for the EPM People** ____ 96
  - To be unconditional is to... **Accompany our vendors and contractors to reactivate the economy** ____ 99
  - To be unconditional is to... **Provide public services for your well-being** ____ 100
  - To be unconditional is to... **Be there for the development of territories** ____ 110
  - To be unconditional is to... **Work for the development of good corporate governance practices** ____ 118
  - To be unconditional is to... **Grow as one to generate value** ____ 120
  - To be unconditional is to... **Manage public affairs for the benefit of all** ____ 123
  - To be unconditional is to... **Move forward for generating energy for Colombia** ____ 125
- To be unconditional is to ...Build our vision of the future to keep growing ____ 129
  - To be unconditional is to... **Be a relevant actor in building sustainable and smart territories** ____ 130
  - To be unconditional is to...**Visualize the present to grow in the future** ____ 133
  - To be unconditional is to... **Support the development of the EPM People for their well-being** ____ 136
- External verification ____ 138

Grupo·epm

Sustainability report 2020

Content

Sustainability Report 2020

Corporate Governance Report 140

- **Presentation** 141
  - Grupo EPM Corporate Governance Code 143
- **Ownership structure of EPM** 145
  - Framework Agreement for EPM Relations - Municipality of Medellín 148
  - Public Accountability 151
- **Structure of EPM administration** 152
  - Critical Concerns 153
  - EPM Board of Directors 154
  - Senior Management 177
- **Operations with related parties** 187
  - Conflict of interest 188
  - Government Agreement 191
- **Ownership structure of Grupo EPM** 198
  - Capital and ownership structure of Grupo EPM 199
  - Shareholder agreements in Grupo EPM 201
- **Structure of the administration of Grupo EPM** 204
  - Boards of Directors Grupo EPM 205
  - Managers of the companies of Grupo EPM 218
- **Corporate governance measurements** 223
- **Corporate governance planning** 227
  - Follow-up to the 2020 Corporate Governance Plan 228
  - Corporate Governance Plan 2021 - 2024 232
  - 2020 Corporate Governance Unit operational plan 233
- **Accountability** 234
  - Ethical management of Grupo EPM 235
  - Control environment of Grupo EPM 236
  - Comprehensive risk management 241
  - Integrated Planning and Management Model - MIPG 241
  - Compliance 246
- **Annexes** 247

Sustainable management

Sustainable management 287

General information 288

- Report profile 289
- Relevant sustainability topics - Materiality 293
- Communication on Progress (CoP)- Global Compact 304
- Commitment to external sustainability initiatives 307
- Synergy with other entities for environmental management 312
- GRI content index 315
- External verification 341

Grupo·epm

Sustainability report 2020

Sustainability Report 2020

Content

Alignment with sustainability initiatives 343

GRI - ISO 26000 344

Articulation with the world development agenda - SDG 353

Global Compact 368

Integrated Report (IIRC) 371

Monitoring and evaluation of institutional performance 375

Stakeholders 378

- **Identification of stakeholders** 379

Our Stakeholders 381

Clients and Users 382

Colleagues 384

Community 385

Owner 387

State 389

Grupo EPM people 391

Investors 393

Suppliers and contractors 396

Partners 398

- **Stakeholder participation** 400
- **Precautionary principle** 417

Material topics 420

- **Access and affordability** 421

Universalization and expansion of service 432

Financing of accounts and delinquencies 442

Rural Electrification 447

Housing Habilitation 451

Pay to your measure 456

Prepaid services 459

Community meters 463

Population without service 466

COVID-19 relief measures 470

- **Water and biodiversity** 473

Conservation of water and biodiversity 484

Use of water and effluents 507

Management of impacts related to water and biodiversity 519

Annexes 535

- **Organizational climate** 556

Grupo·epm

Sustainability report 2020

Sustainability Report 2020

Content

- **Responsible procurement for local development** 560
  - Engagement with suppliers and contractors 565
  - Strengthening and development of suppliers and contractors 570
  - Purchasing and procurement 575
- **Human Rights** 585
  - Human rights in the supply chain 595
  - Human rights management in projects under construction 601
  - Institutional management in human rights 607
  - Security and human rights 615
- **Quality and safety of products and services** 621
  - Quality and continuity of service 635
  - Education and communication to clients and users 641
  - Loss management 644
  - Customer satisfaction 649
  - Safety in the service provision 653
  - Customer service 658
- **Renewable energy** 662
  - Small hydroelectric power stations 669
  - Wind energy 672
  - Geothermal energy 675
  - Photovoltaic solar energy 678
  - Biogas 682
- **Climate strategy** 686
  - Climate management strategy 695
  - Climate change mitigation 703
  - Adaptation to natural variability and climate change 718
- **Financial strength** 723
  - Macroeconomic behavior 733
  - Liquidity strategies 736
  - Financial results 740
- **Rates and prices** 746
  - Invoice 753
  - Aqueduct and sewerage rates 757
  - Cleaning fees 764
  - Electricity rates 768
  - Gas rates 776

Grupo·epm

Sustainability report 2020

Sustainability Report 2020

Content

- **Transparency** 781
  - Information for stakeholders 788
  - Transparency practices 798

Complementary topics 809

- **Corporate citizenship** 810
  - Christmas Lighting 813
  - Events and sponsorships 818
  - EPM Foundation 824
  - City projects 828
- **Innovation Management** 832
  - Highly innovative company 841
  - Distributed resources 845
  - Smart city services and sustainable mobility 849
  - Business platforms and services of the future 853
- **Work environment** 857
  - Work well-being and benefits 863
  - Quality of life 871
  - Job performance 875
  - Training and development 879
  - Retirees and pensioners 885
  - Trade union organizations 889
  - Staff 894
  - Safety and health at work 903
  - Selection of Personnel 909
- **Social and environmental management in projects** 913
  - Aldeas Program 924
  - Intermediate Projects 928
  - Ituango Hydroelectric Project
- **Sustainable production and consumption** 933
  - Energy consumption 941
  - Waste management 954
  - Other efficient consumptions and practices 968

Financial statement

Financial management 974

EPM Financial management 975

EPM certification 1149

Grupo EPM financial management 1158

Grupo EPM certification 1429

Grupo·epm

Sustainability Report 2020

Content

Ituango

Ituango 1438

- **Introduction** 1439
  - Ituango Hydroelectric Project: a commitment to the country 1439
- **1. Technical advance** 1443
  - 1.1 Civil works progress 1444
  - 1.2 Electromechanical equipment assembly advance 1446
  - 1.3 Impacts on the schedule due to the health emergency 1447
  - 1.4 Dam stability studies in progress 1447
- **2. Environmental Management Plan** 1449
  - 2.1 Advances in the physical environment 1450
    - 2.1.1 Atmospheric quality management program 1451
    - 2.1.2 Excavation Material Management Program 1452
    - 2.1.3 Surface waters management program 1453
    - 2.1.4 Domestic and industrial wastewater management program 1454
    - 2.1.5 Comprehensive waste management program 1455
    - 2.1.6 Impact management program for vehicular traffic 1456
    - 2.1.7 Building materials source management program 1457
    - 2.1.8 Instability and erosion management program 1457
    - 2.1.9 Macrophyte and floating waste management subprogram 1458
    - 2.1.10 Efficient Use and Water Saving Program PUEAA 1461
  - 2.2 Advances in the biotic environment 1462
    - 2.2.1 Habitat and organism management program 1462
    - 2.2.2 Vegetation management and conservation program 1465
  - 2.3 Advances in the socioeconomic environment 1469
    - 2.3.1 Community communication and participation program 1470
    - 2.3.2. Living conditions restitution program 1473
    - 2.3.3. Regional Project Integration program 1474
    - 2.3.4 Monitoring program for the Project's area of influence 1476
    - 2.3.5 Preventive archeology program 1477
    - 2.3.6 Indigenous communities 1477
  - 2.4 Contingency plan 1479
    - 2.4.1 Risk awareness 1479
    - 2.4.2 Risk reduction 1481
    - 2.4.3 Disaster management 1481
    - 2.4.4 Preparation for emergency response 1482

Sustainability Report 2020

Content

- **3. Investment 1 %** 1484
  - 3.1 General management 1485
  - 3.2 Land purchase line for the protection of micro-watersheds: 1485
  - 3.3 Basic sanitation line 1486
- **4. Specific Action Pan (PAE)** 1487
  - 4.1 Social line 1488
  - 4.2 Housing line 1489
  - 4.3 Accessibility and transport line 1489
  - 4.4 Health line 1489
  - 4.5 Public services line 1490
  - 4.6 Education line 1490
  - 4.7 Livelihoods 1490
  - 4.8 Environmental line 1491
  - 4.9 Information and communication line 1491
- **5. Territorial Integration Model (MIT)** 1492
  - 5.1 Initiative 1. Cooperate in relevant inter-institutional spaces and promote alliances and collaborative networks. 1494
  - 5.2 Initiative 2. Advance in the universalization of the energy service. 1494
  - 5.3 Initiatives 3 and 4. Promote strengthening the capacities of community organizations and promote training and opportunities for income generation in accordance with the territory potential. 1495
  - 5.4 Initiative 5. Support initiatives that seek to improve the population's access to drinking water and basic sanitation. 1496
  - 5.5 Initiative 6. Contribute to the protection of water resources and biodiversity 1496
  - 5.6 Initiative 7. Contribute to update and implement the Territorial Organization Instruments. 1496
- **6. Other relevant topics** 1498
  - 6.1 Reconciliation process with contractors 1499
  - 6.2 Insurance management 1499
    - 6.2.1 Construction all risk policy claim 1499
    - 6.2.2 Claim of Extra-contractual Civil Liability policy 1500
  - 6.3 Comprehensive risk management 1501
    - 6.3.1 PHI Risk Index 1501
    - 6.3.2 Specific risk analysis for COVID-19 1502
    - 6.3.3 Legal conflicts between the parties that hinder the Project's execution 1502



Our group

Grupo·epm

About us

Back to content

About us
2020

Our Businesses



How we provide services

Energy generation	Transmission, distribution and marketing of energy	Natural gas	Aqueduct	Sewerage
See process ►	See process ►	See process ►	See process ►	See process ►

Some management indicators

Environmental Management Index
98%

CSR trajectory of Grupo EPM
89%

Sustainability Report 2020

Presence in Latin America



Bermudas

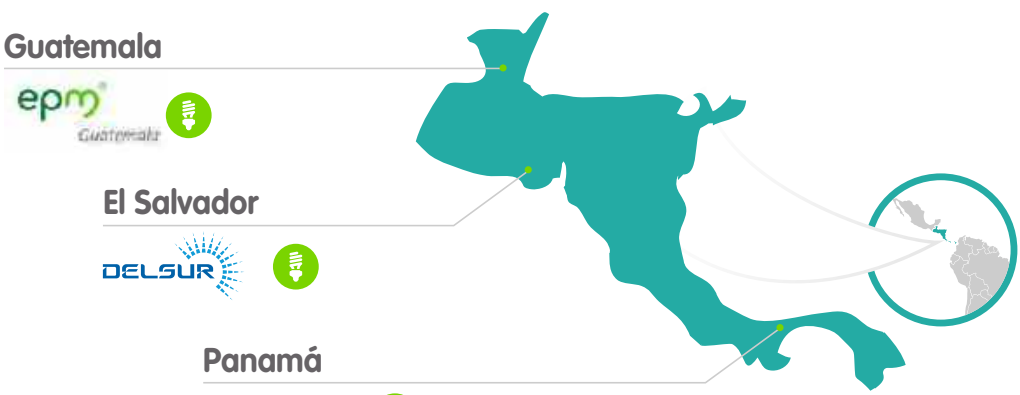
max seguros epm



epm México

Ticsa

México



Guatemala

epm Guatemala

El Salvador

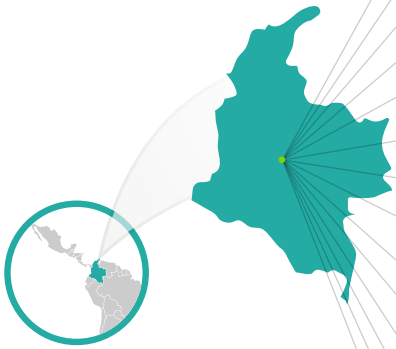
DELSUR

Panamá

ENSA

Promobiliaria

Back to content



Colombia

External jobs generated in Colombia

33,247

Does not include Afinia

epm
emvarias
chec
EPM Inversiones S.A.
Fundación epm
edeq
ESSA
CENS
Aguas del Atrato
aguas regionales
Aguas de Malambo
Aguas del Oriente
afinia
aguas nacionales



Chile

aguas antofagasta

Grupo·epm

Back to content

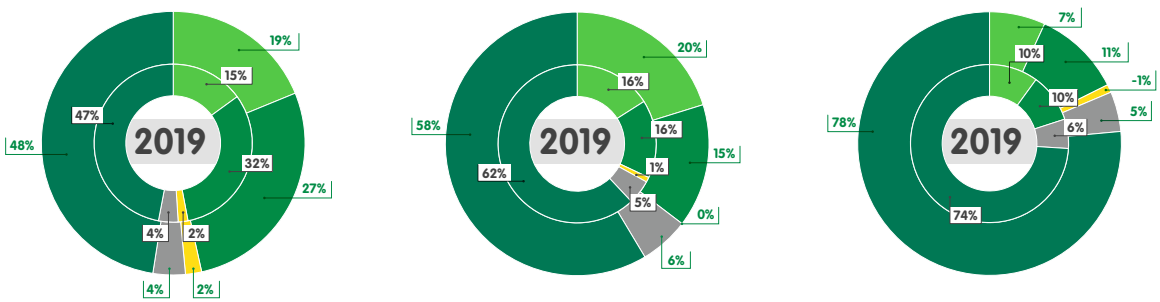
Sustainability Report 2020

Financial results

Grupo EPM 2020

Figures in billion COP

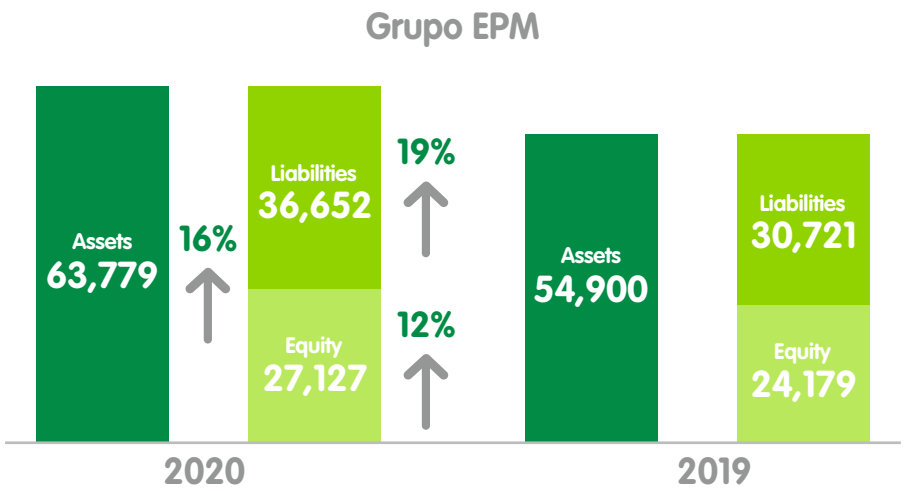
Revenue	Ebitda	Period result
2020	2020	2020



EPM · Energy subsidiaries Colombia · Foreign energy subsidiaries · Colombian water subsidiaries · Foreign water subsidiaries

Source: Finance Vice Presidency

Figures in billion COP



Back to content

Energy
Grupo EPM 2020

Energy Generation Efficiency Indicators



Source: Energy Generation Vice Presidency.

EPM ESSA CHEC HET

Thermal energy efficiency

	EPM	CHEC
Actual availability / projected availability	104.3%	103.3%
Penalized energy / generated energy	0.50%	4.97%

Hydraulic energy efficiency

	Major plants (>20 MW)		
Actual availability / projected availability	101.38%	91.34%	105.24%
Penalized energy / generated energy	0.12%	1.03%	No aplica

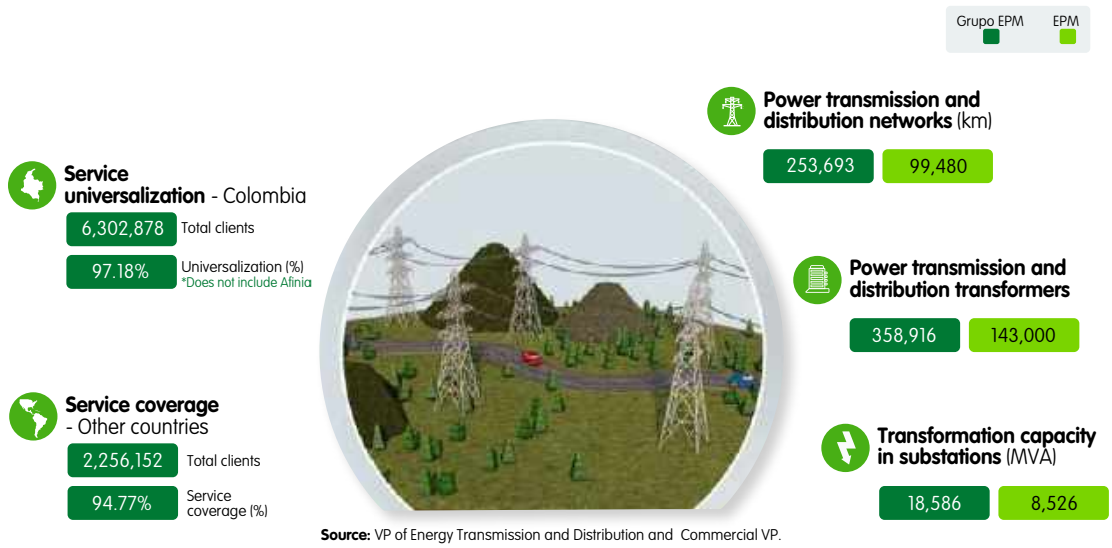
	Minor plants (<20 MW)		
Actual availability / projected availability	100.80%	125.76%	101.27%

Energy generation mix

Source type	Generation plants 2020		Net production (GWh) 2020		Net effective capacity (MW) 2020		Net effective capacity (MW) Projection 2022	
Wind	1	1	10	10	18	18	18	18
Solar self-generation	2	2	0.75	0.75	0.58	0.58	22	22
Thermal*	3	2	1,652	1,580	402	358	402	358
Hydraulic – Mayores de 20 MW	9	6	12,959	12,334	2,887	2,690	3,058	2,819
Hydraulic – Menores de 20 MW	23	16	766	572	171	129		
Hydraulic – Total hidráulicas	32	22	13,724	12,906	3,058	2,819		
Total	**38**	**27**	**15,388**	**14,497**	**3,479**	**3,196**	**3,500**	**3,217**

Grupo EPM EPM

Energy transmission and distribution installed capacity 2020



Source: VP of Energy Transmission and Distribution and Commercial VP.

Power transmission and distribution networks Grupo EPM 2020 (km)

Voltage level	Aerial	Underground	Total
Ultra high transmission voltage (Voltage ≥ 220 kV)	1,338	3	**1,341**
High transmission voltage (57.5 kV ≤ Voltage < 220 kV)	3,903	27	**3,931**
Medium transmission voltage (30 kV ≤ Voltage < 57.5 kV	5,825	76	**5,901**
Transmission and distribution medium (1 kV ≤ Voltage < 30 kV)	109,597	2,441	**112,038**
Low distribution voltage (Voltage < 1 kV)	125,151	5,332	**130,483**
Total kilometers	**245,814**	**7,879**	**253,693**

Source: Energy Transmission and Distribution Vice Presidency.

Note: *Classification according to international standards based on the RETIE standard NTC 1340.*

The length of the lines is determined according to the internally developed guide for measuring cables in the field.

Power transmission and distribution networks Grupo EPM 2020 (km)

Voltage level	Aerial	Underground	Total
National Transmission System (STN) (Voltage ≥ 220 kV)	1,041	3	**1,044**
Level 4: Regional Transmission System (STR) (57.5 kV ≤ Voltage < 220 kV)	1,680	0	**1,680**
Level 3: Local Distribution System (SDL) (30 kV ≤ Voltage < 57.5 kV	2,373	16	**2,390**
Level 2: Local Distribution System (SDL) (1 kV ≤ Voltage < 30 kV)	49,824	931	**50,755**
Level 1: Local Distribution System (SDL) (Voltage < 1 kV)	41,240	2,372	**43,612**
Total kilometers	**96,158**	**3,322**	**99,480**

Source: Energy Transmission and Distribution Vice Presidency.

Notes: *Classification according to CREG Resolutions 025 of 1995 and CREG 097 of 2008.*

Level 4 (STR) is remunerated in the distribution business along with levels 1, 2 and 3.

The length of the lines is determined according to the internally developed guide for measuring cables in the field.

Energy service detailed by company 2020

Service universalization - Colombia

epm	Total clients	2,578,536
	Universalization (%)	97.41%
CENS	Total clients	555,672
	Universalization (%)	93.86%
chec	Total clients	511,799
	Universalization (%)	98.96%
ESSA	Total clients	856,027
	Universalization (%)	97.21%
edeq	Total clients	203,541
	Universalization (%)	99.19%
afinia	Total clients	1,597,303

Service coverage - Other countries

DELSUR	Total clients	413,733
	Service coverage (%)	95.00%
ENSO	Total clients	487,262
	Service coverage (%)	90.60%
EEGSA	Total clients	1,355,137
	Service coverage (%)	98.72%

Total energy service clients Grupo EPM **8,559,030**

Total clients: includes the homes or facilities that enjoy the home public service and those that are without service due to lack of payment.

Sustainability Report 2020

Water and sanitation
Grupo EPM 2020

Water supply installed capacity indicators



Grupo EPM | EPM

Installed capacity

	Grupo EPM	EPM
Drinking water treatment plants	39	13
Drinking water treatment capacity (m^3/s)	20.21	15.46

Water distribution

	Grupo EPM	EPM
Primary distribution networks (km)	562	298
Secondary distribution networks (km)	5,836	3,961

Net production of drinking water (million m3)

Grupo EPM	EPM
390.2	298

Sanitation installed capacity indicators

Grupo EPM | EPM

Installed capacity

	Grupo EPM	EPM
Waste water treatment plants	18	2
Waste water treatment capacity (m3/s)	11.33	1.91

Collection and transport

	Grupo EPM	EPM
Transport networks (km)	692	414
Transport networks (secondary) (km)	5,861	4,446

Source: Water and Sanitation Vice Presidency

Sanitation

	Grupo EPM
Tons transported	665,828
Tons entered into La Pradera for final disposal	1,176,878
Leachate treatment plants	1
Leachates treated (m^3)	333,755

Water treated in plants of wastewater (million m^3)

Grupo EPM	EPM
294	55.6



Water and sanitation service coverage 2020

		Aqueduct	Sewerage	Waste collection
epm	Total clients	1,329,343	1,306,606	N.A.
	Universalization (%)	97.38%	95.53%	N.A.
Aguas del Oriente	Total clients	5,863	5,955	N.A.
	Universalization (%)	100%	100%	N.A.
aguas regionales	Total clients	101,358	78,692	N.A.
	Universalization (%)	92.22%	75.24%	N.A.
Aguas de Malambo	Total clients	24,557	21,997	N.A.
	Universalization (%)	91.75%	77.20%	N.A.
emvarias	Total clients	N.A.	N.A.	885,589
	Cobertura del servicio (%)	N.A.	N.A.	99.26%
aguas antofagasta	Total clients	181,058	180,049	N.A.
	Cobertura del servicio (%)	100%	99.4%	N.A.
Total clients		1,642,179	1,593,299	885,589
Universalization (%) in Colombia		96.92%	93.82%	99.26%

Source: Water and Sanitation Vice Presidency

** **Total clients:** includes the homes or facilities that enjoy the home public service and those that are without service due to lack of payment.*

** Ticsa does not have direct clients, but indirectly serves 1,450,440 clients through the operation of 9 wastewater treatment plants. 3 of the 9 plants were operated by Ticsa from January to September 2020. At the end of 2020 they are no longer part of the Ticsa Group.*

Natural Gas

Grupo EPM 2020

Natural gas installed capacity

Grupo EPM

Measurement, regulation and decompression stations

87

Compressor station (2,000 m^3/h)

1

Polyethylene nets Antioquia (km)

8,319



EPM natural gas service coverage

Total clients

1,307,628

Service universalization (%)

85.29%

Source: Gas Vice Presidency.

***Total clients:** includes the homes or facilities that enjoy the home public service and those that are without service due to lack of payment.*

Grupo·epm

Colombia • Panamá • El Salvador
Guatemala • México • Chile

Our history

Back to content

Our history

1955

Grupo EPM has its origin in EPM, a company of a **public nature** owned by the Municipality of Medellín.



1997

EPM transforms into an **industrial and commercial company of the State** to comply with Law 142 of 1994.

1999

The company Aguas del Oriente is born to meet the demand for the aqueduct and sewerage of the municipality of El Retiro.

Aguas del Oriente

2000

EPM becomes the **parent company** of a **business group.**

Back to content

Sustainability Report 2020

2002

EPM Bogotá Aguas is created, which would later become: aguas nacionales

2003

EPM creates EPM Inversiones SA and buys the subsidiaries **CHEC, EDEQ y HET.**

chec — *Central Hidroeléctrica de Caldas*

edeq — *Empresa de Energía del Quindío*

Hidroecológica del Teribe, Panamá

2005

EPM adopts a new strategy and **changes its organizational structure.**

2006

une®

UNE EPM Telecomunicaciones is created **S.A.E.S.P.**

2006
2007

EPM arrives as a partner to the regional companies **Aguas de Urabá y Aguas de Occidente.**

Aguas de Urabá

Aguas de Occidente

2007

The regional **energy market** is integrated **in Antioquia.**



2009

EPM participates in the **creation of Empresas Públicas de Oriente** and buys the subsidiaries **CENS y ESSA.**

CENS

Centrales Eléctricas del Norte de Santander

ESSA

Electrificadora de Santander S.A.

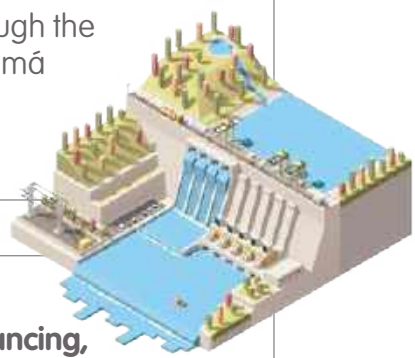
2010

EPM invests in Central American energy companies that already have a position in the region, it acquires the **DECA II holding company and its subsidiaries.**

Back to content

2011

EPM acquires, through DECA II, the company El Salvador Holdings Ltda. Which in turn owns the company Delsur (Distribuidora de Electricidad del Sur) in El Salvador, and through the purchase of the company Panamá Distribution Group SA ENSA (Elektra Noreste S.A.)



EPM formally assumes the financing, construction, maintenance, operation and commercial exploitation of the Ituango Hydroelectric Project, which will be the largest power generation plant in Colombia, with 2,400 megawatts of capacity.

Acquires 85% of the public company **Aguas de Malambo S.A. E.S.P.**

2012

EPM México is created as a platform for the different projects that can be carried out in that country.



Following the early fulfillment of its big and ambitious goal in 2011, **the Group defined a new strategic direction that sets its horizon to the year 2022,** and embarks on a transformation process.

2013

EPM Chile is born as a holding company to leverage the entity's growth plan in the south of the American continent.

Through it, Grupo EPM initiates the construction of **Los Cururos wind farm,** of 109.6 megawatts, in the Coquimbo region, North of Chile, through a "turnkey" contract with the Danish firm Vestas.



Ticsa

Grupo EPM is transforming itself to meet its goals for the year 2022.

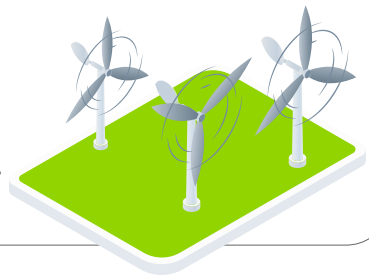
In Mexico, it acquires the majority stake in Ticsa, a holding company dedicated to the design, construction, operation and start-up of wastewater treatment plants.

With the acquisition of Emvarias, the **Grupo EPM** expands its portfolio to include **street cleaning, collection, transportation and final waste disposal services.**



2014

Grupo EPM, through its subsidiary EPM Chile, inaugurates the 110 MW **Los Cururos wind farm.**



The **Grupo EPM** consolidates its **new administrative structure.**



UNE - Millicom seal merger to create a new digital alternative in Colombia.

2015

EPM strengthens its presence in **Chile** with the **purchase of Aguas de Antofagasta.**

Back to content

2016

Regional de Occidente y Aguas de Urabá merge and change the company name to **Aguas Regionales EPM.**

aguas regionales

2017

100% ep-rio

EPM acquires 100% of the shares of EPRio.

This is how Grupo EPM arrives to the **municipality of Rionegro** with the provision of the **aqueduct and sewerage service.**

2018

EPM addresses the social, environmental and technical fronts of the Ituango Hydroelectric Project contingency,



and manages to reduce the risk for downstream communities with the advance in the construction of the dam and the completion of the spillway works.

2019

EPM continues with the works aimed at reducing the risk for the communities downstream of the Ituango Hydroelectric Project: beginning of the recovery of the powerhouse, the commissioning of the spillway and the completion of the dam, as well as the delivery of the road over the dam to the municipality of Ituango.



The Aguas Claras Waste water treatment plant goes into operation in the north of the Aburrá Valley.

The EPRio - EPM merger process culminates, which makes **EPM** the provider of **aqueduct** and **sewerage services** in the **municipality of Rionegro.**

2020

Afinia, the new subsidiary of Grupo EPM, assumed on October 1 the provision of the power service to 1.5 million customers in the departments of Bolívar, Cesar, Córdoba, Sucre and 11 municipalities in the south of the Magdalena region.



Comprehensive risk management

Back to content

Comprehensive risk management

Grupo EPM 2020

Framework

As part of the Control Environment, the **Grupo EPM** has implemented Comprehensive Risk Management (IRM) as a formal and cross-cutting practice in the Organization.

The regulatory framework for risk management is based on the Comprehensive Risk Management policy, which is a formal statement of the Organization's commitment to risk management and is described as:

> *"EPM manages the risks that affect its activity and its environment, adopting the best practices and international standards of Comprehensive Risk Management (GIR) as a way to facilitate the fulfillment of the business purpose, strategy, objectives and purposes, both of statutory and legal origin"*

This policy becomes operational with the implementation of other management elements such as business guidelines and rules, the formal process called "Comprehensive Risk Management". It should be noted that, in 2020, **EPM** made the decision to FURTHER strengthen risk management and give it a strategic character, which is why the new Vice Presidency of Risks was created in the organizational structure of the Company, whose purpose is to lead the formulation, deployment and monitoring of the risk, coverage and security strategy in EPM and its business group, to achieve adequate protection and assurance of assets, resources, infrastructure and interests. The Risk Vice Presidency has four units, the Risk Engineering Directorate, the Corporate Insurance Directorate, the Security Directorate and the Compliance Unit.

The risk management cycle is applied at the different management levels of the organization (Group, Businesses, Companies, Processes, Projects, Contracts and Facilities) and different reporting lines are defined according to the criticality of the risks. In this way, it is possible to identify and mitigate risks of a different nature and provide a broad coverage with the management.

In 2020, the Operational Safety program began and the implementation of the operational risk pillar was built and started in all of **EPM's** businesses as a phase in the development of this program. As a result of this work, the "Facilities" management level was formalized.

As part of risk management, other types of studies are also carried out, such as: specialized risk analysis for decision-making, contingency plans, disaster risk management plans, risk management plans for spillage management, risk retention modeling, among others. To achieve comprehensive management, risk management is articulated with insurance, physical and personal security management and compliance practices.

To analyze and assess the risks to which the Organization is exposed, a formal methodology and associated tools are applied for the identification, qualitative and quantitative assessment of risks. The various elements that make up **EPM's** risk profile are defined and risk tolerance is established as the level of risk that the Company is able to bear, in accordance with limits defined in the risk assessment tables by object of impact, prepared according to the types of effects that can materialize in matters such as damage to reputation, people, the community, quality of service, project execution time, costs or financial resources, information and the environment.

Additionally, as an organizational function, **EPM** defined the Middle Office scheme dedicated to the design and application of methodologies for quantification, review and monitoring of financial risks associated with the management of liquidity surpluses, as well as the definition of the associated regulations. In addition, this function has a reporting line to the Vice President of Risks and the Vice President of Corporate Audit.

Comprehensive Risk Management is part of various reports that are delivered to stakeholders and helps to demonstrate responsibility and due diligence to the community and to control entities.

Risk reporting and management mechanisms during 2020

During 2020, an update was carried out on the risk matrices of the Grupo **EPM's** businesses, companies, projects, processes and contracts, which evidenced a commitment from all those involved in risk management, including senior management.

The risk matrix of the business group was updated and one was built for EPM as the parent company, which includes the highest level and most critical risks from a comprehensive perspective that covers social, economic, environmental, operational, reputational issues, among others. In this construction, the new business context, the challenges derived from the Ituango Hydroelectric Project and the risks associated with the COVID-19 pandemic were taken into account. This proposal was presented and validated in different committees, including those of CORE, Audit and Board of Directors. These risk matrices were also monitored through a periodic reporting mechanism in the same instances: CORE and Audit committees, the latter made up of three independent members of the Board of Directors.

The risks of each business are validated by the respective Vice Presidency (Energy Generation, Energy Transmission and Distribution, Gas, Water and Sanitation, Commercial). The periodic monitoring, as well as its mitigation plans, are in charge of the Performance Management Units of each business.

Likewise, there are risk matrices for each of the subsidiaries of **Grupo EPM** in Colombia and abroad, whose periodic monitoring is carried out by the Management Committee or the Audit Committee of each company.

The risk matrices of projects, processes, contracts and facilities are approved by the person in charge, who can be the head of structure, director and sponsors of the project or requestor of the contract. According to the criticality of the risks, these matrices are presented to the responsible vice presidents according tO the process: in the case of projects to the Projects and Engineering Vice Presidency, and in the case of contracts to the Supply Chain Vice Presidency or the Contracting Committee.

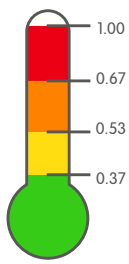
Grupo EPM Risk Matrix as of December 2020

Probability	Consequence				
	Minimum	Minor	Moderate	Major	Maximum
	1	2	4	8	16
Very high					2 - 16 - 18
High			6 - 14	8	5 - 9- 13 - 15
Medium				4a - 4b - 11	10 - 12 - 20 - 21
Low				1	
Very low					3 - 7 - 23

Risk level Extreme · High · Tolerable · Acceptable

Risk acceptability zones

Risk index 0.822



* The risk index is a number that can take values between **0** and **1**, where **0** is the **least risky** and **1** the **most risky**, and represents the risk level of the matrix as a whole.

Top 10 Grupo EPM risks as of December 2020

TOP	Code	Risk name
1	2	Impact on the financial results of the businesses associated with the control measures to face COVID-19 and its collateral effects.
2	16	Difficulties in placing the risks of the **Ituango Hydroelectric Project** in the insurance market.
3	18	Delays in the construction and delivery to the operation of the **Ituango Hydroelectric Project**.
4	5	Difficulty fulfilling the assumptions of the business plans.
5	9	Breach of regulations.
6	13	Untimely delivery and at higher cost of infrastructure projects and operational improvement.
7	15	Partial recognition of compensation for damages to the **Ituango Hydroelectric Project**.
8	10	Deterioration of the issuer risk rating.
9	12	Modifications of the environmental norms given by the competent authorities.
10	20	Restriction of credit sources.

Emerging risks

In the **Grupo EPM's** risk assessment exercise, the following emerging risks were identified, since they are relatively new, with a high degree of uncertainty and with a tendency to increase their level of risk.

Nº	Risks	Main potential impacts	Main mitigation actions
1	Interruptions in service provision caused by the COVID-19 pandemic	- Affectation of reputation. - Possible sanctions by regulatory entities. - Impact on the activities associated with the commercial operation. - Decrease in income. - Reduction of maintenance activities. - Increase in operating costs.	- Mechanisms for temporary hiring associated with work peaks. - Personnel transfers Identification of people with knowledge to support during the contingency. - Strengthening of training and training plans. - Implementation of biosafety protocols.
14	Cybernetic attacks	- Alteration of critical and cyber-active assets. - Discontinuity in service (energy, water and gas). - Network interruption (denial of service). - Sabotage. - Modification of data. - Data deletion. - Violation of intellectual property, plagiarism and defamation. - Affectation of reputation.	- Development of the Sentinel Project and implementation of controls in operation and information technologies.

Sources Definition of Emerging Risk: Risk and Insurance Management Society, Inc. (RIMS). IRIMS executive Report – The Risk Perspective. Emerging Risks and Enterprice Risk Management, New York, NY 10018.

Proposed actions to mitigate the risks of Grupo EPM

Each of the risks identified in the risk matrix of the business group has a person in charge at the level of vice presidencies, in charge of defining the actions of improvement to

mitigate the risk and to integrate the relevant actors in its management. Here are some improvement actions to mitigate the risks:

- To address the contingency due to **COVID-19**, the **PADEC** organizational structure was defined and implemented; A functional team was structured, with advice from experts from the University of Antioquia, to define biosafety strategies and information management for the affected personnel.

In relation to the **Ituango Hydroelectric Project**:

- In order to mitigate the risks associated with the Project, the contracts with the builder, advisor and controller were renewed to give continuity to this Project, which is strategic for the Company and for Colombia.
- The work table was created with the authorities that make up the National System of Attention to Disaster Risks to address the contingency in the Project.
- The relationship and communication plan with control entities and authorities was executed to address the contingency requirements.
- Claims and requests for compensation were submitted to insurance and reinsurance companies.
- The communication strategy with risk rating agencies and creditors was advanced.
- A permanent updating scheme was implemented for the risk analysis associated with the Project and the attention to contingencies.
- The work plan of the El Centinela project, conceived to mitigate the risk of cyberattacks, was executed.
- The financing of **EPM's** investment plan was managed with international banking and the capital market.
- A monitoring scheme was incorporated to the commitments derived from the legal stability contract.

Key milestones of Comprehensive Risk Management in 2020

- Creation of the **Risks Vice Presidency** with a reporting line to the General Manager.
- Formulation of the project "Design and implementation of the new Comprehensive Risk Management (GIR)" model, within an improvement strategy for the business group, which seeks to "Implement a Comprehensive Risk Management (GIR) model with the purpose of strengthening decision-making, optimizing operations and complying with regulatory requirements, by adjusting and consolidating the components of the enterprise architecture", starting in 2021.
- Updating of the risk matrix of the business group and monitoring in different instances.
- Construction of the **EPM** matrix (company level) and monitoring in different instances.
- Construction / updating of contingency plans for different facilities and inclusion of biosafety protocols in the face of the PUBLIC health contingency derived from COVID-19.
- Creation of the **PADEC COVID-19** Team to monitor the risks associated with the pandemic, as well as the development and leadership of action plans.
- Updating of risk matrices of the Group's companies in Colombia and abroad: CENS, ESSA, CHEC, EDEQ, Aguas Regionales, Aguas de Malambo, Aguas de Oriente and Aguas Nacionales.
- Risk update for documented processes.
- Risk analysis for new and ongoing projects.
- Analysis of specialized risks for decision making.
- Construction of the roadmaps for the risk pillar of the Operational Safety program in the different **EPM** businesses.
- Conducting risk analysis of inducers and global vulnerability in different facilities (implementation of the risk pillar of the Operational Safety program).
- Risk analysis of all the contracting processes carried out during 2020

- In 2020, the renewal of the **Grupo EPM** insurance program reflected the impacts on the cycles of the global insurance and reinsurance market, also impacted by the pandemic, with sharp increases in rates, especially in policies with high claims both worldwide and own, with strong increases of up to 30% and in coverage as directors and senior managers. However, it was possible to renew the insurance program of the entire **Grupo EPM** without deterioration in technical conditions and with economic market conditions.

- **Maxseguros EPM** maintained its retention in the policy of Infidelity and Financial Risks and increased its retention in the policy of Material Damages, Loss of Profit and in that of Directors and Administrators, likewise, for the renewal of the Extra-contractual Civil Liability policy of the Hydroelectric Project Ituango began to retain the coverage, otherwise, it continued its work as a facilitator in the Civil Liability, Errors and Omissions and cyber risks policies. The participation of Maxseguros in the transfer strategy was essential to achieve the renewal of the insurance program of the business group.

Events materialized in 2020

- The steps taken in 2020 allowed obtaining compensation for claims in the policies of the corporate insurance program for the Grupo EPM, which include compliance insurance that guarantees the execution of the contracts.

  There were damages in corporate assets such as transformers, poles, cables, computer equipment, mainly due to machinery breakdown, theft, traffic accidents and fire. These were managed and were able to be closes with compensation for the companies of the Grupo EPM amounting to COP 10,733 million and USD 2.9 million and for EPM COP 6,252 million and USD 1.7 million.

- Regarding the "All risk construction and assembly" policy, on September 15, 2020, Mapfre made a second advance payment of USD 100 million corresponding to emergent damage in civil works and equipment.

- Insurance policy of Directors and Administrators: several investigations were presented by the control bodies that have implied the recognition of defense expenses in favor of the policyholders.

See Corporate Governance Report

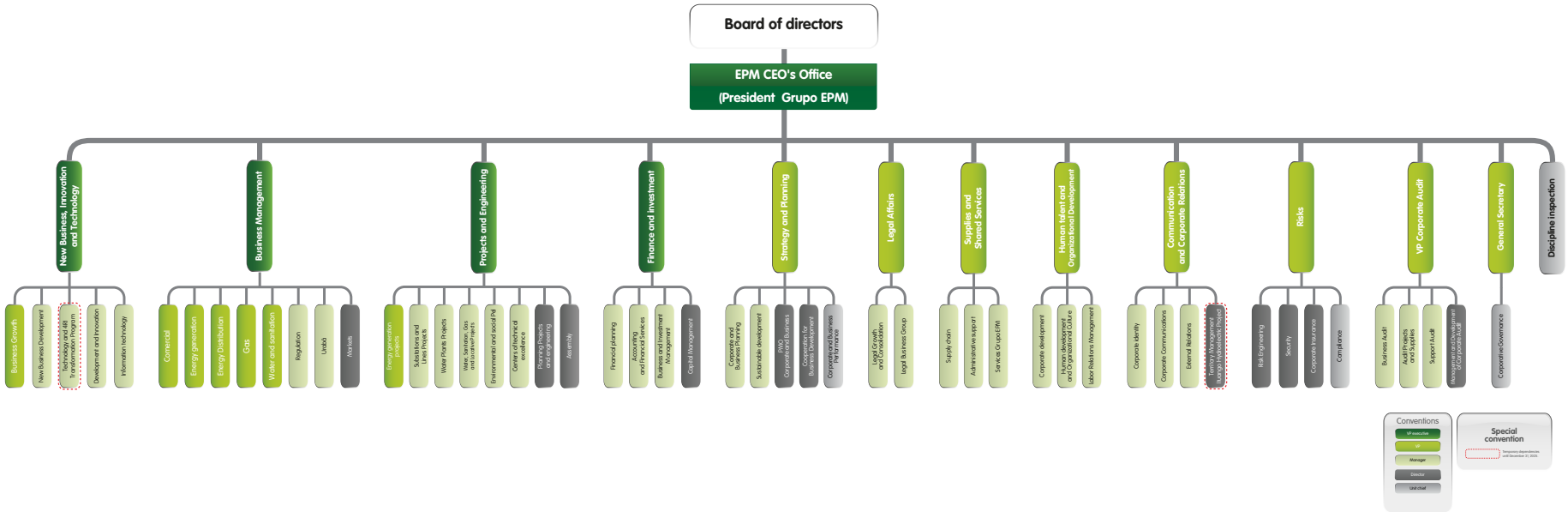
Our organization

Back to content

Sustainability Report 2020

Our organization

Administrative structure



To download a PDF of the administrative structure, click here.

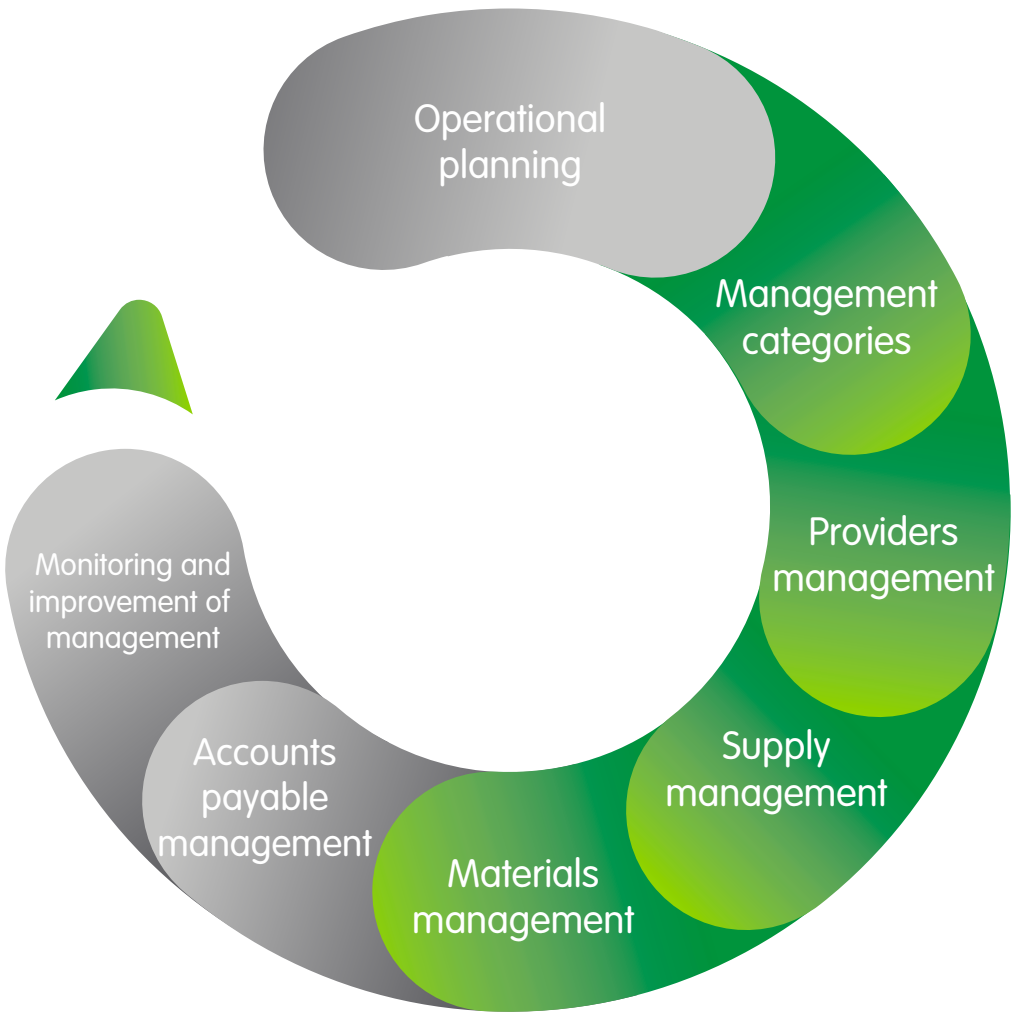
Our supply cycle of goods and services

Back to content

Our supply cycle of goods and services

Grupo EPM 2020

The objective is to supply the goods and / or services that the Organization requires in the best conditions of quality, quantity, opportunity and price, in order to achieve the consolidation of its businesses in the market, and in this way, increase the value for stakeholders.



Back to content

Process	Objective
Operational planning	Plan and schedule in detail the functions, processes and their improvements and the projects defined to achieve the objectives, assigning human, technical and financial resources and identifying the hiring needs required for their execution.
Category management	Identify the options to capture synergies and optimize operating costs through specialized knowledge of the elements that make up the required goods and services.
Providers management	Improve the performance of suppliers and their satisfaction in their relationship with Grupo EPM.
Supply management	Negotiate the acquisition of goods and services in order to meet the needs of the Organization and ensure compliance with the contracted object.
Materials management	Manage logistics, receive, resupply, guard and supply movable property according to the needs of users.
Accounts payable management	Comply with the payment mandate of the different ordering areas of EPM and of the Group companies, in an agile and secure manner, timely compliance with the obligations, guaranteeing the proper management of resources, optimizing the economic benefit for EPM and the subsidiary organizer of payment and the satisfaction of suppliers and stakeholders.
Monitoring and improvement of management	Track performance by monitoring indicators, projects, plans, processes and management systems that allow evaluating compliance with the Group's strategic, tactical and operational objectives and goals, providing accurate, reliable and systematic information, to identify signals for the formulation of corrective and preventive actions that allow verification, approval and decision-making in the different instances.

Learn more, entering the Sustainable Management Report, in the following sections:

- Responsible procurement for local development.
- Purchasing and contracting.
- Engagement with Suppliers and Contractors.
- Strengthening and development of suppliers.


Management
report 2020
Grupo·epm

Letter from the General Manager

Ladies and Gentlemen
EPM Board of Directors
Medellín

Without a doubt, **2020 was a year of great challenges at a global level due to the health emergency caused by COVID-19.** The profound social, cultural, and economic effects of this pandemic on the entire society will endure for many years to come. For Grupo EPM, the challenge was even more complex, since it had been facing the events derived from the Ituango Hydroelectric Project contingency.

Faced with the above scenario, the Grupo EPM's response could not be other than to multiply its efforts in the pursuit of excellence and solidarity in its **business purpose, contributing to life harmony for a better world.**

Faced with a health crisis without historical precedent, **Grupo EPM assumed the unwavering commitment to ensure access for all our users to home public services in the areas where we are present.** For this purpose, different actions were developed to avoid service interruption, to promptly reconnect them, and to offer affordable financing schemes, among others, allowing millions of people to continue enjoying premium quality aqueduct, sanitation, waste collection, energy, and natural gas.

The above brought as a natural consequence a decrease in revenues both for EPM and for all our subsidiaries. Faced with this situation, and to maintain a **solid financial position,** we considered a new bonds issuance in the international financial market, which, despite the communication and displacement difficulties ascribable to the pandemic, was successfully concluded.



Back to content



This issuance, combined with other credit operations in the local and international financial markets, allowed Grupo EPM to maintain and guarantee a **solid financial position,** which is essential to ensure, on the one hand, continuity in the provision of its services in the territories where it has a presence and on the other hand, the advancement of the investment program, which guarantees the **ongoing provision of our services to future generations.**

Despite the arrival of the COVID-19 pandemic, the development of **the Ituango Hydroelectric Project works**, essential for the protection of the communities downstream the dam site, continued while actions were implemented to prevent the contagion of neighboring populations, enable the recovery of positive cases in the Project and avoid fatalities due to health emergency.

The articulation of national, regional and local efforts, the development of an Epidemiological Surveillance System (ESS) in the Project and the existence, since 2016, of an emergency plan, which included a health contingency scenario and compliance with the agreements established with the Municipality of Medellín and the Government of Antioquia, allowed, despite the significant decrease in personnel on the work fronts, to advance under ANIA's Resolution 0820 of 2018 in the development of the Project's stabilization activities, especially, in those works located in the dam's right abutment, the implementation of environmental and social management measures defined in the Environmental Management Plan and the development of Specific Action Plan (SAP) programs, to address the effects caused to the communities by the contingency presented in 2018.

The start-up operation of the Aguas Claras Wastewater Treatment Plant (WWTP) in the municipality of Bello, north of Medellín, marked a historical milestone in wastewater processing in the Metropolitan Area of the Valle de Aburrá. For the normalization of the WWTP's start-up process, it was necessary to apply all the capacity and experience of our people to bring the Plant to an optimal operating point, especially in relation to the emission of odors, ensuring that the neighboring communities will not be affected.

Two other challenges that the Grupo EPM successfully faced during 2020 were the **incorporation of two new core markets** to advance in our growth strategy. **The first of these was EP Rio,** a provider company of drinking water and sanitation services in the municipality of Rionegro, which allowed the business group to consolidate its position in eastern Antioquia. **The second is related to the arrival of EPM to the Colombian Caribbean through Afinia,** distributing the energy service to five new departments in Colombia, which represents for the Grupo EPM not only an important growth milestone, but also a deep commitment to the Caribbean Region and the Country. Today the business group is consolidated as the largest energy distribution agent in Colombia with about 35% of the national market, which allows nearly 18 million Colombians to enjoy a reliable energy service with EPM quality.

Finally, and of no less relevance, one of the most complex challenges faced by the Grupo EPM during 2020 was the **care of our people.** For this, we implemented different measures aimed to promote virtual work for administrative areas employees, and strict sanitary measures for those who, due to the nature of their activities, had to be present at their work sites. These definitions allowed us to responsibly manage and control the effects of COVID-19 on the Grupo EPM's personnel. Clearly, we experienced the greatest effect of the health crisis in the **Ituango Hydroelectric Project** in which, thanks to a determined management and joint efforts by EPM and contractors, we were able to overcome this situation.

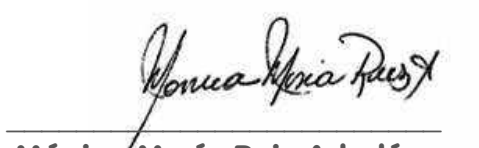


Back to content

Sustainability Report 2020

During 2020 we advanced in the study of new initiatives on vital issues for the territories where we are present, among which it is worth highlighting the **energetic transformation, digital transformation and the circular economy focused on the water and solid waste themes,** which we hope to implement soon, because at the EPM Group we nourish our dreams and passion to innovate to transform lives.

Finally, our 2020 Management Report responds to our "Communication on Progress" commitment to publicize the Group's business practices derived from the conviction and commitment we have with the ten principles on human rights, labor standards, the environment and anti-corruption. We renew our will to remain adhered to the United Nations (UN) Global Pact, as we have done annually since 2006, in accordance with our unconditional commitment to **contribute to life harmony for a better world.**



Mónica María Ruiz Arbeláez
General Manager (in charge) of EPM

Grupo EPM

We are a **Multi Latin American Business Group** comprised as follows:



7 negocios:

- Energy Generation
- Energy Transmission
- Energy Distribution
- Gas
- Water Provision
- Wastewater Management
- Solid Waste Management

*** Subsidiaries in Colombia:** EPM, CHEC, EDEQ, CENS, ESSA, Afinia, Aguas de Malambo, Aguas Regionales, Aguas de Oriente, Aguas Nacionales y Emvarias.

8,559,030
Clients and Users

9,177
Vendors and contractors

15,498
collaborators

To be unconditional is to...
Cope with the pandemic by doing your best

The **COVID-19 pandemic caused a health emergency that impacted every corner of Colombia,** a situation that became one of the main issues of our administration during 2020, occupying a large part of our agenda and efforts.

Once the health emergency was declared in the country, **from EPM we took the necessary preventive measures,** complying with the National Government's guidelines **to promote the well-being of our collaborators and avoid damage to the business's normal operation.** These measures were shared with the national and international subsidiaries and served as a reference in the application of some strategies for the entire Grupo EPM.



In this way, to coordinate strategic and operational decisions in accordance with the emergency behavior, we established the **Corporate Unified Command Post (CUCP)** at EPM Headquarters, which began sessions on March 18, 2020. Similarly, we created the **PMUs for the Ituango Project and subsidiaries,** which were forged as a link between the businesses, the workers and the crisis room, the highest coordination body led by EPM's General Manager and her management committee.

From the **Corporate PMU** we implemented agreements that provided expert and strategic support when making decisions and initiating procedures around a public HEALTH ISSUE SUCH as the COVID-19 pandemic, for which, we made an agreement with the Faculty of Medicine of the Universidad de Antioquia (UdeA) to cover three axes in patient care in the Telesalud Living Lab program, epidemiological advice, and the specialized clinical laboratory -LIME-. Additionally, we modified the epidemiological surveillance contract, signed with the National Faculty of public Health of the UdeA, to improve the accompaniment and advice to the Local Health Directorates of the municipalities in the area of influence of the Ituango Hydroelectric Project (IHP).

The strategies implemented for the evaluation, monitoring and containment of COVID-19 cases within the Organization have generated significant learning for the local and international community. During the **outbreak that occurred in the IHP camps,** we implemented a classification, screening and risk management process that allowed the **Project's operation in optimal conditions, while carefully attending to health needs,** thereby achieving the containment in the number of contagions cases, and in association with the Occupational Risk Insurers (ARL) we provided early, proactive, and comprehensive care to workers, mitigating the impact of morbidity and mortality.

With the lessons learned from the outbreak, **we reinforce and improve the pandemic protocols** with the implementation of two strategies, which have been decisive in containing new outbreaks: first, the **use of proximity technology** for the identification of suspected COVID-19 patient contacts; second, the **modification of relationship and work structures to limit social mobility with a bubble scheme.** In both strategies, the IHP and EPM are the first cases in the Country, and possibly in Latin America, where the effective implementation of these strategies has been carried out reducing the contagion and transmission containment in subsequent months, facilitating the Project's operation.

The information reported daily by the collaborators, through the physical and mental health survey completion, the data obtained from the temperature measurement, the use of smart handles and other information gathering instruments are used by EPM to generate **georeferencing and virus evolution boards,** from which we strengthen risk assessment, analyze trends by age and comorbidities, automatically generate health alerts, implement preventive and control strategies, intensify containment actions and address decision-making in a timely manner. This exercise has been achieved thanks to the **use of innovative technologies** such as smart localization, data analytics, machine learning, big data, and artificial intelligence.



The Ituango Hydroelectric Project and EPM are the **first cases in Colombia,** and possibly **Latin America, with an effective implementation of proximity technology** for the identification of contacts of suspected **COVID-19** patients and the **bubble work scheme**.



Back to content



The use of technology has been key to combat the virus spread in the Ituango Hydroelectric Project, for example, through the software development for the application of daily georeferenced entry and exit surveys, the use of proximity handles or the analysis of personnel databases, we have supported the Project's medical team to deal with COVID-19.

Michel Aljure Jiménez
Professional Expert Development Director
EPM Ituango Project

Regarding contagion rates, the data for the Grupo EPM showed 1,136 positives for COVID-19, the subsidiaries with the highest NUMBER of cases were EPM Headquarters, ESSA, ENSA and DELSUR. The first positive case in EPM appeared in April 2020 and at the end of December we closed with 499 cumulative positives, with an approximate percentage of 60% recovered in the year and with one unfortunate death.

At the IHP, between March and June 918 employees 11 were infected, which is equivalent to 21% of the 4,318 active employees at that time. In December 2020 we managed to control and reduce the contagion among Project personnel in 90%; It is important to consider that at this time there were 6,000 workers on site, of which 108 were positive after applying the **biosafety protocols,** reaching only 1.8% of infected in both camps.

To verify compliance with the biosafety protocol, monitor its effectiveness and make the necessary adjustments, at EPM we carry out specialized audits with the Universidad CES, ARL Colmena and by the EPM Corporate Audit Vice Presidency. It is estimated that during 2020, the Company invested approximately USD 8.5 million (TRM 3,550 pesos) in the prevention, containment, and mitigation of COVID-19.



In relation to the **support provided during the pandemic,** from EPM we contributed COP 3,000 million that included the delivery of 42 new beds to reinforce the capacity for priority care in Medellín through the IPS Universitaria, located in the Intensive Care Unit (ICU) of the León XII Clinic; Among the items delivered there are 37 ventilators, 24 vital signs monitors, three defibrillators, two 12-channel electrocardiographs and a central monitoring station.

Likewise, we signed a **cooperation agreement between EPM and the UdeA for the training and support of health professionals and the development of pedagogical content on the coronavirus,** for a value close to COP 274 million, of which COP 137 million were contributed by EPM. From this agreement, we provided resources to resident doctors who do not have assistance, scholarship or help from another entity, and in return we received continuous training, related to the management of patients with COVID-19 for health personnel assigned to the EPM Medical Service Unit.

Management of the COVID-19 pandemic in the Ituango Hydroelectric Project

Likewise, at EPM we allocate resources to contract a health team to strengthen the response capacity of the municipalities in influence of the Ituango Hydroelectric Project, represented by 17 professionals: 15 nurses, a psychologist, and a doctor with postgraduate degrees in public HEALTH. We also made available to the communities a **digital tutorial which explains the experience that EPM went through to achieve the curve spread flattering of COVID-19 in the IHP.**

COP 3,000 million
assigned by **EPM** to **reinforce the**
priority medical care capacity
during the pandemic.

To be unconditional is to ...
Provide public services for your well-being

Our services in pandemic times

The COVID-19 pandemic had a strong impact on all levels of the Colombian economy, and this contraction is directly evidenced in the **decrease in demand for home public services and the reduction in the number of new customers.**

This effect began in the LAST two weeks of March 2021, with a drop in regulated energy demand at EPM, subsequently, in April there was the largest drop with 15%; Manufacturing industries showed reductions of 51% in energy demand during that month. Compared to the previous year, the energy decrease in Colombia was -2.1%, with the greatest impact on ESSA with -3.3%, followed by EPM with -2.4%.

This behavior was also reflected in the international subsidiaries, in Central America the greatest effects were in El Salvador and Panama with -7% and 6%, respectively, impacting the subsidiaries DELSUR and ENSA; In Guatemala, the reduction was 1.14%, impacting EPM Guatemala.

In gas, the demand segments with the greatest impact were Natural Gas for Vehicles (NGV) and Gas from the unregulated market. The average decrease between March and December in the total aggregate was 37% and compared to the previous year it was 0.14%.

While in the water service, although there was an increase in demand in residential areas, industry, and commerce there were decreases. In EPM Metropolitan Region, the most representative system, an average decrease of 5% in the water demand between March and December was evidenced, and compared to the previous year, the decrease was 1.3%. While for the other national regions, where the Group is present, there were different variations, at the international level in Aguas Antofagasta in Chile the decrease versus the previous year was 0.53%.

In solid waste, the amount of waste collected by Emvarias was reduced compared to the previous year as follows: in Medellín by 1.4% and the waste disposed in La Pradera landfill by 0.1%.

On the other hand, **new customer entailment was** also affected, especially in the first half of the year. In Colombia, the application of environmental measures with mobility restrictions in the first quarter, the paralysis of commercial activities especially during the second quarter, the application of relief measures as a result of the pandemic and the reconnection of public services, generated a discouragement of new requests for home public services, showing decreases of close to 14% in energy services, 28% in gas, 27% in aqueduct and 24% in sewerage, with respect to the number of new customer connections from the previous year.

Therefore, **the optimization of operations constituted a fundamental axis in our management,** insofar as efficient operations are essential to ensure the provision of OPTIMAL AND QUALITY public services, as well as to aim at the growth and delivery of transfers to the Municipality of Medellín.

In a different year for all humanity, with the difficulties of the pandemic and the new ways of working and studying at home, **at Grupo EPM we ensure access to home public services for all our Clients and users, maintaining the standards of reliability, quality, and continuity,** while we continue advancing in the development of strategic projects contributing to life quality in the territories where we are present.



Back to content

Water Supply

With our Water Provision business, **we are present in two countries: Colombia** with EPM, Aguas Regionales, Aguas de Malambo, Aguas del Oriente and Aguas Nacionales - under the Aguas del Atrato brand-; and **Chile** with Aguas Antofagasta.

We are the second company with more Clients and users in Colombia

1,642,179
Clients and users

96.92 %
globalization of the service in Colombia

15.6 %
Participation of Grupo EPM in the Colombian market



39
water treatment plants with an installed capacity of 21.63 m^3/sec

225
storage tanks

6,398 km
of aqueduct networks

Sustainability Report 2020

In 2020 **we supply water suitable for human consumption in all the territories where we have a presence.** At national level, we guarantee continuity, weighted by user, greater than 98.4%, highlighting the increase in Aguas de Malambo in 9.6% which reached a continuity of 75.04% in December. In terms of efficiency and system optimization, the level of water losses at the Group level was 6.64 m3 per billed user, weighted per user, close to the goal established by the Water Regulatory Commission (CRA) of 6.0 m3 per user billed in year 2026.

In the **Water Provision** business in **Grupo EPM,** investments reached COP 554 thousand million during 2020. Business revenues added COP 1.3 billion, representing a growth of 10% and ebitda reached COP 643 thousand million, 8% higher than in 2019.

Relevant milestones 2020

Aguas del Oriente

It modernized the infrastructure of the **Las Flores storage and pumping tanks,** in the municipality of El Retiro, through telemetry systems.

aguas regionales

It expanded the **Potable Water Treatment Plant (PWTP) of San Jerónimo, Antioquia,** doubling its capacity, going from 30 liters per second to 60, guaranteeing the attention of the current and future water demand, and the service continuity.

Aguas de Malambo

It inaugurated **the sludge drying bed at the El Concord plant** in the department of Atlántico, reaching a capacity of 160 m^3/day, generating a highly positive impact on the environment quality.

aguas nacionales

Under the **Aguas del Atrato** brand, it optimized t**he Playitas I and Playitas II PTAP,** achieving a net increase of 185 liters per second (lps) of production capacity, guaranteeing the service continuity in Quibdó, Chocó.

aguas antofagasta

Started the **operation of the Tocopilla desalination plant in Chile,** with a capacity of 75 liters / sec, which benefits 9,329 clients.

Additionally, the international subsidiary carried out a successful **bond issuance** for about USD 118 million in the Chilean capital market and a five-year rates extension was signed with the Superintendency of Sanitary Services (SISS), which allows to stabilize the price of water.

Wastewater Management

With the Wastewater Management business, we have a **presence in three countries: Colombia** with EPM, Aguas Regionales, Aguas de Malambo, Aguas Nacionales and Aguas del Oriente; **Mexico** with Ticsa; and **Chile** with Aguas Antofagasta.

1,593,299
Clients and users

93.82 %
globalization of the service in Colombia



18
Wastewater Treatment Plants (WWTP) with a treatment capacity of 11.33 m³/sec

6,552 km
sewer networks

In the **Grupo EPM Wastewater Management business,** investments reached COP 355 thousand million during 2020. Business revenues totaled COP 951 thousand million, which represents a growth of 1% and ebitda reached COP 536 thousand million, 32% higher than in 2019.

Back to content

Relevant milestones 2020

aguas nacionales

Managed the **stabilization process of the wastewater treatment received at the Aguas Claras WWTP,** serving 99.8% and delivering 100% of quality treated wastewater, effectively contributing to the sanitation, and giving back life to the Aburrá-Medellín river. In this sense, it **achieved the implementation of the 36 actions defined in the emergency and contingency care plan for the mitigation of the odor situation generated in the Aguas Claras WWTP in Bello, Antioquia,** presenting a decrease in odor events.

Aguas Nacionales also executed aqueduct and sewerage projects in Colombia, guaranteeing access to drinking water and wastewater treatment to rural communities in the municipalities of Trujillo, Valle del Cauca, and Caloto in Cauca, benefiting 2,000 and 4,000 inhabitants, respectively.



Ticsa

It closed new deals worth USD 19 million. **It carried out the installation and commissioning of the El Escobero compact WWTP in Envigado, Antioquia,** with a treatment capacity of 2.5 liters / sec, through innovative technology.

"In the LAST year, the Aguas Claras wastewater plant has considerably improved the odors emitted at the beginning of its operation. They have fulfilled the commitments acquired with the communities in the social and environmental part, in addition to supporting our undertakings."

▶ ***Nancy María Ortega Chova***
Inhabitant in the municipality of Bello



Solid waste management

This business is based in **Colombia** with Emvarias in Medellín and Aguas Nacionales, through the Aguas del Atrato brand, in Quibdó.

885,589
Clients and users

Medellin
99.26 %
globalization of the service in Medellin

13 %
share in the cleaning market in Colombia



1 landfill site called La Pradera

176,878
tons enter for final disposal at La Pradera

40
municipalities of Antioquia dispose their waste in La Pradera

1
leachate treatment plant with 333,755 m³ treated

In the **Solid Waste** business at national level, investments reached COP 17 thousand million during 2020. Business revenues totaled COP 249 thousand million, which represents a growth of 0.13% and ebitda reached COP 61 thousand million, 15% lower than in 2019.

Relevant milestones 2020

It signed an **alliance with the company Reciclados Industriales de Colombia (RIC),** where the EPM Ventures Program is a shareholder for the **development of a project to use Demolition and Construction Waste (DCW)** in the Valle de Aburrá.

Additionally, the subsidiary strengthened the **waste management use strategy through the containerization program** associated with the Medellín Futuro Development Plan, with the installation of 421 containers. Also, the final disposal process was included within the scope of certified processes under the ISO9001: 2015 standard for cleaning services. Another relevant aspect is the progress in the procedures for licensing the La Piñuela basin, which will allow the USEFUL life of the La Pradera Landfill site to be extended.

Nuevo Occidente Emvarias containerization project





"Before we were left with odors and garbage in the street. We managed that Emvarias support us with containerization in our sector, and it has been helpful because they corrected all the critical points that we had with waste. The Project has been very well received in the community."

▶ ***Laura Catalina Jaramillo Castro***
Inhabitant of San Antonio de Prado, comuna 80, Villa Pallavecini sector.

Power Transmission

Grupo EPM participates in the Electricity Transmission business in **two countries: Colombia** through EPM, ESSA, CENS and CHEC; and in **Guatemala** with Transportista Eléctrica Centroamericana S.A. (TRELEC).

8.64 %
Transmission market share in Colombia

35 %
Transmission market share in Guatemala

99.9 %
availabilities Reliability average in Colombia



98.5 %
availabilities Reliability average in Guatemala

1,274 km
of transmission networks in Colombia

66 km
of transmission networks in Guatemala

Investments in **Energy Transmission** reached COP 119 thousand million, during 2020. Revenues from the Energy Transmission business totaled COP 354 thousand million, which represents a growth of 17% and an ebitda that reached COP 269 thousand million, growing by 20% compared to the previous year.

Energy Distribution

In the electricity Distribution and Commercialization business, the Grupo EPM is present in **four countries: Colombia** with EPM, ESSA, CENS, CHEC, EDEQ and Afinia; **Panama** with ENSA; **Guatemala** with EPM Guatemala, composed of EEGSA, COMEGSA and TRELEC; and **El Salvador** with DELSUR.

We occupy the first place in distribution and commercialization in Colombia

8,559,030
Clients and users

97.18 %*
service globalization in Colombia

+295,000 km
network



35 %
share in the Colombian market

38 %
share in the Panama market

41 %
share in the Guatemala market

25 %
share in the El Salvador market

The percentage does not include the globalization of **Afinia's Energy Distribution service. Now the business group is carrying out validations to incorporate the exact data in the calculation.*

Grupo EPM's customer base in the Energy Distribution operating segment grew by 25% in 2020 compared to 2019, primarily due to the Afinia subsidiary arrival.

In **terms of service quality,** we executed an important project with a Group scope at national level, which began in 2018 and is projected until 2025. During 2020 we achieved a significant improvement compared to the previous year, achieving compliance with regulatory goals, and contributing to the greater satisfaction of our Clients and users.



3 energy companies of the Grupo EPM were recognized for the greater evolution of the Customer Satisfaction Index with Perceived Quality (CSIPQ) in the CIER awards.

chec — Gold category among companies with more than 500 thousand clients.

DELSUR — Silver category among companies with more than 500 thousand clients.

edeq — Silver category among companies with less than 500 thousand clients. It was also valued among companies with best human resources practices.

Back to content

Regarding the management and control of energy losses, in the Grupo EPM in Colombia we reached a level of losses from the Network Operator (NO) of 9.66%, due to the failure in carrying out suspensions or service interruptions, in accordance with the measures implemented for the COVID-19 health emergency.

During 2020, national investments in the **Energy Distribution** business reached COP 859 thousand million. The revenues from this business totaled COP 13.0 billion, which represents a growth of 5% and the ebitda reached COP 2.3 billion, 16% lower than in 2019.

The **Rural Electrification Program** continued with the connection of 6,796 facilities in rural areas of Grupo EPM, benefiting approximately 26,075 people, with an investment of COP 35,322 million. Since **2013,** this program has made 125,363 connections that benefited 377,000 inhabitants.



Back to content

Relevant milestones 2020

It made significant progress in projects required by the Regulator such as smart metering, comprehensive user care system, management of the pollutant polychlorinated biphenyls (PCB), and distancing the electrical network with respect to homes.

It attended the effects left by tropical storms Amanda and Cristobal, recovering in record time the service in more than 70% of the area of influence.

The **Cartí project,** which offers energy to more than 300 families in the Guna Yala region, the Modelo school with more than 1,000 students and four ports, began with an investment made jointly with the Inter-American Development Bank (IDB) and the Oficina de Electrificación Rural (OER).

In a demonstration of financial soundness and confidence in the investment market, **the risk rating firm Fitch Ratings granted ENSA a BBB rating, an investment grade with a stable outlook,** better than the current one for Panama.

Advanced in formulating the project to access **resources from the General Royalties System.**

The National Government chose **Quindío** to be a **pioneer in 100% coverage** and the first department in Latin America with this condition.

The rural coverage index is 99.69%, achieving a total coverage (urban and rural) of 99.92% in Caldas and Risaralda.

The Palenque 230kV, Río Frío 115 kV and Principal 115 kV substations came into operation, which made it possible to reinforce the high voltage electrical system in the Bucaramanga Metropolitan Area, allowing the improvement of the energy service quality and reliability.

It achieved the allocation of resources for the **rural electrification of 282 users in the Catatumbo region,** by financing the FOndo de Apoyo Financiero for the Energization of Non-interconnected Zones (FANIZ), through solar solutions.



Energy generation

With the Generation business we are present in **two countries: Colombia** with parent EPM and CHEC subsidiaries in the department of Caldas, ESSA, in Santander, and Hidroeléctrica del Teribe (HET) in **Panama.**

We are the first agent in energy production in the Country

21.6 % share in the colombian market

19.6 % share in the National Interconnected System (NIS)

3,479 MW effective Net International capacity

15,388 GWh generated by Grupo EPM in 2020



3 thermal plants

1,652 GWh per generation natural gas thermal

1 eolic park

10 GWh eolic generation

2 solar self-generation systems

0.75 by auto-generation

32 hydraulic power plants

13,724 GWh by hydroelectric generation

We are the second agent in net effective capacity

In relation to 2019, we increased total generation, mainly due to the increase in thermal generation as a strategy to improve the reliability charge at the La Sierra and Termodorada plants. On the other hand, hydraulic generation had a decrease because of the El Niño phenomenon.

HET, despite the few water contributions in the first half of 2020, exceeded its generation by 13.6 GWh, compared to the previous year, due to the hydrological conditions of the rest of the year and the equipment availability. Regarding the availability of the Grupo EPM plants, **we generally achieved good performance,** meeting and in some cases exceeding the goals set in our different plants, specifically in HET, we highlight the **excellent availability of the Bonyic plant** throughout 2020.

The previous year, investments in the **Power Generation** business reached COP 1.2 billion. Business revenues totaled COP 5.0 billion, which represents a growth of 24% and ebitda reached COP 1.9 billion, 3% lower than in 2019.



Back to content

Gas

The residential natural gas distribution and commercialization business is provided through EPM in Colombia, with a 22-year operation history.

We are the second distributor of natural gas in Colombia

1,307,628
Clients and users

85.29 %
globalization of gas service

13 %
market share in the country

92 municipalities and 120 towns
from Antioquia enjoy gas service

88 km
steel net

8,448 km
polyethylene mesh



17
Service stations (EDS) EPM brand

33 %
share of Antioquia in Vehicles Natural Gas (VNG) market

Relevant milestones 2020

epm

Connections for Life Program	In agreement with the Municipality of Medellín, we reached 7,238 new families from Medellín from strata 1, 2 and 3, of which 74% belong to strata 1 and 2, located in the areas of Villa Hermosa, Belén, Buenos Aires , San Javier, Robledo, Manrique, Doce de Octubre, Aranjuez, Popular, Castilla, San Antonio de Prado, Santa Cruz, Guayabal, La Candelaria, La América, San Cristóbal, El Poblado and Laureles; to which a **subsidy of 100% of the connection charges to the natural gas network was granted.**
Liquefied Natural Gas (LNG)	We implemented the technology in non-interconnected regional markets, through the consolidation of a pilot in five stations and the signing of a contract for eight-year supply for 60% of EPM's virtual market. In addition, we provide the service with this technology to the municipalities of Sopetrán, San Jerónimo, Santa Fe de Antioquia, Olaya -Sucre-, Liborina, Sabanalarga, Toledo, San José de la Montaña, Cañasgordas, Frontino and Dabeiba.
Gas sales application	It entered into operation satisfactorily in order to optimize the gas service connection time, representing a reduction in the order creation time by four days, favoring the customer's experience with a more timely service.
Project for the use of non-conventional energy biogas	In the San Fernando WWTP, since the completion of all the corresponding procedures to start the execution during 2021, the process makes it possible to bring the biogas to biomethane conditions and inject it into the natural gas network, increasing the efficient use and circulating energy resources, reducing, in turn, Greenhouse Gas (GHG) emissions.
During 2020 we comply 100%	The continuity and quality indicators required by current regulations. Regarding losses, we strengthened the operating capacity through the implementation of technologies, information, and field crews' capacities, which allowed us to maintain the level of losses in the distribution system at 4.6%, at the end of the year.

In the Gas business, investments reached COP 14 thousand million during 2020. Revenues reached COP 1.2 billion, with a growth of 32%. For its part, the EBITDA achieved was COP 129 thousand million, which represents a growth of 12%.



We are the **first company in Colombia** implementing **LNG technology** for the **distribution of natural gas**

To be unconditional is to ...
Be there for the development of territories

In our actions we seek to impact the territories where we have a presence, generating value for companies and society. From our own business activities with an ecosystem vision of a broader environment, **we encourage our management to contribute caring for the environment, and economic and social development.**

For the environment care

In 2020 we continue our work oriented around two initiatives:

Comprehensive Management Strategy for Water Resources and Biodiversity, we continue with the implementation of initiatives for the protection of water resources in the water supply basins of the Grupo EPM systems and reservoirs, such as Río Grande, Río Aburrá, Porce-Alto Nechí, La Fe, Rio Negro-Nare, Cauca, Chinchiná, Serranía de Abibe in Urabá and some areas of influence of the subsidiaries EDEQ, CENS, CHEC and ESSA.

In this way, **as Grupo EPM we contributed to the protection of 21,022 hectares during 2020, from EPM we contributed 19,150 hectares,** for an accumulated in the period 2016-2020 of 97,527 hectares, through initiatives such as forest conservation, restoration and reforestation, practices and sustainable uses, compensation, and new protection areas; contributing directly to the fulfillment of the Sustainable Development Goals (SDG).

From the Strategy for the Comprehensive Management of Water Resources and Biodiversity, we contribute to the following SDGs:





Back to content

Climate Strategy of Grupo EPM, we seek to achieve **resilient businesses and efficient carbon by 2030,** as well as **obtain a neutral carbon operation in 2025.** In this sense, all the efforts we make in the Grupo EPM, within the framework of the Climate Strategy, are proof of the materialization of concrete actions towards the contribution of **SDG 13 Climate Action,** with which we adopt urgent measures to combat climate change and its effects.



With the PURSUIT of a neutral carbon operation in 2025, as a Group we will contribute to Colombia's commitment to the 2015 Paris Agreement, updated in 2020, whose premise is to reduce 51% of Greenhouse Gas (GHG) emissions by 2030, with 2010 as the base year.

For this, from EPM we carry out the verification of the emission reduction projects registered against different standards, to have carbon credits available for the different compensation or commercialization purposes, both in the national and international markets.

In 2020, we sold 1.7 million Green Energy Certificates (I-REC), which represent an income of COP 2,800 million and are equivalent to 280,000 tCO_2 avoided. As of December, 59% of EPM's Unregulated Energy Market customers had an energy supply generated from 100% renewable sources, and 40% of the energy assigned for the Unregulated Market is green.

At Grupo EPM, we are aware of the main environmental, climatic, and social consequences that dependence and excessive use of fossil sources have brought, as well as the inappropriate use and demand of energy for the sustainability of natural resources and the planet. Therefore, we have made advances in initiatives to reduce energy losses in the lines and SF6 (Sulfur Hexafluoride) leaks in the Power Transmission and Distribution business companies, achieving their annual goals. Sulfur Hexafluoride is an artificial gas widely used in high voltage electrical equipment because it is an excellent electrical insulator.

Likewise, we carry out self-supply and energy use actions in the Wastewater Treatment Plants (WWTP) and Drinking Water Treatment Plants (PTAP); and we carry out saving actions in the consumption of electrical energy in administrative and operational areas -sensors, efficient lighting, and low consumption air conditioners, among others- and we substitute refrigerant gases for air conditioners in several companies of the Grupo EPM.



ENSA, DELSUR, Aguas de Malambo, EPM and CHEC took advantage of the solar resource by developing initiatives for energy auto-generation in their administrative headquarters or facilities.

Back to content

For its part, **EEGSA** continued with its process before the National Electric Energy Commission of Guatemala to contract the renewable energy supply purchase, going from 56% to 80% of renewable energy in its energy matrix.

Uraba development



Consolidating our role as **articulators in the development of Urabá,** in 2020 from **EPM** we implemented a route that was translated into institutional actions and synergy with entities such as the municipal mayors, the Urabá University Company State Society Committee (CUEES) and the various social and economic actors, among which stand out the banana growers -associated in Augura-, whose purpose was to coordinate in the midst of the quarantine, accompanying measures with local, departmental and national governments to preserve productive activity at all times of the pandemic, and adding contributions from the various actors to reduce the negative impact on the life quality of families and communities.

In this scenario, **Grupo EPM's** contribution was fundamental, by **guaranteeing the provision of public services with quality and reliability,** with 100% urban **energy** coverage and 98.13% rural; in **gas** of 83%, with an increase of 3% compared to the previous year; in **aqueduct** 97.7%, with an increase of 4.7%; and in **sewerage** 80.2%, with an increase of 3.2%.

But our contribution to development goes further, the CUEES Urabá, where EPM has a seat on its advisory board, contributes professional tasks from the Technical Committee and coordinates the Table of Social Innovation Platforms; Likewise, we led an inter-institutional action to collect resources from various actors that enabled the region to be provided with a molecular laboratory for the processing of COVID-19 tests, which was possible thanks to the contribution of more than COP 1,200 million.

Citizenship, is the **social mobilization strategy** framed **in the premise Urabá cares for Urabá** and that arises from the Table of Social Innovation Platforms to minimize the impact of the pandemic, contributing to the generation of a culture of greater individual and collective care.



"In the Citizenship campaign, it was essential to unite various actors in the region to join efforts, knowledge, and views such as the territorial commitment of the Grupo EPM in Urabá."

▶ ***Diego Sierra***
Apistograma Manager

Additionally, from Grupo EPM we assume challenges associated with the accelerated development of this subregion derived from port development, as well as the growth of urban projects and the potential of industrial development, contributing with **important investments in energy, gas, aqueduct and sanitation,** which During 2020 reached a value of **COP 57,047 million,** represented in investments for operational maintenance, extension of gas networks, aqueduct and sanitation, and infrastructure works in all services.

In **energy,** we highlight the progress in the Urabá substation connecting project - Nueva Colonia - Apartadó 110 kV, which presents a physical progress of 49%, with which we will support port and business development. Complementing this investment route, the Chigorodó 44 / 13.2 kV substation modernization projects and the Puerto Antioquia - Nueva Colonia 110 kV substation connection.

In addition, **we contribute to the improvement of the energy service quality,** which translates into a reduction in the duration of service interruptions, going from 23.83 hours in 2019 to 16.73 hours in 2020, as well as the frequency of interruptions, going from 12.45 times in 2019 to 9.79 times in 2020. Also, with the actions for the management and control of losses, it was possible that during 2020 1,978 facilities were normalized in Urabá.

In **Gas,** we highlight **EPM's alliance with the international marketer Unibán,** managing to accomplish the materialization of a cleaner alternative as an energy source with LNG to reduce the environmental impact of its operation.



"In addition to the productive and environmental impact of gas at our Zungo plant, going together with EPM allowed us to improve the quality of life in neighboring communities."

▶ ***Carlos Pinilla Gallego***
Director of Institutional Affairs C.I. Uniban

In addition to the development of this project, w**e benefit the neighboring community of the Zungo town in the municipality of Carepa,** managing to supply natural gas service to 60 homes, providing an economic, ecological, and safe energy for residential and industrial users. We also completed the **gasification project in the Nueva Colonia township of the Turbo district,** with 1,417 connections for new users who enjoyed gas service.



Back to content

In the **aqueduct and sanitation service,** despite the impacts of a pandemic that forced the reconnection and reinstallation of the service, systems such as Turbo presented positive results in the Index of Losses Per Billed User (IPUF), going from 19.6 m^3/ user billed in 2019 to 14.7 m^3/billed user. Regarding the continuity in the summer season, the flows of the collection sources were reduced, but the coordinated work of the subsidiary Aguas Regionales, EPM Matrix and the municipal administrations, allowed the execution of contingency plans, guaranteeing the provision of the aqueduct service in the district of Turbo, strategies that were also used in other systems such as Apartadó and Carepa, guaranteeing the service continuity.

It is important to highlight that, in 2020, thanks to the reduction of losses with commercial actions, correction of leaks, elimination of fraud and network optimization, the best historical result in continuity was achieved in the Turbo district, arriving at 64.3%. The other systems served in the subregion presented continuities above 98.8%.

We also highlight the **connection of the National Navy's headquarters at the Las Vacas point in Turbo,** who were served by tank truck, and whose project was carried out as an additional stage to the air network. Similarly, we linked the Nueva Florida and Bellavista neighborhoods in Turbo, which never had potable water through the network.

Through the figure of **works for EPM's taxes,** with the subsidiaries EDEQ and Aguas Regionales, the project to optimize the aqueduct system in the municipality of Apartadó was executed for COP 9.040 million, changing the networks that were in asbestos cement for the installation of 13,785 meters of distribution networks, contributing to the improvement in the life quality of Clients and users, the quality of the service and the reduction of losses in the system.



Aguas Regionales obtained the **first place** in the recognition of **Andesco and Superservicios** for the best practices of service to users in the Social impact category for the **air network project in Turbo.**

Bajo Cauca, a territory of opportunities

Aware of the importance to continue working in the Lower Cauca territory of Antioquia, and increasing the efficiency and sustainability of economic, social, and environmental contributions, from EPM we proposed seven initiatives to gain coherence integrating processes in the territory and within the Organization in the operations, businesses and the business group companies.

During 2020 we achieved important progress in three main initiatives:

1. Advance in the globalization of the energy service, with the development of electrical interconnection works, which allow 1,416 families to have this service for the period 2021-2023. Additionally, we will implement the service provision through isolated solutions, such as the individual solar photovoltaic solution (SISFV), to achieve in the territory access to energy service for approximately 2,000 new families.

2. To contribute in the protection of water resources and biodiversity, we execute 11 agreements with environmental and fishing authorities, universities and other suitable entities for each subject; as a result, we identified some priority areas for restoration, the formulation of the agreement with the Government of Antioquia, Fondo Paz, and Corantioquia for the restoration of ecosystems, the structuring of the bank of properties and the preliminary feasibility analysis for its intervention, among others.



Back to content

3. Contribute to the updating and implementation of territorial planning instruments, we define the agreements structure for updating the Territorial Planning Schemes (EOT) in five municipalities, achieving the territorial planning diagnosis and the formulation and development of the Valdivia territory planning guidelines, the analysis of the development plans for the localities and observations delivery oriented to risk management and updating the Territorial Ordering Instruments (IOT); the articulation programs identification for the development plans and initiatives of EPM and other entities, and the construction of environmental determinants associated with the Cauca River, useful for municipal administrations.

"The University of Cordoba works with EPM to advance conservation strategies aimed at developing captive reproduction technologies for the most important fishing species in the middle and lower basin of the Cauca River."

▶ ***Víctor Atencio***
Professor at the University of Córdoba



Back to content

To be unconditional is to ...
Take care of public goods by managing risks

For the Grupo EPM it is of great importance to manage risks, and as part of the control environment we **implement Comprehensive Risk Management (IRM) as a formal and cross-cutting practice in organizations,** therefore, in the development of operations and in the framework of strategic direction, we define the policies, guidelines and the process that compose the GIR.

To do this, in 2020 the Risks Vice Presidency is created with direct reporting to the General Management, strengthening the strategic relevance of risk management, articulated with strategic planning, and whose main function is to formulate, deploy and supervise the risk strategy, coverage and security in EPM and its business group.

In the Group today we have a **risk map,** which has been constructed based on environmental signals, risk trends and the participation of different vice presidencies and Group companies, with a focus on long-term sustainability and business liquidity. This map has with 21 risks, valued with financial impact, quality, people, and reputation. The risk index during 2020 presented a downward trend, motivated by the risk management carried out by the different areas and work teams in the business group.

In a particular way, the monitoring of Grupo EPM's risks is presented to the CORE Committee, Audit Committee, Strategy and Investments Committee and the Board of Directors.

In 2020, **we formulated the project Design and implementation of the new Comprehensive Risk Management (GIR) model,** within an improvement strategy for the Group, which aims to implement a GIR model to strengthen decision-making, optimize operations and comply with regulatory requirements, by adjusting and consolidating the company's architecture components, which we expect to start in 2021. In addition to the above challenge, we propose to develop the business continuity and compliance management systems.



Back to content

To be unconditional is to ...
Make positive energy flow together

Grupo EPM, with a vision focused on its market growth, clients and geography in the Energy Distribution and Commercialization business, **participated and acquired the operation of CaribeMar de la Costa S.A.S E.S.P.,** after meeting the conditions set in the Share Acquisition Agreement on September 30, 2020, thus formalizing the official transaction closing that allowed **Afinia, the brand of the new EPM Group -CaribeMar- subsidiary,** to start operations in the Caribbean Region on October 1, 2020.

We occupy the first place as an operator of energy distribution and commercialization in the Country

12 %
Grupo EPM's participation in the energy distribution and commercialization market increased approximately

35 %
participation of Grupo EPM in this market, maximum limit allowed by the Colombian regulation



+1.5 million
of Clients and users

6 million
people from Bolívar, Cesar, Córdoba, Sucre and 11 municipalities of Magdalena enjoy Afinia's energy

Sustainability Report 2020

Our **great challenge** is to **improve the quality indexes in the provision of service and collection,** as well as to **reduce the levels of energy losses,** for which, we must make investments for COP 4 billion in the next five years.

From a commercial point of view, efforts will focus on offering adequate service to Clients and users and improving the collection indicator. In the supply chain, the contracting processes and the purchase of materials supplies required to execute the investment plan will be monitored. In human talent, it will focus on accompanying the sizing and population of the personnel plant. In information and operation technologies (IT-TO), it is responsible for carrying out the migration plan and executing an accelerated and transitory plan for the transfer of services provided by the Afinia Shared Services Center, which operate with a high level of obsolescence.

Relevant milestones 2020

afinia Grupo-epm

Establishment of the **corporate governance model,**

Approval of **the 2020 and 2021 budget** and the **investment plan 2021-2025.**

The **integration plan** was advanced, through it, 14 work fronts execute their plans to achieve the adequate and complete incorporation of the subsidiary into the Grupo EPM. In this way, each of the work teams reviews the processes to share best practices and propose work plans aimed at closing gaps in the different processes, prioritizing those that represent the main value levers, among which are technical areas that will have as a great challenge the execution of CAPEX, optimization of OPEX, control of losses and improvement in the service provision quality.

Establishing a **focus on the operation stabilization and start-up of the main projects** to improve the service quality and increase by 35% the NUMBER of local operation brigades, to reduce the attention time for clients' technical requirements.

With the extension of the opening hours to the public in 81 face-to-face offices, **Afinia has managed to serve a total of 1,000 additional users per day** throughout the territory, respecting biosafety measures.

Sustainability Report 2020

Afinia was instantly implemented in the Cartagena, Monteria and Valledupar offices to facilitate the management of client's requests in line, allowing to serve and provide solutions in line to 32% of the contacts that enter these offices, contributing to client's satisfaction.

415 direct connections of people who support the consolidation of the subsidiary's team.

Implementation of **two mobile offices in Cartagena** in the Pozon and Mandel neighborhoods, this means that 98% of Clients and users rate the care received in commercial offices between excellent and good. Likewise, with the expansion of virtual channels, 21,500 new application downloads for mobile devices, 117,604 registrations in the virtual office and more than 1,900 claims that have been resolved through the Virtual Claims Analyst, responding to the client in a first contact.

Signing the Management Program with the Superintendency of Public Services and carrying out different relationship **activities with interest groups** such as union organizations, mayors, governors, unions community, vendors and entities of the National Government, among others.



Back to content

Afinia's investments during the first five years of operation will be around COP 3.7 billion in electrical infrastructure -substations and lines, distribution networks and network assurance- and additional investments in Information Technology and Operation Technology (IT -OT), for a total of COP 4 billion.

In the next 10 years, Afinia's investments will reach COP 8 billion. These resources will translate into more development for the Colombian Caribbean, improvement in the quality of life for six million people and greater job creation for the region.

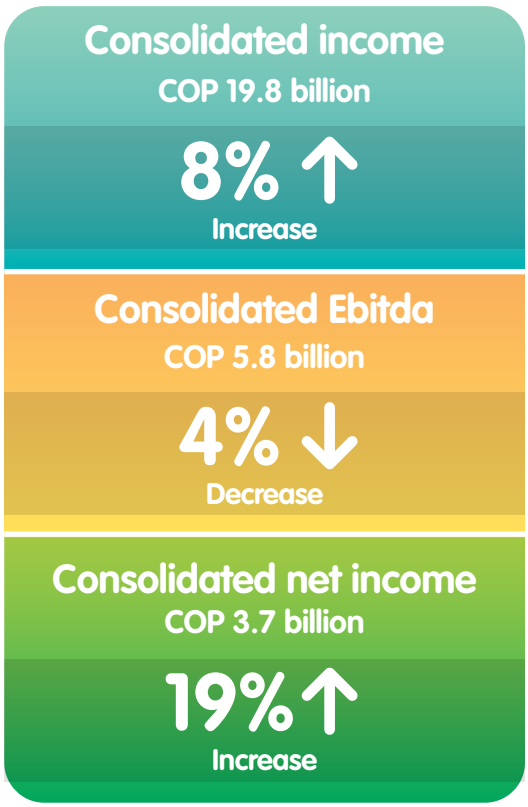


"Providing a service as the community deserves it, we will achieve it with the participation of all. It is a joint responsibility between Grupo EPM, Afinia, clients, users, regional companies, territorial entities, local governments, and the National Government."

▶ ***Blanca Liliana Ruiz Arroyave***
Afinia's General Manager

Back to content

To be unconditional is to...
Grow as one to generate value



The **financial results of the Grupo EPM** occur during an economic environment characterized by the uncertainty derived from the COVID-19 pandemic and volatility in the financial markets, mainly caused by the fall in oil prices.

Among the steps that determined the path in 2020, we find the internal adjustments that the Group companies had to carry out to allocate the necessary resources issued by governments to face the health emergency of COVID-19; the commencement of the energy service provision in five departments of the Colombian Caribbean Region with the new subsidiary Afinia; and the continuity in the fulfillment of technical, social, and environmental milestones for the development of the Ituango Hydroelectric Project.

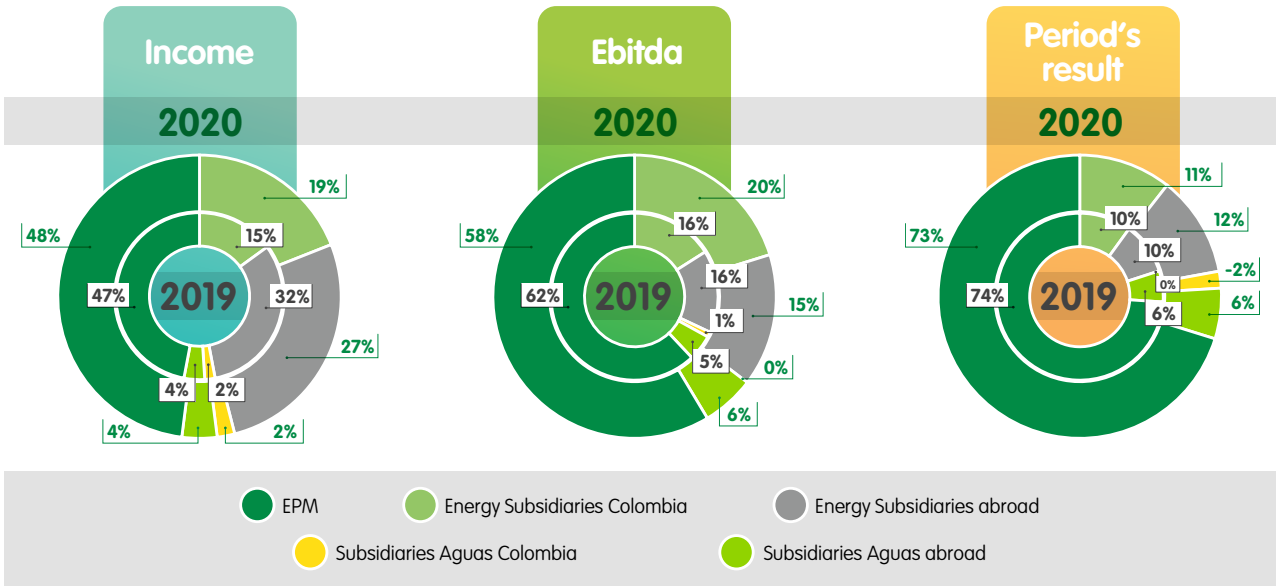
Amid this panorama, Grupo EPM achieved **revenues** for COP 19.8 billion, with a growth of 8% compared to the previous period. The Power Distribution and Transmission businesses contributed 61%, followed by Generation with 22%, Water and Sanitation with 11% and Gas with 5%, the remaining 1% corresponds to other segments.

In terms of **ebitda,** there was a 4% decrease in relation to the previous year, for a value of COP 5.8 billion, explained by a combined effect of an income growth lower than expected by the fall in the demand of the industry for the confinement and the higher costs generated in the commercial operation -energy purchases-, portfolio deterioration, biosafety supplies acquisition, among others. 45% of the ebitda was contributed by the Distribution and Transmission businesses, followed by Generation with 33%; Water Provision, Wastewater Management and Solid Waste Management with 21%; and Gas with 2%.

Sustainability Report 2020

Grupo EPM's net income was COP 3.7 billion, with a growth of 19%, equivalent to COP 584,942 million, this is mainly explained by the net effect of a positive variation in income of COP 1.4 billion; higher costs and expenses for COP 2.3 billion, accumulated devaluation of 4.74%; and an operation resulting from the application of International Standards, which generated recognition for the difference in the assets' book value versus the real potential for generating market value and the associated risk.

The **affiliate companies** contributed COP 2.6 billion to the Group's ebitda, in which the international affiliates participated with 50%, as well as the national companies. The structure by business presents a contribution of 84% from energy companies and 16% from water companies.



In 2020, **the subsidiary Afinia joined the Grupo EPM,** in charge of the operation in some departments in the north of Colombia. Attention to this market requires investments of around COP 4 billion in the first five years, which will be funded with resources from capitalizations, the internal generation of resources originated in the company's operation, the working capital transferred by the seller, resources for the execution of projects called CONPES and, in the medium term, with financial indebtedness.

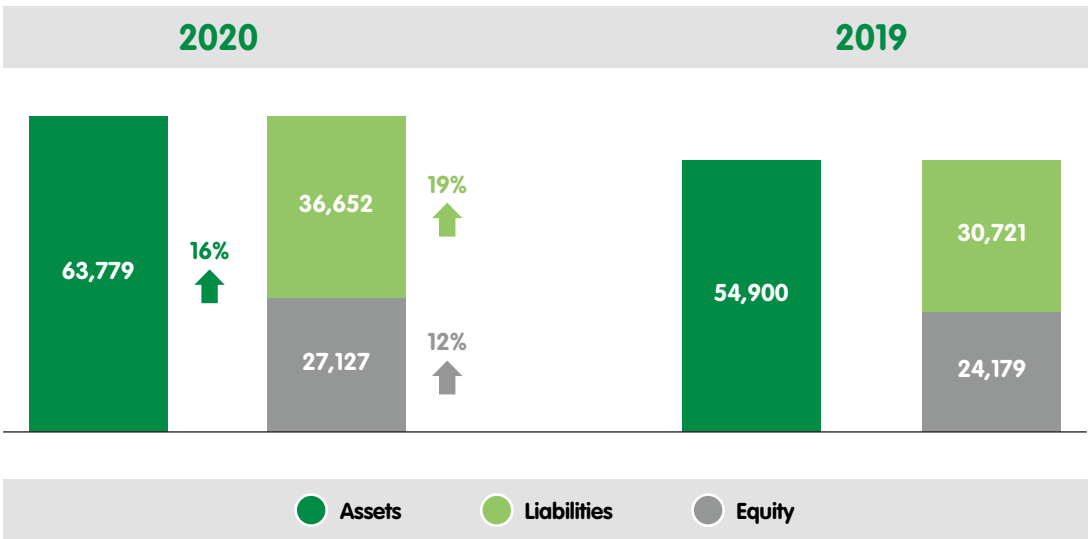


Back to content

The companies **Aguas Nacionales and Afinia** were capitalized in COP 113,397 million and COP 368,326 million, respectively; SOMOS autonomous equity was capitalized with COP 10,000 million, and EP Rio decapitalization was performed in COP 46,905 million, as part of the fusion process that took place by the end of 2019.

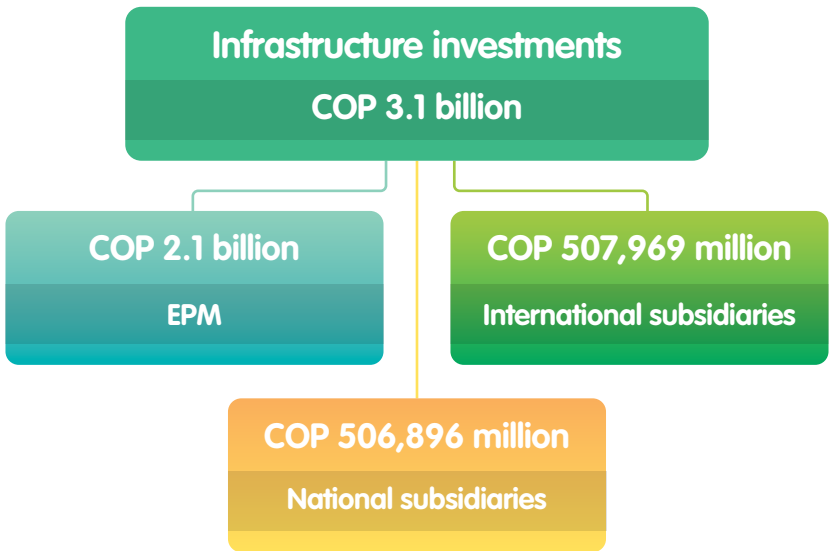
EPM received in 2020 dividends for COP 465,074 million, of which 84.3% came from subsidiaries and the rest from non-controlled companies. The book value of portfolio investments in controlled and uncontrolled companies amounts COP 13.2 billion, at the end of 2020.

For its part, the **assets of the Grupo EPM** showed a growth of 16%, going from COP 54.9 billion to COP 63.7 billion; **liabilities** grew 19%, going from COP 30.7 billion to COP 36.6 billion; and in **equity** a growth of 12% was declared, going from COP 24.2 billion to COP 27.1 billion.



Sustainability Report 2020

Total investments in infrastructure projects amounted COP 3.1 thousand million, of which EPM executed COP 2.1 thousand million, the national subsidiaries COP 506,896 million and the international ones COP 507,969 million.

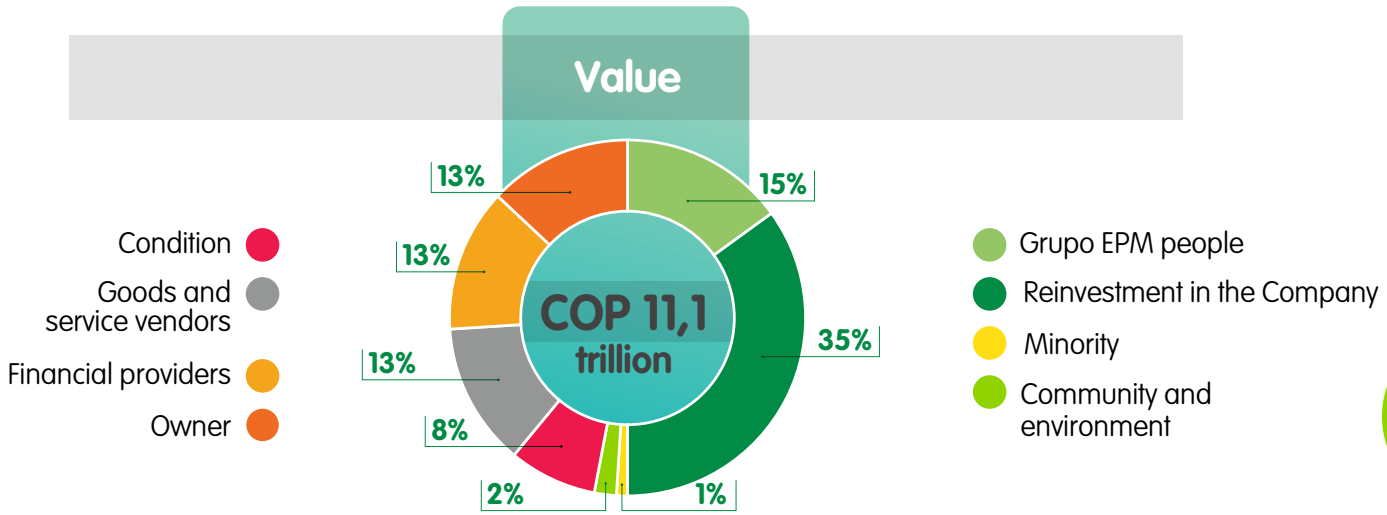




Back to content

Sustainability Report 2020

The Grupo EPM generated **Added Value for COP 11.1 billion** in the period, thus contributing to the development of the territories in which we are present. We highlight that goods and services vendors received COP 1.5 billion, which is reflected in an important contribution to job creation and economic growth. In this same concept, we also exalt the COP 221 thousand million that were allocated to the communities and to the environmental improvement.





Back to content

EPM

2,621,326
Clients and users in the department of Antioquia

7,791
collaborators



6 businesses

- Energy transmission
- Energy distribution
- Energy generation
- Water provision
- Wastewater Management
- Gas

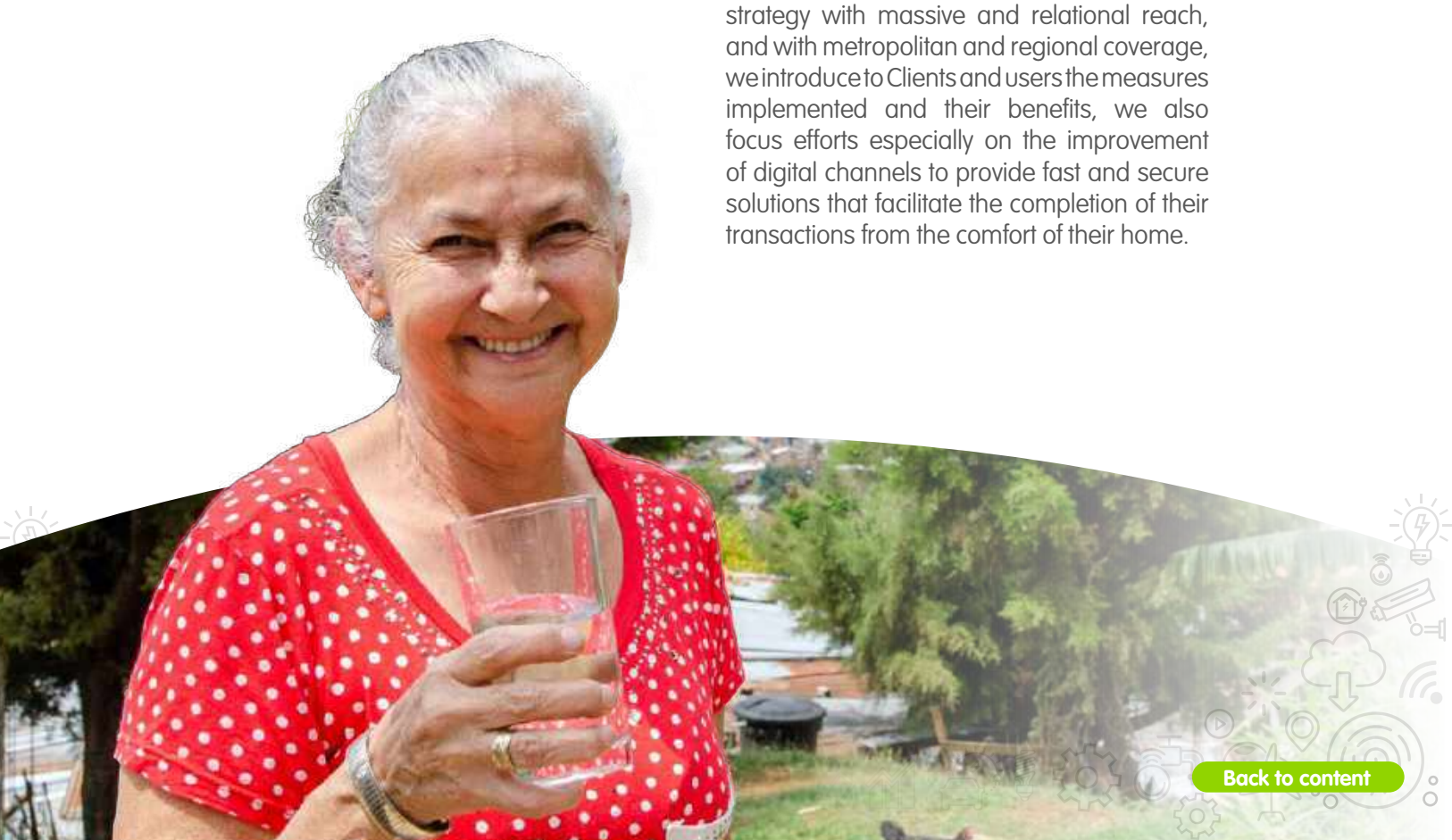
To be unconditional is to ...
Be part of your life to improve your days

At EPM, through the provision of home public services, we consciously generate a social and economic impact, which allows us to accompany you at every moment to improve your wellbeing. In this sense, during 2020 **we carried out initiatives for three interest groups: Clients and users, EPM People and Vendors and contractors,** aimed at mitigating the impacts of the COVID-19 pandemic and making life a little easier in these times.

To be unconditional is to ...
Implement measures to make life easier for our Clients and users

From EPM we share with our Clients and users our **own relief measures and those decreed by the National Government,** to ensure that they **continue receiving public services during the health emergency due to COVID-19,** and thus mitigate the pandemic economic effects caused by this contingency.

Through a comprehensive communication strategy with massive and relational reach, and with metropolitan and regional coverage, we introduce to Clients and users the measures implemented and their benefits, we also focus efforts especially on the improvement of digital channels to provide fast and secure solutions that facilitate the completion of their transactions from the comfort of their home.



Sustainability Report 2020

Next, we present the results obtained during the year with these measures in their respective validity periods:

We reinstalled and reconnected more than 23,000 homes to energy service, 11,000 to gas service, and 14,000 to water service. The water service continues to be reinstalled and reconnected for residential clients, until the end of the sanitary emergency.

We do not carry out suspensions or cuts due to non-payment, benefiting more than 400,000 homes for residential and non-residential clients. This measure remains in force until the end of the decreed health emergency.

We suspended the collection of Somos credits for cop 146,000 million and suspended public **service financing installments** for COP 481 thousand million, benefiting 160,215 Clients and users.

We generate payment facilities for debts prior to the COVID-19 health emergency for Clients and users, offering special rates and terms, which allowed them to pay their debts in an easier way. The measure is available until the National Government defines the end of the health emergency.

We do not generate collection of interest on arrears to more than 4,000,000 invoices that were paid on a date after their due date, this represented a value close to COP 10,000 million.

We established payment agreements for clients of the Unregulated Energy and Gas Market, amounting COP 27,000 million in deferred, and COP 167 million in forgiven interest.



Back to content

Deferred payment options of the National Government were focused on households, however, we decided to expand this alternative for non-residential clients for energy and gas consumption billed in April, May, and June 2020. In aqueduct and sewerage, it applied for consumptions invoiced between March 17 and July 31, 2020. The maximum value of deferred payments for non-payment was COP 242,000 million, of which COP 169,000 million were applied to energy and gas services in the regulated market and COP 72,000 million to water services.

We continue with Prepaid and Paid Services at your capacity, so that Clients and users maintain the possibility of consuming home public services and thus satisfy their tastes, preferences and needs according to their capacities and disposition, linking 41,725 Clients and users during the year.

These links show a decrease compared to the previous year, mainly due to prepaid offers for the reconnection relief measure, which affected the target market. Specifically, in **Aguas Prepago** we linked 711 Clients and new users in 2020 in the Valle de Aburrá, for a cumulative since the start of the offer in 2015 of 25,922. In **Prepaid Energy** in 2020 at EPM we linked 11,398 Clients and users in Antioquia, for an accumulated of 287,431.

With **Pay at your capacity,** in 2020 we linked 29,616 Clients and users in Antioquia and since the start of the offer in 2014 we linked 225,269, facilitating the installment payment of their invoice in up to five installments in the month.

We do not collect 10% of the debt in each recharge to Clients and prepaid users within the relief measures applied. About 12,000 clients made the financed prepaid water preloads and 195,000 clients made energy preloads. The amount financed by the prepaid water preloads was COP 1,995 million, and COP 27,534 for prepaid energy.



Back to content

Split payment: At EPM we launched a special program on UTILITY bills in October 2020, in support of the COVID-19 emergency. Through this alternative payment, 22,658 Clients and users divided the value of their UTILITY bill into up to three payments during the month.

Encounters to generate closeness: more than 460 meetings and trainings for leaders and the community, and more than 17,000 home visits to raise awareness in the efficient use of public energy, gas, and water services. With this strategy we benefit more than 80,000 clients and users. Additionally, we held 250 virtual talks with leaders and users, 190 radio programs in Medellín, 11 Facebook Live and we attended 26 television programs, the contents of which were oriented to families.

Digital services project focused on Clients: Seeking to facilitate and effectively solve the needs of Clients and users through digital channels, during 2020 we made 55 new transactions or interactions available in different digital channels such as the website, Chat Bot virtual advisor, mobile application, and modules of self-management. Among the new transactions or interactions published are: Credit to your invoice, Water requests, Somos balance inquiry, Inscription to Pay at your capacity, and Analysis of energy connection feasibility.



531 %
increased the
digital transactions
during 2020.

To be unconditional is to...
Give the best for the EPM People

With the firm commitment to give life to our business purpose of contributing to the harmony of life for a better world, **nearly 5,000 collaborators continued their work in the face-to-face mode or in alternation at the different EPM headquarters** during the toughest times of the pandemic and its general confinements, all this, aiming to guarantee the service provision to our Clients and users and giving continuity to the Company's business.

"I felt particularly good with the biosafety protocols that the Company implemented, and during this LAST year EPM has been very aware of the workers who had to complete the day away from home. Our work allowed people to continue benefiting from water, which is a vital service. And since the pandemic IS not over yet, we must continue taking care of ourselves and comply with the protocols."

▶ ***Óscar Vicente Torres Escudero***
Operational Technician of the EPM Water Supply Operation and Maintenance Unit



Taking care of the collaborator's life, **personnel with morbidities, or those over 60 years of age were not allowed to enter the facilities.** Likewise, to reduce the risk of human talent exposure to COVID-19, we postponed the return to workplaces for all those servers who could carry out their work from home.

Consequently, during the health emergency we provide support for the promotion of health and the prevention of mental health problems in employees. Both EPM and the ARL offer psychosocial support to the servers, and psychological support for them and their families. Likewise, we implement a communications plan with 40 active lines to inform, sensitize, raise awareness, and motivate staff towards self-care and the adoption of the recommendations contained in the biosafety protocols.

Considering the challenges that remote work implied, and with it the changes in relationship dynamics, we launched the **EPM Contigo Program** with strategies aimed at responding to three objectives: the first, to work in an articulated manner; the second, emotionally accompany people and the third, to achieve transcendence in time.

Making the experience of confinement a possibility for personal and family encounter was the major driving force, and for this the program was developed around three lines of action:

1. Mental and Physical Health: We frame activities related to the attention of emotional, physical, and psychosocial aspects.

2. New Forms of Work: We group the activities related to the challenges of the new normality, such as the dynamics of remote work, telework, virtuality and technology.

3. Connect with Life: We promote relationship activities other than the workplace, such as campaigns for virtual meetings with colleagues, sharing culinary recipes, among others.



"I am a follower and convinced of the EPM Contigo program. These spaces strengthen the balance in work and personal life; the talks, the teachings, the recommended books, and the relaxation techniques have been wonderful for this moment in my life. I thank the Company for leading these initiatives that promote integral development and improve the well-being of its employees!"

▶ ***Luz Dary Rendón Pérez***
Professional Energy Exchange Management Unit EPM

Relevant milestones 2020

We created the **EPM Contigo microsite,** an informative space that grouped notes of interest, recommendations, and activities for EPM People during the health contingency of COVID-19, being the third most visited page on the corporate intranet with more than 23,638 visits in the year.

We program a **virtual sports agenda** for servers, beneficiaries, pensioners, and retirees, serving 316 people through virtual training, with 8,573 attendances and 460 virtual classes through Facebook. At the generation plants and the Ituango Hydroelectric Project, we continued with face-to-face accompaniment in outdoor recreational sports activities, with 45,254 assistants.

We hold **virtual corporate events,** such as Children's Day, Classic Day, Christmas Novenas and Sustainable Mobility Week with a total of 4,345 connections. We also carried out Family Day with 10,538 people registered, Years of Service with 631 honorees and the Program for the recognition to officials assigned to the Vice Presidency of Transmission and Distribution with 80 people.

We develop **virtual activities** to provide support to the servers and impact the family group through 78 meetings held with an attendance of 15,616 people.

Sustainability Report 2020

We published **70 podcasts** on the internal virtual station EPM Radio, with various topics such as parenting guidelines, leadership, active breaks, culinary recipes, life balance, yoga for the body and mind, among others.

We carry out **six campaigns during the year,** aiming to generate closeness and social relations between work teams, and stimulating other forms of collaborative work other than meetings.

Additionally, to counteract the speed and spread of the contagion of COVID-19 within the parameters of prevention, containment, and mitigation in accordance with the regulations of the National Government, we review proposals for adjustments in work shifts, ensuring the proper service provision, for which we design and homologate some working days of the Company.

We design and execute a Closeness with Leaders strategy to recognize the support and willingness they had to accompany their work teams remotely and in person.



EPM, is considered the 5th. best company to attract and retain talent in Colombia, according to the monitor **Merco Talento Colombia.**

To be unconditional is to...
Accompany our vendors and contractors to reactivate the economy

From EPM we ensure an approach oriented to the prevention of occupational risks not only for EPM People, we also did it with our **Vendors and contractors.** For this, we assume the responsibility of advising the contracting and auditing groups for the inclusion and monitoring of the COVID-19 management. We also carry out different activities to contribute to economic reactivation and communicate biosafety protocols to be implemented during the health emergency.

The actions included **six virtual events** with a total attendance of 1,442 people and with the participation of allied companies such as ARL Sura, ARL Colmena, Grupo Éxito, Mayor's Office in Medellín, among others, to address issues related to the Biosafety Protocols for contractors, tools for market analysis in times of crisis, company management in times of crisis and health and safety at work.

Likewise, and to know the health status of the contractors' workers, we designed a weekly survey that would allow us to have a COVID-19 indicator, to define joint alternatives that allow mitigating operational, or contagion risks caused by this virus in contracts.



"In challenging times, we learned that being one we are more. That we are united by the purpose of building a competitive, sustainable country with opportunities for all. In times of change we join efforts to ensure the provision of basic services to thousands of homes and industries in Colombia."

▶ ***Francisco Martínez***
Maintenance Manager Ingeomega S.A. - Supplier & EPM Contractor

Finally, through the **Recyproco mailbox** we share monthly newsletters and messages by WhatsApp Business for P&C; In total, we sent 17 communications related to COVID-19 to our Ariba provider database, with information of interest for care and prevention.

To be unconditional is to ...
Provide public services for your well-being

As in the business group, despite the impact of the COVID-19 pandemic arrival, **EPM's services were provided with reliability, quality, and continuity,** guaranteeing access to all our Clients and users during the confinements ordered by the National and local governments. At the same time, we continue making progress in our strategic projects that generate development in all the regions where we are present.

EPM water provision

In 2020 we supply **water suitable for human consumption in all the municipalities of Valle de Aburrá and Rionegro,** reaching the goals of the main operational indicators, such as continuity of service greater than 99.7% and compliance with the watercolor index of 95.81 %. In terms of efficiency and system optimization, the level of water losses was 5.92 m3 per billed user.

1,329,343 Clients and Users

13.7 % participation of EPM in the Colombian market

97.38 % globalization from service



13 purification plants with a capacity of 16.82 m³/s

125 storage tanks with a capacity of 457,000 m³

4,330 km of aqueduct networks

Back to content

Sustainability Report 2020

In the Water Provision business in EPM, investments reached COP 382 thousand million during 2020, generating business income for COP 713 thousand million, which represents a growth of 7% and EBITDA reached COP 302 thousand million, 2% lower than in 2019.

Relevant milestones 2020

Water Provision Intervention Program (PIPA): It integrates the defined critical actions and a series of projects that will improve the continuity in the water supply service provision, in which during 2020 we invested COP 123,088 million.

Of these projects, **we highlight the entry into operation of:**

- Impulsion Robledo - Porvenir - Aures, which belong to the **Cadena de Occidente project.**
- Execution of civil works for phase 1 and designs for phases 2 and 3 of the **Expansion Yulimar project.**
- Actualization of the **Buey collection system-Piedras.**
- Execution of civil works for the **Manzanillo, Itagüi, Ajizal tanks.**
- Associated conduction and execution of civil works for stage 1 of the **Santa Elena conduction – La Cascada**

"We are a community that has suffered a lot by the water pressure. It seems to me that this is not a project, but a Megaproject, and we are fortunate because thanks to EPM our quality of life is going to improve and we are going to stop suffering for water, it has also given many job opportunities and the community has been considered."

▶ ***Diana Marcela Sepúlveda Díaz***
Leader and member of the Communal Action Board La Sierra, commune 8 - Medellin



Back to content

Caldas and Barbosa master plans: During 2020, the operation began, with a restored and modernized infrastructure to guarantee the aqueduct service provision and the wastewater collection discharged to the tributaries of the Medellín River, in addition to manage the growth of Clients and users.

Water connections for Life program: In conjunction with the Municipality of Medellín, the Social Institute of Housing and Habitat of Medellín (ISVIMED) and the Urban Development Company (EDU), during 2020 we contributed to the improvement in the quality of life of 3,229 homes in Medellín that did not have aqueduct and / or sewerage service.



Integration of the Rionegro service provision area with EPM Headquarters: The integration with the Rionegro service provision area was successfully carried out with investments for COP 38.505 million, leveraging the quality service provision in this eastern Antioquia territory.

The approval of the regional market[1] was achieved before the CRA, which, once approved by the Board of Directors, will allow unifying the costs of providing services and making investments in the Caldas and Rionegro interconnected systems.

1 The regional market refers to the set of service provision areas served by the same provider, through non-interconnected systems in a specific geographic area that covers more than one municipality and / or district and whose provision, jointly, allows improvements in the conditions of quality, coverage, and continuity in the provision of services.

EPM Wastewater Management

Among the main relevant milestones of the year, we highlight the project to close gaps linking 1,757 families to the sewerage service, which only had an aqueduct. We also expanded the San Fernando WWTP, improving the processes performance and complying with the regulatory requirements for the wastewater quality, required in resolution 0631 of 2015. On the other hand, the consolidation of the commercial offer of Non-Domestic Wastewater Treatment with revenues of COP 1,515 million and a total of 32 signed contracts is highlighted.

1,306,606
Clients and market

95.53 %
service globalization

4 WWTP
located in Antioquia



4,856 km
of networks for the collection and transport of wastewater

1.8 m^3/sec capacity
the San Fernando WWTP

5.0 m^3/sec capacity
of the Aguas Claras WWTP
(operated by the subsidiary Aguas Nacionales)

0.11 m^3/sec capacity
of the Tranvía en Rionegro WWTP

40 liters/sec
capacity of the El Retiro WWTP

In the Wastewater Management business at EPM, investments reached COP 164 thousand million during 2020. Revenues from this business totaled COP 686 thousand million, which represents a growth of 33% and ebitda reached COP 472 thousand million, 51% higher than in 2019.

Energy Transmission

In the **Energy Transmission** business, we made investments that reached COP 4 thousand million, during 2020. Revenues from this business totaled COP 175 thousand million, which represents a growth of 1% and an ebitda that reached COP 121 thousand million, growing by 4% compared to the previous year.

7.59 %
share of the transmission market in Colombia

99.9 %
average availability for reliability in Colombia



1,044 km
in the National Transmission System (STN)

EPM Energy Distribution and Marketing

We highlight the improvement in the **energy service quality** in terms of the decrease in the duration of service interruptions, going from 14.55 hours in 2019 to 11.46 in 2020, as well as the frequency of interruptions going from 7.29 times in 2019 to 6.67 in 2020 EPM's losses in the Network Operator (NO) are 8.67% for 2020 under the new methodology included in resolution 015 of 2018 from the Energy and Gas Regulation Commission (CREG).

2,578,536
Clients and users

97.41 %
service
globalization



95,446 km
of networks from the Regional Transmission System (RTS) and Electricity Distribution

14.2 %
participation in the distribution market in Colombia

16.2 %
commercialization market share in Colombia

123
municipalities of Antioquia receive the energy service

1
Chocó municipality receives the energy service

Relevant milestones 2020

epm

Rural Electrification Program: To give continuity to this initiative, we made 5,036 connections, benefiting 20,144 people, with an investment of COP 24,820 million. During the program's trajectory, 116 municipalities located in the regional market of the department of Antioquia have benefited, as well as municipalities such as Carmen de Atrato, Carmen del Darién and Riosucio in the department of Chocó, contributing to the growth of the service coverage.

184,000 people
in total, through
61,149 connections
have received the energy service thanks to
Rural Electrification.

Public Lighting of the Municipality of Medellín: We highlight the contract closing for the Administration, Operation and Maintenance (AOM) of the Public Lighting of Medellín for a period of 15 years, in which we contemplate the modernization in the next three years of 100% of the system to LED technology. In addition to the above, we closed the energy supply contract in the Unregulated Market for Public Lighting in the same period.

EPM as operator of the Public Lighting of Cartagena: This district accepted the proposal for the AOM Public Lighting in the city for the term of one year -2021-, which will allow us to be from February 1st as operator of the public lighting service in the Ciudad Amurallada, where we will also develop the Christmas lighting project, helping to enhance the attractiveness of this tourist destination par excellence, for the Christmas season and holidays.



Field productivity: The good performance of this initiative methodology, which is being carried out in the national subsidiaries to contribute to the profitability of business operations, has made possible the deployment of the Project in international subsidiaries, accompanying efforts in EEGSA and DELSUR. Consequently, the learning in Field Productivity also contributed to the connection with Afinia.

Project start-up: Thanks to the investments of COP 347 thousand million made in the Energy Distribution business, the entry into operation of projects was made possible, which due to their importance contribute to the improvement in the service quality, guaranteeing the supply of electrical energy for all our customers in a safe and reliable way among which we highlight the increase in the installed transformation capacity of 260 MVA for the transmission system and EPM's energy distribution, mainly in the Urabá, Central, Guayabal, Poblado and Miraflores substations; as well as the replacement of two autotransformers banks of 180 MVA at the Envigado Electrical Substation (SE). In addition, the expansion projects SE Urabá 230/110/44 kV, Conexión Colanta - SE San Pedro de los Milagros, Rapid change of power transformers in Poblado and Miraflores, and the new SE Yondó 34.5 / 13.2 kV began operations

In addition to the previous projects, we achieved early victories in projects that, although have not been fully completed their execution offer benefits and contributions to the transmission and distribution system since this year to strengthen the optimization of our operations and to achieve business objectives. Some of these projects are the Consolidation of Control Centers, Actualization of the SE Central 110/44 / 13.2 kV, and Actualization of the SE Guayabal 110/44 / 13.2 kV.

Revenues from the Energy Distribution business totaled COP 3.6 billion, which represents a decrease of 1%, and ebitda reached COP 869 thousand million, 23% lower than 2019.



EPM Power Generation

Compared to the previous year, **we increased generation** from thermals by 1,420 GWh to improve future revenues associated with the reliability charge at the La Sierra plant. On the other hand, hydraulic generation had a decrease of 1,175 GWh because of the El Niño phenomenon, which began at the end of 2019 and lasted until June 2020.

The lower contributions in 2020 influenced the stock price, which for 2020 was 254 $/KWh, compared to 231 $/KWh in 2019, which was also affected by the effects of this phenomenon, especially between October and December.

20.5 %
participation in energy production in Colombia

18.1 %
participation capacity share in Colombia

3,196 MW
net effective capacity

14,497 GWh
EPM generation in 2020



2
thermal plants

1,580 GWh
per thermal generation to natural gas

1
eolic park

10 GWh
per wind generation

2
solar auto - generation systems
0.75
by autogeneration

22
hydraulic power plants
12,906 GWh for hydroelectric generation

In accordance with the aforementioned panorama, we highlight the efforts made by EPM to renew the drought risk coverage scheme for four more years, which allowed mitigating the impact of the strong rainfall and flows deficit in the EPM basins registered since August 2019 to May 2020.

In this sense, we highlight the high technical performance **availability of the generating plants,** meeting the planned goals. As well as the entry into operation of the Actualization and Equipment Replacement project in the La Ayurá mini-plant, which was carried out between 2016 and 2020, seeking to increase the reliability of the mini-plant generation, and strengthen the optimal dispatch in water supply.

Investments in **Power Generation** reached COP 1.2 billion, during 2020. Business revenues totaled COP 4.8 billion, which represents a growth of 24% and an EBITDA that reached COP 1.8 billion, decreasing 3% compared to the previous year.

Gas EPM

We address this business in the Grupo EPM chapter, since EPM is the ONLY company in the business group that provides this service.



Back to content

To be unconditional is to...
Be there for the development of territories

For the environment care

At EPM we are committed to preserve our planet through initiatives such as:

- **Comprehensive management of water resources and biodiversity strategy:** We protected **19,150 hectares** during 2020, for a cumulative 80,200 hectares in the 2016-2020 period.

- **(PSMV) Sanitation and Discharges Management Plan of the Aburrá - Medellín river:** We continue ahead with the decontamination of the Medellín river and its tributary creeks with investments of COP 85,293 million during 2020, for an accumulated investment of COP 584,056 million since 2017, for projects such as the Modernization and Expansion of the San Fernando WWTP in operation since 2019; Centro Parrilla in operation since 2019; La Iguaná - La García Basins; South Interceptor; Collector Renovation; Other Basins; Rodas, Piedras Blancas and El Salado basins; and discharges Elimination.



Back to content

We added 16 wastewater discharges collected in 2020, for a **total of 313** separated as follows:

- **107** at Centro Parrilla.
- **76** in Other Basins.
- **67** in La Iguaná-La García Basins.
- **32** in Rodas, Piedras Blancas and El Salado basins.
- **31** at South Interceptor

Likewise, in the second semester of 2020 we began the entry into operation of the Other Basins projects with the construction of 58 km of sewerage networks and 33 km of aqueduct in Bello and Medellín, as well as the entry into operation of the Rodas, Piedras Blancas and El Salado basins project in November, which included the construction of 28.2 km of sewerage networks.

- **Grupo EPM's climate strategy:** From EPM we are committed to keep the emission factor below the System factor of the National Interconnected (SIN); commitment that we have achieved since 2012. Additionally, within this strategy framework, we develop the following initiatives:



  - **EPM's Thermal District La Alpujarra:** We continue our efforts on the mitigation of climate change through energy efficiency initiatives. With the thermal district we met the capacity goal in advance, linking in 2020 the EDU, Éxito San Antonio, Plaza Mayor, Mayor's Office of Medellín, Government of Antioquia, DIAN and EPM Building, with the LATTER, a 30% reduction in CO2 emissions is estimated, as a contribution to environmental care in Medellín.
  - **Use of biogas:** We continue with this initiative at the San Fernando WWTP, which on average self-generates about 40% of the plant's energy requirements. Likewise, we made progress in the award process for the execution of the biomethane utilization plant at this WWTP, to inject it into the natural gas network.
  - **Sale of photovoltaic solar energy for large clients:** We are committed to materialize this execution, achieving a generation of 750 MWh, as well as new agreements for an additional 3.5 MWp. We install comprehensive solutions for Homes and SMEs in Antioquia for 33 clients, equivalent to 304 kWp.

Back to content

- **Photovoltaic solutions for Non-Interconnected Zones (ZNI):** on December 30, we formalized the inter-administrative framework agreement with the Government of Antioquia contributing to the globalization of the energy service and to improve the quality of life of the inhabitants, with four lines of action that include the subsidy of 70% in the connection to new clients in the regulated market and the contribution with capital resources for photovoltaic solar solutions.
- **Non-Conventional Renewable Energies (NCRE):** In response to the mandates of the corporate strategy to participate in the energy business with energy production based on NCRE, we continue advancing in the execution of the strategy to strengthen said initiative through the consolidation of knowledge, development and subsequent construction, operation and maintenance of projects based on solar photovoltaic and wind technology, which we will expand on later in this report, in the chapter Building vision for the future.
- **Air Quality Program:** From EPM we continue caring for the environment with the Sustainable Mobility strategy through initiatives that include **electric mobility, natural gas for vehicles and the Sustainable Mobility Business Plan (PEMS),** as clean transport alternatives that reaffirm our commitment contributing to the City, the Department, and the Country.
  - **Electric mobility:** We highlight the adaptation and start-up of a public charge eco-station in the Sao Paulo shopping center in Medellín, for a total of 20 throughout the Valle de Aburrá; We started the charging stations operation for the Metroplús electric buses at the Universidad de Medellín, Terminal de Transporte and Fátima by EPM; and we carried out the adaptation of 23 facilities for the internal charging of electric vehicles during 2020, for a total of 104. For their part, the ESSA subsidiaries, EDEQ and CHEC maintained the pilot test operation of fast and slow public charging stations for this technology users.
  - **Vehicle Natural Gas (VNG):** We financed more than COP 2,800 million through the Somos program for the conversion of vehicles to natural gas; In addition, we delivered 2,537 bonds, of which EPM and the natural gas chain agents, producer, transporters (2) and the distributor / EPM- contributed with COP 4.4 thousand million. We maintained the operation of the 17 VNG stations, 15 of these in the Valle de Aburrá, one in Apartadó and one in Rionegro.



Regarding the vehicles fleet dedicated to natural gas, there was an increase of 20%, going from 506 units in 2019 to 606 in 2020. Additional in the year we have a total of 2,537 conversions, for a total of 24,000 vehicles with installed and active VNG.

In our estimates we find that the use of gas has reduced the particulate matter in 91.87%, the volatile organic compounds in 45.54% and the carbon dioxide in 21.14%, *-estimates that are obtained when comparing the reduction in emissions when using gas as a substitute for diesel with Euro IV technology; for electric vehicles, the reduction is 100% in these pollutants-.*

Suppliers and contractors

We also contribute to the development of sustainable and competitive territories through the generation of value chains with the strengthening of development initiatives for Vendors and contractors, strengthening during 2020 the spaces for relationships and the local productive force.

Within the spaces for relationship with Vendors and contractors, we hold talks and virtual events, we also send newsletters and communications related to supply chain issues, COVID-19, electronic invoicing, gender equality and inclusion campaigns, health and safety at work, asset management, among others. Additionally, we highlight the activation of the WhatsApp Business channel, with five categories in goods, works, maintenance and operation, professional services, and social contracting.

Vendors' Sustainable Ecosystem Development

Within this strategy for the development of Vendors and contractors we manage three initiatives, among which we find:

1. Program for the Industrialization of the Water Sector: made it possible to improve the productivity and competitiveness of Vendors and contractors, and EPM personnel who are linked to the water sector -aqueduct and sewerage-, based on the training of its human resources at different levels -operative, technical, technologist, professional and expert.

Since the beginning in 2018 and until 2020, we carried out five cohorts of the thermo and electro fusion welding program, with the participation of 227 people who approved the program, for which, the estimated inventory of contractor personnel who were not certified in each of the standards.

2. Water Sector Skills Schools: with the official inauguration of the first edition, we created a training space for the operating personnel of the contractors' companies and EPM, to avoid reprocessing, higher costs and execution times in the work.

3. Grupo Pares: made up of more than 40 anchor companies, a collaborative management was started to promote the development and strengthening of Vendors and contractors to improve their productivity and competitiveness.

Additionally, in 2020 with the interest of helping Vendors and contractors in reactivating business management and providing them with information and knowledge that will help to overcome the COVID-19 crisis, we held several talks with an approximate.

Local hiring: In our commitment promoting this form of contracting, more than 36 thousand contracts were formalized with local vendors, which is equivalent to 80.51% of the contracting carried out in the Company and represents 66% of the contracted value. Likewise, we advanced 59 Community Action Boards and Asocomunales. This was presented mainly within the modalities of private and SINGLE offer contracting, which corresponds to 31,777 million with a participation of 2% within the total contracting.



"Acting as an ecosystem has allowed us to obtain superior results, gaining efficiency and productivity in our processes. Connecting from our strengths and opening ourselves to the possibilities of improving our skills has been key to improve what we do and deliver what the market really needs."

▶ ***Maryori Blandón***
Acuatubos Billing Assistant - Vendor & EPM Contractor

EPM solidarity actions

In a year with so many health, economic and social impacts, **the solidarity that EPM has always shown with its communities and with the Country,** has become stronger. This is how we experienced it during the main emergencies presented in 2020, among them, **the drought in the municipalities of Arboletes and Necoclí to the north of Urabá, landslides due to heavy rains in the Dabeiba sector and the passage of hurricane Iota near the coast of the archipelago of San Andrés and Providencia;** In each of these situations we were present with technical and institutional support to face the needs of the territories that suffered these emergencies.



"I greet all of you with affection, admiration, and gratitude. I want to tell you, the reconstruction of Providence is an act of sovereignty, an act of love for this land, an act of commitment to your countrymen from these lands of the Archipelago. I have seen them work intensely, from day one, once again giving the energy service to the entire community. I am proud of you, this is a heroic, titanic, humanitarian work, I want to tell you with all my affection how much I appreciate you and ¡long live Colombia!"

▶ ***Iván Duque Márquez***
President of Colombia



Today I want to thank the company from Medellín that arrived on the island and we are grateful to them that in a week they connected light for us, and we are commenting to all the people that they were so efficient. Many thanks to the EPM company and we hope that ONE day the people of Medellín will be able to come back to collaborate with us.

▶ ***Ferma Livingston***
Inhabitant of Providencia

In **Urabá** EPM allocated a tank truck with a capacity of 12,000 liters for 75 days so that the community could have access to drinking water.

In **Dabeiba,** through the Aguas Regionales subsidiary in Urabá, we sent a tank truck with a capacity of 12,000 liters of drinking water delivered to the families who were isolated.

In **San Andrés and Providencia,** we initially sent 15,000 liters of drinking water, in coordination with the National Navy and the UNGR; and later, our technical staff and heavy equipment -16 people, 3 cranes for lifting the poles, and a pressure and suction equipment for unblocking and cleaning the sewage networks, which allowed reestablishment of the energy and aqueduct infrastructure of Providencia.

EPM Foundation

With the **EPM Foundation** we manage and develop **programs and projects** to benefit and contribute **to the harmony of life for a better world.**



1,281,718 people benefited during 2020 with the programs and projects of the **EPM Foundation,** through virtual and face-to-face strategies.

Some of the flagship programs and initiatives of the EPM Foundation during 2020 were:



Water for Education Program, Education for Water: We installed 44 water treatment solutions in 17 municipalities of Antioquia, benefiting 2,240 people and providing access to drinking water in rural areas that lack the service. In this way, there are already 766 water treatment solutions installed in six departments of Colombia.

Environment for Life Project: We provide socio-environmental support and community strengthening actions to the Ituango Hydroelectric Project, by carrying out social and educational actions in the communities downstream of the Project, for 18,889 people from six municipalities in the North and Bajo Cauca antioqueño.

Antioquia Higher Education Scholarship Fund Program: in alliance with the Government of Antioquia and the Institute for the Development of Antioquia (IDEA), benefiting 641 young people from Antioquia with a scholarship that covers tuition and support costs to carry out higher education studies at a technical, technological and / or university level.

Educating with Love Project: With the aim of contributing to the care of the health emergency caused by COVID-19, we allocated COP 135 million to this line education, which is consolidated as a strategy that seeks to provide a comprehensive response to education needs as a result of the pandemic.

Donatón for Medellín: Led and promoted by the Medellín Mayor's Office, we donated COP 800 million for the acquisition of medical equipment, destined to the conditioning of new Intensive Care Units (ICU) and Special Respiratory Care Units (UCRE) for the León XIII Clinic of the IPS Universitaria-Universidad de Antioquia.



COP 25,487 million allocated from the **EPM Foundation** for the **execution of these programs and projects,** which allow us to be present and hand in hand with the communities in influence of the Grupo EPM

To be unconditional is to...
Work for the development of good corporate governance practices

The **Corporate Governance of Grupo EPM** is defined as *"The system by which the companies of Grupo EPM are directed, managed and controlled through the balance between ownership and administration, in order to guarantee their sustainability and growth, the rights of their investors, transparency and ethics in their actions and access to information for their stakeholders"*. The practices applied in this matter are compiled and protected in the **Corporate Governance Code of EPM and the Group.**



During 2020, as a result of the change in Municipal Administration in the governing bodies, the following new features were presented:

- As of January 1st, 2020, Mr. Daniel Quintero Calle took office as Mayor of Medellín, who ACTS as representative of EPM Owner.

- Through Decree Nº. 002 of January 1st, 2020, the Mayor of Medellín, in use of his legal and statutory powers, appointed Mr. Álvaro Guillermo Rendón López as General Manager.
- To fill two vacancies on the Board of Directors, the Mayor appointed by Decree Nº. 0090 of January 24, 2020 Mr. JESÚS Arturo Aristizábal Guevara and by Decree Nº. 0091 of January 27, 2020 Mr. Luis Fernando Álvarez Jaramillo.
- Subsequently, through Decree Nº. 0329 of March 10, 2020, he appointed Mr. Oswaldo León Gómez Castaño, in replacement of Mr. Alberto Arroyave Lema.

Additionally, there were situations that implied great challenges for the Corporate Governance, such as on August 11, when eight members of the EPM Board of Directors presented to the Mayor of Medellín their resignation as members of the Board of Directors, which was accepted.

The foregoing occurred, after holding an extraordinary session, convened at the request of the members of the Board of Directors, in which the issues related to the approaches set forth in a letter sent to the General Manager of EPM on the night of August 10, 2020, which was announced in some media, in this letter the call to the extraordinary board session was requested.

Regarding the measures adopted to rebuild the existing governing bodies, the Mayor of Medellín issued the following decrees:

- Decree 0785 of August 17, 2020 para el nombramiento del señor Jorge Iván Palacio y el señor Omar Flórez Vélez.
- Decree 0801 of August 21, 2020 for the appointment of Mr. Pablo Felipe Robledo del Castillo.
- Decree 0801 of August 25, 2020 for the appointment of Mrs. Bernardita Pérez Restrepo, Mr. Guillermo León Diosa Pérez, Mr. Jorge Andrés Carrillo Cardoso, Mr. Olmer Orlando Palacio Garzón and Gildardo Antonio Correa Salazar.

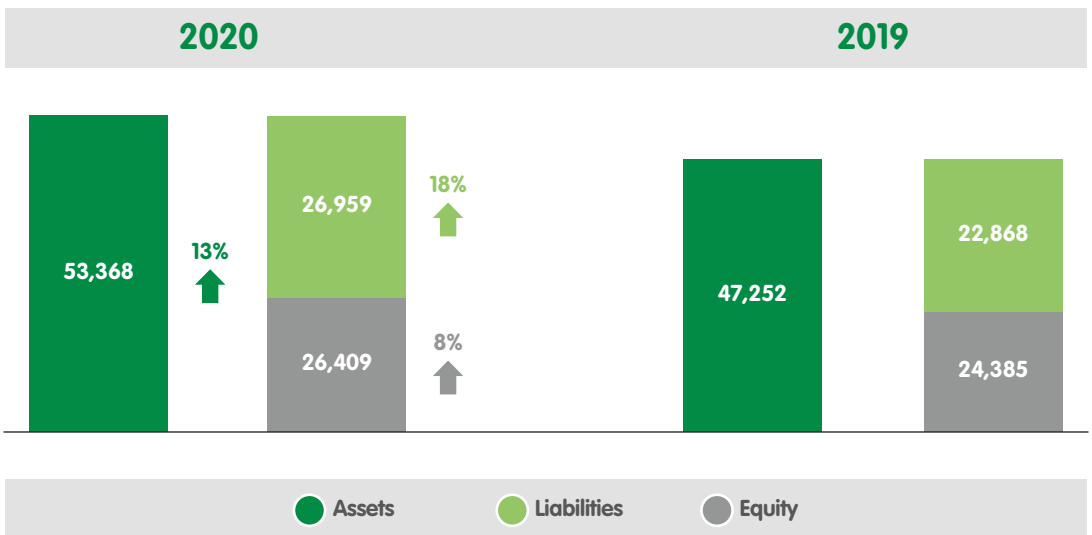
Additionally, the new members of EPM's Board made a public declaration , in which, among other points, they committed to comply and enforce the principles and practices of Corporate Governance.

Finally, the achievements in terms of Corporate Governance during the 2020 term, as well as the challenges for subsequent terms, are detailed in the Annual Corporate Governance Report, published within the framework of the Organization's Sustainability Report.

To be unconditional is to...
Grow as one to generate value

Income COP 9.9 billion 12% ↑ Increase	**Net profit** COP 2.5 billion 6% ↓ Decrease
Ebitda COP 3.6 billion 6% ↓ Decrease	**Transfer to the Medellín Municipality** COP 1.5 billion 15% ↑ Increase

At the end of 2020, EPM achieved **revenues** of COP 9.9 billion, an **EBITDA** of COP 3.6 billion and a **result for the year** of COP 2.5 billion. **Total assets** amounted COP 53.3 billion, equity in COP 26.4 billion and liabilities COP 26.9 billion, figures that compared to December of the previous year showed growth of 13% for total assets, as well as for liabilities plus equity. The **EBITDA margin** and equity profitability reached results of 37% and 10%, respectively.



The 10% growth in **non-current assets** is presented by investments in infrastructure projects for COP 2.1 billion and by the increase in investments in subsidiaries due to the capitalization made in Afinia. **Current assets** grew by 44%, especially due to the resources that entered the Company because of the funding made with international markets.

The growth presented in **liabilities** is explained by obtaining the resources required to meet the needs of the second semester of 2020 and prefunding part of year 2021. These resources were obtained successfully with a new foray into the international capital market, through the placement of bonds equivalent to USD 750 million, represented in a bond issuance in dollars for USD 525 million maturing in 2031 and a second reopening of the Global peso bond maturing in 2027, for USD 175 million equivalent; additionally, loans were obtained from commercial banks and development banks for COP 181 million.

The important position in dollars and receivable accounts in foreign currency that EPM has, forced the establishment of mechanisms that would allow the Company to protect itself from fluctuations in the financial markets. Since June, once the respective authorizations were achieved and after an average stabilization of the financial markets, conditions were created allowing EPM to close 16 hedging operations for an amount of USD 1.45 billion, significantly mitigating the market risks associated with financial liabilities in foreign currency, decreasing the foreign exchange exposure from USD 1,660 million in January to USD 414 million in December.

During 2020, **we maintained transparency practices in the international financial market** to provide extensive updated information on the Company, among the most representative initiatives we find the quarterly teleconference for the delivery of financial results in two versions -Spanish and English- and permanent attention to the concerns of local and international investors.



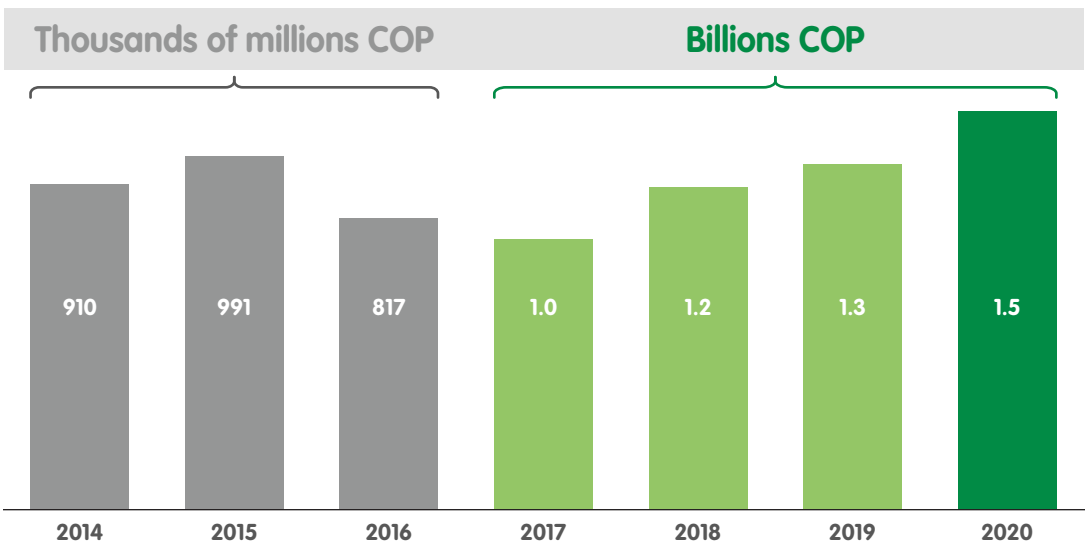
Once again, we obtained the **Investor Relations (IR) recognition from the Colombian Stock Exchange,** for voluntarily adopting the **best practices in terms of disclosure and investor relations.**

On the other hand, the Debt / ebitda indicator of the business group as of December 2020 amounted 4.37, above the established limit of 3.5, deteriorating with respect to the value obtained in 2019 -3.49-, this is due to the increase in debt by 20% compared to the previous year, reaching COP 25 billion. Said increase was mainly due to international bond issuance and loan disbursement with HSBC, for the allocation of resources for general corporate uses and the investment plan. With said ebitda, the Company would take approximately a little more than four years to pay the financial debt it currently has, close to COP 25 billion.

Regarding the compensation received during 2020 for claims in the corporate insurance program policies for the Grupo EPM, also including the compliance insurance that guarantees the execution of the contracts, we received close to COP 25,200 million in compensation for national subsidiaries, including EPM.

In the framework of the **Ituango Hydroelectric Project contingency,** we received three advance payments for the claims of affected third parties in the extra-contractual civil liability policy for a value of COP 8,666 million. Regarding the Construction and Assembly All Risk policy, on September 15, 2020 Mapfre made a second advance payment of USD 100 million, corresponding to the consequential damage in civil works and equipment.

Transfers to the Municipality of Medellín year after year contribute to social investment in the city and in Medellín population, during the most recent periods their behavior has been as follows:



COP 1.5 billion was the **transfers value to the Municipality** in 2020, of which COP 811,810 million correspond to ordinary transfers and COP 676,509 million to extraordinary transfers, is 15%; these contribute to **social investment in the city and the people of Medellín.**



To be unconditional is to...
Manage public affairs for the benefit of all

Attending the fulfillment of requirements as a public entity, both EPM and the national subsidiaries completed three years in the implementation of the **Integrated Planning and Management Model (MIPG).** Precisely during 2020, from EPM we adjusted our work plan related to the implementation of this model and reinforced collaborative work with national subsidiaries, developing a space to share good business practices and the collective creation of agile and productive implementation solutions in the business group. As a result of this collaborative work, MIPG's activities have been positioned on the Board of Directors, through quarterly monitoring, both in the Management Committee and in the Audit Committee.

Using the Unique Management Progress Report Form (FURAG) tool, we carried out the second annual progress measurement in the implementation of MIPG, based on the previous year, in which, as in 2019, we stand out as a benchmark entity among the pairs in our comparison group with an Institutional Performance Index (IDI) that goes from 77 points in 2018 to 88 points in 2019, on a 1 to 100 scale. In this sense, national subsidiaries are also making positive progress in the implementation of MIPG. This progress responds to progress in closing gaps in the issues identified in the auto-assessment and to the lessons learned in the FURAG completion process.

When comparing the scores between the dimensions, in the case of EPM we observe that the Strategic Direction and Planning Dimension is the one with the lowest value, while the Human Talent Dimension is the best rated. Likewise, the integrity policy is the one that presented the best results, while the organizational strengthening and process simplification policy is the one that achieved the lowest score, followed by the institutional planning policy and the document management policy. These results allow us to focus our efforts to achieve constant improvement in the gap closing plan during 2020 and 2021.

We also highlight some successful initiatives such as the homologation of the code of ethics and the code of integrity values in public service; training on MIPG for all EPM public employees; the approval of defense lines scheme in the Management Committee; and the execution of dissemination and awareness activities within the Organization, in particular, of the second line of defense, progress in the implementation and institutional framework of the Document Management Program, adjustment to the accountability process and completion of improvement plans.

In compliance with Law 603 of 2000, we certify that the current regulations on intellectual property and copyright were fully observed in such a way, that the trademarks are duly registered, and the use of software products that the company uses for its normal operation is carried out by virtue of its ownership or through license contracts, which comply with current legislation.

Likewise, in accordance with the second paragraph of article 87 of Law 1676 of 2013, through which access to credit is promoted and rules on security interests are issued, we corroborate that the company has not hindered the free circulation of the invoices issued by vendors or suppliers.

To be unconditional is to ...
Move forward for generating energy for Colombia



Contributing to materialize greater opportunities and promoting the economic and social development of the 12 municipalities that are part of its area of influence, are distinctive features of the Ituango Hydroelectric Project (IHP), which will generate energy with clean, reliable, and safe technology that Colombian households need.

Since the IHP began, we have overcome challenges and reached achievements that today we can highlight from the different components of this majestic work, the resilience capacity that has become a permanent characteristic, and that undoubtedly came to light again with the arrival of COVID-19. The outbreak of this virus caused a significant reduction in personnel on the different work fronts, both in contractors and EPM's own personnel, and the delay in the supply of basic elements and equipment that came from countries such as China, Spain, and Brazil.

Measures such as the implementation of a health survey where each of the Project workers records their location, physical and mental health symptoms, and contact with positive people or health workers on a daily basis; the formation of working bubbles; social distancing; work at home for staff with health comorbidities or older than 60 years.
activation of disinfection programs; update of biosafety protocols, and modification of work shifts, among others, made it possible to achieve zero contagion indicators in the IHP.

Such was the success in implementing measures to mitigate the health emergency that **IESC (Independent Environmental and Social Consultant),** the entity in charge of monitoring each of the environmental, social and health and safety commitments in the IHP work, made an acknowledgment, in which it mentions: *"The degree of commitment and quality of EPM's environmental and social team is recognized, it has faced in an exemplary manner the MULTIPLE challenges resulting from the Contingency and currently from COVID-19."*[1]



1 VI IESC-IDB Monitoring Report

The management of the pandemic was fundamental to give continuity to the construction of the IHP, thus achieving an important **advance in physical work** of 80.62% and an accumulated cost of COP 11,955,142 million; with important technical milestones such as the manufacture of turbines, change of generators and other equipment affected by the contingency, as well as the continuity of excavation work and cleaning areas in the powerhouse, maintenance and monitoring work at the landfill and monitoring and maintenance of the road that connects to the municipality of Ituango.





80.62% is the **physical progress of the works** in the **Ituango Hydroelectric Project** as of December 2020

In addition, thanks to the adjustment in the interpretation of Resolution 820 issued by the National Environmental Licensing Authority (ANLA), we were able to give continuity to works that reduce the risk levels of the communities downstream the IHP.

During 2020 it was possible for us to demonstrate that beyond carrying out technical work, the Project has a real commitment to the people, therefore, we exalted the management carried out with the downstream communities through the **Specific Action Plan (PAE),** with investments of more than COP 59,000 million to repair the families affected by the contingency, improving their living conditions with more dignified housing, and strengthening the attention and care of life with the delivery of the mobile health unit in Puerto Valdivia. Likewise, we carried out different road infrastructure interventions, which made it possible to connect communities through bridges recovery.



Back to content

"EPM recently gave us an acknowledgment and with that we keep moving forward, we put that money together and organize the little shop and part of the house. EPM has been pending of us for the return when we needed something and to help us."

▶ ***Maribel Vergara***
Returned resident of the Palomas sector, Valdivia



In the **environmental component,** we established prevention, care, and compensation actions with the implementation of management programs for atmospheric quality, surface water, reservoir filling and river diversion, management of habitats and organisms, vegetation conservation, among others. that allows minimizing the impact generated in the IHP area of influence.

Aware of the importance of continuing to work in the territory through the implementation of a short, medium and long-term action model for the articulation of programs and participation projects in the local region development, thanks to this systematic orientation, we have made progress in the participation of inter-institutional spaces and collaborative networks that strengthen relationships and the management of alliances, as well as the development of electrical interconnection works, promotion of capacities in community organizations and improvement in the access to drinking water and sanitation for the basic population, among others.

It should be noted that none of the activities mentioned above would have been carried out if there were no support or enabling processes that allow giving strength to the structure that any project needs to be executed. A clear example is the Comprehensive Risk Management that allows us to identify possible events that may affect the achievement of the particular objectives of the Project, minimizing and preventing losses.

Throughout 2020 the **evolution of the IHP risk index,** despite showing an upward trend, largely associated with the health emergency, began a slight recovery at the end of the year thanks to the implementation of different actions that decreased the probability of occurrence and mitigation of possible impacts.

In this sense, the signing of the consultancy, supervision, and construction contracts extension of main works until December 2021, which included clauses that enables a new extension for 2022, will allow to continue the Project progress until its implementation and start-up.

Likewise, we made progress in the negotiations with the **Project's insurance** thanks to the Framework agreement signed between EPM and Mapfre in the Construction and Assembly All Risk policy, which covers material damage as well as delays in starting operations, establishing the conditions for making advance payments, beginning in September 2020 with the second payment for USD 100 million by Mapfre corresponding to the emergent damage in civil works and equipment. This amount is added to the USD 150 million received as the first advance payment in 2019.

With the Extra-contractual Civil Liability policy, which generally covers property damage, current damage loss of profit- and non-pecuniary damage -moral damage and physiological damage or to the life of the relationship- caused to third parties because of the execution of activities related to the construction of the project, at EPM

We received a second compensation advance payment for the claim of COP 8,057,394,460.

In this way, we continue in the process of quantifying the damages caused to third parties regarding the event presented on May 12, 2018, while working to guarantee the continuity of the project's coverage in the All-Risk Construction and Assembly policy and Extra-contractual Civil Liability.

All these achievements show us the dedication and commitment of each person linked to IHP, regardless of the challenges we may have to face, we will continue generating the energy that our country needs, with a projection to meet the energy demand of 6.5 million Colombian households, contributing to turn, to the local and regional development of the territory.



Back to content

To be unconditional is to ...
Build our vision of the future to keep growing

Building a vision of the future for Grupo EPM implies being attentive to the signs **and trends observed in the environment.** By virtue of this, we are aware of the relevant factors such as digitization, democratization, decentralization, deregulation and decarbonization in the public services sector. To this end, we are **currently carrying out a review of the strategy dimension** to incorporate and address the opportunities derived from these signals in a relevant manner.

Thus, since March 2020 we have undertaken a reflection on the relevance and timeliness of our strategy, incorporating analysis on three work fronts associated with high-impact macro-trends for EPM and the other Group companies, such as **digital transformation, circular economy and transformation of the energy sector,** and other transversal, complementary fronts to enable the evolution of current businesses and obtain the desired results such as the organizational design framed in the chosen Business Architecture, the review and adjustment of the Large and Ambitious Strategic Goal (MEGA) of the business group and the expansion of the corporate purpose.

The articulated work of the enunciated fronts will result in the updating of the strategic dimension of the Strategic Direction, base of its Business Architecture, will demarcate the roadmap that all companies and businesses of the Grupo EPM must travel in the future, in order to obtain an adequate balance between the optimization of current operations and the transformation oriented towards the generation of new business models through which, as a Group, we expand our products and services portfolio, consolidating as a relevant actor in the construction of sustainable and intelligent territories.

We have anticipated that these new possibilities will require, in addition to the current analysis and due diligence in the structuring of the different business cases, actions leading to the modification of the current corporate purpose of EPM, the business group parent company, specifically limited to the provision of domiciliary public services and complementary activities, within the framework established by laws 142 and 143 of 1994. With the modification of the corporate purpose, it is intended to enable the Organization to actively participate in the new business opportunities observed in the environment and thus complement the portfolio of services that we currently offer as Grupo EPM.

To be unconditional is to...
Be a relevant actor in building sustainable and smart territories

With a view to build **smart cities, within the framework of future services and the Fourth Industrial Revolution,** understood by EPM as more connected, safe, inclusive, and resilient cities; the advanced measurement infrastructure, the access networks to meet the telecommunications needs of the Grupo EPM businesses and the way to exploit the remaining capacity of the network, and the smart grids are essential.

To do this, we propose to define an integrated vision of technological incorporation composed of new measurement equipment, telecommunications infrastructure and central systems for data analysis that allow a two-way flow of information, optimizing the operation of electrical networks and helping to improve the reliability, security, quality of service and the approach with our Clients and users through digital platforms and the new technologies that will support the businesses, turning people into relevant and active actors in the management and efficient use of energy.

In 2020 we began the process of contracting a consultancy that will allow the formulation of projects and the enabling of the infrastructure required to provide new services to the users and territories in which we have a presence. Likewise, in the **Smart Cities project** we started a market study in its qualitative phase, to understand the perception of the inhabitants in the different areas of Medellín and identify the areas of opportunity for EPM in smart city services.

In addition, seeking to take advantage of the infrastructure that we have available in the City, taking advantage of useful information that can be monetized for the provision of services. From EPM **we advance in the generation of value offers for the city in environmental, safety, and security issues. mobility and health,** using tools such as *Internet of Things (IoT), Big Data* and Advanced Analytics, to do this, we carried out a prospective exercise for public lighting, aiming for the scenario to be an input for the future of smart city services in the Grupo EPM.

With the **Information Company** project, we have the objective of structuring and putting into operation a new business model where information is the main value driver, allowing us to generate new income and well-being for the citizens of Medellín and the Metropolitan Area. This information will contribute to efficiency in internal processes, useful for Grupo EPM's subsidiaries, and later, as an offer to other public service companies.

We will approach this from two angles,

the first, providing reliable information to the citizens and entities of the territory so that they are aware of what is happening in their environment, and the second, facilitating the procedures that PEOPLE MUST COMMONLY carry out in their territories with information solutions, to consolidate EPM and Grupo EPM as **an innovative service organization** that provides its Clients and users with new business models and differentiated services, and that allow us to be competitive and address the challenges and opportunities that arise.

In this sense, we managed the creation of the **Innovation Center, Entrepreneurship and Digital Transformation of Medellín (CIET)** through the signing of the collaboration agreement between **EPM and Ruta N,** which includes resources for COP 12,000 million in the next three years, from which COP 10,800 million are contributed by EPM and COP 1,200 million by Ruta N. At CIET, initiatives of COMMON interest will be generated, and activities, programs and projects of innovation and entrepreneurship will be deployed supporting the development of an intelligent and innovative territory, in accordance with the strategic direction of EPM and the mission of Ruta N.
During 2020, with the **Innovate** program, we carried out a special training process of 52 hours



"Innovation is an organizational development capacity in EPM and requires collaborative strategies with the local and national ecosystem to be strengthened, , ***the Innovation Center, Entrepreneurship and Digital Transformation of Medellín (CIET)*** *is our main bet to achieve it."*

▶ ***John Restrepo Giraldo***
EPM Development and Innovation Manager

of mentoring and spaces for prototyping business ideas with external attendance and intra-entrepreneurs, until the selection of the best six ventures that CONTINUE with a new acceleration phase in 2021. While in the **Ventures EPM** program we invested COP 19,160 million in Capital Funds to promote ventures, which in the future could become potential providers of solutions for EPM.

In relation to **solar auto-generation,** we completed the floating photovoltaic generation pilot with ERCO ENERGÍA S.A.S, advances in comparative performance between systems installed on the roof and in water, which will allow us to replicate favorable results in other reservoirs and in the Group's infrastructure.

Additionally, with the development of the **transactive energy pilot** in agreement with the Universidad EIA and Erco Energía S.A.S. and with the new **solar community pilot,** with the same allies, we advance in the understanding and methodologies of client education in new energy commercialization initiatives, and we aim to continue capturing market signals that allow us to improve the value proposition and the Customer and user experience through scalable solutions.
In **smart aqueducts,** we developed some pilot projects to take advantage of available

"The location of Casa Kolacho is strategic because all day we have the transit of the sun. Thanks to this project we can say that between 85 to 90% of the energy consumed in the house is solar energy and this has a great economic and social impact for the community and for us, since it is allowing us to be a benchmark in initiatives, not only artistic, but also environmental in nature with a commitment to renewable energy."

▶ ***Ciro***
Artist and member of Casa Kolacho



resources and provide decentralized solutions, among them, **Internet of Things (IoT) pilots for the management of rural aqueducts and business infrastructure with remote measurement** in agreement with the company Telemetrik and the Aguas Regionales subsidiary in the aqueduct system of the Sucre district, Olaya municipality. This pilot was the first regional aqueduct with IoT technology in Colombia and received an honorable mention in the 2020 Portafolio Awards in the innovation category. Additionally, we installed an ultrafiltration plant that has improved the service in the subnormal neighborhoods of said Municipality.
In our business group, **digital transformation** is a reference of organizational transformation,

since it impacts the development of skills in human talent, the improvement of current technologies, the incorporation of technologies from the Fourth Industrial Revolution (4RI) and the development of agility and business innovation. In such a way that leverages efficiencies in current businesses, the redesign of internal transactions, the client's improvement experience and the development of new business lines.

By 2020 we increase the number of digital transformation teams focused on solving business challenges, which have generated minimum viable products in advanced analytics, client experience and cross-cutting digital components. Additionally, we define a digital strategy and teams called Virtual Centers of Excellence, which will be in charge of setting the path for the evolution of different key disciplines in the current and future context of EPM, in terms of intelligent automation of processes, agile practices and innovation, client experience and data science.

To be unconditional is to...
Visualize the present to grow in the future

Faced with the growth and management of the portfolio, we are analyzing the new market realities, therefore, as Grupo EPM we set out to **be a relevant player in the segment of renewable energy sources.** For this, within the framework of the alliance with Invenergy, we define challenges and goals in the medium term related to the construction of **NCRE projects between 400 and 500 MW,** capacity development to carry out generation projects with NCRE sources and the definition of a portfolio for commercialization and market supply.

In this sense, we actively participate in the worktables organized by the National Government, whose objective is to address the conditions of La Guajira. Within the framework of the **alliance for the development of NCRE sources between EPM and Invenergy,** we prioritized four projects: two from EPM -An Eolic park and a solar farm- and two from Invenergy -two solar farms-. For this, we continue with the projects to bring them to the ready-to-build state; Additionally, we jointly define a financial model for them.

For one of the prioritized projects, we were able to file in May, before the competent environmental authority, the environmental impact study required to obtain the environmental license. Regarding the marketing strategy, **long-term energy**

sales contracts were signed with large clients, for 7 and 15 years, and with some trading companies. In the management of the project portfolio, we received favorable connection concepts for two new solar farms in Santander, likewise, we made significant progress in the protocolization of Prior Consultation agreements with the communities of the EO200i Eolic park.

In **Small Hydroelectric Power Plants (PCH)** the main challenges are found in the implementation of competitive schemes, the strengthening of the project's portfolio in this segment and the beginning in the construction of the Santo Domingo Hydroelectric Project, contributing to the development of Eastern Antioquia in the municipalities of San Francisco and Cocorná, therefore, we highlight the approval by CORNARE of the modification to the environmental license for the construction of this project. We also made progress in the technical and environmental structuring of the Santo Domingo PCH and in search for an ally for its development. We also carry out the technical and environmental studies of the Guacaica, Minavieja and Miraflores PCHs.

To grow in the Solid Waste business, we have the challenge of participating, articulating, and aligning the waste business initiatives with the Comprehensive Solid Waste Management Plan (PGIRS) of Medellín and the 2020-2023 Development Plan. In order to do so, define the waste utilization model / recycling waste that Emvarias / EPM will implement.



Back to content

In this sense, during 2020 we strengthened the role of **Emvarias** as a relevant actor in the management of waste use with the creation **of worktables with recyclers** in Medellín. Additionally, we will focus on reinforcing **commercial management and technical capacity in Emvarias, we will guarantee the start-up of the pilot project for the use of Construction and Demolition Waste (RCD)** in 2021 and we will venture into the **clean points operation** to make the operation more efficient.

In order to contribute to better waste management and Solid waste recovery in Medellín, we carried out a pre-feasibility study in 2020 in which the most appropriate alternative was selected to advance to a feasibility phase.

It should be noted that within the focus of growth through **new business lines**, we invested COP 647 million in a consultancy that allowed us to build the proposed structuring **of the Mineral Dielectric Oil Renewal (RAD) business** and the execution of a market research **for the sale of water in Service Stations project.** Currently, we have a projection of the demand and the implementation proposal.

In our constant quest to be at the forefront, we analyze the global transformations that are taking place in the public services sector and the implications they have for the future of business. Therefore, in 2017 we developed a consultancy that yielded a series of recommendations on the new businesses and lines that should be integrated into EPM, as well as the action routes in the medium and long term to maximize the value of the Grupo EPM by 2025. Based on these recommendations, we are currently executing the following projects:

B2B B2C project (Business to Business - Business to Client): with which we seek to offer complete solutions in relation to household public services for homes, micro and small businesses, mainly, in energy equipment with installation, repairs and maintenance. We were gradually able to explore the market with the provision of more than 1,000 services with the providers Haceb and Dismogas, improving the value offer and mitigating risks. Our massive market launch is scheduled for May 2021, with which we expect to generate revenues of COP 55,000 million pesos and an EBITDA of COP 5,000 million by 2027.

Financing Project: In order to expand the portfolio of products and services related to home public services that will be financed through EPM and national energy subsidiaries, in November 2020 we launched into the market the new SOMOS loan in EPM, CHEC, EDEQ and ESSA. To give a greater scope to the implementation of the offer, the ViveSomos element was included. In this way, we strengthen the commercial capacities that will provide a greater participation in the national market and will allow us to achieve the projected ebitda of COP 81,000 million by 2027.

Additionally, we implemented a new credit granting tool that streamlines the process by taking advantage of digital transformation solutions. As a result, in the year we were able to link 31,488 Clients and users to the Somos credit, for an accumulated close to 280,000, thus reaching in the year a value in financed sales of COP 129,745 million and a total accumulated of COP 835,246 million since the beginning of the program in which 960,000 clients have registered.

To be unconditional is to...
Support the development of the EPM People for their well-being



Cultural Evolution, as a transversal dimension to the entire Organization, accompanied the learning, change and training process from the different culture mobilizers, and that is how we managed to overcome a challenging year and turn it into an inspiring year, where the EPM People were the most cared and valued asset.

In this sense, we continued with the development of the **Leadership School** with an attendance of 679 people. Regarding **ethical management,** we hosted the third meeting to commemorate the International Day Against Corruption and associated with the virtual course "Ethics begins with you" with the participation of 6,498 officials. We manage dissemination and awareness-raising actions for the activation of more than 200 promoters of ethical practices, the communication of ethical dilemmas by way of reflection and the dissemination of the organizational structure that the Organization has for ethical management.

Faced with **collaborative networks,** spaces that seek to strengthen relationships and consolidate cultural evolution within our company, we carried out 168 collaborative networks with the participation of 1,015 people, addressing issues related to inner leadership, diversity, the dimensions of the conversational capital, the value of the essential, and conversation as a builder of realities, among others.

In order to work for the labor inclusion of people with disabilities and seeking gender equality, we are advancing for the second year with the **pilot program for the inclusion of people with disabilities.** We accompany this group of collaborators to ensure their employability in EPM and in other companies; and we prepare the third cohort of new admissions for 2021. Additionally, we sponsored 25 people with physical and cognitive disabilities in the administrative assistant technique with the Sena, to prepare them for their access to the labor market.

Finally, since August 2019, we have carried out actions proposed by the methodology of the Equipares strategy of the Ministry of Labor and the UNDP, this management allowed us to receive **recognition as an Equipares company by the Presidency of the REpublic of Colombia.**



Back to content

External verification

Consult the certificate of the external verification of the figures of the 2020 Management Report that are part of the EPM 2020 Sustainability Report at: Independent review report.

The financial figures listed below were subject to external verification by KPMG, through its audit of the financial statements of EPM and Grupo EPM. The reports of the independent auditors are available at: EPM Certifications and Grupo EPM Certifications.

Financial information	Chapter and subchapter of the 2020 management report	Data subject to verification	Verified figure	Page
Financial results	**Grupo EPM** Unconditional is ... Growing together to generate value	Income Grupo EPM	At Grupo EPM, we achieved **revenues** of 19.8 billion COP, with an 8% growth compared to the previous period. Figures validated in substantive cross-tests in the consolidated financial statements.	45
	Grupo EPM Unconditional is ... Growing together to generate value	Grupo EPM profit for the period	**Grupo EPM's net income** was 3.7 billion COP, with a growth of 19%, equivalent to 584,942 million COP. Figures validated in substantive cross-tests in the consolidated financial statements	46
	Grupo EPM Unconditional is ... Growing together to generate value	Assets Grupo EPM	**Grupo EPM's assets** grew 16%, going from 54.9 billon COP to 63.7 billon COP. Figures validated in substantive cross-tests in the consolidated financial statements	47
	Grupo EPM Unconditional is ... Growing together to generate value	Liabilities Grupo EPM	**Liabilities** grew 19%, going from 30.7 billion COP to 36.6 billion COP. Figures validated in substantive cross-tests in the consolidated financial statements	47

Financial information	Chapter and subchapter of the 2020 management report	Data subject to verification	Verified figure	Page
Financial results	**Grupo EPM** Unconditional is ... Growing together to generate value	Equity Grupo EPM	**Equity** grew by 12%, going from 24.2 billion COP to 27.1 billion COP. Figures validated in substantive cross-tests in the consolidated financial statements	47
	EPM Unconditional is ... Growing together to generate value	Income EPM	EPM at the end of 2020 reached **revenues** of 9.9 billion COP. Figures validated with substantive and cross tests against separate financial statements	79
	EPM Unconditional is ... Growing together to generate value	Results for the period EPM	At the end of 2020, EPM achieved **results for the year** of 2.5 billion COP. Figures validated with substantive and cross tests against separate financial statements	79
	EPM Unconditional is ... Growing together to generate value	Assets EPM	**Total assets** amounted to 53.3 billion COP. Figures validated with substantive and cross tests against separate financial statements	79
	EPM Unconditional is ... Growing together to generate value	Equity EPM	**Equity** in 26.4 billion COP. Figures validated with substantive and cross tests against separate financial statements	79
	EPM Unconditional is ... Growing together to generate value	Liabilities EPM	**Liabilities** 26.9 billion COP. Figures validated with substantive and cross tests against separate financial statements	79

Corporate Governance Report

Grupo·epm

Presentation

Back to content

Presentation

EPM, in its role as parent company of the Grupo EPM, annually prepares a Corporate Governance Report that is presented to the EPM Board of Directors with the other year-end documents, after a favorable review and report from the Audit Committee. **Country Code 33.1, GRI 102-32**

Grupo EPM understands corporate governance as the system by which companies are directed, managed and controlled by balancing ownership and administration, in order to guarantee their sustainability and growth, the rights of their investors, transparency and ethics in its performance and access to information for its stakeholders. Corporate governance is relevant for the Grupo EPM because it allows to evidence management in accordance with the business philosophy, it leverages the achievement of strategic objectives and generates trust in stakeholders and in society.

This report gives an account of the monitoring of the main corporate governance practices, as well as the progress and changes that occurred during 2020, and is a sample of EPM's commitment to transparency and the disclosure of information to its stakeholders. **Country Code 33.2, 33.3**

As a consequence of the change in municipal administration in Medellín, during 2020 there were movements in EPM's governing bodies (ownership, direction and management), which always represent great challenges for corporate governance; some of the main changes occurred in the presidency of the Board of Directors, in the filling of two vacancies on the Board of Directors and the replacement of one of its members, the General Manager and some members of the team of vice presidents; subsequently, on August 11, 8 members of the Board of Directors resigned, which led to the appointment of new members of the Board of Directors by the Mayor of Medellín.

EPM's corporate governance is not immune to the effects of the transitions that are taking place in the world in the concepts of governance. There is a growing demand for leaders to act with awareness of the impacts generated by each of their actions and decisions and to seek that the general interest always prevails over the particular interest.

Maintain the balance between the governing bodies of the company (owner, represented by the Mayor of Medellín, Board of Directors and General Manager), to guarantee the stability of the system of checks and balances, so that each body adequately exercises the rights, decisions and responsibilities that have been assigned within the governance structure, ACCORDING TO the corresponding level (ownership, direction, management); and that there are appropiate information flows between sai bodies, tpowards the entireorganization and towards its stakeholders, in order to guarantee transparency and disclosure of information;

they will be one of the great challenges of corporate governance in EPM, to generate trust and maintain a long-term vision in the strategic direction and in the plans, programs and projects of the Company.

All of this contributes to the sustainability of the Organization, which is the COMMON interest of its governing bodies, its stakeholders and society in general, as well as to guaranteeing quality, continuity and coverage in the provision of domiciliary public services in the territories where the Grupo EPM has a presence, having as a pillar the ecosystem purpose of "Contribute to the harmony of life for a better world".

Grupo EPM Corporate Governance Code

EPM's Board of Directors approved the update of the Corporate Governance Code and its annexes through Decree 472 of September 24, 2019; subsequently, through Decree 481 of January 13, 2020, it approved the modification of subparagraph "4.3 First-level executives with direct report to the General Manager."

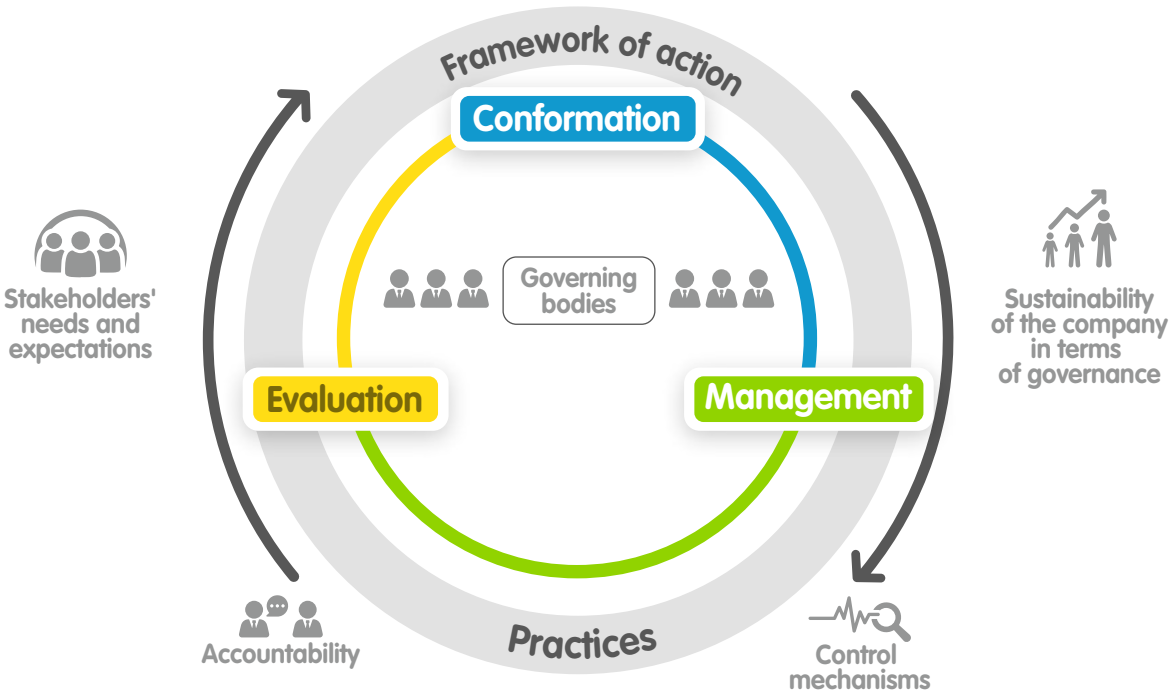
The Code compiles and discloses the practices that are defined and implemented in EPM in matters of corporate governance and are adopted by the subsidiaries of the business group ACCORDING TO their internal procedures, adapting them to the standards and particularities that apply to each company of the EPM Group.

In 2020, 8 Colombian subsidiaries approved the new Corporate Governance Code in their respective Boards of Directors.

EPM has concentrated its efforts on the implementation of the General Framework of Corporate Governance of Grupo EPM, which is the set of elements that INTERACT to strengthen corporate governance, promoting unity of purpose and direction through the implementation of a model aligned with the strategic direction defined for the business group.

This model is based on the governing bodies, the definition of their Framework for Action through governance practices, control mechanisms and accountability (see Annex 1:General Framework of the Corporate Governance of Grupo EPM).

Corporate governance planning



Verification of corporate governance

General Framework of Corporate Governance.

Compliance with the Code

Subparagraph "9.2 Annual Corporate Governance Report of Grupo EPM" establishes, among other things, that EPM will issue a report in which, in addition to disclosing data related to the content of the Code, it will indicate its degree of compliance. The degree of compliance with the Corporate Governance Code is published on the EPM website, which you can check here.

Ownership structure of EPM

Back to content

EPM ownership structure

EPM is an official entity of DOMICILIARY Public services, constituted as a State Industrial and Commercial Company, of the municipal order, subject to the legal regime that regulates the provision of DOMICILIARY Public services, established in Act 142 of 1994.

The Municipality of Medellín is the SOLE owner of EPM.



La Alpujarra Administrative Center

The relationship with the Municipality of Medellín, in its capacity as owner, respect for the autonomy granted by administrative decentralization and internal regulations are contained in the Framework Relations Agreement signed in 2007 between the Mayor's Office of Medellín and EPM. The powers of the Medellín Council in relation to EPM are defined in the Company's Bylaws and in Colombian law.

The Mayor of Medellín, in his capacity as representative of the owner, exercises the property exclusively through the Board of Directors of EPM, in his role as President of the same, by virtue of the provisions of the Framework Relations Agreement. By legal provision and the Company's Bylaws, the Mayor of Medellín appoints the General Manager and appoints the members of the Board of Directors.

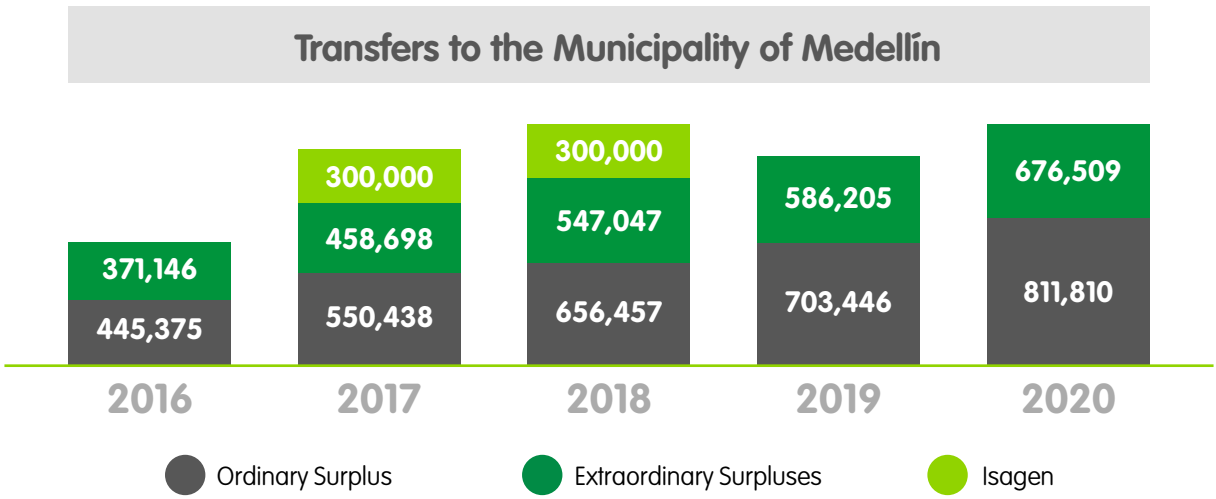
As of January 1, 2020, Mr. Daniel Quintero Calle took office as Mayor of Medellín, and therefore as representative of the owner of EPM.

Transfers to the Municipality of Medellín

Municipal Agreement No. 69 of 1997 of the Council of Medellín establishes that EPM must transfer annually, in an ordinary way, up to 30% of the profit. However, the Relations Framework Agreement allows additional transfers to be decreed, considering both the financial requirements of the Municipality for specific investment programs and the financial sustainability of EPM. Additional transfers must be authorized by the Medellín Council.

In 2020 EPM delivered to the Municipality transfers equivalent to COP 1,488,319 million, of this amount COP 811,810 million were ordinary corresponding to 30% of the profits of the year 2019 and COP 676,509 million as extraordinary corresponding to 25% of the profits.

The following graph shows the transfers for the LAST five years:



Ordinary and extraordinary transfers between 2016 - 2020 to the Municipality of Medellín (value in millions of COP).

Note: *transfers for Isagén are given in ACCORDANCE WITH the provisions of the Medellín Council in Agreement No. 032 of June 5, 2017, in relation to the transfer of an item of EPM's assets, product of the sale of the EPM's shareholding in Isagén SAESP, to the general budget of Medellín distributed in fiscal periods 2017 and 2018, for a value that amounts to COP 600,000 million of the total obtained in the transaction, which amounted to COP 1.4 trillion.*

Ordinary and extraordinary transfers between 2016 - 2020 delivered to the Municipality of Medellín amounted to COP 6,407,132 million (COP 3,167,527 for ordinary and COP 3,239,605 for extraordinary.)

Framework Agreement for EPM Relations - Municipality of Medellín

In the Relations Framework Agreement, signed between EPM and the Municipality of Medellín in 2007, the obligations of both parties are agreed through self-regulations that define the exercise of property and business management, while the COMMON objective of the two entities to generate business management conditions in EPM that improve the generation of value for its stakeholders and make it viable as a growing and sustainable source of income for the city of Medellín.

In this agreement the principles of the owner-company relationship are determined. These principles go beyond the legal conditions that both entities must comply with, becoming self-regulations that limit the exercise of property and business management. In this way, a system of counterweights is generated that establishes responsibilities and self-limitations for each of the parties.

The provisions of this agreement are a clear example that corporate governance is a key factor in competitiveness and business sustainability, which contributes to the proper balance in the exercise of ownership, direction and management (see Annex 2:Context on the Framework Relations Agreement).

EPM's self-evaluation of compliance with its obligations established in the Framework Agreement

The following is a detail of the self-assessment carried out by EPM of the fulfillment during the year 2020 of its obligations:

	Obligation	Management
Compliance with financial management indicators	Carry out efficient and productive financial management, based on technical criteria and reflected in minimum EBITDA criteria, profitability of equity and other financial indicators. The Board of Directors will define the indicators annually, based on the strategic plans and the budget, for the time horizons agreed upon therein.	Financial indicators are part of the Balanced Scorecard (CMI), a mechanism through which the performance of the business group's strategy is periodically monitored. The CMI in turn is part of Grupo EPM's business plan and strategic plan, which are approved by the Board of Directors. Monitoring of the CMI is periodically presented to the Board of Directors.
Transfers to the Municipality	Transfers may only be greater than 30%, considering financial requirements of the Municipality for specific investment programs and financial needs of EPM, so as not to jeopardize business viability or its expansion. Additional transfers must be authorized by the Council, with prior support from the Mayor of the effects on EPM's finances.	See Transfers delivered to the Municipality in the chapter on EPM ownership structure in this report.
Settlement of transfers	The plan to carry out the transfers must consult the cash requirements of the Municipality and the availability of liquid resources of EPM. In this way, adequate cash management will be carried out in both entities.	The surpluses to deliver to the Municipality of Medellín are defined ACCORDING TO what is established in the EPM Bylaws: Ordinary surpluses correspond to 30% of the net profit of the previous year and extraordinary surpluses have corresponded to a maximum of 25% of the net profit of the previous year. Based on the above, the current projection of the surpluses to the Municipality corresponding to 55% of the profit of the previous year, contemplates the fulfillment of the legal and statutory requirements and the monitoring of the liquidity of the company with which the resources are guaranteed for the normal operation of the businesses and the execution of the infrastructure investment plan, in order to continue providing quality public services. In this way, the obligation to properly manage cash management in EPM is fulfilled.
Communication Mechanisms	For the owner-decentralized entity relationship, the conduit is: Mayor - Board of Directors - EPM Management. For the other relationships: Private Secretary of the Municipality and External Relations Management of EPM.	The communication channel in the owner-company relationship has been: Mayor -> Board of Directors and its committees Mayor -> EPM Management Mayor's Office -> directly with some vice presidencies Formal procedures and requests are channeled through EPM's External Relations Management (VP of Communication and Corporate Relations).

	Obligation	Management
Commitment to transparency with the community	Contractual processes under principles of transparency, impartiality and objectivity, in an environment of free competition, applying the regime of inabilities and incompatibilities. Invite the presentation of offers through the corporate information system.	- Decree 362 of 2014 of the Board of Directors by which the general contracting regulations are issued. - Policy for the supply of goods and services approved by the Board of Directors in December 2014. - Application of the declaration of transparency of servers. See Compliance chapter in this report.
	Define profiles and competencies for the servers, which will be strictly verified in the selection processes.	EPM has defined the Positions Manual. It is available on the corporate intranet and is the input for the selection processes.
	Have mechanisms for communication and dissemination of information to the public related to the hiring and selection processes.	EPM publishes the selection and hiring processes on its website, at the following links: **Job offers:** https://www.epm.com.co/site/home/nuestra-empresa/ofertas-de-empleo **Contractual processes for suppliers and contractors:** https://cu.epm.com.co/proveedoresycontratistas/contratacion/te-cuento
Permanent External Audit	Permanent External Auditor hired ACCORDING TO the Audit Committee guidelines. He will not be able to provide different services within the entity and his contract will be no longer than 3 years. It will be ensured that the External Auditor is the same for all the companies that make up the EPM Group.	See Compliance chapter in this report.
Corporate social responsibility	Formulate and develop CSR policies, especially with actions aimed at the most vulnerable population and taking into account the following criteria: - Activities circumscribed in the corporate purpose and aligned with the strategic objectives. - Actions that do not compromise financial viability. - CSR model incorporated into the strategic framework, keeping the sustainability of the Company as a central objective and taking into account the commitments of the Global Compact.	The Sustainability and CSR Model is an integral part of the EPM Group's Strategy dimension, approved by the Board of Directors. Likewise, this model in the Grupo EPM is based on an ethical conviction and is materialized in events that add value to stakeholders and to the Company. The CSR policy was approved by the EPM Board of Directors on September 1, 2009.
Provision of with human resources	Provide, with its servers, support to the Municipality under special circumstances, formalized through agreements in which the resource is expressed, the time required and the consideration.	A professional B of Project Management and Engineering of the Water, Sanitation, Gas and Locative Projects Management 2, is on commission in the Municipality of Medellín from March 16, 2020 and until March 16, 2022.

Public Accountability

Aware that the citizens of Medellin are ULTIMATELY the owners of EPM, as a practice of transparency and in compliance with the constitutional and legal provisions, EPM annually its Public accountability to publicize the main achievements and challenges of business management and its articulation with stakeholders.



Public Accountability 2020

The Public rendering of accounts was held on May 7, 2020, a 100% virtual event due to the confinement situation due to COVID-19 and was televised on the regional channels Tele Medellín and Teleantioquia.

The EPM management issues addressed in this space were the following:

Management Report 2019

- Strategic targeting
- Services to our clients and users
- Environmental management
- Project development
- Innovation Management
- Operation of our businesses
- Information technology
- Suppliers and contractors
- People Grupo EPM
- Corporate Governance
- EPM Foundation
- Financial results
- Integrated Planning and Management Model - MIPG
- Awards and distinctions

Balance 100 first days 2020

- **Focus 1:** Services of the future in the framework of smart cities and the fourth industrial revolution
- **Focus 2:** City / Region
- **Focus 3:** Growth / Portfolio Management
- **Focus 4:** : Socio-economic benefits of public services
- **Focus 5:** Optimization of operations
- **Focus 6:** Ituango Hydroelectric Project
- **Focus 7:** CaribeMar
- **Focus 8:** Cultural evolution
- Other relevant management events

Structure of EPM administration

Back to content

EPM administration structure

Critical Concerns

GRI 102-33 102-34

For the purposes of this report, critical concern is understood to be an event that imposes challenges to the governing bodies in their management and has a reputational impact.

In 2020, the main critical concerns were:

- Resignation of 8 of the 9 members of the EPM Board of Directors on August 11.

  In order to restore this administrative body, the Mayor appointed the Board of Directors, which is currently in office. This implied a total renovation of this governing body.

  As a consequence of the indicated corporate governance situation, MULTIPLE requests from the Superintendency of RESIDENTIAL Public Services, the Financial Superintendency, surveillance entities, investors, creditors, councilors, congressmen, oversight bodies, unions and other interest groups were met. Given the great demand for information, a commission was created with the function of reviewing and guiding the different requests that were received.

  Likewise, the Corporate Audit Vice Presidency carried out an Internal Audit whose general objective was: to evaluate the management carried out by the Company to face the impact on the risks of the Grupo EPM generated by the current situation of corporate governance.

- Presentation of requests for extrajudicial conciliation before the Delegate Attorney's Office before the Administrative Court of Antioquia, in which he summoned the contractors of the Ituango Hydroelectric Project and the insurance companies, in order to claim the damages derived from the contingency in the Ituango Hydroelectric Project, started on April 28, 2018.

  In 2021, after the conciliations had been declared failed, the corresponding lawsuits were filed.

EPM Board of Directors

The management of EPM is in charge of the Board of Directors, by virtue of the provisions of the Company's Bylaws.

Formation of the Board of Directors

Country Code 33.3 – ii. a); GRI 102-18 102-22

Conformation of the Board of Directors from January 1 to August 11, 2020

At the beginning of the 2020 term, the Board of Directors had two vacancies due to the resignation of members Claudia Jiménez Jaramillo and Carlos RAÚL Yepez Jiménez as of December 31, 2019. Through Decrees 0090 of January 24, 2020 and 0091 of January 27, 2020, the Mayor of Medellín appointed in their replacement, as members of the Board of Directors of EPM, Messrs. Jesús Arturo Aristizábal Guevara and Luis Fernando Álvarez Jaramillo, respectively.

On March 10, 2020, through Decree 0329, the Mayor elected Mr. Oswaldo León Gómez Castaño from the list of control members, and appointed him a member of the EPM Board of Directors to replace the also control member, Mr. Alberto Arroyave Lema.



Daniel Quintero Calle
President *(Not independent)*
Profile: *Mayor of Medellin*
Start: *01/01/2020*
Participation in other Boards: 3



Elena Rico Villegas
Controlling Member *(Independent)*
Profile: *Management of Public services*
Start: *1/26/2016*
Participation in other Boards: *0*



Andrés Bernal Correa
Independent
Profile: *Business and financial*
management Start: *06/02/2012*
Participation in other Boards: *3*



Gabriel Ricardo Maya Maya
Control Member *(Independent)*
Profile: *Legal*
Start: *02/22/2008 **
Participation in other Boards: *3*



Manuel Santiago Mejía Correa
Independent
Profile: *Business and financial*
management Start: *4/30/2012*
Participation in other Boards: *3*



Javier Genaro Gutiérrez Pemberthy
Independent
Profile: *Public services*
Start: *3/9/2016*
Participation in other Boards: *1*



Luis Fernando Álvarez Jaramillo
Independent
Profile: *Legal*
Start: *27/01/2020*
Participation in other Boards: *1*



Jesús Arturo Aristizábal Guevara
Independent
Profile: *Project management and Public services*
Start: *1/24/2020*
Participation in other Boards: *6*



Oswaldo León Gómez Castaño
Control Member *(Independent)*
Profile: *Social and solidarity management*
Start: *10/03/2020*
Participation in other Boards: *6*



Alberto Arroyave Lema
Controlling Member *(Independent)*
Profile: *Control and social participation*
Start: *25/02/2008***
Participation in other Boards: *3*

** Mr. Gabriel Ricardo Maya Maya was also a member of the Board of Directors from January 30, 2004 to January 16, 2006.*
*** Mr. Alberto Arroyave Lema was a member of the Board of Directors until March 9, 2020.*

Until August 10, 2020, the Board of Directors was made up of: Daniel Quintero Calle, Elena Rico Villegas, Andrés Bernal Correa, Gabriel Ricardo Maya Maya, Javier Genaro Gutiérrez Pemberthy, Jesús Arturo Aristizábal Guevara, Luis Fernando Álvarez Jaramillo, Manuel Santiago Mejía Correa and Oswaldo León Gómez Castaño.

On August 11, 2020, the members of the Board of Directors: Elena Rico Villegas, Andrés Bernal Correa, Gabriel Ricardo Maya Maya, Javier Genaro Gutiérrez Pemberthy, Jesús Arturo Aristizábal Guevara, Luis Fernando Álvarez Jaramillo, Manuel Santiago Mejía Correa and Oswaldo León Gómez Castaño, resigned from the Board of Directors of EPM.

Conformation of the Board of Directors as of August 25, 2020

The new Board of Directors was made in full on 25 August 2020 by the Mayor of Medellin and was informed EPM by sending the decrees appointing as follows: Mr. Jorge Iván Palacio Palacio and Omar Flórez Vélez, through Decree 0785 of the August 17, 2020; Pablo Felipe

Robledo Del Castillo, by Decree 0801 of August 21, 2020, and Messrs. Jorge Andrés Carrillo Cardoso, Bernardita Pérez Restrepo, Guillermo León Diosa Pérez, Gildardo Antonio Correa Salazar and Olmer Orlando Palacio Garzón, by Decree 0806 of August 25 2020.



Daniel Quintero Calle
President *(Not independent)*
Profile: *Mayor of Medellin*
Start: *1/1/2020*
Participation in other Boards: *3*



Jorge Iván Palacio Palacio
Independent
Profile: *Public and legal management*
Start: *8/17/2020*
Participation in other Boards: *0*



Pablo Felipe Robledo del Castillo
Independent
Profile: *Public and legal management*
Start: *8/21/2020*
Participation in other Boards: *0*



Bernardita Pérez Restrepo
Independent
Profile: *Public and legal management*
Start: *8/25/2020*
Participation in other Boards: *2*



Omar Flórez Vélez
Independent
Profile: *Public and legal management*
Start: *8/25/2020*
Participation in other Boards: *0*



Jorge Andrés Carrillo Cardoso
Independent
Profile: *Public ADMINISTRATION, Public and environmental services*
Start: *8/25/2020*
Participation in other Boards: *0*



Gildardo Antonio Correa Salazar
Control member *(Not independent)*
Profile: *Social and community management and public services*
Start: *8/25/2020*
Participation in other Boards: *0*



Olmer Orlando Palacio Garzón
Control Member *(Independent)*
Profile: *Social and community management and public services*
Start: *8/25/2020*
Participation in other Boards: *0*



Guillermo León Diosa Pérez
Control Member *(Independent)*
Profile: *Social and community management, Public and environmental services*
Start: *8/25/2020*
Participation in other Boards: *0*

Composition of the Board of Directors

- The Mayor of the city of Medellín, who presides over it.
- Five people freely designated by the Mayor of Medellín, all of them independent.
- Three people chosen by the Mayor of Medellín from among the control officers registered by the development and social control committees of home Public services (Article 27.6 of Act 142 of 1994). **Country Code 33.3 – ii. f); GRI 102-24**

EPM's Board of Directors has maintained a NUMBER of independent members (higher than the 25% required by Article 44 of Act 964 of 2005 for issuers of securities and 55.6%, defined in internal regulations). Currently seven of the nine members of the Board of Directors are independent (78% of the total).

EPM's Corporate Governance Code indicates the criteria that the Mayor must consider for the appointment of the members of the Board of Directors: **GRI 102-24**

- Professional academic training and in subjects related to the corporate purpose of EPM and with the functions of a member of the Board of Directors.
- Business or work experience related to the public services SECTOR.
- For the control members, evidence is required of the length of stay in the Development and Social Control Committee that elected them, the relationship they have with it, and the actions they have taken to carry out their duties.

The relationship of the Board of Directors with the users of the DOMICILIARY Public services is fulfilled through the participation of the control members in the collegiate body. In this way, the constitutional precept of citizen participation in the management and supervision of the Company as an entity that provides home Public services is materialized. Likewise, in the Board of Directors, the control members represent the interest groups, clients and users, the community and, in some cases, the suppliers and contractors. **GRI 102-21 102-22**

In order that the strategic direction, policies and guidelines set by the Board of Directors have continuity and do not generate negative effects for the operation of the Company as a result of changes in municipal administration, and to preserve the level of knowledge and experience acquired by the members of the Board of Directors, for their composition, by virtue of the Relations Framework Agreement, the Mayor of Medellín will endeavor to

maintain at least (5) of the independent members. Additionally, he will promote a gradual renewal of the members of the Board of Directors, which consult its profile, as well as the target average AGE of its members.

Thus, for the conformation of the Board of Directors that served between January and August 2020, the criterion of gradual renewal, established in the Corporate Governance Code, was met, since ONLY 2 vacancies were filled by resignation and one of Its members, 5 of the independent members remained, of them 44% had a permanence between 4 and 7 years, and 33% a permanence of more than 7 years. The current Board of Directors had a total renovation, except its president, after, on the occasion of the resignation of 8 of its 9 members, the Mayor appointed 8 new members.

The members of the Board of Directors who are independent have this quality from the date of their appointment. In accordance with the provisions of the Corporate Governance Code, those persons who are:

- Employees or directors of the Company or of any of its affiliates, subsidiaries or controllers, including those persons who have had such capacity during the LAST 5 years immediately prior to the appointment, except in the case of the re-election of an independent person. **Country Code 33.3 – ii. d); GRI 102-22**
- Partners or employees of associations or companies that provide advisory or consulting services to EPM or to the companies that belong to the business group, when the income from such concept represents 20% or more of their operating income.
- Employees or directors of a foundation, association or society that receives contributions or sponsorships from the Company.
- People who receive from EPM any remuneration other than fees as a member of the Board of Directors, the Audit Committee or any other committee created by the Board of Directors.
- Office Secretaries, employees of the Municipality of Medellín or of any of the entities controlled, attached or linked to it, or that have been during the LAST 5 years, before their appointment.
- Administrators of an entity in whose board of directors EPM participates.
- People who depend exclusively on the income received from fees as members of the Board of Directors of EPM.
- Family members of any person who is or has been employed in the LAST three years by the Company or its subsidiaries as an executive.
- Advisor or employee of a company that advises the Company or one of its members of Senior Management.

- Supplier or significant customer of the Company.
- People who have signed contracts for personal services with the Company, or with a board member of the same.
- Partner or employee of the Company's External Audit firm for the LAST three years.

The above independence criteria consult the provisions of Act 964 of 2005 (Article 44), the Framework Relations Agreement and good corporate governance practices.

The members of the Board of Directors are subject to the disability and incompatibility regime established by law, in accordance with Article 9 of the Bylaws.

Profiles of the members and characteristics of the composition of the Board

The characteristics of the Board of Directors, in terms of training, experience and trajectory of its members, the diversity of perspectives and gender and participation in other boards, are factors that contribute to adequate strategic decision-making.

Profile matrix of the members of the Board of Directors
By "profile" is understood the area of knowledge in which there is training or experience
(Meeting from January 1 to August 11, 2020)

Training and / or experience / Board Member	Daniel Quintero Calle	Andrés Bernal Correa	Jesús Arturo Aristizábal Guevara	Javier Genaro Gutiérrez Pemberthy	Manuel Santiago Mejía Correa	Luis Fernando Álvarez Jaramillo	Elena Rico Villegas	Gabriel Ricardo Maya Maya	Oswaldo León Gómez Castaño	Alberto Arroyave Lema
Business management with an emphasis on international business.	X	X		X			X			
Financial management.	X	X		X	X		X			
Management of home Public services or other sectors of EPM's business including urban development.			X	X			X	X	X	X
Ethics, sustainability and corporate social responsibility.		X		X	X					
Public management or legal management.	X		X	X	X	X	X	X		

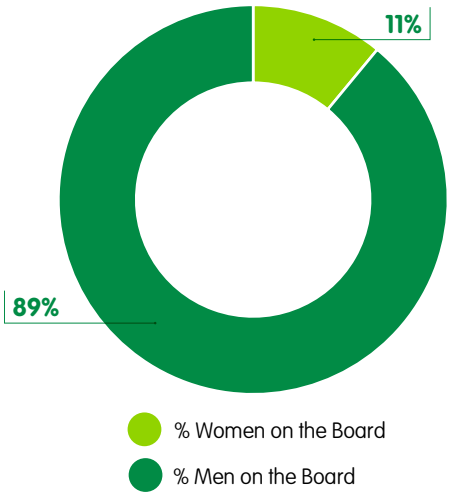
Profile matrix of the members of the Board of Directors
By "profile" is understood the area of knowledge in which there is training or experience (Board as of August 25, 2020)

Training and / or experience / Board Member	Daniel Quintero Calle	Jorge Iván Palacio Palacio	Bernardita Pérez Restrepo	Pablo Felipe Robledo del Castillo	Jorge Andrés Carrillo Cardoso	Omar Flórez Vélez	Guillermo León Diosa Pérez	Gildardo Antonio Correa Salazar	Olmer Orlando Palacio Garzón
Business management.	X					X			
Financial management.	X								
Management of home Public services or other business sectors of EPM including urban development and social control of public services.					X		X	X	X
Ethics, sustainability and corporate social responsibility.					X		X		
Public management or legal management.	X	X	X	X	X	X	X		
Social and community management.								X	X

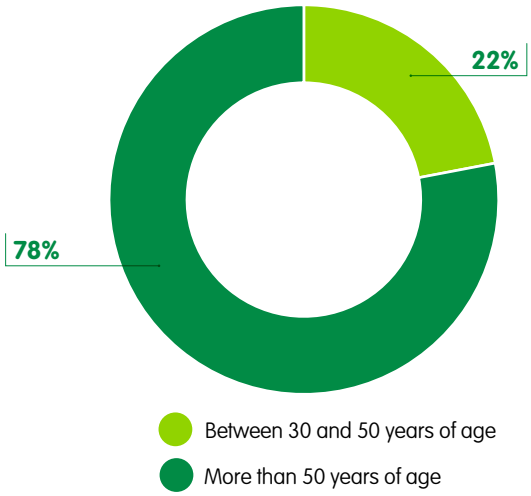
The details of the resume of the members of the Board of Directors can be found at the end of this report (see annex 3:CV members of the Board of Directors). **Country Code 33.3 – ii. b); GRI 102-22**

Board of Directors from January 1 to August 11, 2020

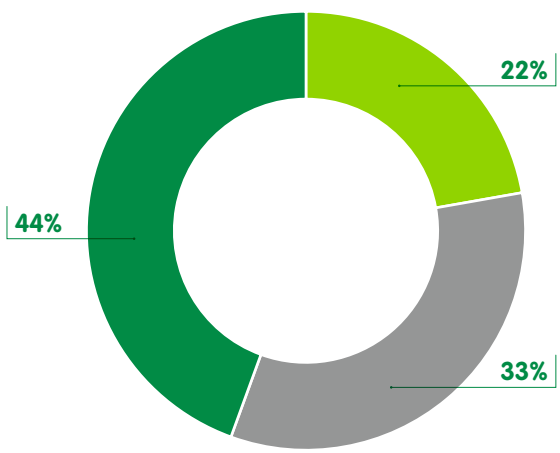
Distribution by gender



Distribution by age range



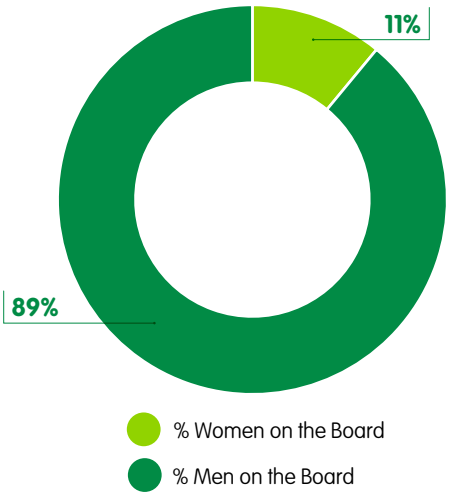
Distribution by range of time spent on the Board of Directors



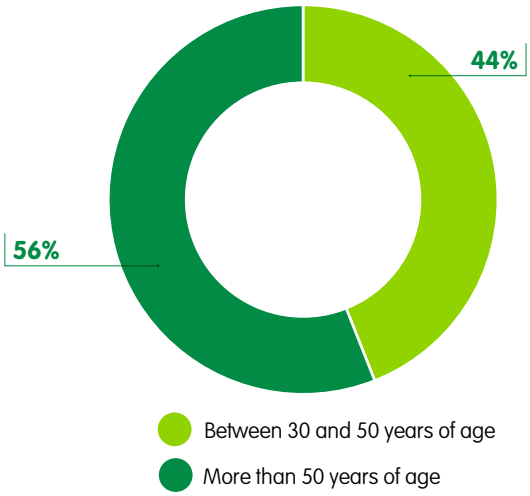
Back to content

Board of Directors as of August 25, 2020

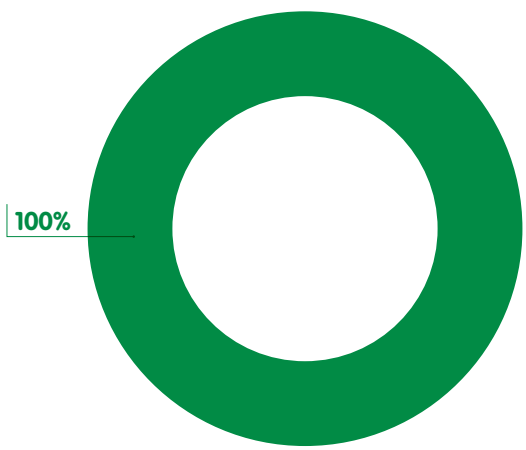
Distribution by gender



Distribution by age range



Distribution by range of time spent on the Board of Directors



Induction of the Board of Directors

During 2020, the induction program to the Board of Directors was executed in two cycles, due to the changes in its composition. This program aims to:

- Provide context to the new members of the Board of Directors on EPM and the business group, in addition to the corporate governance practices that facilitate the exercise of their role.
- Generate spaces for conversation between the Board of Directors and the Administration, which allow to align expectations in relation to the management of the company and the exercise of their roles.
- Address concerns about specific topics that arise during the development of each induction session.

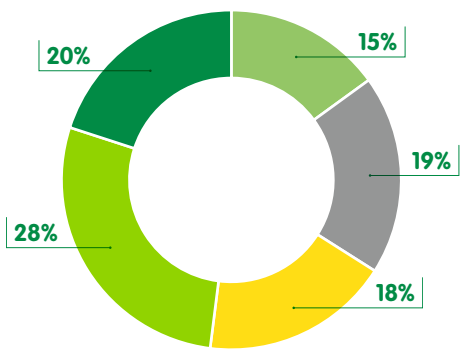
The first induction cycle was directed to Luis Fernando Álvarez Jaramillo, Oswaldo León Gómez Castaño and Jesús Arturo Aristizábal Guevara. Below are the main statistics:

First cycle

Scheduled		Executed	
6 Sessions	23 Hours	5 Sessions	16 Hours 25 Minutes

- 2 months of induction (July and August).
- The fulfillment of the planned time was 71%.
- Average total attendance was 87%.
- The context of strategic direction was programmed in the August session of the Board of Directors.
- The presentation of the Gas, Transmission and Distribution, Energy and Water and Sanitation vice presidencies (which includes Solid Waste), were scheduled in accordance with what is defined in the typical agenda of the Board of Directors.

Distribution of total time according to the topics presented in the sessions



- Presentation of the induction program, General Framework of Corporate Governance of the Group and regulatory framework associated with the Board of Directors
- Relevant issues for the management of the Board of Directors
- General introduction to the Company and the EPM Group, strategy and planning
- Regulatory framework and business cycle
- Business cycle and support process

** Due to the news in the formation of the Board, a session corresponding to the cycle of support processes and the evaluation of the induction program was pending.*

The second induction cycle was addressed to the new Board members, Mrs. Bernardita Pérez Restrepo and Mr. Jorge Iván Palacio Palacio, Pablo Felipe Robledo del Castillo, Omar Flórez Vélez, Jorge Andrés Carillo Cardoso, Gildardo Antonio Correa Salazar, Olmer Orlando Palacio Garzón, Guillermo León Diosa Pérez.

The induction plan was presented at the August Board session and was structured in 3 stages that included the presentation of the Group's General Corporate Governance Framework, the regulatory framework associated with the Board of Directors, context information for the management of the Board of Directors, prioritized and relevant issues for the continuity of the Company's management, business cycle and its regulation, new businesses, innovation, technology and support processes.

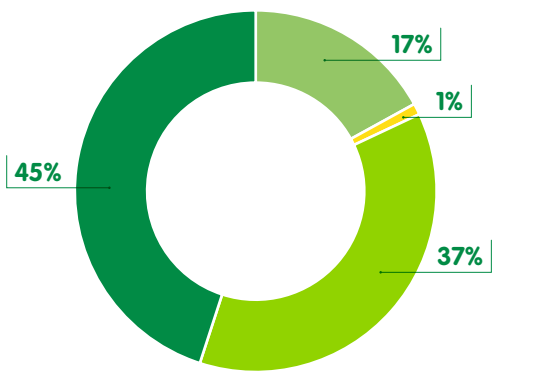
During 2020, it was possible to complete the prioritized topics in the first stage and progress was made in the second, in 2021 the pending sessions will be held to allow the conclusion of the program. Below are the main statistics:

Second cycle

Scheduled		Executed	
5 Sessions	45 Hours 50 Minutes	9 Sessions	43 Hours 50 Minutes

- 2 months of induction (August and September).
- The fulfillment of the planned time was 96%.
- Average total attendance was 98%.
- An exhaustive agenda has been developed that has required more time, consequently by 2020 the first stage was completed and progress was made in the second, during the year 2021 pending issues will be addressed to finalize the program.

Distribution of total time according to the topics presented in the sessions



** Within the category prioritized, relevant topics and contextual information for the Board, the general induction to the Company and the Grupo EPM is included, as well as strategy and planning.*

At the end of the proposed schedule, the evaluation of the induction program will be applied.

Board of Directors Quorum

Country Code 33.3 – ii. i)

The deliberative quorum for the sessions of the Board of Directors is formed with the majority of its members.

The decision-making quorum corresponds to the majority of those present in the respective session. For decision-making purposes, each of the members of the Board of Directors has one vote.

Management of the Board of Directors

The functions of the Board of Directors are defined in article 17 of the Bylaws, contained in Agreement 12 of 1998 of the Medellín Council. Regarding contracting, the Board of Directors is responsible for issuing the general regulations and indicating the amounts within which the General Manager can delegate the competence to award and enter into contracts. **GRI 102-19**

In accordance with the Internal Regulations of the Board of Directors, the main functions of the President include the following: **GRI 102-26**

- Appoint and remove its members freely.
- Ensure that the Board of Directors sets and efficiently implements the strategic direction of the Company.
- Coordinate and plan its operation through an annual work plan.
- Be a spokesperson for the Board of Directors and delegate said responsibility when deemed necessary.
- Ensure the execution of the agreements and the fulfillment of the responsibilities and participation of all its members.
- Lead the evaluation process of the Board and its committees.
- Promote active coordination between the Company and issues of interest to the city of Medellín, in compliance with what is defined in the Relations Framework Agreement, and ensure compliance with the Regulations of the Board of Directors. **Country Code 33.3 – ii. k); GRI 102-23**

The Secretary of the Board of Directors, who according to the Bylaws is also the Secretary General of EPM, has among his main functions the following:

- Make the summons to meetings.
- Give timely processing to the requests of the Board of Directors.
- Prepare the minutes of the sessions and sign them jointly with the President.
- Ensure the preservation of the documents of the Board of Directors and the legality of their actions.
- Define the procedure for the effective development of the sessions of the Board of Directors. **Country Code 33.3 – ii. l)**

Article 8 of the Regulations of the Board of Directors details the procedure to be followed by the areas of the Organization to bring matters within their competence to the Board of Directors, among the main steps are the following: **GRI 102-33**

- At the Management Committee meeting the week after the Board of Directors session, the issues that will be presented for consideration by the Board of Directors in the next session and the person responsible for presenting each issue and the time they will have to do it are defined.
- All approval issues that will be submitted to the Board of Directors for consideration will be previously analyzed by a Strategic Committee of the Organization (Management or CORE), as well as by a Committee of the Board of Directors, in accordance with the respective regulations.
- On the first business day of the week prior to the meeting of the Board of Directors, the documents, presentations, studies and annexes that will serve as support for the presentation of the topics will be delivered to the General Secretariat.

Outstanding actions of the Board of Directors in 2020

GRI 102-29 102-31

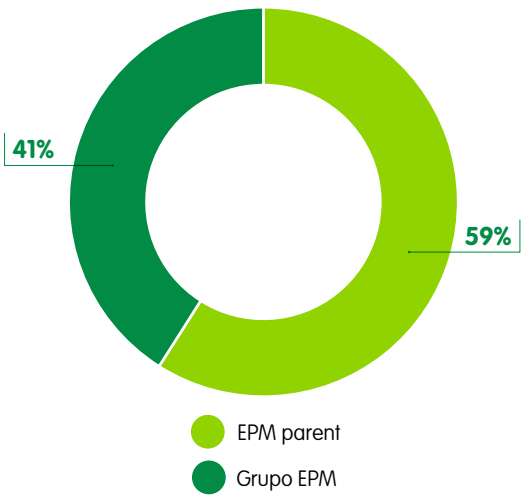
- Approval of the typical agenda of the Board of Directors and annual calendar for the year 2020.
- Approval of the modification of subparagraph 4.3 of the Corporate Governance Code.
- Approval of the adjustment to the structure of the Organization. The creation of dependencies with managerial-level positions is noteworthy, such as the General Secretariat, in charge of corporate governance management, the Vice Presidency of Risks, the Executive Vice Presidency of New Businesses, Innovation and Technology, and the Vice Presidency Strategy and Planning. Likewise, the structure of the Executive Vice Presidency of Finance and Investments was modified, to eliminate the functions related to risk management and of the Vice Presidency of Human Talent and Organizational Development, to eliminate the functions associated with information technology.

- Approval of short and long-term financing alternatives for EPM in the face of the COVID-19 situation.
- Monitoring of the development of the necessary actions to overcome the contingency of the Ituango Hydroelectric Project.
- Monitoring of EPM's businesses and the performance of its subordinates.
- Approval of the creation of the Relationship Committee.
- Approval of modifications to the investment plan, business plan, budget and future validity, in compliance with the provisions of Municipal Agreement 109 of March 6, 2019, which regulates the preparation, conformation and execution of the budgets of industrial and commercial companies of the State of the municipal order of Medellín.
- Approval of the CaribeMar transaction.
- Approval of the strategic plan of Grupo EPM 2021-2030, based on article 3 of Decree 1571 of 2006 and literal C of article 17 of Municipal Agreement 12 of 1998.
- Monitoring of the conciliation process of the Ituango Hydroelectric Project.
- Approval of the modification of the Human Talent Policy. **Country Code 33.3 – ii. e)**
- Approval of the Business Plan 2021-2024.
- Approval of the EPM Budget for the year 2021.

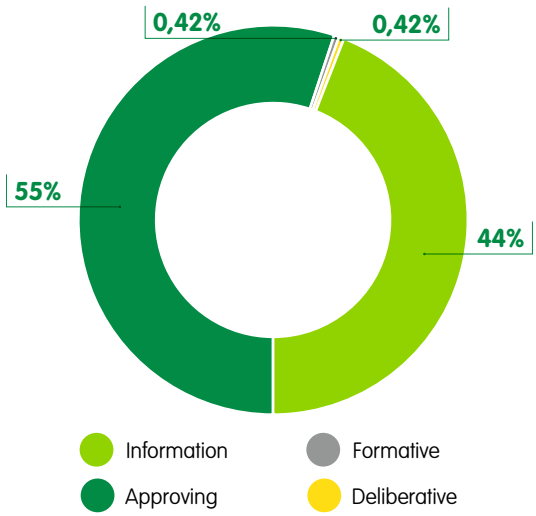
Between August 2018 and August 2020, the Board of Directors had the advice of Mr. Luis Fernando Rico Pinzón, for matters related to the contingency of the Ituango Hydroelectric Project. During 2020, he attended 12 sessions of the Project Monitoring Committee, chapter of the Ituango Hydroelectric Project. **Country Code 33.3 – ii. n); GRI 102-27**

The topics analyzed by the EPM Board of Directors during 2020 are distributed as shown in the following graphs:

EPM vs Group Topics



Character of the topics



Typical Board of Directors Agenda and Calendar

GRI 102-31

The definition of the typical agenda and the annual calendar of the Board of Directors of EPM, is a planning instrument that allows the collegiate body to address the issues that are fundamental and in which its contribution is greater, in accordance with the provisions of the Regulation of the Board of Directors and in line with the recommendations of the Country Code.

The typical agenda defines the frequency and periodicity with which economic, environmental and social issues are discussed during the year, within the issues scheduled in the typical 2020 agenda are the following:

Subject	Theme	Character
Formal business of the Board	Verification of the quorum and approval of the agenda	Approving
	Consideration and approval of the previous act	Approving
	Follow-up to requests from the Board of Directors	Informative
	Various (includes topics of the members of the Board of Directors)	Informative
	Relevant information	Approving

Subject	Theme	Character
Update and follow-up	Reports of the Board of Directors committees	Informative
	General Manager Report	Informative
	Follow-up to the Ituango Hydroelectric Project	Informative
	Monitoring the CMI and the risk map	Informative
	Monitoring of financial statements	Informative
	Investment decision monitoring	Informative
	Follow-up to the EPM Foundation	Informative
	MaxSeguros Management Report	Informative
	Monitoring of legal contingencies within the scope of Grupo EPM	Informative
	CaribeMar and CSC follow-up	Informative
Strategy	Corporate strategic direction and analysis of the environment	Approving
	Innovation and technology within the reach of Grupo EPM	Informative
	Human talent strategic plan with the scope of Grupo EPM	Informative
	Strategic communication and relationship plan scope Grupo EPM	Informative
	Financial projections	Informative
	Strategic plan for shared supply and services within the scope of Grupo EPM	Informative
	Preliminary investment plan	Informative
	Additional session: EPM 2021-2024 business plan, 2021 budget, 2021-2024 infrastructure investment plan and 2021-2024 CMI goals.	Approving
Monitoring of the EPM Group's business strategy	Business monitoring from the customer-user perspective in charge of the administration and control members of the Board of Directors.	Informative
	Generation business with scope of Grupo EPM	Informative
	Gas Business	Informative
	Water Supply and Wastewater Management Businesses within the scope of Grupo EPM	Informative
	Solid Waste Business	Informative
	Transmission and Distribution Businesses within the scope of Grupo EPM	Informative
Financial issues	Financial statements of EPM and Grupo EPM as of December 31	Approving
	Opinion of the External Auditor	Approving
Risk and audit issues	Audit planning 2021	Approving
	Follow-up to the audit plan and presentation of the evaluation carried out by assurance providers	Informative
	Risk management monitoring	Informative
	Management report of the Compliance Unit, annual compliance and anti-corruption plan	Informative
Human development	Salary increase Public EMPLOYEES	Approving
	Cultural evolution	Informative

Subject	Theme	Character
Gobierno Corporativo	Typical Board Agenda and Annual Calendar	Approving
	Board of Directors committee's management report	Informative
	Annual management report of the General Manager	Approving
	Corporate Governance Report	Approving
	Country Code Report	Informative

Information system of the Board of Directors

Country Code 33.3 – ii. o)

The management of the information associated with the Board of Directors is subject to the Information Management policy approved by the Board of Directors on December 2, 2014, in order to guarantee its integrity, reliability, availability and timeliness, for an adequate capture decision that leverage business growth and sustainability.

EPM has an information system called ARCA that was developed to meet the specific needs that were evidenced in the information management of the Board of Directors and its committees. Through ARCA, the main aim is to guarantee the criteria of transparency, security and timeliness in the supply of information, through a systematized process of administration, collection, storage, processing and distribution of data.

The contingency due to COVID-19, during 2020, led to a scenario in which the value generated by ARCA in the information management process of the Board of Directors and its committees could be made visible in a powerful way, by allowing calls in real time, consult and review documents through workflows, generate task notifications, sign and publish minutes, among other functionalities, without necessarily requiring presence and with a significant level of resource optimization.





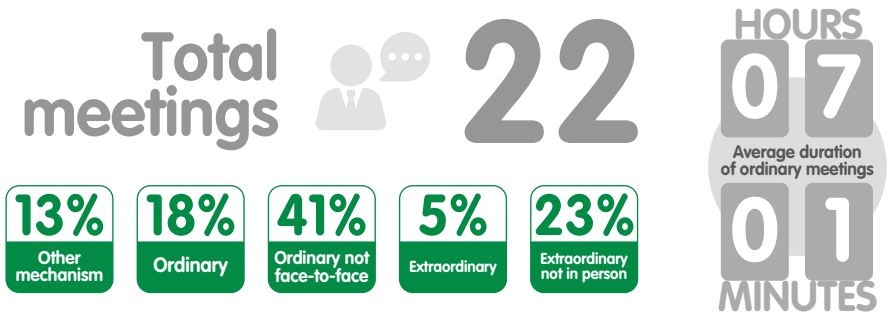


Attendance to the Board of Directors

Country Code 33.3 – ii. j)

During 2020, 22 Board of Directors sessions were held:

January 10, 2020 — **December 15, 2020**



The average total attendance of the Board members was 100%. Below is the detail of the attendance for each member:

Board Member	% Assistance	Period
Daniel Quintero Calle	100%	January - December
Elena Rico Villegas	100%	January - August 11
Andrés Bernal Correa	100%	
Gabriel Ricardo Maya Maya	100%	
Javier Genaro Gutiérrez Pemberthy	100%	
Jesús Arturo Aristizábal Guevara	100%	
Luis Fernando Álvarez Jaramillo	100%	
Manuel Santiago Mejía Correa	100%	
Oswaldo León Gómez Castaño	100%	March 10 - August 11
Alberto Arroyave Lema	100%	January - March 9
Bernardita Pérez Restrepo	100%	August 25 - December
Gildardo Antonio Correa Salazar	100%	
Guillermo León Diosa Pérez	100%	
Jorge Iván Palacio Palacio	100%	
Jorge Andrés Carrillo Cardoso	100%	
Olmer Orlando Palacio Garzón	100%	
Omar Flórez Vélez	100%	
Pablo Felipe Robledo Del Castillo	100%	

Management of the Board of Directors committees

In 2020, the Board of Directors approved the creation of a Board Committee called the Relationship Committee, in order to guide and support the strategic relationship of the Organization at the local, national and international levels.

The five committees of the EPM Board of Directors analyzed the issues under their responsibility in a manner articulated with the recommendations of the Country Code and with the legal and statutory functions. The committees are spaces designed with the purpose of guaranteeing efficiency in decision-making, through a detailed analysis of the issues before each session of the Board of Directors.

EPM's External Auditor is a permanent guest on the Audit Committee, as he has constant and periodic relationship with the Board of Directors. **Country Code 33.3 – ii. m)**

Most of the committees are made up and chaired by independent members of the Board of Directors, considering the training and experience of its members and the definition and responsibility of each of them: **Country Code 33.3 – ii. p) GRI 102-18 102-26 102-30**

Committee	Activities	Conformation
Audit	Supervision: internal audit, disclosure of financial information, external audit, Internal Control system, Comprehensive Risk Management system, compliance, loan proposals, internal and external control entities, operations between related parties, intellectual property and Corporate Governance Report.	**From January 1 to August 11, 2020** Alberto Arroyave Lema (until March 9) Oswaldo León Gómez Castaño Andrés Bernal Correa Gabriel Ricardo Maya Maya **From August 25 to December 31, 2020** Bernardita Pérez Restrepo Pablo Felipe Robledo del Castillo Olmer Orlando Palacio Garzón
Management	Monitoring of business management, corporate reputation, intellectual capital, ethics, business image, administrative structure, business and commercial development projects, appointments and remuneration, conflicts of interest, evaluation of the Management and Senior Management, and corporate governance.	**From January 1 to August 11, 2020** Gabriel Ricardo Maya Maya Javier Genaro Gutiérrez Pemberthy Luis Fernando Álvarez Jaramillo **From August 25 to December 31, 2020** Bernardita Pérez Restrepo Pablo Felipe Robledo del Castillo Omar Flórez Vélez

Committee	Activities	Conformation
Strategy and investments	Strategy, unity of purpose and direction, business policies, investments and new businesses, research, development and innovation projects, corporate social responsibility, sustainability, environmental management and engagement plan with stakeholders.	**From January 1 to August 11, 2020** Elena Rico Villegas Javier Genaro Gutiérrez Pemberthy Jesús Arturo Aristizábal Guevara **From August 25 to December 31, 2020** Jorge Iván Palacio Palacio Jorge Andrés Carrillo Cardoso Guillermo León Diosa Pérez
Project monitoring	Monitoring of the formulation, execution and evaluation of the projects prioritized by the Board of Directors, as well as their respective risk maps, CMI and other control instruments.	**From January 1 to August 11, 2020** Manuel Santiago Mejía Correa Elena Rico Villegas Jesús Arturo Aristizábal Guevara **From August 25 to December 31, 2020** Guillermo León Diosa Pérez Jorge Andrés Carrillo Cardoso Omar Flórez Vélez
	Specific chapter dedicated to monitoring the Ituango Hydroelectric Project [*]	**From January 1 to August 11, 2020, the following participated:** Javier Genaro Gutiérrez Pemberthy **From August 25 to December 31, 2020, the following participated::** Jorge Iván Palacio Palacio
Relationship	Guide and support the strategic relationship of the Organization at the local, national and international levels.	**From January 1 to August 11, 2020** Manuel Santiago Mejía Correa Jesús Arturo Aristizábal Guevara Luis Fernando Álvarez Jaramillo Alberto Arroyave Lema (until March 9) **From August 25 to December 31, 2020** Jorge Iván Palacio Palacio Omar Flórez Vélez Gildardo Antonio Correa Salazar

[*] *In August 2018, the Board of Directors created, as part of the Project Monitoring Committee, the chapter for monitoring the Ituango Hydroelectric Project, the objective of which is to carry out detailed monitoring and analysis of the contingency recovery and continuity activities. Between January and August 2020, he had the external advice of Mr. Luis Fernando Rico Pinzón. During 2020, 22 sessions were held.* ***GRI 102-34***

Attendance to the committees of the Board of Directors

Country Code 33.3 – ii. j)

Attendance to the Board of Directors committees is 99% on average, as follows:

Total NUMBER OF sessions	12	11	18	13	11	22
Member	**Management**	**Relationship**	**Strategy and investments**	**Audit**	**Project monitoring**	**Project Monitoring (Cap. P. H. Ituango)**
From January 1 to August 11, 2020						
Alberto Arroyave Lema		100%		100%		
Andrés Bernal Correa				100%		
Elena Rico Villegas			100%		100%	100%
Gabriel Ricardo Maya Maya	100%			100%	100%	100%
Javier Genaro Gutiérrez Pemberthy	100%		100%	100%		100%
Jesús Arturo Aristizábal Guevara		100%	100%		100%	100%
Luis Fernando Álvarez Jaramillo	100%	100%				
Manuel Santiago Mejía Correa		100%			100%	100%
Oswaldo León Gómez Castaño				100%	100%	50%
From August 25 to December 31, 2020						
Bernardita Pérez Restrepo	100%			100%		
Gildardo Antonio Correo Salazar		100%				
Guillermo León Diosa Pérez			100%		100%	100%
Jorge Andrés Carrillo Cardoso			100%		100%	100%
Jorge Iván Palacio Palacio		100%	100%			100%
Olmer Orlando Palacio Garzón				100%		
Omar Flórez Vélez	100%	75%			100%	100%
Pablo Felipe Robledo Del Castillo	100%			100%		
% Total attendance	**100%**	**96%**	**100%**	**100%**	**100%**	**95%**

Note: *The percentage of attendance is given based on the NUMBER of sessions attended over the NUMBER of sessions scheduled. If there are modifications in the composition of the Committees during the period, a greater NUMBER of members will be reflected in the Committee whose composition was modified.*

In the Board of Directors session of July 28, 2020, AS recorded in Act No. 1690, the Mayor requested that the Private Secretary of the Mayor's Office or whoever she delegates, attend the board committees.

Remuneration of the Board of Directors

Country Code 33.3 – ii. h); GRI 102-36

Through Decree 1165 of August 12, 2009, the Mayor of Medellín as representative of the community and the owner of EPM, defined the remuneration of the members of the Board of Directors of EPM in three legal monthly minimum wages in force in Colombia, for attendance to each session of the Board of Directors and to each committee. **Country Code 33.3 – ii. g); GRI 102-35 102-37**

At EPM, the members of the Board of Directors do not have variable remuneration and the Mayor of Medellín, in his capacity as a member of the Board of Directors, does not receive remuneration.

The following is the amount paid for fees to the members of the Board of Directors in 2020:

Concept	Amount paid in 2020
Board of Directors	COP 437,145,894
Committees of the Board of Directors	COP 560,916,117
Total paid	**COP 998,062,011**

Evaluation of the Board of Directors

Country Code 33.3 – ii. q); GRI 102-28

The evaluation of the Board of Directors and its committees is a monitoring mechanism for the management of this collegiate body. At EPM it is an annual exercise implemented as a good practice in matters of corporate governance, sustainability, transparency and accountability.

The EPM Board of Directors during 2020 had great challenges, among them, the contingency due to COVID-19 and the change of 8 out of 9 of its members; In this sense, since self-evaluation is one of the components of the evaluation, it should be borne in mind that it

corresponds to the period August - December 2020, since it was carried out by the new members.

The evaluation process was in charge of the Corporate Governance Unit of EPM and was developed with a methodology that allows to present the vision of the members of the Board of Directors and top-level managers about the performance and operation of the Board of Directors of EPM.

The instruments used in the process were:

- Self-evaluation survey of the Board of Directors with which it is sought to determine the degree of fulfillment of the duties and responsibilities of each of them, the value that their performance contributes to the entity, and the recommendations to make the Board a highly effective body. It was filled out by 8 of its 9 members.
- Evaluation survey of the Board of Directors carried out by first level managers. It was completed by 8 managers.
- Private meeting with the members of the Board of Directors to analyze the results and define the strengthening plan.

Senior Management

GRI 102-20

The Administration of EPM, its representation and the management of its businesses are in charge of the General Manager, who has the powers to celebrate or execute, without other limitations than those established in the Bylaws, all the acts included in its object or that are directly related with its existence or operation.

As of January 1, 2020, Mr. Daniel Quintero Calle began his term as Mayor of Medellín. In use of his legal and statutory powers, on January 1, 2020, through Decree No. 002 of 2020, Mr. Álvaro Guillermo Rendón López was appointed as General Manager of EPM, who took office on January 2, 2020.

As part of the management team consolidation process, the General Manager requested the creation and modification of the vice presidencies that report directly to him as follows:

NO.	Structure 2019	New Structure 2020	Structure 2020
1	Executive VP Business Management	Without changes	Executive VP Business Management
2	Executive VP Projects and Engineering	Without changes	Executive VP Projects and Engineering
3	Executive VP Strategy and Growth	It changes its name, its category (it goes from VPE to VP) and the functions related to the growth of the Grupo EPM and innovation are abolished	VP Strategy and Planning
4	Executive VP Corporate Finance, Risk Management and Investments	The name is changed and the functions related to risk management are abolished	Executive VP Finance and Investments

NO.	Structure 2019	New Structure 2020	Structure 2020
5	VP Human Talent and Technology	Renamed and IT-related functions removed	VP Human Talent and Organizational Development
6	VP Supplies and Shared Services	Without changes	VP Supplies and Shared Services
7	VP Communication and Corporate Relations	Without changes	VP Communication and Corporate Relations
8	VP Legal Affairs and General Secretariat	The name changes and the functions related to the General Secretariat are abolished	VP Legal Affairs
9	VP Corporate Audit	Without changes	VP Corporate Audit
10		New VP	General Secretary
11		New VP	Executive VP New Business, Innovation and Technology
12		New VP	VP Risks

In accordance with the foregoing, EPM's Senior Management is made up of twelve executives, reporting directly to the General Manager of EPM. They have functions within the scope of Grupo EPM and are responsible for directing, planning and verifying compliance with the objectives, plans and goals of EPM and the subsidiaries of the business group.

The team of vice presidents that accompanied the management of Mr. Álvaro Guillermo Rendón López, as General Manager, during 2020 had the following developments:

NO.	Position	Developments	Office Holder
1	Executive VP Business Management	Between January 1 and 28 this position was vacant, during this period the persons in charge were: Santiago Ochoa Posada (from January 1 to 6) and Inés Helena Vélez Pérez (from January 7 to 28). As of January 29, Daniel Arango Ángel took office	Daniel Arango Ángel
2	Executive VP Projects and Engineering	Between December 23, 2019 and March 8, 2020, this position was vacant, during this period the persons in charge were: John Jairo Celis Restrepo (from December 23 to January 15) and Ana Milena Joya Camacho (from January 16 to March 7). As of March 9, Gabriel Jaime Betancourt Mesa took office.	Gabriel Jaime Betancourt Mesa
3	VP Strategy and Planning (formerly VP Strategy and Growth)	Gabriel Jaime Betancourt Mesa was the head of the VPE Strategy and Growth position until March 8. Between March 9 and May 21 this position was vacant, during this period the persons in charge were: As of May 22, Mónica María Ruiz Arbeláez took office.	Mónica María Ruiz Arbeláez
4	Executive VP Finance and Investments	Jorge Andrés Tabares Ángel was the incumbent of the position until November 5, the date on which his resignation became effective. Between November 6 and 29 this position was vacant, during this period Juan Carlos Castro Padilla was in charge. As of November 30, Miguel Alejandro Calderón Chatet took office.	Miguel Alejandro Calderón Chatet
5	VP Human Talent and Organizational Development	Ricardo José Arango Restrepo was the holder of the position until January 26, the date on which his resignation becomes effective. Between January 27 and September 3, this position was vacant, during this period the persons in charge were: María Patricia Giraldo Velásquez (from January 27 to March 1) and Alejandra Vanegas Valencia (from March 2 to September 3). As of September 4, Alejandra Vanegas Valencia took office.	Alejandra Vanegas Valencia
6	VP Supplies and Shared Services	José Nicolás Ríos Correa was the holder of the position until January 27, the date on which his resignation becomes effective. Between January 28 February 20, this position was vacant, during this period the persons in charge were Daniel Arango Ángel. As of February 21, Carlos Enrique Londoño Amariles took office.	Carlos Enrique Londoño Amariles

NO.	Position	Developments	Office Holder
7	VP Communication and Corporate Relations	Luz Mercedes Mejía López was the incumbent until January 27, the date on which her resignation became effective. Between January 28 and February 20 this position was vacant, during this period the persons in charge were Mónica María Ruiz Arbeláez. As of February 21, Manuel Eduardo Osorio Lozano took office.	Manuel Eduardo Osorio Lozano
8	VP Legal Affairs	Maritza Alzate Buitrago held the post until January 19, the date on which her resignation became effective. Between January 20 and June 15 this position was vacant, during this period the person in charge was Gabriel Jaime Velásquez Restrepo. As of June 16, Jhon Alexander Sánchez Pérez took office.	Jhon Alexander Sánchez Pérez
9	VP Corporate Audit	Without changes, the holder of the position since January 4, 2018 is Oscar Alberto Cano Castrillón.	Oscar Alberto Cano Castrillón
10	General Secretary	Juan Gabriel Rojas López was the incumbent of the position between February 21 and September 23, the date on which his resignation became effective. As of September 24, this position is vacant; Between September 28 and December 25, Marcela Salgado Gutiérrez was in charge.	Vacancy _ No current holder.
11	Executive VP New Business, Innovation and Technology	Darío de Jesús Amar Flórez has held the position since March 9.	Darío de Jesús Amar Flórez
12	VP Risks	Between March 9 and August 31, this position was vacant; Between March 9 and August 4, Angela Vergara Jaller was in charge. As of September 1, Andrés Felipe Uribe Mesa took office.	Andrés Felipe Uribe Mesa

During 2020, the management of Senior Management was focused on 8 management focuses proposed by the General Manager:

- **Focus 1:** Services of the future, smart cities and the fourth industrial revolution
- **Focus 2:** City / Region
- **Focus 3:** Growth / Portfolio Management
- **Focus 4:** Socio-economic benefits of public services
- **Focus 5:** Optimization of operations
- **Focus 6:** Ituango Hydroelectric Project
- **Focus 7:** CaribeMar
- **Focus 8:** Cultural evolution

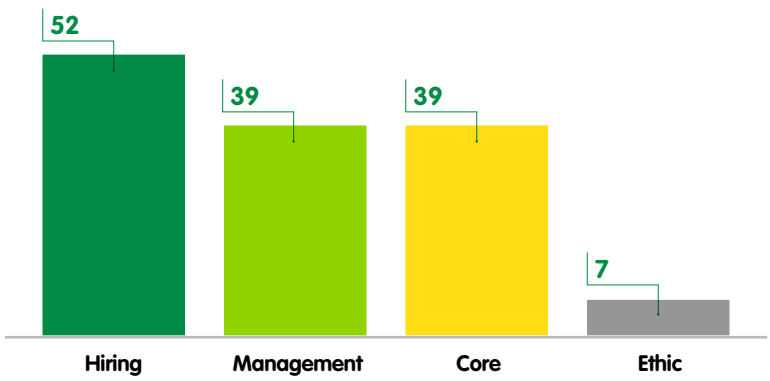
Senior Management Performance

GRI 102-26

The strategic committees are the mechanisms that facilitate the interaction of the Senior Management, to attend the decisions and / or relevant and strategic actions in an articulated and coherent.

The following is the composition of the strategic committees and the NUMBER of sessions held during 2020:

Sessions of the 2020 strategic committees



Management

Objetive

Articulate and control the management of the company, through the analysis, definition, approval and monitoring of the matters that concern it, in order to achieve the strategic direction of EPM.

Conformation

President:
Leader of the EPM Group, General Manager of EPM
Secretary:
VP Strategy and Planning
Members:
- Level I Vice Presidents
- Permanent guests:
- Business Vice President (one per week)

Thematic

- Planning
- Policies for EPM.
- Monitoring of the performance of EPM's businesses and services (EPM CMI).
- Risk management strategy, articulated with integrated planning.
- Comprehensive risk monitoring and management.
- Organizational capabilities including digital transformation, technology and information.
- Projects in EPM.
- Relationship with interest groups of the company.
- Customer experience.
- Internal audit.
- Modifications to the administrative structure of EPM.
- Reports from external assurance providers.

Core

Objetive

Establish and lead the unity of purpose and direction that all Grupo EPM companies must follow, by analyzing, defining and monitoring the matters that concern it, in order to achieve the objectives of the business group.

Conformation

President:
Leader of the EPM Group, General Manager of EPM
Secretary:
VP Strategy and Planning
Members:
- Level I Vice Presidents
- Permanent guests:
- Head of Corporate Governance Unit

Themes / Key missions

- **Strategic leadership:** provide the vision, direction and purpose of Grupo EPM.
- **Capital:** minimize the cost of capital and provide funds for growth.
- **Capabilities:** enable the implementation of strategic direction.
- **Control:** ensure compliance with strategies, plans, guidelines and compliance with legal and regulatory requirements.
- **Identity:** formulate shared vision and values for Grupo EPM.

Back to content

Hiring

Objetive

Analyze and recommend on the matters of contracting associated with the process of acquisition of goods and services and contracts in which EPM ACTS as a contributor, ACCORDING TO the delegations decree.

Conformation

President:
Head of Categories and Contracting Unit
Secretary:
VP Legal Affairs
Members:
- General Manager
- General Secretary
- VPE Finance and Investments
- VP Risks
- Supply Chain Manager
- VP Corporate Audit

Permanent guests:
- Competent Executive to hire, ACCORDING to delegations decree
- The vice president of the management area accompanied by the manager who makes the requisition

Thematic

- Pre-contractual and contractual procedures, in accordance with the principles that govern contracting and with the corporate policy for the acquisition of goods and services, approved by the Board of Directors of EPM.
- Recommendations or pertinent observations to the competent manager, ACCORDING TO the delegations decree.
- Periodic reports presented by the vice presidencies of Shared Supplies and Services and Corporate Audit related to the contracting of EPM and the pertinent recommendations.
- Monitoring of the annual hiring plan.

Ethic

Objetive

Promote and lead the implementation of ethical management, guiding the consolidation of the exercise of PUBLIC function in terms of efficiency, transparency, probity and service to citizens by all PUBLIC SERVANTS.

Conformation

President:
VP Human Talent and Organizational Development
Secretary:
Human Development and Organizational Culture Management
Members:
- VP Risks
- VP Communication and Corporate Relations
- VP Corporate Audit
- Head of Compliance Unit
- External member
- Server chosen by the General Manager

Permanent guests:
- Labor Relations Management Manager
- Corporate Communication Manager
- Support Audit Manager

Themes / Key missions

- Framework of action for ethical management.
  Initiatives, mechanisms and methodologies for ethical management.
- Ethical commitments.
- Analysis of ethical dilemmas.

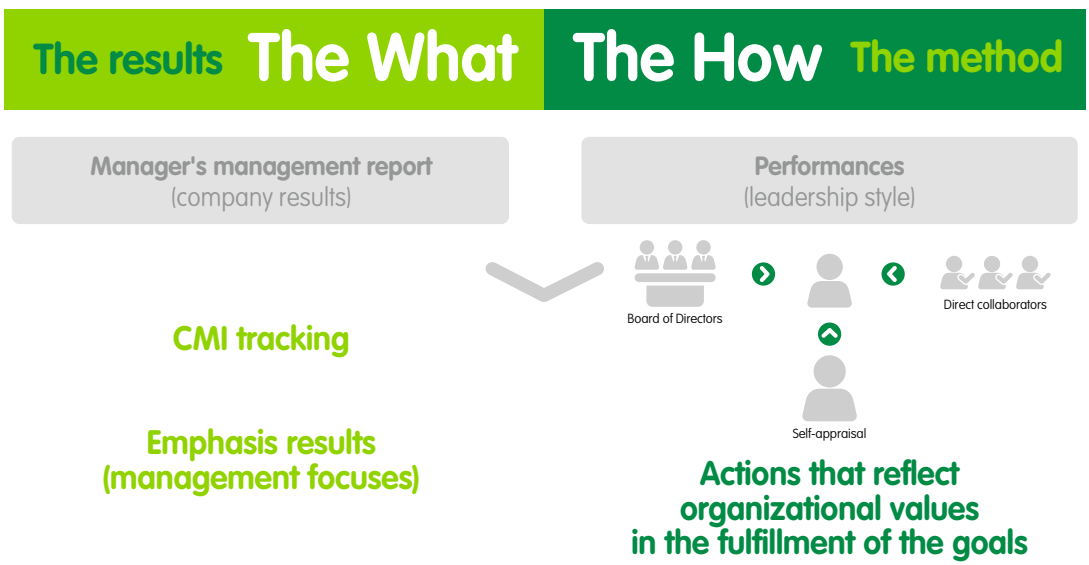
Induction of the General Manager

The Corporate Governance Unit developed an induction plan for the General Manager, however upon arrival he chose to use a methodology that he called "express splicing", which consisted of selecting the 20 critical points of the Company, which in his opinion are more relevant, from a report delivered by the previous administration; During 3 weeks the areas responsible for these matters delivered the reports for each of the topics selected by the Manager, after that time the "express splice" was concluded and the Manager took care of his work with the philosophy of "learning by doing".

General Manager Evaluation

Country Code 33.3 – ii. q); GRI 102-28

The Board of Directors of EPM carries out a systemic process that allows to show achievements and challenges of the General Manager's management in terms of its results and methods to obtain them (what and how).



Likewise, the Government Code in numeral 4.7 establishes, among other matters, that the evaluation can "use the self-evaluation of the General Manager, the evaluation by the

Board of Directors and the evaluation by the top-level management team. ; its results will be disclosed in the public rendering of accounts and in the Corporate Governance Report ".

The evaluation process of the manager's management during 2020 began in 2021 with the presentation of the methodology in the Management Committee in its January session and the subsequent sending of the forms to the Board of Directors, at the first directive level and the Manager. However, given the declaration of non-subsistence of the Manager as of February 1, 2021, the evaluation process could not be completed, since it is closed in a space designated in the agenda of the same session of the Board of Directors in which the management report and the end-of-year results are presented, which was scheduled for March 23, where the results (what) and the method to obtain them (how) are reviewed.

Senior Management Remuneration

Country Code 33.3 – ii. h); GRI 102-36

In the Human Talent Management policy, approved by the Board of Directors on December 7, 2010, the Human Talent and Technology Vice Presidency issued Guideline 51 on November 15, 2019, which addresses three important issues related to variable compensation, fixed compensation and benefits for EPM workers.**GRI 102-35**

The total remuneration of Senior Management in 2020 was as follows:

EPM Senior Management Remuneration		
Grouper	**Position**	**Total paid in 2020**
General management	General Manager	**$ 6,233,928,202**
Executive Vice Presidencies	VPE New Business, Innovation and Technology	
	VPE Finance and Investments	
	VPE Business Management	
	VPE Projects and Engineering	
Level I Vice Presidents	VP Strategy and Planning	
	VP Corporate Audit	
	VP Legal Affairs	
	VP Communication and Corporate Relations	
	VP Supplies and Shared Services	
	VP Human Talent and Organizational Development	
	General Secretary	
	VP Risks	

Note:
- Payments include vacations, bonuses, and benefits (including vehicle recognition).
- Severance payments are those paid directly to the worker or consigned in February 2020 to the Funds.
- Payments are affected in 2020 for the following reasons:
a) *The Act of the Board of Directors of EPM No. 1394 of 2002 is no longer applied, which indicated that for EPM Public employees the amount to be paid for the service premium (June) was one (1) month plus one (1) day of ordinary salary, and they were paid for this concept the equivalent of fifteen (15) days of average salary.*
b) *There is a change of administration and the technical premium is paid according to the fulfillment of the requirements of the server occupying the position.*

- Ratio of the total semi-annual compensation of the highest paid person in the Organization to the median of the total semi-annual compensation of all employees, excluding the highest paid person: **9.04** GRI 102-38
- Ratio of the percentage increase in the total semi-annual compensation of the highest paid person in the Organization compared to the median percentage increase in the total semi-annual compensation of all employees excluding the highest paid person: **1** GRI 102-39

Operations with related parties

Back to content

Operations with related parties

Since the implementation of IFRS, in 2013, EPM accepted the definitions established by IAS 24 regarding related parties, and specific financial policies and guidelines were established in accordance with the applicable financial regulations.

The Governance Agreement and the relationships derived from it, as well as the annual transfer pricing statement, are articulated with the information published in the financial statements under IFRS as elements that frame the operations with related parties of the EPM Group.

EPM's transactions with its related parties are executed under conditions equivalent to those that exist in transactions between independent parties, in terms of their object and conditions. The details of the operations with the most relevant related parties can be found in the Financial Report, an integral part of the EPM Group's Sustainability Report (annual). Additionally, operations between companies of the Grupo EPM are included each year in this report.

Conflict of interest

Country Code 33.3 - iii. c); GRI 102-25

Annex No. 8 of the Corporate Governance Code, "Manual of conflicts of interest and treatment of decisions in the interest of Grupo EPM", issued by Decree No. 390 of November 24, 2015, establishes the procedure for managing conflicts of interest of the members of the Board of Directors. When the conflict is permanent and prevents the independent exercise of the functions, the Board member must resign. **Country Code 33.3 - iii. d); GRI 102-25**

This manual regulates the differences that may arise between the parent company of the Grupo EPM and the subordinate companies, with respect to the interest of the business group. The procedure consults the Governance Agreement between the companies of the EPM Group, the shareholders' agreements signed and the governance model defined for each of the subordinate companies. It also indicates the actions that correspond in each case to the Board of Directors of the subordinate company, the Management Committee of the Parent Company and the Board of Directors with their respective committees. **Country Code 33.3 – iii. a)**

In compliance with subparagraph 11 of the manual where it indicates that "The conflicts of interest that arise and oblige the administrator to refrain from participating in the debate on a certain matter, will be published annually in the Corporate Governance Report.", It is reported:

In EPM during 2020 there was 1 conflict of interest on the part of the members of the Board of Directors.

The conflict of interest presented in EPM is detailed below:

NO.	Date	Minutes number	Description of the conflict	Date reported to Compliance Unit
1	24-nov-20	1699	Mr. Guillermo León Diosa Pérez stated that he could be in a situation of conflict of interest by participating in the discussion and decision on the topic "Future Validity" on the "PCH TZ II 10.5 MW Connection Project- Tarazá 44kV Substation". The Board of Directors analyzed the issue and declared the existence of a conflict of interest, which is why Mr. Guillermo León Diosa Pérez abstained from participating in the deliberation and decision related to the issue "Future Validity", which was presented to the Board of Directors. November 24, 2020.	11-dic-20

In the Colombian subsidiaries of Grupo EPM during 2020, Aguas Nacionales reported 4 conflicts of interest on the part of the members of the Board of Directors. There were no conflicts in the other companies.

.

The conflicts of interest presented in Aguas Nacionales are detailed below:

NO.	Date	Minutes number	Description of the conflict
1	27/08/2020	233	The main member and Chairman of the Board of Directors, Santiago Ochoa Posada, departed from the deliberation and decision of the first three issues that had to do with the authorization to sign a transaction agreement with EPM for the provision of auditing services, as well as the modification of the structure and the creation of jobs and positions for these purposes. The Board of Directors, made up of Jorge Alberto Cadavid and Juan Carlos González, deliberated on these issues.
2	18/09/2020	234	The main members of the Board of Directors, Santiago Ochoa Posada and Darío Amar Flórez, expressed their impediment to making the decision corresponding to the approval of the modification to the basic function and the modification of the experience of the positions related to the application and associates to the project "Diagnosis, design, construction and replacement of aqueduct and sewerage networks, connections and accessory works, where EPM provides its services". With the above, a vote was requested from Jorge Alberto Cadavid and Johnier Alberto Montoya, first and second alternate of the administrative body, respectively.
3	3/12/2020	237	The main member, Santiago Ochoa Posada, after sending the request, expressed an impediment to making the decision to sign a bilateral modification act of the sewerage interconnection contract No. CT-2013-002297-A421, decreasing its value by $ 2,583 million. Jorge Alberto Cadavid, the first alternate of the administrative body, was asked to vote.
4	10/12/2020	238	At this point it is recorded that authorization is requested to sign a modification to the Interconnection Contract No. CT-2013-002297-A421 that Mr. Santiago Ochoa, departed from the deliberation and decision regarding the authorization. The Board of Directors, made up of Jorge Alberto Cadavid, president of the session, and Juan Carlos Castro, deliberated on this issue.

Government Agreement

Country Code 33.3 – iii. b)

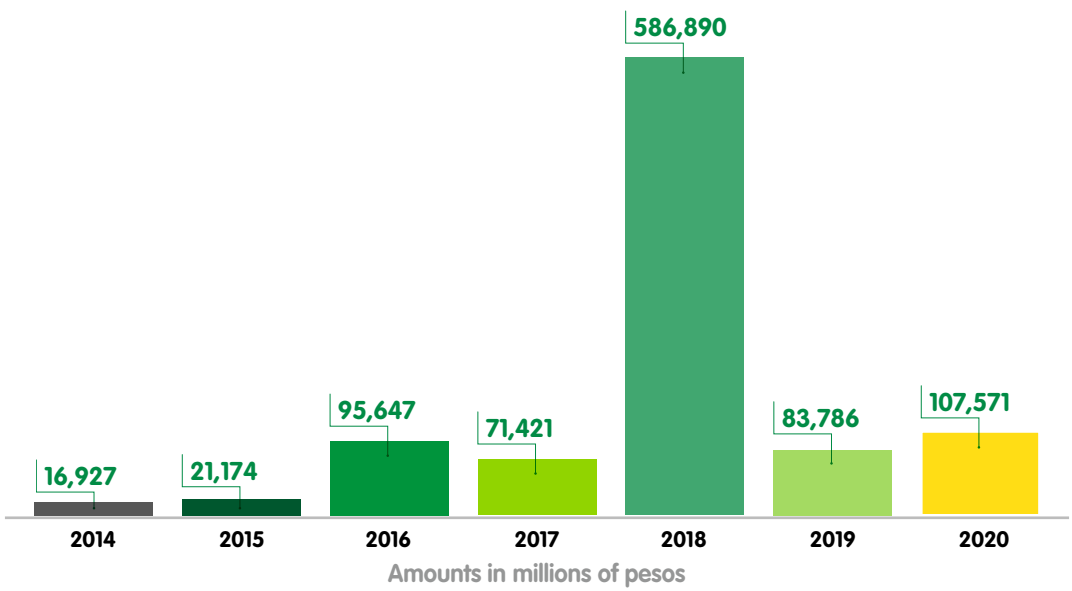
The Governance Agreement is a document that formally defines and guides the relationships between the companies that make up Grupo EPM. It has allowed the signing of different minutes that facilitate the achievement of business objectives and the obtaining of business group synergies, in tune with the unity of purpose and direction.

General report of the minutes signed in the framework of the Government Agreement:

Transaction relationships

They are those that are established between the parties in order to supply goods and provide services (that do not correspond to the provision of home Public services), in order to amplify competitive advantages, such as shared infrastructure and support, technical and commercial services, among others.

Transaction minutes



Compared to the information published at the end of 2019, it is reported that the historical data of the Transaction Minutes presented the following variations:

1. In 2017, a decrease of COP 341 million is reflected due to modifications in 6 transaction documents, among which the following stand out:

    - Minutes signed with CENS in order to "Set the administrative, technical and legal conditions on which the parties agree that the contractor will provide the contractor with the basic services of information and communications technology and specialized technical advice in the same areas of knowledge". This act presented a lower value corresponding to COP 240 million.
    - Minutes signed with CENS in order to "Set the administrative, technical and legal conditions on which the parties agree that the contractor will provide the contractor with Cloud Computing services under the modality of Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) ". This act presented a lower value corresponding to COP 129 million.

2. In 2018, an increase of COP 45 million is reflected due to modifications in 5 transaction documents, among which the following stand out:

    - Minutes signed with CHEC for "The provision, by the supplier to the client, of the selection service with the provision of human talent, taking into account the job profiles defined to meet the needs of the business group." This act presented a higher value corresponding to COP 79 million.
    - Minutes signed with Emvarias in order to "Provide by EPM the basic services of information technology, operation and support of IT solutions". This act presented a lower value corresponding to COP 53 million.

3. In 2019, a decrease of COP 726 million is reflected due to modifications in 14 transaction documents, among which the following stand out:

    - Minutes signed with EDEQ in order to "Set the administrative, technical and legal conditions based on which the parties agree that the contractor will provide the contractor with implementation, operation and support services for information systems solutions." This act presented a lower value corresponding to COP 894 million.
    - Minutes signed with CENS in order to "Set the administrative, technical conditions and legal based on which the parties agree that the contractor will provide to the

contractor the services of implementation, operation and support of information systems solutions". This act presented a lower value corresponding to COP 280 million.

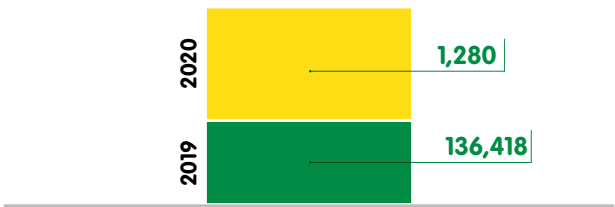
- Minutes signed with Emvarias in order to "Provide by EPM the basic services of information technology, operation and support of IT solutions". This act presented a higher value corresponding to COP 278 million.
- Minutes signed with Ticsa for the purpose of "Construction of the outlet structures associated with the modernization project of the La Ayurá drinking water production plant". This act presented a higher value corresponding to COP 231 million.
- Minutes signed with EDEQ in order to "Provide EDEQ with infrastructure services in information and communications technology and specialized assistance, necessary for its operation and functioning". This act presented a lower value corresponding to COP 212 million.

Regarding the year 2020, 156 transaction minutes worth COP 107,571 million were signed, among which the following stand out:

- Minutes signed with Ticsa for the purpose of "Design, supply, construction, assembly, commissioning and commissioning of an operational flexibility module - MOFLO - with a capacity of 1.0 m3 / s maximum daily flow (QMD) for the Manantiales "drinking water production plant, worth COP 47,149 million.
- Minutes signed with Aguas Nacionales for the purpose of "Administrative, technical, financial, social, environmental and OSH auditing for the diagnosis, design, construction and replacement of aqueduct and sewer networks and accessory works, where EPM provides its services", for the value of COP 14,922 million.
- Minutes signed with the EPM Foundation in order to "Set the financial, administrative and legal conditions based on which the parties agree to the provision of services, by the Foundation, for the administrative management of the EPM Library, operation and provision of the services that make up its programmatic offer; as well as providing training services and execution of activities and programs indicated by EPM to achieve the objectives of the EPM University ", for a value of COP 4.706 million.
- Minutes signed with the EPM Foundation for the purpose of "Provision of services for the development and execution of relationship activities, social management, training and qualification in matters of home Public services under different methodologies", for a value of COP 3,413 million.

The following is the summary of the transaction minutes signed between subsidiaries, in which EPM is not an involved party:

Transaction record between subsidiaries

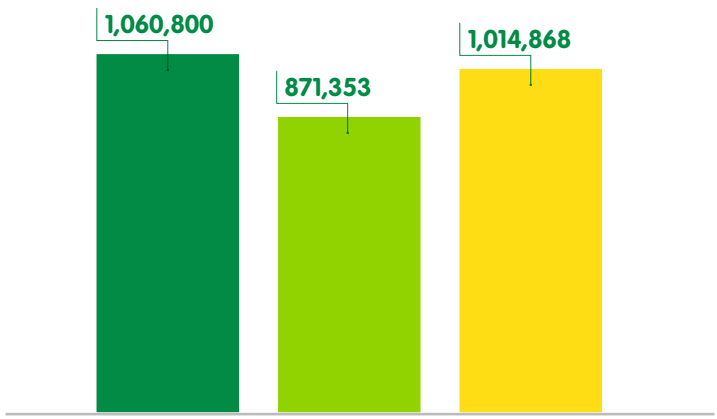


Compared to the information published at the end of 2019, an increase of COP 229 million is reflected due to a modification in the transaction document signed between Aguas de Malambo and Ticsa with the purpose of "Design, construction and start-up of the treatment system of sludge from the El Concorde water treatment plant".

During 2020, 6 transaction minutes worth COP 1,280 million were signed, among which the following stand out:

- Minutes signed between Aguas Nacionales and the EPM Foundation for the purpose of "Provision of services for the realization of the programmatic offer of a RECREATIONAL, educational, cultural, recreational and environmental nature at the UVA Aguas Claras de Aguas Nacionales EPM SA ESP", for the value of COP 668 million.
- Minutes signed between CENS and ESSA for the purpose of "Provision of administration services for application servers and databases of the Commercial Suite SAC, in their production and testing environments", for a value of COP 244 million.
- Minutes signed between Aguas Nacionales and Ticsa with the aim of "Provision and installation of four (4) folding doors with a complement in the sludge dehydration building, in the loading and unloading area of WET biosolids in the Aguas Claras treatment plant", by value of COP 200 million.

Transaction record between subsidiaries



Figures in dollars

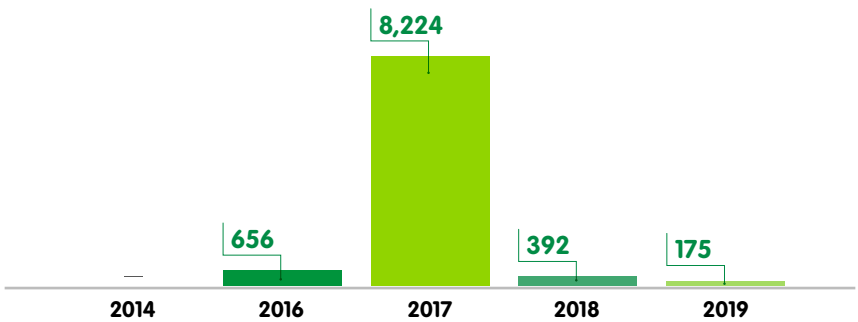
During 2020, the following 3 transaction documents were signed for a value of USD 1,014,868:

- Minutes signed between Delsur and ENSA for the purpose of "Functional / technical support and maintenance of the SAP system", for a value of USD 1,000,800.
- Minutes signed between ENSA and ENSA Servicios for the purpose of "Energy monitoring and management for corporate buildings", for a value of USD 8,068.
- Minutes signed between ENSA and ENSA Servicios for the purpose of "SAP improvement projects due to COVID-19", for a value of USD 6,000.

Intervention relationships

They are those that are established between EPM and the other parties to execute a directive of the CORPORATE CORE that implies a certain transaction for the supply of goods and provision of services between a Grupo EPM company and a third party, derived from actions of control and good governance such as, for example, contracts for the tax audit and information systems required by the CORPORATE CORE for all Grupo EPM companies, among others.

Intervention Minutes



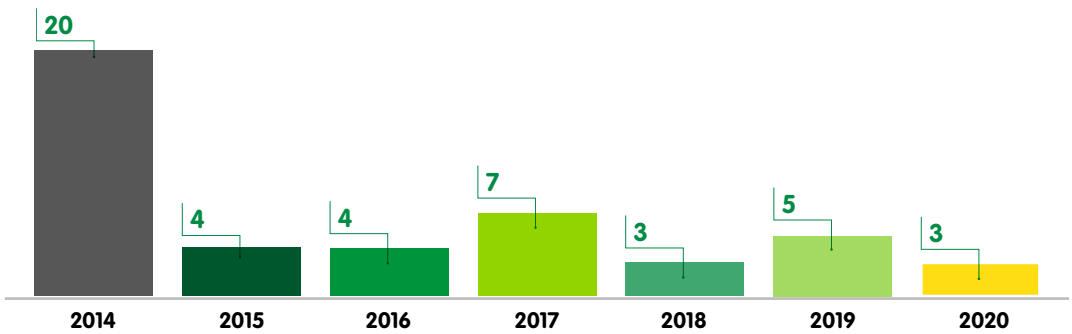
Amounts in millions of pesos

There are no variations in relation to the historical data of the intervention minutes. During 2020, no minutes of intervention were signed, nor were the existing ones modified.

Interaction relationships

They arise in order to enable the unity of purpose and direction of the Group and allow, among other aspects, to optimize processes and adopt integrated procedures defined by the CORPORATE CORE for the benefit of the business group.

Interaction Minutes



In 2020, EPM signed 3 interaction minutes for:

- Strengthen the processes and procedures of the CENS Distribution Maintenance team, through knowledge transfer by EPM personnel. Aimed at engineers and technologists, who carry out analysis, planning and leadership activities in the execution of work with tension, in order to improve the optimization of times, resources and effectiveness in scheduled work.
- Standardize the digital security process, the Information Security Management System (ISMS) and cybersecurity, the strategy and implementation controls of the El Centinela project at Distribuidora de Electricidad Delsur, based on the strategy defined by the Group's parent company EPM.
- Implementation of the directives of the CORPORATE CORE, which promote unity of purpose and direction of the EPM Group.

Ownership structure of Grupo EPM

Back to content

Ownership structure of Grupo EPM

Grupo EPM, whose parent company is EPM, is a multi-Latin business group that has a diversified portfolio that benefits about 20 million people in Mexico, Guatemala, El Salvador, Panama, Chile and Colombia, through 7 businesses: Power Generation, Power Transmission, Power Distribution, Gas, Water Supply, Waste Water Management and Solid Waste Management.

At the end of 2020, Grupo EPM's revenues amounted to COP 19,799 billion.

Capital and ownership structure of Grupo EPM

Country Code 33.3 – i. a); GRI 102-10

In 2020, the following developments were presented in the ownership structure of Grupo EPM:

- Acquisition of 100% of the company CaribeMar de la Costa SAS E.S.P. - Afinia.
- Increase in EPM's shareholding in Aguas Nacionales EPM SAESP from 99.9706% to 99.9723%.
- Decrease in the shareholding of EPM Inversiones SA in Aguas Nacionales EPM SAESP from 0.0288% to 0.0271%.
- Withdrawal of EV Alianza Energética SA due to liquidation.
- Increase in EPM's shareholding in Aguas Regionales EPM SAESP from 67.25% to 72.45%.
- Decrease in the shareholding of EPM Inversiones SA in Aguas Regionales EPM SAESP from 2.51% to 2.11%.
- Capitalization of Investments and Projects Hidrosur SpA in the amount of USD 15,500,000, through the issuance of 15,500 shares, keeping EPM Chile's 100% stake in this company.

The ownership structure of Grupo EPM can be consulted in appendix 4 of this report (see appendix 4: Shareholding composition of Grupo EPM).

As of October 1, 2020, Afinia, a trademark of the CaribeMar company, becomes a subsidiary of Grupo EPM.

Corporate Governance in the framework of the acquisition of CaribeMar

The National Government and EPM formalized on September 30, 2020 the closing of the transaction, which allowed after the fulfillment of the conditions established in the Share Acquisition Agreement, that CaribeMar de la Costa SAS ESP became, as of October 1, 2020, a subsidiary of Grupo EPM, provider of electric power service in the departments of Bolívar, Sucre, Córdoba, Cesar and 13 municipalities of Magdalena.

In this way, the challenges that the growth of the Grupo EPM and the consolidation of the new subsidiary entail, make corporate governance relevant to facilitate the new company to implement management practices in accordance with the philosophy of the business group that leverage the achievement of the strategic objectives and those prioritized for the provision of the service, sustainability, among other relevant matters, and thus generate trust in the different interest groups. In this sense, the corporate governance team managed various actions and deliverables such as:

- Government model of the subsidiary.
- Adjustments to the bylaws in aspects related to corporate governance.
- Adhesion to the Government Agreement by the subsidiary.
- Coordination of actions, before the competent ones, for the conformation of governing bodies and agenda of first sessions.
- Planning of the Board of Directors of the subsidiary (calendar and agenda) in accordance with the strategic priorities and aligned with Grupo EPM issues.
- Induction to Secretary General and Member of the External Board.
- Diagnosis and plan to close gaps in corporate governance for the corresponding execution in 2021.

On the other hand, as a consequence of the separation of the markets served by Electricaribe in the 7 departments of northern Colombia, a Shared Services Center (CSC) was set up, given that since Electricaribe is a single company and considering the division of the market into two companies (CaribeMar and CaribeSol), the information technology (IT) and operation

technology (OT) systems were migrated to the CSC because they could not be divided before the closing of the transaction. This company has the mission of migrating IT-TO systems to both CaribeMar and CaribeSol within a maximum period of 3 years. The ONLY clients of the CSC are CaribeMar and CaribeSol, which in turn are its SOLE shareholders and each company has a 50% stake. The Board of Directors is made up of 5 main members and 5 alternates, of these 4 members are non-independent, 2 nominated by CaribeMar and 2 by CaribeSol and the fifth member is independent. There is a shareholder's agreement and a temporary services contract where the guidelines for interaction are stipulated. Although the company Centro de Servicios Compartidos is not part of Grupo EPM, it is of vital importance for CaribeMar's operation.

Shareholder agreements in Grupo EPM

Country Code 33.3 i. f)

The shareholder agreements signed by EPM and in force as of December 31, 2020 are presented below.

Company	Parties involved	Signature Date	Synthesis
UNE EPM Telecommunications	• EPM • Millicom Spain SL (and other companies of the Millicom Group) • Institute of Sports and Recreation of Medellín (Inder)	October 1, 2013	Relationship and commitments betwee shareholders. Establishes the special majorities of the Assembly and the Board.
Aguas Regionales EPM*	• EPM • Gobernación de Antioquia • Municipality of Apartadó • Municipality of Chigorodó • Municipality of Mutatá • Municipality of Turbo • Municipality of Carepa	December 1, 2006	Conditions and framework of action for their participation as shareholders, taking into account the antecedents and special considerations for the management and development of the regional aqueduct that is the object of the company.
	• EPM • Gobernación de Antioquia • Municipality of Santa Fe de Antioquia • Municipality of Sopetrán • Municipality of San Jerónimo • Municipality of Olaya	December 19, 2007	
	• EPM • Gobernación de Antioquia	December, 2006 December 27, 2007	Ensures that decisions in society are made through the plural vote of EPM and the Government of Antioquia.

** After the merger of Aguas de Urabá SAESP and Regional Occidente SAESP in 2015, the shareholder agreements that existed in each of the merged companies are maintained.*

Company	Parties involved	Signature Date	Synthesis
Aguas de Malambo	• EPM • Municipality of Malambo • Juntas de acción comunal de Malambo • Instituto Municipal de Deportes • Hospital de Malambo • Instituto de Cultura de Malambo	June 29, 2011	Conditions and framework of action for their participation as shareholders, taking into account the antecedents and special considerations for the management and development of the regional aqueduct that constitutes the object of each of these companies.
Hidroecológica del Teribe S.A. (HET S.A.)	• EPM • Administradora Serviagro SA • Consultores Asociados de Ingeniería SA • MacEnergy (Cayman) Ltda.	November 6, 2003	Determine the basic conditions that will govern their relationships within the company, as well as the establishment of the agreements required to exercise and fulfill their rights and obligations to achieve the complete execution of the project.
Centro de Servicios Compartido S.A.S.	• CaribeMar de la Costa S.A. E.S.P. • Air-e S.A.S. E.S.P.	October 1, 2020	Establish the terms and conditions that will govern the relations of the parties regarding their participation as shareholders of the company Centro de Servicios Compartidos SAS (the "CSC" or the "Company"), in order to: • achieve an adequate and harmonious collective participation in the Company's corporate bodies; • establish the way in which a vote should be taken at the General Shareholders' Meeting to make certain decisions; • regulate the transfer of shares; and • regulate other relations of the shareholders among themselves and between the shareholders and the company.

Shareholders' meetings and relationship with partners

During 2020, ordinary meetings of the shareholders' assemblies of all the companies of the Grupo EPM were held, in these spaces the management reports of the Board of Directors and Management were presented, as well as the financial results at the end of the year, The Board of Directors was also appointed for the period from March 2020 to March 2021. These meetings are par excellence the meeting place with the different members of the EPM Group. Due to the Public health contingency due to COVID-19, the National Government authorized the shareholders' assemblies to meet virtually.

In order to strengthen trust with partners, the companies of the Grupo EPM are committed to keeping the section on the website of each subsidiary updated, enabled for the attention of this interest group. Thus, transparency, access to information and communication channels are strengthened. **Country Code 33.3 – v. b) c)**

The relationship plan with the Partners interest group was 100% compliant in 2020. With the leadership of the managers of each subsidiary, activities programmed in the relationship agenda were carried out, as well as the induction for the partners.

Structure of the administration of Grupo EPM

Back to content

Structure of the administration Grupo EPM

The Grupo EPM Administration is exercised through its governing bodies: General Assembly of Shareholders, Board of Directors and General Manager of each subsidiary. These bodies must guarantee the articulation of each of the companies with the vision of the business group.

Boards of Directors Grupo EPM

The composition of the boards of directors of the subsidiaries responds to the relationship model established in the business group. Strategic factors, the specific situation of each company, the level of involvement of the subsidiary with EPM and knowledge of the plans drawn up by the EPM Group for each business by the EPM executives who are part of the respective business are taken into account, in search of the unity of purpose and direction that characterizes business groups. Thus, AS defined in the "Guide for the nomination of Boards of Directors of Group companies", the predominant profile of the members representing EPM will be business, and business / financial in some cases. **GRI 102-18**

The objective is to have administrative bodies that align the management of the companies with the unity of purpose and direction, while facilitating the implementation of the strategy and business plans outlined by the Headquarters, and have a coordinated process decision-making and effective instruments to develop the corporate governance principles that govern Grupo EPM, aimed at generating value. The boards of directors have the mission of controlling compliance with financial and ethical plans and standards.

In this way, the boards of directors have internal members who are part of the directive body of EPM and do not receive additional remuneration for this function, and with representatives of the partners who, for the most part, correspond to territorial entities.

Additionally, in some cases, EPM EVALUATES the relevance of nominating external members who contribute diversity in the profiles of the boards of directors, provide experience in the local context for decision-making in the board and contribute to the strategic relationship of the business group in the territory. Therefore, for the appointment of these members, the aim is to select people from the market of incidence of each one of the companies.

In 2020 the formation of the boards of directors of the subsidiaries was done with different procedures and some criteria far from those established in the Guide for the Nomination of Boards of Directors of the companies of the EPM Group.

The following table includes the composition of the Boards of Directors / Directories / Boards of Directors of the companies of the EPM Group for the period between March 2020 and March 2021:

National Water and Sanitation Companies			
Company	**Position**	**Name**	**Category**
Aguas de Oriente	1	León Arturo Yepes Enríquez	Internal
	2	Edgardo Martínez Echeverri	Internal
	3	Santiago Wilches Yepes	Internal
	4	Mayor of the Municipality of El Retiro	Partner
	5	El Retiro Municipality Representative	Partner
	Sup. 1	Luisa María Pérez Fernández	Internal
	Sup. 2	Valeria Restrepo Abad	Internal
	Sup. 3	Juan Carlos González Ramírez	Interno
	Sup. 4	El Retiro Municipality Representative	Partner
	Sup. 5	El Retiro Municipality Representative	Partner
Aguas de Malambo	1	Santiago Ochoa Posada	Internal
	2	Jorge Antonio Yepes Vélez	Internal
	3	Lady Johanna Ospina Corso	External
	4	Maritza Amparo Orrego Martínez	Internal
	5	Mayor of the Municipality of Malambo	Partner
	Sup. 1	Jorge William Ramírez Tirado	Internal
	Sup. 2	Leon Arturo Yepes Enríquez	Internal
	Sup. 3	Johnier Alberto Montoya Pereira	Internal
	Sup. 4	Valeria Restrepo Abad	Internal
	Sup. 5	Julio César García Fernández	Internal
Aguas Regionales	1	Jorge William Ramírez Tirado	Internal
	2	Álvaro León Ospina Montoya	Internal
	3	Alejandro Villa Sánchez	External
	4	Luis Fredy Mejía Betancur	Internal
	5	Representative of the Department of Antioquia	Partner
	Sup. 1	Valeria Restrepo Abad	Internal
	Sup. 2	Jorge Antonio Yepes Vélez	Internal
	Sup. 3	Leon Arturo Yepes Enríquez	Internal
	Sup. 4	Julio César García Fernández	Internal
	Sup. 5	Representative of the Department of Antioquia	Partner
Aguas Nacionales	1	Santiago Ochoa Posada	Internal
	2	Darío Amar Flórez	Internal
	3	Juan Carlos Castro Padilla	Internal
	Sup. 1	Jorge Alberto Cadavid Monroy	Internal
	Sup. 2	Johnier Alberto Montoya Pereira	Internal
	Sup. 3	Juan Carlos González Ramírez	Internal

Back to content

International Water and Sanitation Companies			
Company	**Position**	**Name**	**Category**
Ticsa	1	Daniel Arango Ángel	Internal
	2	Darío Amar Flórez	Internal
	3	Santiago Ochoa Posada	Internal
	4	Francisco Canal	External
	5	Gilberto Escobedo	External
	Sup. 1	Carlos Israel Orduz Aguilar	Internal
	Sup. 2	Juan Felipe Valencia Gaviria	Internal
	Sup. 3	Jorge Antonio Yepes Vélez	Internal
	Permanent guest	Miguel Ángel Godinez	External
Aguas de Antofagasta	1	Santiago Ochoa Posada	Internal
	2	Álvaro García Hurtado	External
	3	Mónica María Ruíz Arbeláez	Internal
	4	John Alberto Maya Salazar	External
	5	Carlos Enrique Londoño Amariles	Internal
	Permanent guest	Juan Carlos Canal Colmenares	External
Hidrosur	1	Santiago Ochoa Posada	Internal
	2	Mónica María Ruíz Arbeláez	Internal
	3	Carlos Enrique Londoño Amariles	Internal
	4	Luisa María Pérez Fernández	Internal
	5	John Alberto Maya Salazar	External

Solid Waste Company			
Company	**Position**	**Name**	**Category**
Emvarias	1	Santiago Ochoa Posada	Internal
	2	Luis Javier Vélez Duque	Internal
	3	Armando Hernández	External
	Sup. 1	Juan Carlos Castro Padilla	Internal
	Sup. 2	Juan David Vélez Hoyos	Internal
	Sup. 3	Luisa María Pérez Fernández	Internal
	Permanent guest	Pedro Miguel Estrada Londoño	External

National Energy Companies			
Company	**Position**	**Name**	**Category**
EDEQ	1	Juan Felipe Valencia Gaviria	Internal
	2	Juan Carlos Duque Ossa	Internal
	3	Jaime Zapata Franco	External
	Sup. 1	Juan Rafael López Foronda	Internal
	Sup. 2	Blanca Liliana Ruiz Arroyave	Internal
	Sup. 3	Carlos Mario Jaramillo Duque	Internal
CHEC	1	Daniel Arango Ángel	Internal
	2	Diego Humberto Montoya Mesa	Internal
	3	Blanca Liliana Ruiz Arroyave	Internal
	4	Jaime Ramos Agudelo	External
	5	Governor of Caldas	Partner
	Sup. 1	Juan Rafael López Foronda	Internal
	Sup. 2	Carlos Enrique Londoño Amariles	Internal
	Sup. 3	Alberto Mejía Reyes	Internal
	Sup. 4	Carlos Mario Jaramillo Duque	Internal
	Sup. 5	Mayor of Manizales	Partner
ESSA	1	Inés Helena Vélez Pérez	Internal
	2	Ana Milena Joya Camacho	Internal
	3	Governor of Santander	Partner
	Sup. 1	Juan Carlos Duque Ossa	Internal
	Sup. 2	John Jairo Celis Restrepo	Internal
	Sup. 3	Governor's Delegate	Partner
CENS	1	Inés Helena Vélez Pérez	Internal
	2	Juan Carlos Canal Colmenares	External
	3	Governor of Norte de Santander	Partner
	Sup. 1	Juan Carlos Duque Ossa	Internal
	Sup. 2	Jaime Alberto Villa Valencia	Internal
	Sup. 3	Carlos Mario Tobón Osorio	Internal
Afinia	1	Daniel Arango Ángel	Internal
	2	Juan Carlos Castro Padilla	Internal
	3	Alejandro José Jaramillo Arango	Internal
	4	Andrea Pérez Cadavid	External
	5	Vacant	
	Sup. 1	Juan Felipe Valencia Gaviria	Internal
	Sup. 2	Carlos Enrique Londoño Amariles	Internal
	Sup. 3	Alejandra Vanegas Valencia	Internal
	Sup. 4	Vacant	
	Sup. 5	Vacant	

Back to content

International Energy Companies

Company	Position	Name	Category
Delsur	1	Inés Helena Vélez Pérez	Internal
	2	Carlos Mario Tobón Osorio	Internal
	3	Eric Casamiquela	External
	Sup. 1	Diego Humberto Montoya Mesa	Internal
	Sup. 2	José Enrique Salazar Velásquez	Internal
	Permanent guest	Sergio Restrepo Muñoz	External
Eegsa, Trelec	1	Vacant	
	2	Inés Helena Vélez Pérez	Internal
	3	Alejandra Vanegas Valencia	Internal
	4	Ana Milena Joya Camacho	Internal
	5	Raúl Edmundo Archila S	External
	Sup. 1	Diego Humberto Montoya Mesa	Internal
	Sup. 2	José Enrique Salazar Velásquez	Internal
	Sup. 3	John Jairo Celis Restrepo	Internal
	Sup. 4	Juan Rafael López Foronda	Internal
	Sup. 5	Juan Carlos Duque Ossa	Internal
Comegsa	1	Vacant	
	2	Inés Helena Vélez Pérez	Internal
	3	Alejandra Vanegas Valencia	Internal
	4	Ana Milena Joya Camacho	Internal
	5	Diego Humberto Montoya Mesa	Internal
	Sup. 1	José Enrique Salazar Velásquez	Internal
	Sup. 2	John Jairo Celis Restrepo	Internal
	Sup. 3	Carlos Mario Jaramillo Duque	Internal
	Sup. 4	Juan Rafael López Foronda	Internal
	Sup. 5	Juan Carlos Duque Ossa	Internal
DECA II	1	Vacant	
	2	Inés Helena Vélez Pérez	Internal
	3	Alejandra Vanegas Valencia	Internal
	4	Ana Milena Joya Camacho	Internal
	5	Raúl Edmundo Archila S	External
GESA, Amesa, Ideamsa, Enérgica, Credieegsa	1	Mario Alberto Naranjo Echeverri	Internal
	2	Inés Helena Vélez Pérez	Internal
	3	Vacant	
	4	Alejandra Vanegas Valencia	Internal
	5	Raúl Edmundo Archila S	External
	Sup. 1	Diego Humberto Montoya Mesa	Internal
	Sup. 2	Juan Rafael López Foronda	Internal
	Sup. 3	Carlos Mario Jaramillo Duque	Internal
	Sup. 4	Ana Milena Joya Camacho	Internal
	Sup. 5	Juan Carlos Duque Ossa	Internal
ENSA	1	Daniel Arango Ángel	Internal
	2	Inés Helena Vélez Pérez	Internal
	3	Alejandro Villa Sánchez	External
	4	Federico Alfaro Boyd	Partner
	5	Julio Javier Caballero Decerega	Partner
HET	1	Carlos Alberto Solano Bonnett	Internal
	2	Luz Marina Escobar Arango	Internal
	3	Alberto Mejía Reyes	Internal
	Sup. 2	Santiago Villegas Yepes	Internal

Investment vehicles			
Company	**Position**	**Name**	**Category**
EPM Inversiones	1	Vacant	
	2	Juan Carlos Castro Padilla	Internal
	3	Ángela Vergara Jaller	Internal
	Sup. 1	Carlos Mario Giraldo Gómez	Internal
	Sup. 2	Ángela María Ocampo Carmona	Internal
	Sup. 3	Ángela María Loaiza Cortés	Internal
EPM Latam	1	Carlos Mario Tobón Osorio	Internal
	2	Juan Carlos Castro Padilla	Internal
	3	Maritza Amparo Orrego Martínez	Internal
Panamá Distribución Group -PDG-	1	Carlos Mario Tobón Osorio	Internal
	2	Juan Carlos Castro Padilla	Internal
	3	Ángela María Ocampo	Internal
EPM Chile	1	Carlos Mario Tobón Osorio	Internal
	2	Juan Carlos Castro Padilla	Internal
	3	Maritza Amparo Orrego Martínez	Internal
EPM Capital México	1	Juan Carlos Castro Padilla	Internal
	2	Carlos Mario Tobón Osorio	Internal
	3	Maritza Amparo Orrego Martínez	Internal

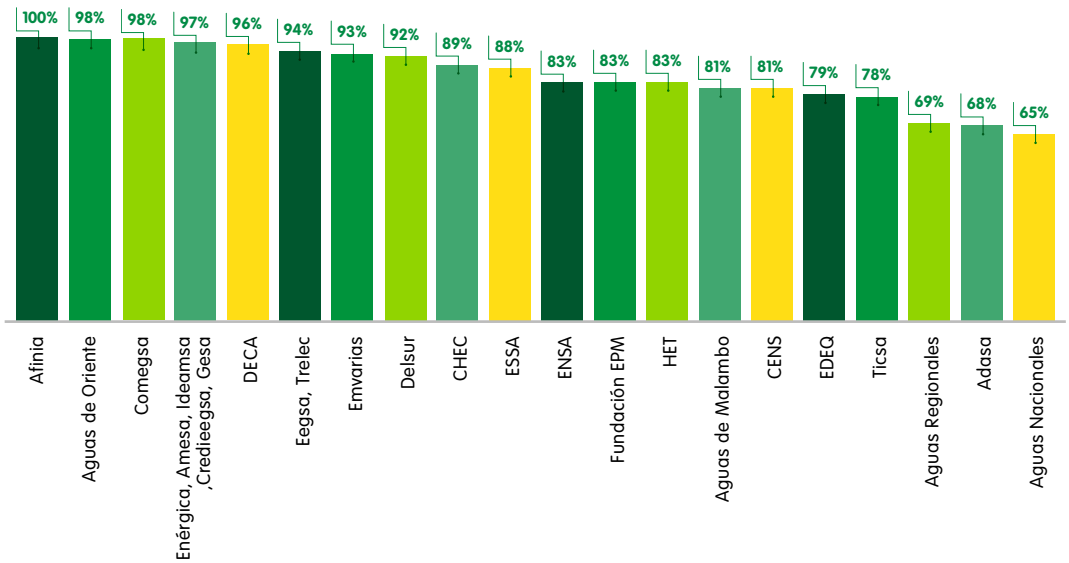
Corporate companies			
Company	**Position**	**Name**	**Category**
Maxseguros	1	Vacant	
	2	Tatiana Isaza Jaramillo	Internal
	3	Daniel Sandoval	External
Promobiliaria	1	Carlos Enrique Londoño Amariles	Internal
	2	Vacant	
	3	Hugo Javier Arango Acevedo	Internal
	4	Fernando León Duque Becerra	External
	5	Vacant	
Fundación EPM	1	Manuel Eduardo Osorio Lozano	Internal
	2	Vacant	
	3	Vacant	
	4	Secretario de Educación de Medellín	Partner
	5	Ana Milena Joya Camacho	Internal
	Sup. 1	Diana Rúa Jaramillo	Internal
	Sup. 2	Jorge Hernán Villa Hoyos	Internal

Back to content

Attendance at the Boards of Directors of Grupo EPM

Below is the average attendance of the main members of the board of directors of the companies of the EPM Group:

Average attendance of the boards of directors of the companies of the EPM Group Year 2020



Typical agenda and calendar of the Boards of Directors of Grupo EPM

GRI 102-31

As a good corporate governance practice and to promote the unity of purpose and direction of Grupo EPM, the Corporate Governance Unit prepares each year the integrated calendar of the ordinary sessions of the boards of directors and assemblies of the subsidiaries and defines the typical agenda. In the Joint Boards session of December 5, 2019, these instruments were approved for the year 2020 and during this period the respective follow-up was carried out.

The typical agenda of the EPM Group Board of Directors in 2020 had an average compliance for Colombian companies of 99.6% (100% energy and 99% water subsidiaries) and for international companies of 97.2% (energy subsidiaries of the 99.5% and 95% water).

Evaluation of the Boards of Directors of Grupo EPM

Since 2014, the EPM Group has a unified evaluation methodology of the Group's boards of directors, in order to know in detail, the management of this body, the degree of compliance with the commitments that each of its members has assumed and the value that their performance adds to each company. The government codes implemented in 2020 in the national subsidiaries include what is related to this practice.

The components evaluated are the following:

1. Relationship of the Board of Directors with the administration of the company.
2. Performance and effectiveness of the Board of Directors as a collegiate body.
3. Role of the President and Secretary of the Board of Directors.
4. Individual performance as a member of the Board of Directors.
5. Level of discussion and depth of topics by the Board of Directors.
6. Interaction and relationship between the parent company and the subsidiaries.

Additionally, and in order to strengthen the evaluations of the boards of directors and embrace best practices in the matter, since 2017 the evaluation was implemented from the perspective of the administration, with the purpose of evaluating the degree of alignment and the interaction between Management (Board of Directors) and Administration (Senior Management).

The following is a synthesis of the results of the self-evaluations by component evaluated and by group of companies:

No.	Components evaluated	Water, sanitation and solid waste companies													
		Oriente		Malambo		Regionales		Nacionales		Emvarias		Ticsa		Adasa	
		2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
1	Relation of the Board of Directors with the administration of the company	78%	78%	91%	87%	91%	98%	90%	89%	90%	83%	93%	90%	89%	95%
2	Performance and effectiveness of the Board of Directors as a collegiate body.	87%	87%	97%	92%	97%	97%	91%	98%	95%	93%	93%	91%	95%	97%
3	Role of the President and Secretary of the Board of Directors.	91%	92%	100%	98%	96%	98%	94%	100%	98%	97%	100%	97%	93%	100%
4	Individual performance as a member of the Board of Directors.	96%	93%	98%	96%	99%	97%	98%	96%	95%	100%	100%	96%	97%	100%
5	Level of discussion and depth of topics by the Board of Directors.	83%	83%	91%	88%	88%	95%	84%	90%	88%	81%	94%	90%	89%	93%
6	Interaction and relationship Parent - Subsidiaries.	91%	76%	100%	83%	98%	95%	90%	93%	100%	78%	96%	88%	97%	95%
	Total average	**87%**	**85%**	**96%**	**91%**	**95%**	**97%**	**91%**	**94%**	**94%**	**89%**	**96%**	**92%**	**93%**	**97%**

Approval levels

● Averages greater than 91% ● Averages between 84% and 91% ● Averages equal to or less than 83%

No.	Components evaluated	Energy companies																
		CHEC		EDEQ		CENS		ESSA		Afinia	DECA II		Delsur		ENSA		HET	
		2019	2020	2019	2020	2019	2020	2019	2020	2020	2019	2020	2019	2020	2019	2020	2019	2020
1	Relation of the Board of Directors with the administration of the company.	99%	97%	99%	99%	96%	99%	98%	97%	88%	83%	93%	82%	96%	96%	97%	91%	98%
2	Performance and effectiveness of the Board of Directors as a collegiate body.	95%	97%	98%	99%	99%	99%	100%	97%	92%	91%	95%	92%	95%	98%	98%	96%	98%
3	Role of the President and Secretary of the Board of Directors.	99%	96%	99%	99%	100%	100%	100%	98%	86%	89%	98%	96%	100%	100%	95%	98%	100%
4	Individual performance as a member of the Board of Directors.	98%	98%	98%	99%	98%	98%	97%	96%	99%	96%	97%	98%	100%	98%	99%	98%	98%
5	Level of discussion and depth of topics by the Board of Directors.	95%	94%	96%	97%	92%	96%	93%	95%	89%	84%	94%	82%	94%	94%	98%	96%	91%
6	Interaction and relationship Parent - Subsidiaries.	95%	89%	100%	98%	100%	97%	97%	90%	89%	91%	93%	90%	95%	92%	96%	98%	100%
	Promedio total	**97%**	**95%**	**98%**	**98%**	**97%**	**98%**	**97%**	**95%**	**91%**	**89%**	**95%**	**90%**	**97%**	**95%**	**97%**	**96%**	**98%**

Approval levels

● Averages greater than 91% ● Averages between 84% and 91% ● Averages equal to or less than 83%

General conclusions

For the year 2020, the self-evaluations of the boards of directors of the Group's companies CONTINUE TO SHOW positive results, taking into account that most of them had the participation of new members and that some companies had a change of administration.

Additionally, although the current conditions imposed by COVID-19 did not allow a direct relationship between the members of the Board, the discussions and conversations took place in an environment of respect for the other and always acting in favor of the company. There was objectivity among the members, which facilitated discussion and decision-making as a collegiate body.

There is a cohesion between the governing bodies (Board of Directors and Administration), a commitment as a collegiate body and superior results with respect to the role and performance of the presidents and secretaries of the boards of directors. The fulfillment of their legal duties, the reservation of confidential information, independence and objectivity, participation in decision-making, as well as in compliance with the Internal Regulations of the Board of Directors is highlighted.

In conclusion, the behaviors evaluated were those desirable for the development of the functions of these governing bodies and that, in general, their management during 2020 was outstanding.

In the component "Parent - Subsidiary Interaction and Relationship", which accounts for the knowledge on the part of the boards of directors about the interaction guidelines between the governing bodies, the Group's expectations and guidelines, and corporate governance practices, although it obtained positive results, recommendations were made by some members related to the clarity that must be had regarding the relationship and communication channels that are created in EPM, in order to guarantee that the achievement of the objectives of the EPM Group companies is adequately supported.

Finally, having external members on the Board of Directors implies paying greater attention to permanently disseminating the interaction guidelines and expectations of Grupo EPM.

Strengthening plan

The results of the evaluation of each Board of Directors are the basis for establishing a plan to strengthen its management.

With a view to defining the strengthening plan, in the session of each Board of Directors scheduled by a typical agenda, a space for dialogue is fostered between the members of this body and the Administration. This plan is built and validated in this session and the Secretary of the Board is responsible for monitoring its implementation.

The strengthening plan seeks:

- Promote systematic reflection by the Board about its own management and that of the Administration, to establish comprehensive improvement plans.
- Align the management of the Administration with the expectations of the Board of Directors.
- Contribute to the cohesion of the collegiate body and the generation of trust among its members.

The typical agenda of the EPM Group subsidiaries establishes the dates on which the implementation of this plan must be monitored.

Remuneration of the Boards of Directors of the EPM Group companies

GRI 102-36

In the EPM Group, it is recognized, for the external members and representatives of the partners, the attendance to the meetings of the Board of Directors and the committees in the companies that have them.

Amount paid by each affiliate: GRI 102-35

Company	Value per session attended	Currency
Water companies		
Aguas de Oriente Antioqueño	1 SMMLV*	COP
Aguas de Malambo	1 SMMLV	COP
Aguas Nacionales EPM	1.5 SMMLV	COP
Aguas Regionales	1.5 SMMLV	COP

Company	Value per session attended	Currency
Emvarias	1.5 SMMLV	COP
Adasa	55	UF**
Ticsa	1,800	USD
Energy companies		
CHEC	2 SMMLV	COP
EDEQ	2 SMMLV	COP
ESSA	2 SMMLV	COP
CENS	2 SMMLV	COP
Afinia	3 SMMLV	COP
DECA, Eegsa, Comegsa y Trelec	2,000	USD
Delsur	1,600	USD
ENSA	2,000	USD

** SMLMV - Current Legal Monthly Minimum Wage (Colombia)*
*** UF - Development Unit (Chile)*

In compliance with the Corporate Governance Code, the amount that each company paid during 2020 for fees and / or benefits (per diem) to the members of their respective boards of directors is detailed below:

Remuneration of boards of directors Grupo EPM

Subsidiary	Currency	Total paid in 2020
Aguas de Oriente	COP	14,922,651
Aguas de Malambo	COP	5,266,818
Aguas Nacionales	COP	-
Aguas Regionales	COP	9,216,928
Emvarias	COP	17,717,139
Adasa	UF	1,760
Ticsa	USD	59,400
CHEC	COP	32,736,420
EDEQ	COP	17,556,060
ESSA	COP	14,044,848
CENS	COP	16,927,582
Afinia	COP	19,205,126
DECA, Eegsa, Comegsa y Trelec	USD	64,000
Delsur	USD	24,065.42
ENSA	USD	46,210

Managers of the companies of Grupo EPM

In 2020, the following changes occurred in the management of the Group companies:

- Gustavo Alejandro Gallego Hernández, Manager of Emvarias since January 21, 2020.
- Carolina Alexandra Quintero Gil, General Manager of Delsur since February 1, 2020, had been serving as EDEQ Manager, where a two-year commission was granted to serve the new position, she has been in the EPM Group for 7.15 years.
- Nelson Armando Ramírez Gallo, Manager of Promobiliaria since July 1, 2020.
- Blanca Liliana Ruiz Arroyave, General Manager of Afinia, as designee, since October 1, 2020. At EPM he had been carrying out the position of Director of Energy Regulation, he has been in the EPM Group for 24.73 years.

The leaders that make up Grupo EPM's team of managers are listed below:

Subsidiary	Name	Position	Seniority in the EPM Group (years)
Aguas de Oriente	John Fredy Restrepo Sánchez	Manager	1.60
Aguas de Malambo	Walther Darío Moreno Carmona	Manager	5.17
Aguas Regionales	Hernán Andrés Ramírez Ríos	Manager	3.49
Aguas Nacionales	Henry Parra Molina	President	11.12
Emvarias	Gustavo Alejandro Gallego Hernández	Manager	0.94
Adasa	Carlos Mario Méndez Gallo	General Manager	29.16
Ticsa	Juan Carlos Restrepo Perea	Director General	9.51
Hidrosur	Víctor Rodrigo Vélez Marulanda	Representative Legal (EPM server)	26.80
EDEQ	Jorge Iván Grisales Salazar	Manager	31.50
CHEC	Jhon Jairo Granada Giraldo	Manager	15.01
ESSA	Mauricio Montoya Bozzi	Manager	5.59
CENS	José Miguel González Campo	Manager	5.14
Afinia	Blanca Liliana Ruiz Arroyave	General Manager	24.73

Subsidiary	Name	Position	Seniority in the EPM Group (years)
EPM Guatemala	Mario Alberto Naranjo Echeverri	Country Manager	24.76
Delsur	Carolina Alexandra Quintero Gil	General Manager	7.15
ENSA	Esteban Barrientos Moreno	CEO	12.74
Maxseguros	Oscar Armando Restrepo Posada	Head of Captive	7.08
Fundación EPM	Claudia Elena Gómez Rodríguez	Managing Director	6.68
Promobiliaria	Nelson Armando Ramírez Gallo	Manager	0.50
EPM Inversiones	Carlos Mario Tobón Osorio	Legal Representative (EPM server)	26.57

Each year, aligned with the strategic objectives, performance commitments are defined for the managers of the EPM Group companies. Its objective is to promote and emphasize the main value levers of the business, generate cohesion and coherence in the actions of the entire company and draw up a basic roadmap of what is expected of each subsidiary and its administration, taking into account its particularities and priorities.

The approval of these performance commitments is done in a very important space for EPM Group, called "Joint Boards of companies in the EPM Group", in which the three governing bodies MEET the subsidiaries:

- The property, represented by the EPM Group Manager and by the representatives of some of the partners.
- The management, represented by the Boards of Directors.
- Performance, represented by Managers.

Meeting of Directors of Grupo EPM

Since 2014, the management team of the EPM Group, made up of the vice presidents of EPM and the managers of the national and international operating and corporate subsidiaries, led by the General Manager of EPM, MEETS periodically with two fundamental objectives:

- Creation of shared vision of Grupo EPM.
- Empowerment of company managers as business group leaders.

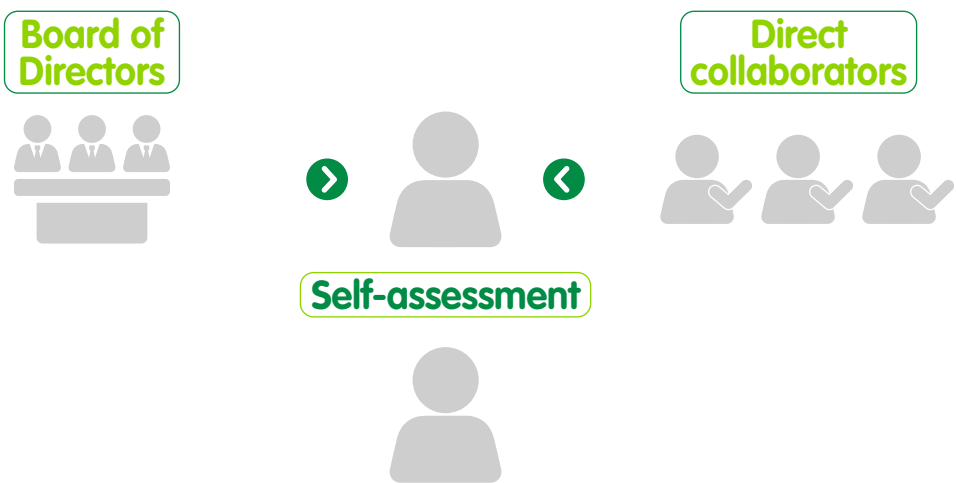
Each meeting addresses a specific topic aligned with the EPM Group's strategic moment, which strengthens the unity of purpose and direction.

In 2020, due to the COVID-19 pandemic situation, NO Executive Meeting was held.

Evaluation of the EPM Group Managers

In the same way as the evaluation of the General Manager and leader of the EPM Group is carried out, the managers of the Group companies are evaluated according to the quantitative results of their management (the what) and the way in which said results were obtained (the how). The results obtained in the indicators of the Balanced Scorecard are taken into account, as well as the coherence of the leadership style of each manager with the behaviors and actions that the EPM Group has determined for its leaders.

Groups of evaluators



The unified methodology for this exercise consists of a multi-source tool that makes it possible to assess the descriptors associated with ten organizational actions defined for the EPM Group. The actions are the behaviors that show the presence of the Group's cultural traits, declared to enable its strategic direction.

For their part, the Corporate Governance Codes implemented in the subsidiaries in Colombia, establish that there is a manager evaluation methodology, which is approved for the managers of the EPM Group companies.

Organizational actions defined by the EPM Group to evaluate the leadership exercise of the managers of the subsidiaries:

Ethical management	Service orientation
Create strategic vision	Development
Achieve results	Adaptability
Impact and influence	Innovation
Cultural sensitivity	Learning capacity

Strengthening plan

The results of the evaluation are delivered in the February session of the Board of Directors of each subsidiary. Based on the feedback, each collegiate body concludes if the manager:

- Fails.
- Complies with the performances.
- He has superior performances that allow him to be an exemplary leader in Grupo EPM.

This qualification is part of the goals of each manager and is called the Managerial Style indicator, and in companies that have variable compensation, it registers a weight within their annual bonus.

Based on the results obtained in this evaluation exercise, a strengthening plan is defined for the Manager and a Public statement about his management that is part of the annual Management Report of the respective company.

Remuneration of the management team of Grupo EPM in Colombia

In compliance with the Government Code for national subsidiaries, the amount for salaries and benefits that during 2020 was paid to the General Manager and the people who are part of their first level of reporting in the structure of each business is detailed below:

Remuneration of the management team of Grupo EPM's subsidiaries in Colombia

Subsidiary	Currency	Total paid in 2020
Aguas de Oriente	COP	159,846,054
Aguas de Malambo	COP	415,476,811
Aguas Nacionales	COP	623,078,429
Aguas Regionales	COP	961,478,442
Emvarias	COP	1,176,467,406
CHEC	COP	2,760,471,271
EDEQ	COP	1,774,959,705
ESSA	COP	3,171,861,216
CENS	COP	2,383,860,956
Afinia*	COP	696,348,802
Fundación EPM	COP	1,061,287,979

** At Afinia, the value corresponds to the income received by executives during the October-December quarter of 2020*

Corporate governance measurements

Back to content

Corporate governance measurements

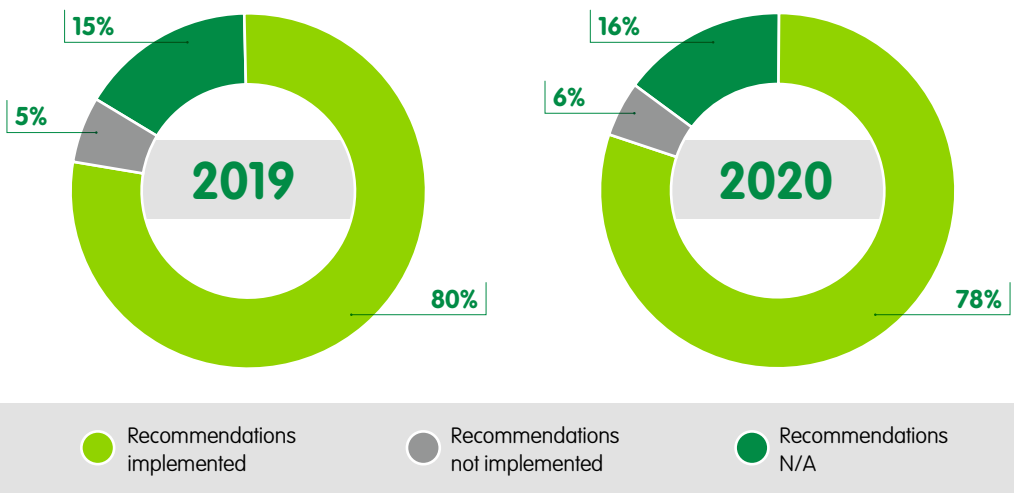
Country Code

On January 31, 2020, within the period established by the Financial Superintendency of Colombia, EPM transmitted the Implementation Report of the Country Code Survey, corresponding to the period between January 1 and December 31, 2019. For this period, the implementation of 80% of the 148 recommendations of the survey was reported.

Similarly, on January 29, 2021, EPM transmitted the Implementation Report of the Country Code Survey, corresponding to the period between January 1 and December 31, 2020. For this period, the implementation of 78% was reported.

The responses to the survey explain the corporate governance practices adopted and applied by EPM during each term. The non-implementation of the recommendations is due to reasons of size, structure, culture or particular moment of the company. The recommendations whose implementation does not apply are mainly associated with the legal nature of the company.

Implementation report Country Code



The report of this survey is published at www.epm.com.co

Corporate transparency

EPM participates in the Business Transparency Measurement, Public Services chapter, promoted by the Transparency for Colombia Corporation. The general objective of the measurement is, through the identification of corruption risks, to improve transparency and anti-corruption standards to strengthen business management. This is a tool that identifies institutional designs and practices that generate corruption risks and promotes the formulation and execution of improvement actions.

The Business Transparency Measurement consists of four components: clear rules, openness, dialogue and control.

The results obtained with the measurements carried out at EPM and the Colombian water and energy subsidiaries reflect the commitment as a business group to this important practice and become a stimulus for continuous improvement and strengthening of the corporate integrity system.

Relevant information

EPM has the status of issuing entity because it participates in the Colombian Public securities market through the issuance of bonds and commercial papers. Therefore, it is subject to timely notice to the market of relevant information that arises in the development of its activities.

In the same sense, and because it is a business group, the Financial Superintendency requires reporting relevant information from subsidiaries. That is why Notice 2018-CIR-1553 of October 10, 2018 was issued, with detailed instructions and procedures, it was disclosed and accepted by all the companies of the EPM Group.

During 2020 EPM made 96 reports of relevant information.

Since 2013 EPM has received the Recognition to Issuers -IR1- granted by the Colombian Stock Exchange (BVC), given the importance of the markets having sufficient and timely information for investment decisions. This recognition encourages issuers to adopt best practices in terms of information disclosure and investor relations (Investor Relations, IR).

[1] *https://www.bvc.com.co/pps/tibco/portalbvc/Home/Empresas/IR/Empresas_IR?action=dummy*

Credit risk rating

Regarding credit risk ratings, in 2020 EPM continued with its practice of informing investors widely and in a timely manner about relevant facts, in order to provide them with the necessary elements for their decision-making in a transparent manner and thus preserve trust in the Company.

In 2020, the double grade of international investment was sustained by the rating agencies Fitch Ratings and Moody's. Fitch Ratings placed EPM's risk rating at "BBB-" on the international scale and "AAA" on the national scale, both in negative observation, while Moody's maintained the international rating at "Baa3" level with a negative outlook.

With respect to the national subsidiaries and the subsidiary Adasa, in Chile, there were positive behaviors as their ratings were sustained: "AAA" for the national Energy subsidiaries, "AA +" for Emvarias, "A" for Aguas Regionales and "AA-" (local rating in Chile) for Adasa. ENSA, for its part, maintained its "BBB" investment grade rating on an international scale, with a stable outlook.

Investor Relations

EPM maintained its transparency practices in the national and international financial markets, complying with the timely delivery of updated information on the Company. Some of the most representative practices in this regard are: quarterly teleconference for the delivery of financial results in two versions (Spanish and English) and permanent resolution of the concerns of local and international investors.

Corporate governance planning

Back to content

Corporate governance planning

Every year the EPM Board of Directors approves the "Corporate Governance Plan", which consolidates the initiatives that will be developed to maintain a constant evolution of corporate governance. This practice has been implemented, voluntarily, since 2006.

The plan includes activities to be carried out by different EPM dependencies to improve the relationship between the governing bodies of the Company and the Group, in addition to strengthening the General Framework of Corporate Governance of the EPM Group (see Appendix 1:General Framework of Corporate Governance of Grupo EPM).

Follow-up to the 2020 Corporate Governance Plan

During the year 2020, periodic monitoring was carried out on the fulfillment of the proposed activities and adjustments were made in the deliverables or in the deadlines of the initiatives, which facilitated their fulfillment. Likewise, in July, the Management Committee of the Board of Directors of EPM followed up on it.

No.	Emphasis / Plan subjects	% Planned progress	% Progress executed and compliance
1	Strengthening property management	100%	63%
2	Strengthening of the EPM Group's governing bodies	100%	98%
3	Strengthening of intragroup relationships	75%	59%
4	Strengthening Framework for Action, Government Model and their relationships	83%	90%

Conventions

- % Planned
- Compliance equal to or greater than 95%
- Compliance between 75% and less than
- 95% Compliance below 75%

Regarding the execution of the activities, needs for changes were identified by some managers, which led to the withdrawal of the following initiatives from the plan:

- Define and implement the shareholders' meeting regulations for the Group's subsidiaries in Colombia.
- Updating of the regulations of the audit committees implemented in subsidiaries.
- Regarding the compliance mechanisms within the framework of initiatives to strengthen the control environment, the annual report to the Board of Directors of the actual and potential conflicts of interest declared by the General Manager and senior executives in Colombian subsidiaries.

Achievements and progress in EPM

- Definition and implementation of the training program, socialization and monitoring of the General Government Framework, with the following virtual courses:
  - Corporate Governance Code: 7,165 people were trained in the main corporate governance topics of EPM and the business group. In other words, 91.34% of the total EPM personnel, at the end of 2020, acquired knowledge in the main corporate governance practices, consolidating a shared vision and a COMMON language in this matter.
  - Government Agreement: 100 people were trained in the key concepts of the relationship between the companies of the EPM Group. This course was to TARGET people who advance the subscription Minutes of the Agreement, i.e., the 49.26% of the total of the target AUDIENCE defined closing 2020 acquired knowledge to strengthen the development of relationships that facilitate the achievement of the objectives business and the optimization of synergies of the business group.
- ARCA application evolution for the EPM Board of Directors, referring to improvements in the functionality of the Board Committees.
- Definition of the regulations of the CORE and Management Committees.
- Proposal of a documentary structure for corporate governance.

In the initiatives proposed to strengthen the control environment, the following advances were obtained:

Ethical management

- Virtual training in ethical management, which allowed the training of 6,498 people in EPM and the goal was achieved by 164%.
- Measuring the climate in EPM, with a response rate of 69%, 5,028 employees attended the measurement.

Risk management

- Risk management training for governing bodies, in which new members of the Board and new vice presidents of EPM were inducted.

Strengthening of the Internal Control System

- Audit of the implementation of the MIPG model (Integrated Planning and Management Model), the evaluation of the Internal Control System was carried out applying the new DAFP methodology and in accordance with the MIPG guidelines.
- Implementation of private meetings by the Audit with the Manager, following recommendations from the International Institute of Auditors (IIA).

Achievements and progress in Grupo EPM

- Updating of the Government Codes of the Colombian subsidiaries, Aguas de Oriente and the EPM Foundation remained pending. Additionally, the adoption of this practice, as part of CaribeMar's Post Acquisition Integration Plan, was included in the corporate governance work front.
- Documentation of the evaluation methodology of the Boards of Directors of subsidiaries.
- A proposal for the evaluation of corporate governance was designed.
- The implementation of mechanisms for the resolution of conflicts between government bodies was evaluated.

Regarding the initiatives proposed to strengthen the control environment, the following advances were obtained:

Ethical management

- Measurement of the ethical climate in national subsidiaries.
- A proposal was prepared to update the Business Conduct Manual in accordance with the requirements of Resolution 080 of 2019 of the CREG.

Risk management

- Training in risk management aimed at the governing bodies of Afinia, the new subsidiary of the Group, in which the external member of the Board of Directors of that company was inducted.

Strengthening of the Internal Control System

- An audit was carried out on the relationship model with the companies of the EPM Group.

Corporate Governance Plan 2021 - 2024

The Corporate Governance Plan 2021–2024 was designed, based on an analysis from MULTIPLE sources that consolidates a long-term vision and includes the initiatives of the EPM Group to maintain constant evolution in this matter.

1	Strengthening property management
1	Define corporate governance matters to be included in the management reports for shareholders' meetings.
2	Evaluate the feasibility of defining and implementing the majority shareholder declaration.
3	Propose methodology to 3 Municipality of Medellín for evaluation of the Agreement Relationship Framework.
4	Relationship management in electoral cycle (informative opening) and splicing.
5	Work plan of the Management Committee for the governing bodies, due to a change in the representation of the property of EPM.
6	Analyze the participation of office secretaries in the committees of the EPM Board of Directors.
7	Comprehensive review of the EPM Board of Directors committees.

2	Strengthening of the EPM Group's governing bodies
1	Lead the corporate governance front of the Guatemala and CaribeMar projects.
2	Update corporate governance codes in subsidiaries.
3	Document the induction methodology for members of the EPM Board of Directors.
4	Lead the implementation of mechanisms for the resolution of conflicts between government bodies.
5	Updating of the Bylaws of international subsidiaries
6	Evaluate the feasibility of defining and implementing evaluation methodology among peers of the Board of Directors in EPM and subsidiaries.
7	Evaluate feasibility of defining methodology for succession plan for management in subsidiaries.
8	Analyze the corporate governance instruments for the EPM Group's meeting nomination guide.

3	Strengthening of intragroup relationships.
1	Subscribe minutes of interaction guide Agreement Government with water and international energy subsidiaries.
2	Define policy regarding operations with related parties.

4	Strengthening Framework for Action, Government Model and their relationships.
1	Define information disclosure policy.
2	Document corporate governance planning methodology.
3	Initiatives to strengthen the control environment.
4	Evaluate political applicability on contributions and zero donations.
5	Lead the implementation of the ARCA information system in the national subsidiaries.
6	Implement a proposal for the evaluation of corporate governance.
7	Analyze the impact of Decree 151 of February 10, 2021, which modifies Decree 2555 of 2010 regarding the disclosure of information by issuers of securities.

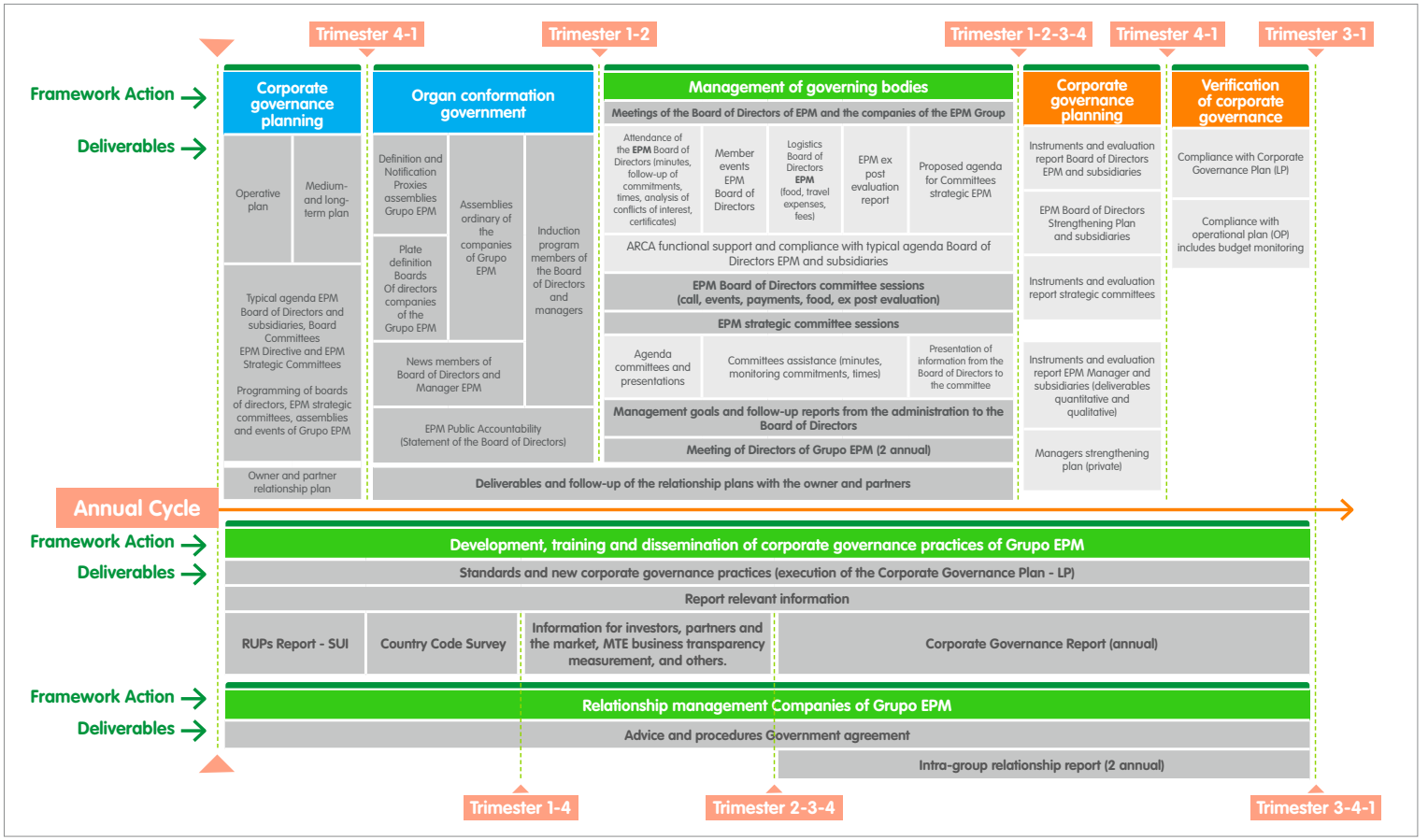
Conventions

2021 | 2022 | 2023 | 2024

Subsidiaries:** national and international companies or subordinate companies of **Grupo EPM

2020 Corporate Governance Unit operational plan

Consolidates the recurring deliverables of the annual cycle, in accordance with the Action Framework and the Corporate Governance practices of Grupo EPM (see Annex 1:General Framework of Corporate Governance of Grupo EPM). The result of monitoring the operational plan is detailed in this report.



Back to content

Accountability

Back to content

Accountability

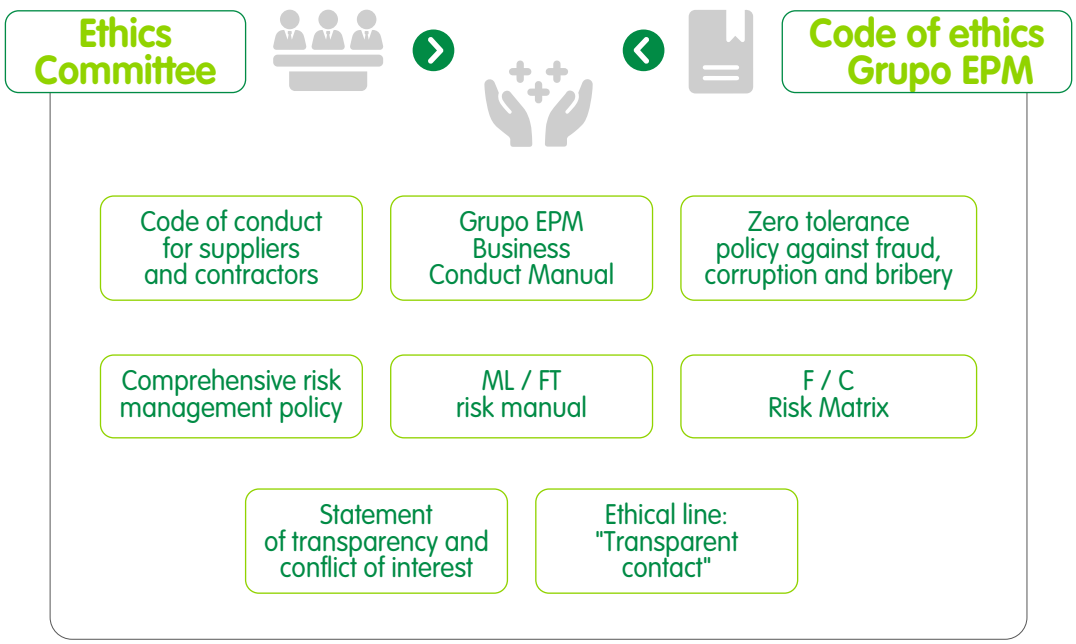
Ethical management of Grupo EPM

GRI 102-17

The EPM Group is aware of the role it plays in the society where it OPERATES and to which it provides its services. That is why it instituted Social Responsibility as the transversal axis that guides its actions and its strategy for optimizing operations and growth.

This responsibility comes to life in the performance of the team of collaborators that make up each Company, since each behavior of the EPM Group People reflects the principles of ethical action and values on which it is based.

Ethical management



In the material topic "Transparency" of the Sustainability Report, the details of the actions carried out during 2020 aimed at strengthening ethical and transparent behaviors in employees, fundamental to strengthen trust, are reported. Between the different interest groups with which the Company is related.

Control environment of Grupo EPM

The legal nature of EPM, its 100% state character, the economic sector in which it OPERATES and its status as issuer of securities, make it an entity that is widely supervised by the internal control mechanisms regulated by the Law and external control entities, in addition to those that have been adopted on a voluntary basis and have been implemented in the subsidiaries of the business group.

In addition to allowing cohesion between companies, the control environment allows for policies, processes, procedures, activities and information that guarantee unity of purpose and direction, and also comply with the internal and external legal framework that regulates it; all this with the purpose of achieving the objectives and the MEGA of Grupo EPM.

Control environment

Comprehensive management of risks	• Includes the definition of risk policies, as well as the definition and execution of methodologies for their identification, evaluation, measurement, administration, monitoring and reporting. • It requires an internal control system to ensure, through controls, that risks are managed in accordance with the defined policy and methodology and that these are applied in practice.
Internal control	(Act 87 of 1993) "System made up of the organization scheme and the set of plans, methods, principles, standards, procedures and verification and evaluation mechanisms adopted by an entity, in order to ensure that all activities, operations and actions, as well as the administration of information and resources, are carried out in accordance with the constitutional and legal norms within the policies outlined by the management and in attention to the intended goals or objectives ".
Compliance	Risk management associated with money laundering and terrorist financing, which represent a significant threat to the economic, social and political stability of a country and of the markets worldwide.
Internal audit	• Performs the evaluation of the internal control system, which is defined as an independent and objective activity of assurance and consultation. Its purpose is to help improve the management of the organization and the fulfillment of its objectives. • The internal audit activity provides a comprehensive approach to assess and improve the effectiveness of comprehensive management risk management, controls and governance.

External financial audit	Evaluates the accounting information in general and the financial statements, as well as the rendering of an independent opinion regarding the reasonableness with which they indicate the financial situation of EPM at the end of each fiscal year.
External controls	They are also part of the control environment of the Company due to their legal nature, since they seek to guarantee the development of its governance process within the public administration.

Corporate Audit Management

In 2020, 100% of the risk-based Audit Plan was executed, approved by the Board of Directors and scheduled at that cutoff for the EPM Group, covering the processes with the highest level of risk and in accordance with the prioritization criteria defined based on the methodology.

229 assurance and consultation, and management and development work were carried out in Grupo EPM to evaluate missionary, strategic and support processes.

As a result of the audit work, opportunities for improvement were identified that must be managed by those responsible through the formulation of improvement plans and the verification of compliance and effectiveness, in accordance with the follow-up carried out by the audit.

During 2020, in the EPM Group, the control effectiveness indicator (monitoring of improvement plans) was 91%.

The objective of the Corporate Audit Model is to carry out assurance and consultation activities in the EPM Group, additionally, during 2020 the following activities were carried out:

- Updating of the audit procedure, towards a more agile audit, those responsible for the processes were accompanied in the identification of the root cause, and a more effective improvement plan was achieved for the organization.
- Definition and promotion of the implementation of awareness and communication plans in control culture, with emphasis on the model of the three lines of defense and improvement plans.
- Quality Assurance and Improvement Program - PAMC, evaluation to determine compliance with international auditing standards.
- Development of tools for the extraction, automation and presentation of data, towards a continuous audit.
- Evaluation of the structuring of the Integrated Planning and Management Model - MIPG.

Sustainability Report 2020

As a result of the strategic approach of the Corporate Audit for the year 2019-2025, the strategic initiatives are aimed at leveraging four management emphases:

Contribute to the harmony of life for a better world

1 Results — Alignment with the objectives and strategic risks

Deliver results that help protect the value of the Organization.

2 Product — Trust relationships and strategic leadership

Provide strategic support for decision making.

Impact

3 Process — Strengthening the audit activity

Promote the best of the Internal Control System in the Group, Comprehensive and corporate audits (global opinions).

4 Supplies — Approach to prevention: Proactivity and future orientation

Develop capacities, innovation, digital transformation and quality of internal audit activity.



Improve and protect the value of the Organization

External Audit Plan

Country Code 29.12

Due to the legal nature of an industrial and commercial company in the State, EPM is not obliged to have an external financial audit. As a good corporate governance practice and in response to the entity's commitments to multilateral banking, EPM contracted an external financial audit, which included an opinion on the financial statements, the annual evaluation of the Company's internal accounting control system (relevant for the preparation and fair presentation of the financial statements), an audit of the information reported to CREG by the network operators and related to the administration, operation and maintenance (AOM) expenses incurred, and a specific audit to certify compliance by EPM with the commitments acquired in the Legal Stability Contract, as well as the verification of the Business Environmental Management Index (IGAE), the verification of the Sustainability Report and the financial audit of the Thermal District project.

As external financial auditor for Grupo EPM, it was continued with the private firm KPMG SAS, cataloged among the four largest auditing firms in the world.

Contract	Object	Period (Start - End)	Payments made 2020
CRW 55509 KPMG	The contractor is entrusted with the provision of external audit services required by EPM.	01/01/2020 31/12/2020	COP 1,736,985,504 (without VAT)

The value of the external audit contract during the period from January to December 2020 was COP 1,736,985,504.

The fees paid by EPM represent 1.55% of KPMG's total income for the external audit activity for the same period.

This Corporate Governance Report has been prepared in accordance with the Standards for the Preparation of Sustainability Reports of the Global Reporting Initiative (GRI) and has been externally verified by the firm KPMG, which performs the external audit of EPM and the fiscal review in the EPM Group companies. Check the external verification certificate in the Social and Environmental Management Report that is part of the Sustainability Report.

External entities for control, supervision and surveillance

External control entities

They are those organizations to which the Political Constitution of Colombia entrusts the functions related to disciplinary control, defense of the people and fiscal control. The control entities of the Colombian state are: The Comptroller General of the Nation, the territorial comptrollers' offices, the Public Ministry in which the Office of the Attorney General of the Nation, the Ombudsman's Office and the district and municipal authorities are framed.

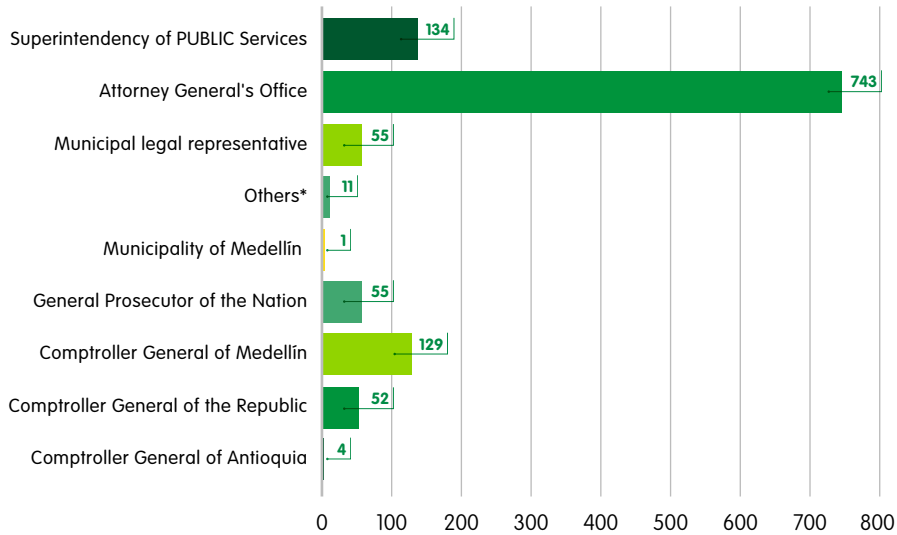
Supervision and surveillance entities

Entities defined in the structure of the Colombian State with supervision and surveillance functions in accordance with the services provided by EPM. THE SUPERINTENDENCE OF Public Services and the Financial Superintendency are part of this group.

In its duty of transparency, EPM has the responsibility to respond in a timely, complete and pertinent manner to the requirements made by the different control bodies and the supervisory and surveillance entities.

EPM attended, in a responsible and timely manner, during 2020 a total of 1,184 requests from the different control, supervision and surveillance entities.

Requirements external control entities



** Financial Superintendence of Colombia, Superintendency of Industry and Commerce, National Unit for Disaster Risk Management and Municipal Comptroller of Bello, among others.*

Comprehensive risk management

Country Code 33.3 – iv. b) c) d); GRI 102-30

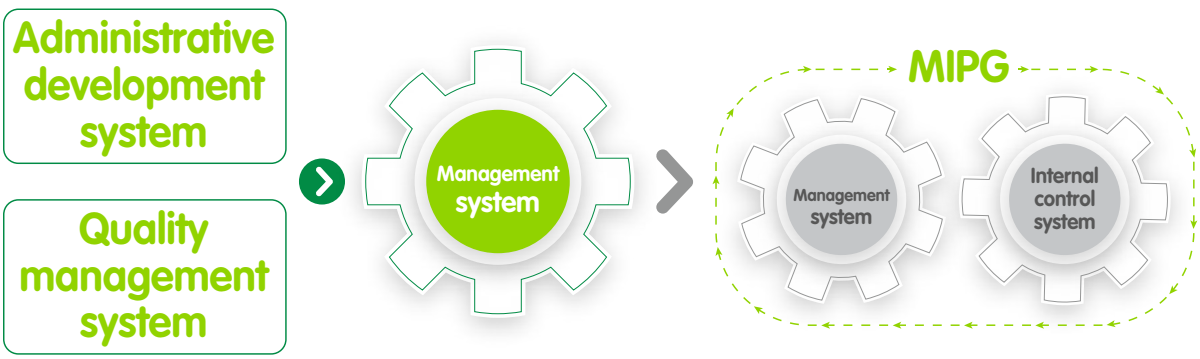
The comprehensive risk management report is a section of the "Our Group" chapter of the Sustainability Report, it contains the definitions, progress and challenges of the EPM Group related to this matter.

Integrated Planning and Management Model - MIPG

Country Code 33.3 – iv. a)

The Integrated Planning and Management Model - MIPG is a new frame of reference to direct, plan, execute, monitor, evaluate and control the management of public entities and agencies, in order to generate results that meet development plans and solve the needs and problems of citizens, with integrity and quality of service, ACCORDING TO decrees 1499 and 648 of 2017, of the Administrative Department of Public Function - DAFP.

The Integrated Planning and Management Model, MIPG, articulates the Management System, made up of the Administrative Development System and the Quality Management System, with the Internal Control System, resulting in a SINGLE Management System. **Country Code 33.3 – iv. a)**



At EPM, the responsibility of the Integrated Planning and Management Model - MIPG rests with its legal representative (Decree 2198 of May 2, 2018), while its institutional framework is represented by both the Institutional Management and Performance Committee and the Institutional Coordination Committee of Internal Control (Decree 2192 of January 5, 2018).

In 2020, the MIPG model completed three years in the process of implementation in EPM and subsidiaries in Colombia. This year coincided with the change of national, regional and municipal governments, also leading to administrative changes within the Organization. At this juncture, EPM recomposes its work plan related to the implementation of this planning and management model and reinforces collaborative work with subsidiaries, creating a space to share good business practices and collective creation of agile and productive implementation solutions for EPM Group companies.

Governance structure for the implementation of MIPG in EPM

To advance in the implementation, the following governance structure was established, which responds to the roles and responsibilities of the issues that make up the dimensions and their policies.

The responsibility for the implementation of MIPG rests with the General Manager; However, he can delegate roles and responsibilities to senior management in two ways Institutional

Management and Performance Committee - CIGD and the Institutional Internal Control Coordination Committee - CICCI. For EPM, the roles of the Management Committee were adjusted to the conditions required for it to meet and add to its thematic plan, what is related to MIPG.



- **Institutional Management and Performance Committee - CIGD:** In this committee all the members have voice and vote, with the exception of the Vice President of Corporate Audit who participates with voice, but without vote; the secretary, currently the Vice Presidency of Strategy and Planning, is the one who exercises the role of strategic planning.

- **Institutional Internal Control Coordination Committee - CICCI:** whose secretary is the one who exercises the role of internal control and participates with voice and without vote. Currently the Vice Presidency of Corporate Audit exercises this role.

The coordination of the implementation of MIPG in EPM is in charge of the Corporate and Business Planning Management, and those responsible for the implementation of each dimension of MIPG and its policies are distributed as shown below:

	1	2	3	4	5	6	7
Dimension	Human talent	Strategic direction and planning	Management with values for the result	Evaluation of results	Information and communication	Change management	Internal control
Responsible	VP Human Talent DO	VP Strategy and Planning	VP Human Talent DO	VP Strategy and Planning	VP Corporate Communications	VP Human Talent DO	VP Human Talent DO
			VP New Business, Innovation and Technology		VP Human Talent DO	VP Strategy and Planning	VP Risks
			VP Strategy and Planning		VP Supplies and Shared Services		VP Corporate Audit
					VP New Business, Innovation and Technology		VP Strategy and Planning

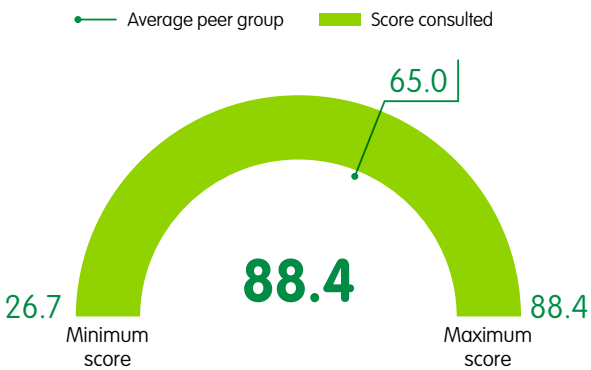
As for the national subsidiaries, this model is applied adapted to the structure of each one.

Results FURAG 2019[2]

With the FURAG tool, the second annual measurement of progress in the implementation of MIPG based on the previous year was carried out, in which EPM, as in 2018, is distinguished as a benchmark entity among the peers of its comparison group with an Index of Institutional Performance -IDI- that goes from 77 points in 2018 to 88 points in 2019, on a scale of 1 to 100.

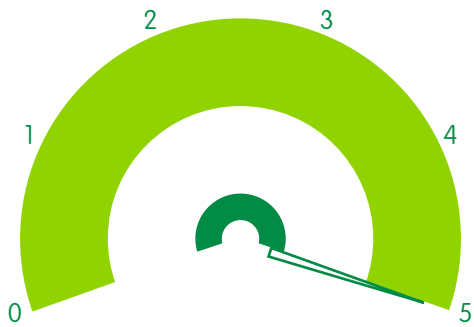
Institutional performance index

Institutional performance index



Note 1: *The group average corresponds to the average scores of the entities that are part of said group. This value is displayed when a single entity is queried.*

Ranking (quintile)



Note 1: *The information in this chart is only valid when filter or query a single entity.*
Note 2: *the entities with the highest score are located in quintile 5; those with the lowest scores are located in quintile 1.*

Advances in MIPG in 2020

- Restructuring of the 2021 improvement plans: the purpose is to design improvement plans by dimension, which will be registered in Avanza.
- As a result of the audit on the implementation of MIPG carried out by the Vice Presidency of Audit, aspects were identified to adjust, related to the coordination of the implementation, the performance of the RICs of MIPG, among others. Additionally, a consultancy to the MIPG implementation plan was made available to restructure this plan and prepare it by dimension, which is STILL in process.

[2] ***FURAG:*** *Unique Management Progress Report Form. Mechanism used by the Public Function (DAFP) to measure the degree of implementation of MIPG in the entities that apply to them.*

- Carrying out the MIPG RIC and activation of discussions with the national subsidiaries of MIPG Grupo as a mechanism to share progress and concerns related to this model.
- Approval of the code of ethics and the code of integrity-values of the Public SERVICE.
- Training on MIPG for all EPM Public OFFICIALS.
- Approval of the lines of defense scheme in the Management Committee and execution of outreach and awareness activities aimed at EPM People, in particular, on the second line of defense. The lines of defense are:

Strategic line		
EPM Strategic Committee (Management Committee)		
1st line of defense	**2nd line of defense**	**3rd line of defense**
Self-control	**Self-appraisal**	**Independent evaluation**
All collaborators	**75 dependencies**	**VP Corporate Audit**
• Process managers. • Heads of administrative structure and their teams.	• Responsible for monitoring and evaluating controls and risk management. • Responsible for consolidating and generating information for decision-making, guaranteeing confidentiality, integrity and availability of the information. • Responsible for monitoring business plans and support. • Responsible for evaluating compliance with the achievement of objectives. • Responsible for generating information for the assurance of the operation. • Responsible for the security of information, the physical security of assets and people who guarantee their protection. • Responsible for the implementation and maintenance of management systems in matters of quality, environment, safety and health at work, asset management, information security, among others. • Responsible for relations with stakeholders.	• Responsible for the independent verification process.

- Adjustment of responsibilities of the Management Committee in relation to MIPG: CIGD, CCICI.
- Completion of the Single Management Report Form - FURAG.
- Completion of the Transparency and Access to Information Index - ITA.

- Progress in the implementation and institutional framework of the Document Management program.
- Adjustment to the accountability process.
- Design of the communication plan on MIPG. Everything related to the defense lines was executed.
- Progress was made in defining the Digital Government policy.

Completion of the MIPG source improvement plans: These plans have to do with the audit of integrity strategies, attention to gaps in the publication of information, human development activities, information technologies and accountability.

Evaluation of the internal control system

Corporate Audit Vice Presidency within MIPG has been conducting semiannual evaluations dimension 7 "Internal Control System" supported on the methodology of the Administrative Department of the Public Function -DAFP-, results are published in www.epm.com.co. EPM has made important progress in the different components, supported by the management of improvement plans.

Compliance

GRI 102-17

The compliance report is detailed in the material topic "Transparency" of the Sustainability Report, it reports on the transparency practices applied in Grupo EPM and its main achievements and challenges during the period.

Annexes

Back to content

Annexes:

Annex 1[3]:
General Framework of Group Corporate Governance

Definition of Corporate Governance

In accordance with the provisions of subparagraph 1.3 of the EPM and EPM Group Governance Code, Corporate Governance is "the system4by which the companies of the EPM Group are directed, managed and controlled through a balance between ownership and administration, in order to guarantee its sustainability and growth, the rights of its investors, transparency and ethics in its actions and access to information for its stakeholders (…) "

Strategic statement of Corporate Governance

The EPM Group guides its management through the development and adoption of good governance practices, for the conscious decision-making of the governing bodies, fostering a business management culture that contributes to the balanced satisfaction of the needs of its stakeholders, the creation of value and the sustainability of companies within the framework of unity of purpose and direction.

Objective of the "General Framework of Corporate Governance"

Define the scope of action of the property, the direction and the management or management of the companies of the EPM Group, implementing the necessary practices to strengthen these governing bodies, verifying their degree of compliance and disclosing the results to the stakeholders.

Scope of the "General Framework of Corporate Governance"

The "General Framework of Corporate Governance" is the set of elements that INTERACT to strengthen Corporate Governance, promoting unity of purpose and direction through the implementation of a model, aligned with the strategic direction defined for the Group. The "General Framework of Corporate Governance" is an integral part of the Government Code,

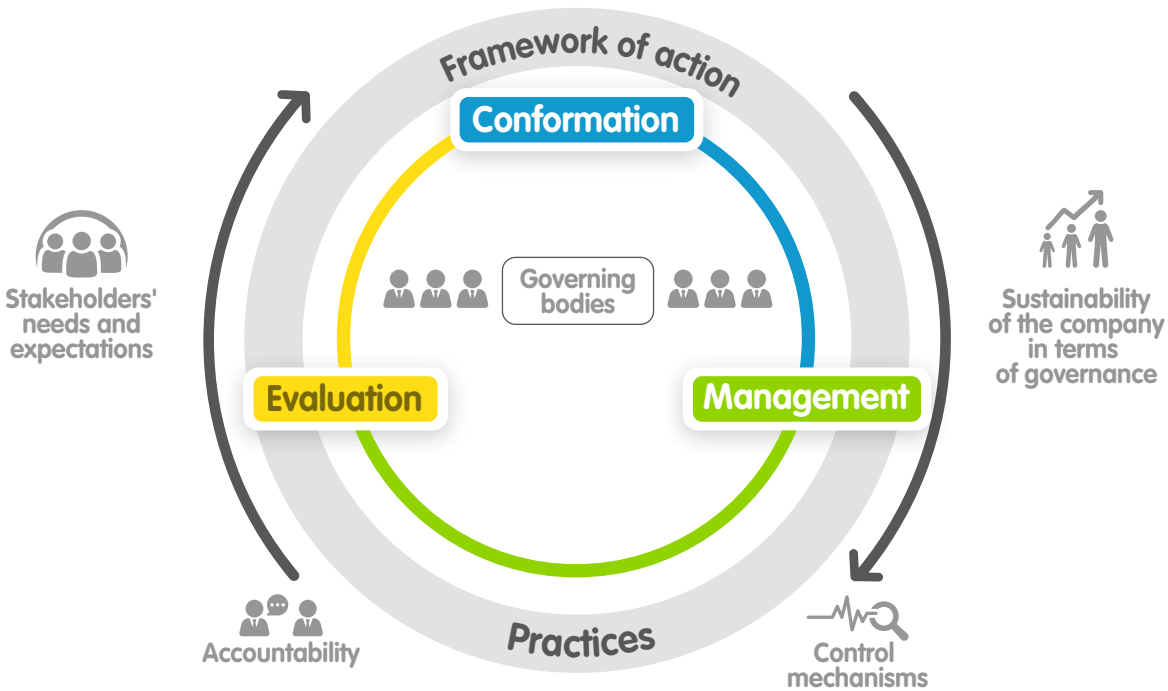
[3] This text is a true copy of the General Framework of Corporate Governance of Grupo EPM, which is an annex to the Corporate Governance Code.
[4] ""Corporate governance is the system by which the direction and control of companies is exercised", Sir Adrian Cadbury 1992, Report on the Financial Aspects of Corporate Governance in the UK.

in this sense it is defined and implemented in EPM, and it is adopted by the subsidiaries, ACCORDING TO their internal procedures, adapting them to the rules and particularities that apply to each company of the Group.

Graphic representation of the "General Framework of Corporate Governance of Grupo EPM"

This model is based on the governing bodies, the definition of its framework of action through governance practices, control mechanisms, and accountability.

Corporate governance planning

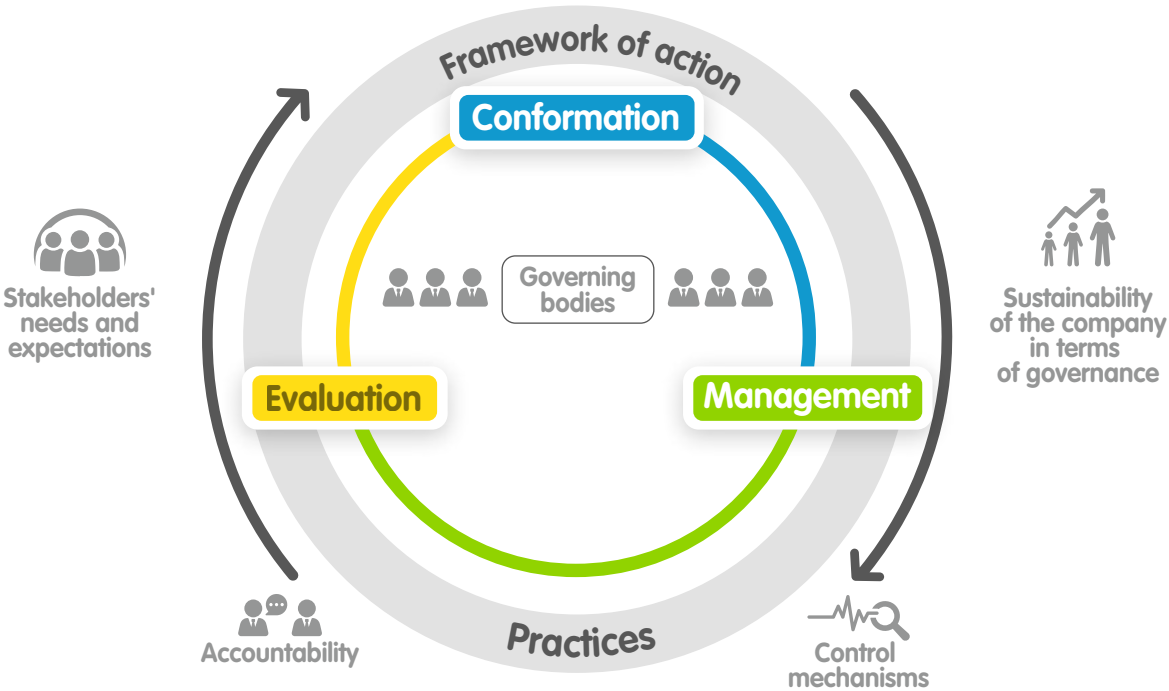


Verification of corporate governance

** Graphic Representation of the "General Framework of Corporate Governance"*

Corporate Governance Planning

Corporate governance planning



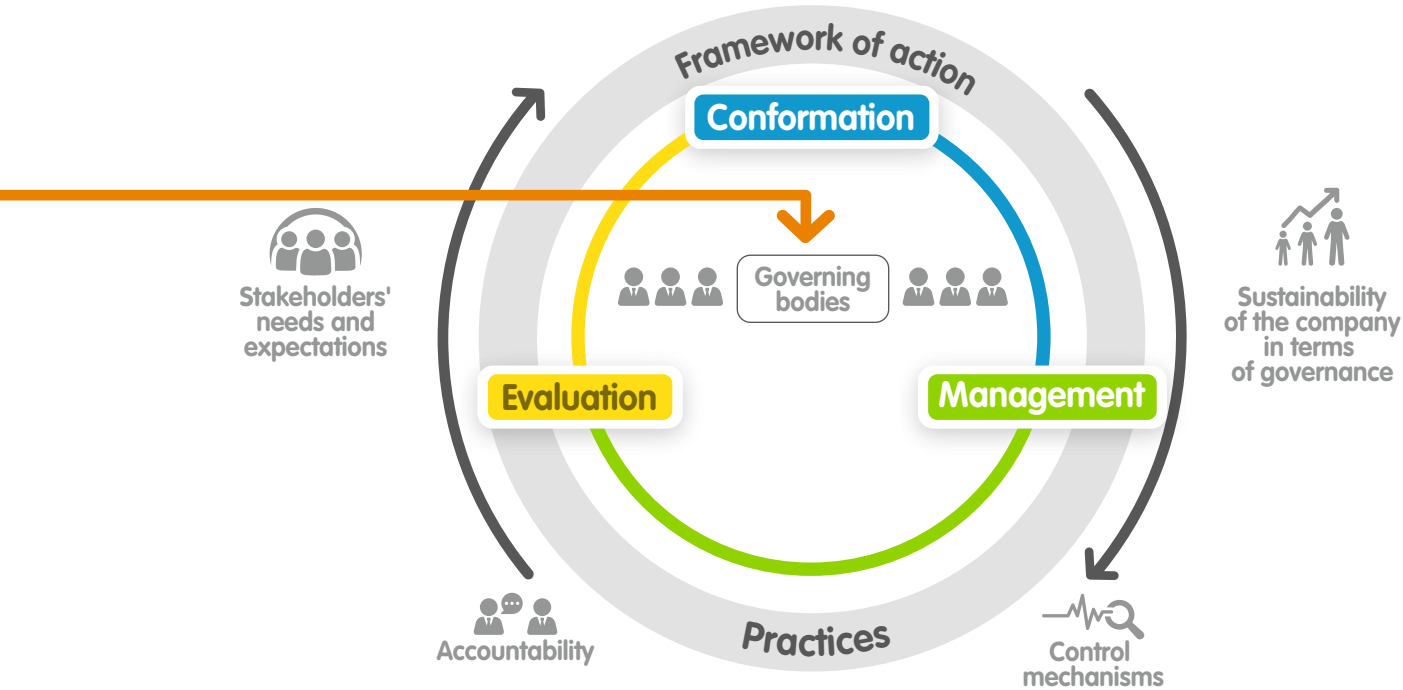
Verification of corporate governance

The "General Framework of Corporate Governance" considers the needs and expectations of Stakeholders 5 In matters of Corporate Governance, the articulation with the components of the strategic direction is also sought to align the interests of the governing bodies towards the achievement of the expectation of generating value, thus identifying the emphases, initiatives, objectives, goals and schedules that must be met to strengthen the maturity level in matters of Corporate Governance of Grupo EPM.

[5] *Person or organization that can affect, be affected or perceived as affected by a decision or activity (ISO 9001-2015)*

Corporate Governance Bodies

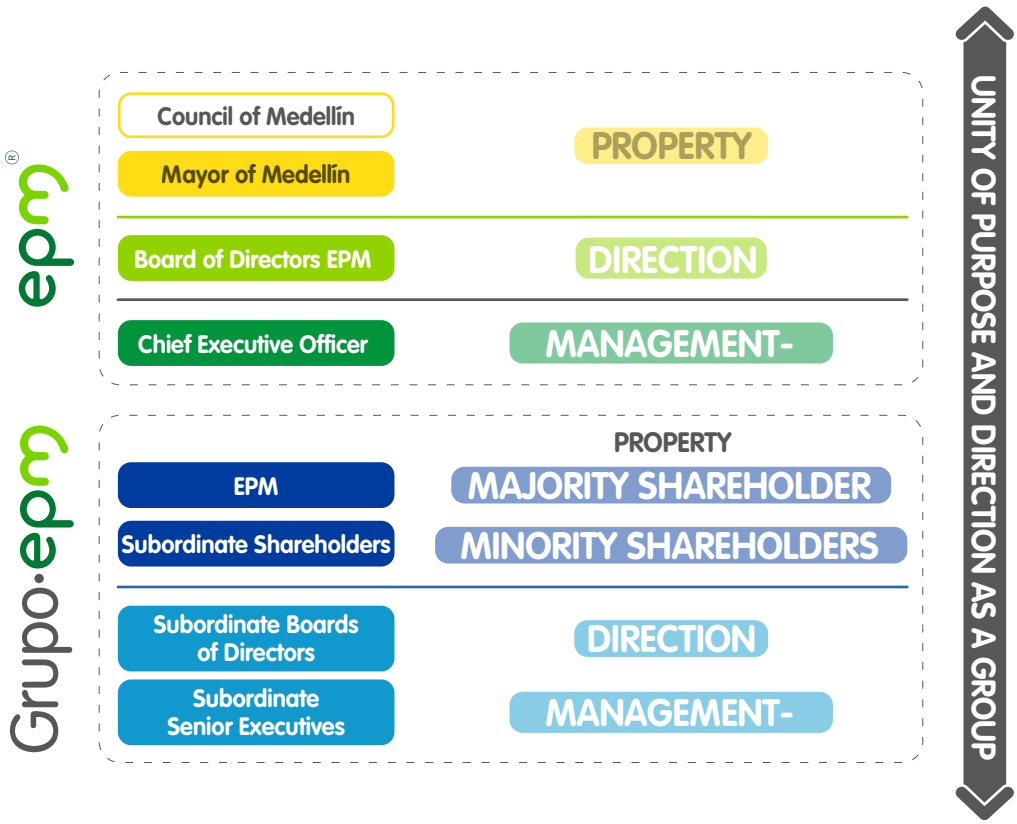
Corporate governance planning



Verification of corporate governance

Graphic representation of the levels of government of EPM as the Parent of the Group and of the subordinate companies, indicating who exercises ownership, direction and management. Likewise, the distribution of rights, decisions and responsibilities is shown so that it is developed in a system of checks and balances, aligned with the unity of purpose and direction, in an environment of control and accountability. The Corporate Governance Code describes each level.

Rights, Decision, and Responsibilities

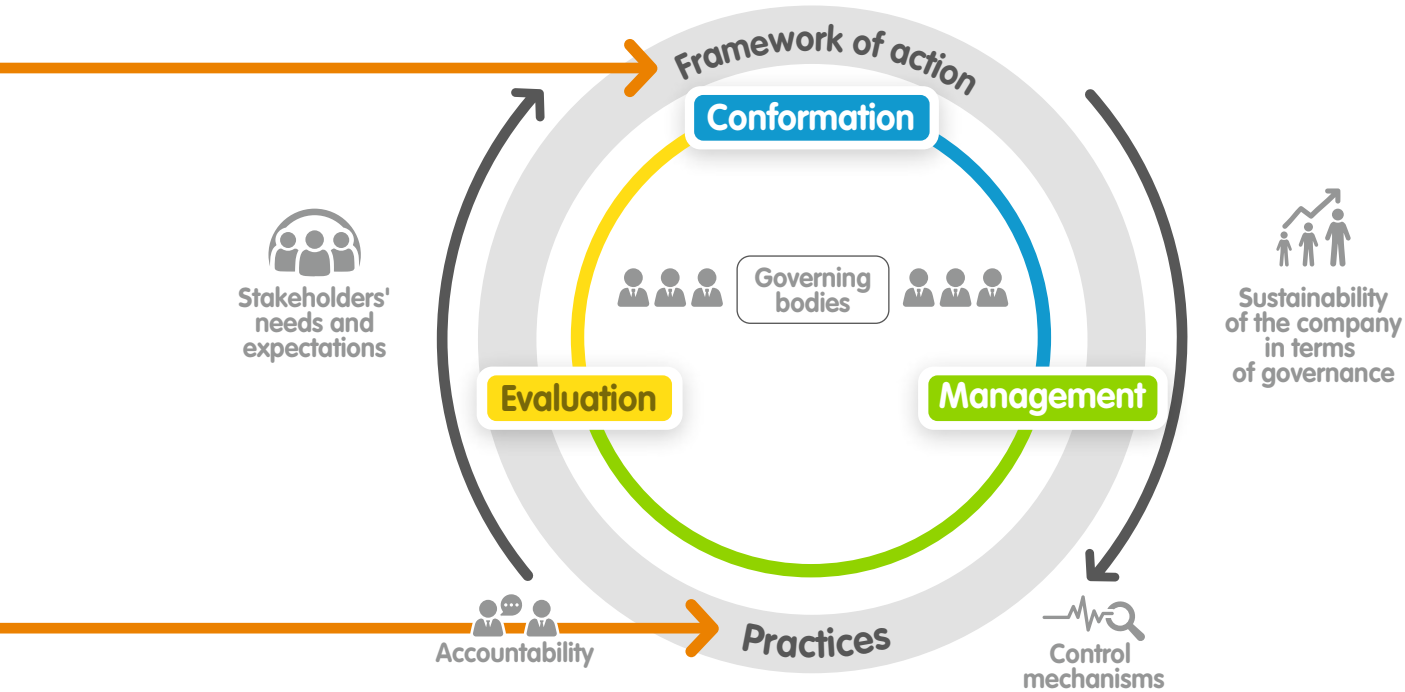


Control environment and Accountability

** Governing Bodies Chart*

Framework for Action and practices

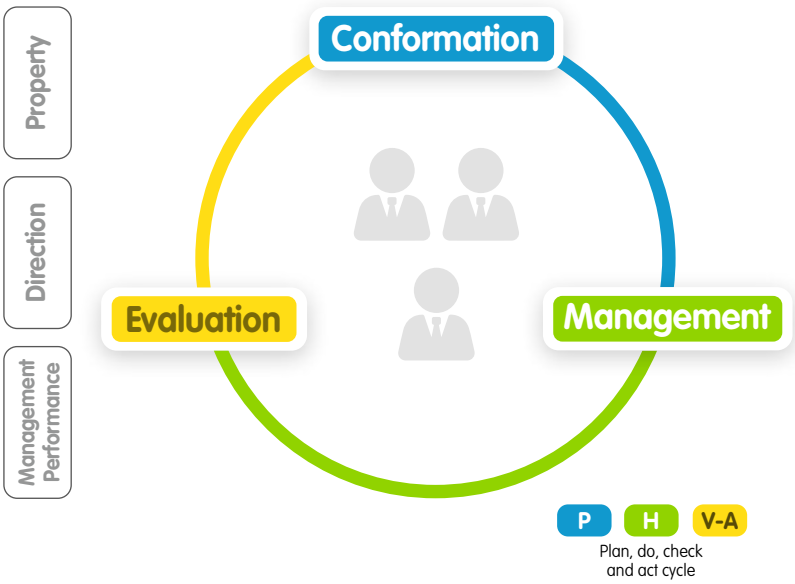
Corporate governance planning



Verification of corporate governance

Graphic representation in order of precedence and time, of the Corporate Governance practices applied to the Governing Bodies of Grupo EPM, also includes those aimed at strengthening the relationship between the Group's companies, and finally those aimed at strengthening the evolution of the Government Corporate through development, training and dissemination.

Corporate governance planning



Management of the relationship of companies of the EPM Group

Development, training and dissemination of governing practices of Grupo EPM

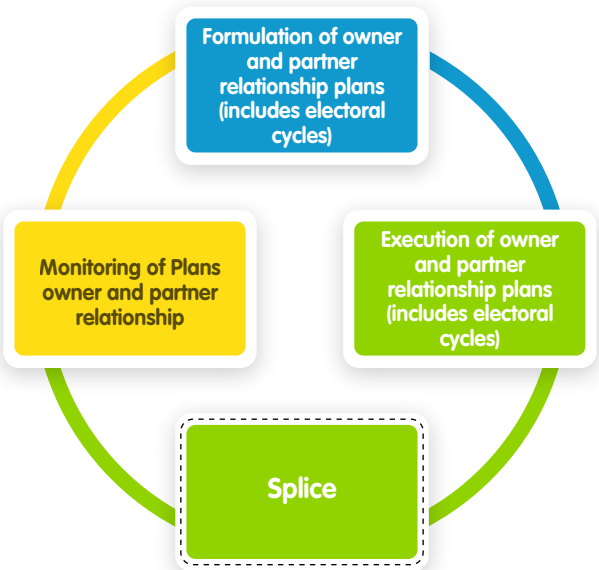
Verification of corporate governance

** General Action Framework Chart*

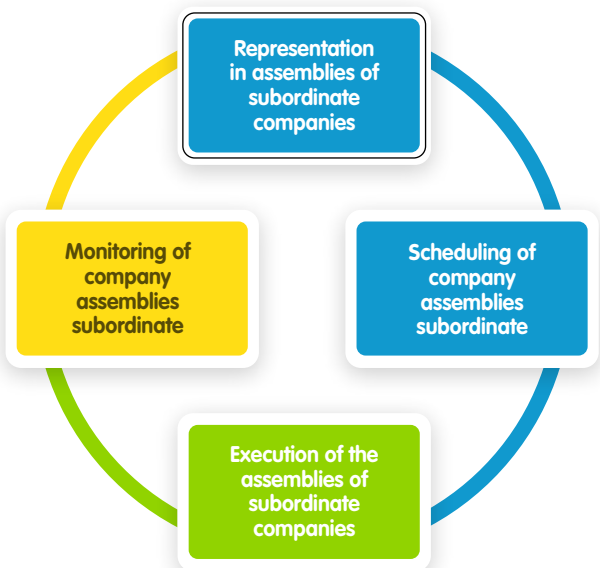
Property

Formation, management and evaluation of Governing Bodies

EPM practices with its owner, and EPM as majority shareholder



Practices of the subordinate companies of the EPM Group



P H V-A

Plan, do, check and act cycle

Applies for EPM

Applies every 4 years

** Action Framework Chart - Property detail.*

Direction

Formation, management and evaluation of Governing Bodies

Practices of EPM and the subordinate companies of the Group

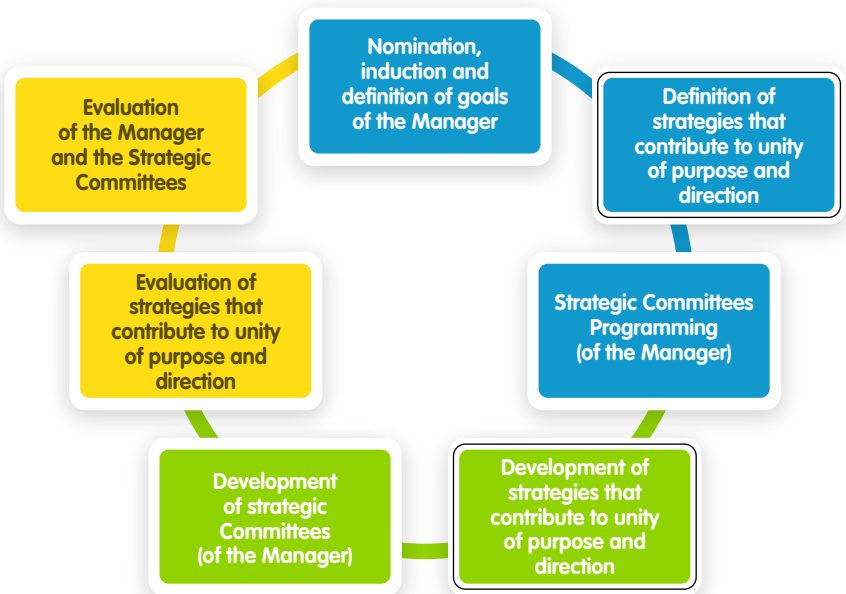


** Action Framework Chart - detail of the Directorate.*

Management or Performance

Formation, management and evaluation of Governing Bodies

Practices of EPM and the subordinate companies of the Group



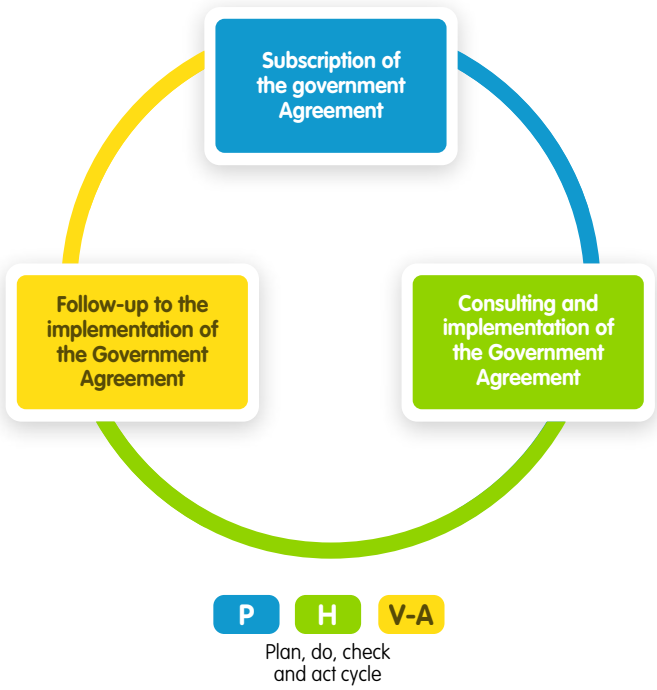
P H V-A
Plan, do, check and act cycle

Applies for EPM

** Action Framework Chart - detail of Management or Performance.*

Management of the relationship of EPM Group companies

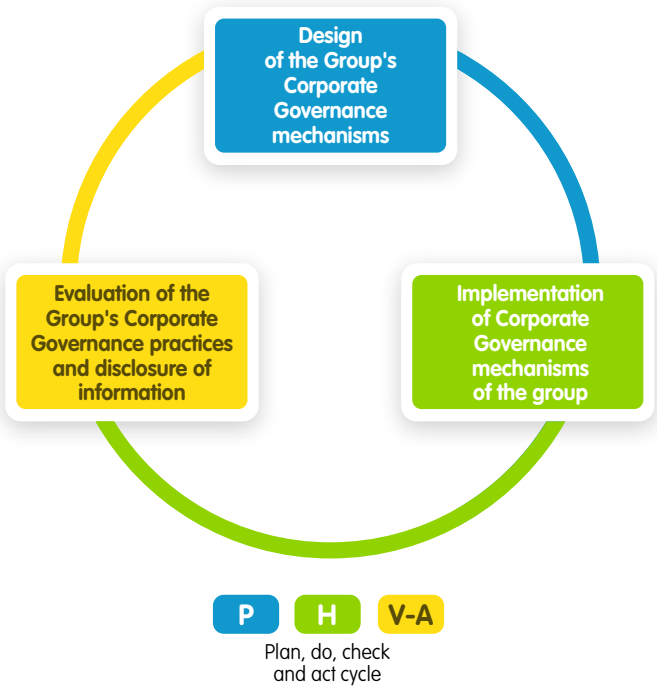
Practices of EPM and the subordinate companies of the Group



** Action Framework Graph - detail of the Management of the relationship of the Group's companies.*

Development, training and dissemination of governance practices of Grupo EPM

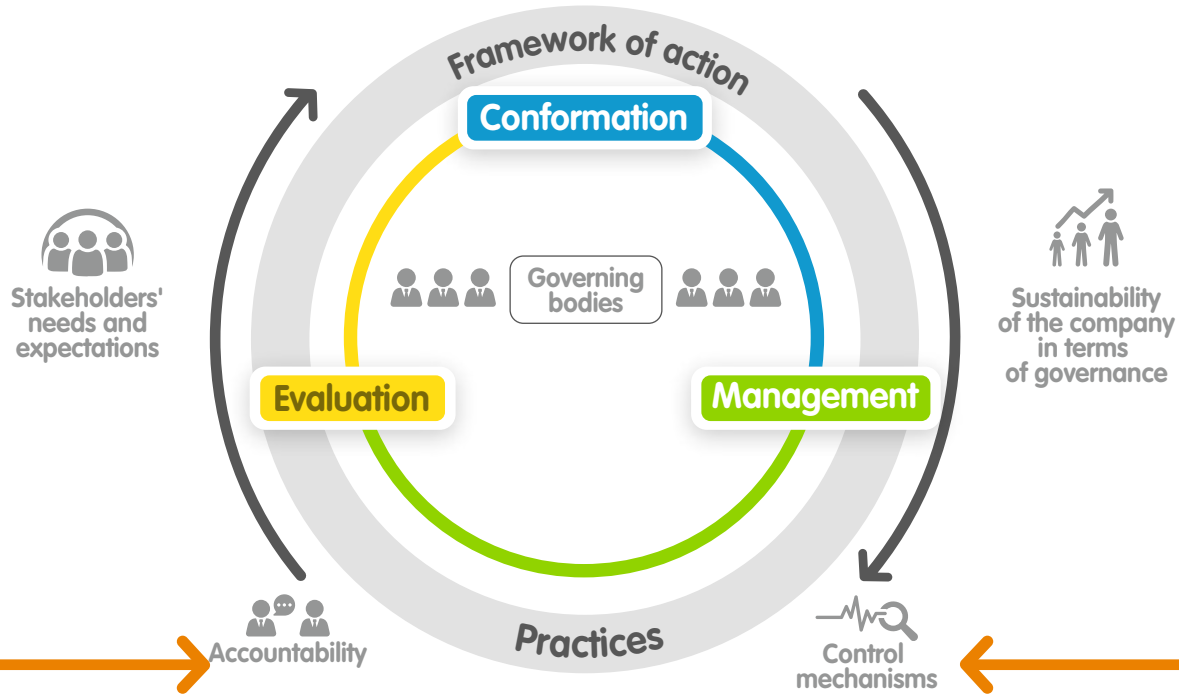
Practices of EPM and the subordinate companies of the Group



** Action Framework Chart - detail of the Development, training and dissemination of the Group's governance practices.*

Control and Accountability Mechanisms

Corporate governance planning



Verification of corporate governance

The regulation, self-regulation and control mechanisms allow to ensure compliance with the rules that limit the exercise of the functions of each of the company's Governing Bodies, so it is essential to implement these mechanisms in the Framework of Corporate Governance Action of the company, since they contribute to the existence of checks and balances in the "General Framework of Corporate Governance".

For the EPM Group, it is of utmost importance to ensure that the mechanisms described above exist, for which it has internal and external controls. Within the latter there are all those

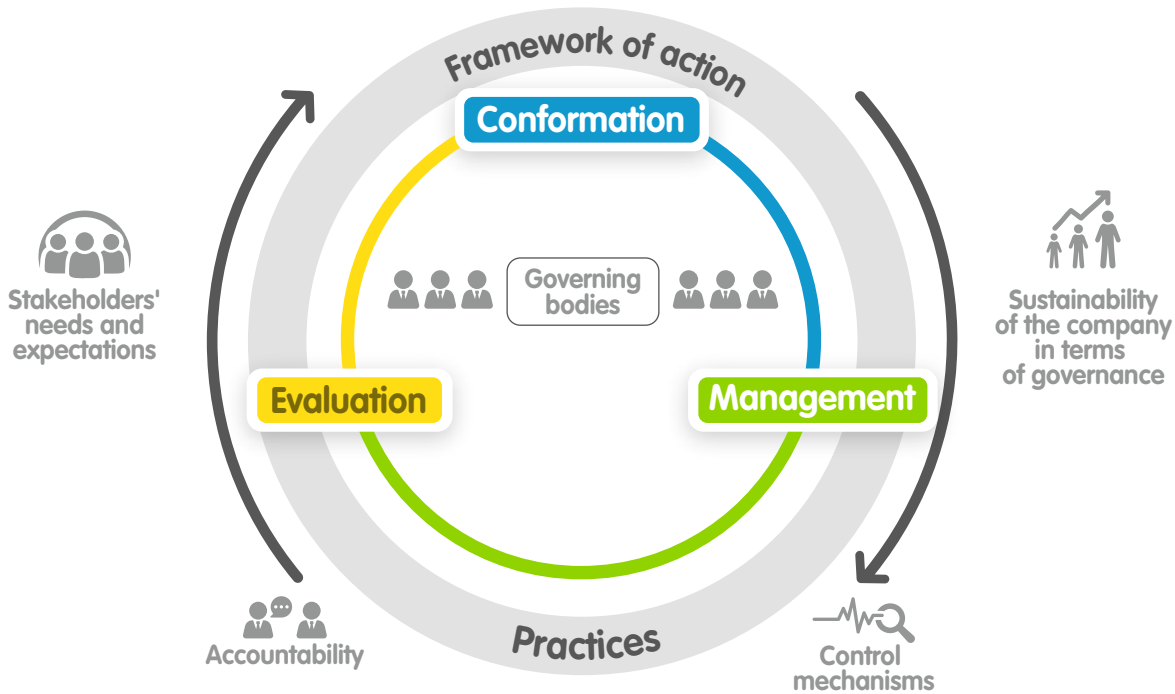
implemented by the bodies that exercise control by law, as well as the voluntary measures that monitor the state of control practices in an impartial, independent and objective manner; these are, for example: the measurement carried out by the entity Transparencia por Colombia, the audit of the execution of the Annual Corporate Governance Activity Plan, the control exercised by the Financial Superintendence of Colombia and the investors, among others. Likewise, the General Framework of Corporate Governance INTERACTS with other implemented management systems, to promote a culture of risk management and controls, ethical management, compliance, among others; that strengthen the control environment in the Group.

In addition to the practices adopted within the control environment, it is a priority for Grupo EPM to bring the Company's management closer to the public and, in general, to stakeholders, so that they can verify compliance with the best corporate governance practices, since they are guarantors of the preservation of the generation of value for the Company.

Therefore, accountability completes the control environment described above, where by means of timely, clear and transparent communication mechanisms, the EPM Group seeks to promote the construction of social capital that allows good business practices to be sustained. In this way, accountability is manifested in practices such as ethical management, culture and values; the disclosure of timely, complete and available information to stakeholders and the market in general; the mechanisms for citizen participation, the disclosure of conflicts of interest, the rating of corporate governance standards by external international entities such as risk rating agencies, among others.

Verification of corporate governance

Corporate governance planning



Verification of corporate governance

In accordance with the planning and the results of the different evaluations defined in the action framework, progress is monitored, deviations are identified and improvement actions are implemented that allow the achievement of the objectives and the strengthening of the maturity level in terms of Corporate Governance of Grupo EPM.

Documentation structure of the "General Framework of Corporate Governance of Grupo EPM"

The documentation of the practices that originate in the General Framework of Corporate Governance are organized as follows:

Level of the General Framework of Corporate Governance	Document that formalizes the Corporate Governance practice	Criteria for issuing and formalizing the document
General framework	Corporate Governance Code	It is projected in EPM, it is submitted for consideration and it is formalized in the respective Governing Body of each company of the Group.
Framework of Action	Guides, regulations, manuals, instructions, protocols, among other documents issued by the Governing Body in accordance with the competence or by the Corporate Governance Unit.	The documents containing the practices are projected in EPM, submitted for consideration and formalized in the respective Governing Body of each company. The documents that contain the management and structuring of the General Framework of Corporate Governance, for example: how to do the governance evaluation, how to celebrate and administer the minutes of the Agreement, the application of the Board's evaluation methodology, the application of the evaluation methodology of the Manager, among others; they are projected and formalized in the EPM Corporate Governance Unit, are submitted for consideration and are adopted in the Group companies through the mechanisms defined by the Governance Agreement.

The documents issued and the records that are generated from the execution of the Corporate Governance practices are controlled in accordance with the document management defined in each company of the EPM Group.

Annex 2:
Context on the Framework Relations Agreement)

The Relations Framework Agreement[6], signed between EPM and the Municipality of Medellín in 2007, includes the COMMON objective of these entities to generate business management conditions that enable sustainability and the generation of value for stakeholders, but very especially that they make EPM a viable source of income for the city of Medellín.

Owner-Company Relationship

EPM	Obligations	Medellin Municipality
Meet financial management indicators		Administrative and financial autonomy
Transfers to the Municipality		Exercise the role of owner through a SINGLE formal channel: the EPM Board of Directors
Appropriate communication mechanisms		Selection of Independent Board of Directors and with pre-established profiles
Transparency with the community: in hiring and selection of servers (based on defined profiles and skills)		Manager selection taking into account criteria of experience, suitability, professionalism, honesty and moral solvency
Permanent External Audit		Not to influence or participate, directly or indirectly, in the selection of the servers, except in those where the approval or disapproval corresponds to the Board of Directors
Corporate Social Responsibility Policies		Not influence or participate, directly or indirectly, in the hiring processes
Support to the Municipality with human resources from EPM through special circumstances (agreements)		Process delegation of the Comfis to the Board of Directors to approve the budget
		EPM participation in the development plan (commitments consistent with the plans approved by the Board of Directors)

[6] *Link to the Relations Framework Agreement: https://www.epm.com.co/site/Portals/5/documentos/InformacionRelevante/1.%20Convenio%20marco%20de%20relationships.pdf*

Annex 3:
CV members of the Board of Directors



Daniel Quintero Calle

Mayor of Medellín

Electronic Engineer, Finance Specialist, Master in Business Administration (MBA). Experience in the public - private sector.

Chairman of the EPM Board of Directors
(Since 01 / January / 2020)
Not Independent

Education

- Electronic Engineer ***University of Antioquia (Medellín-Colombia)***
- Specialization in Finance ***University of Los Andes (Bogotá-Colombia)***
- Master of Business Administration (MBA) ***Boston University (USA)***

Other studies

- Course for global leaders in Public Finance Administration ***(Harvard Kennedy School of Government)***

Experience

- *Deputy Minister of the Ministry of Information Technologies and Telecommunications* ***(2016-2017)***
- Director INNpulsa Colombia ***(2015-2016)***
- Director of the Piensa Verde Foundation ***(2012-2014)***
- Management Advisor Intrasoft SA ***(2005-2015)***

Acknowledgments

- Carlos Lemos Simmonds Order for Transparency, Democracy and Social Development
- Saint Gabriel Archangel National Army Medal



Alberto Arroyave Lema

Participation and Social Control

Committed to the construction processes of the city based on community and social participation, with the purpose of promoting proposals and ideas that contribute especially to the improvement of the provision of home public services and the well-being of the communities.

Member of the EPM Board of Directors
(From 22 / February / 2008 - Until 9 / March / 2020)
Independent

Education

- Sociology ***University of Antioquia (Colombia) - 8 Semesters***

Experience

- Control member of the Committee for the Development and Social Control of Home Public Services - *Conectémonos*
- Labor and social advisor
- Member of the Public Policies Committee of Social Organizations of Medellín
- Member of different education and academic committees in Medellín
- Founder and editor of local newspapers
- Councilor of the Municipality of Apartadó
- President of the Social Control Board of Mutual AMUSSE



Andrés Bernal Correa

Business and Financial Management

Master in Business Administration with experience in business creation, growth strategies, M&A, financing and operational and tax optimization.
Experience in senior management positions in the financial and insurance sector.
Member of the Board of Directors of important national and international companies.

Member of the EPM Board of Directors
(From 06 / February / 2012 To 11 / August / 2020)
Independent

Education

- Business Administration ***EAFIT University (Medellín-Colombia)***
- Master in Business Administration-MBA ***Babson College (Massachusetts-USA)***
- Strategic Planning Course ***MIT (Massachusetts-USA)***

Experience

- President of Grupo ORBIS SA
- Vice President of Finance and Strategic Development SURA Asset Management ***(2012-2017)***
- Financial and Investment Vice President Grupo SURA SA ***(2004-2012)***
- Manager of Inversiones Corporativas Corfinsura SA ***(2001-2004)***
- Corporate Finance Manager Corfinsura SA ***(2000-2001)***
- Project Manager Corfinsura SA ***(1996-1999)***

Board of directors experience

He has been a member of the Board of Directors of Cementos Argos SA, Protección SA, Suramericana SA, Nutresa SA, Enka de Colombia SA, Constructora Capital SA, Tablemac SA, Edatel ESP, VIVA, ARUS SA, among others, in Colombia, and of several Boards of Directors in Mexico, Nicaragua, Panama, PERU and Chile. He is a member of the Boards of Bios SA, Everfit SA, Inversiones Umami SA.



Elena Rico Villegas

Management of Public Services

Electrical Engineer Specialist in Finance and Expert in Management Systems. Extensive experience in structuring and Project Management.
Experience in strengthening and increasing business competitiveness, innovation in the industry and the creation of collaborative work networks.

Member of the EPM Board of Directors
(From 21 / January / 2016 To 11 / August / 2020)
Independent

Education

- *Electrical Engineering* ***Universidad Pontificia Bolivariana (Medellín-Colombia)***
- Specialization in Finance ***EAFIT University (Medellín-Colombia)***

Experience

- Advisor for electric power generation, transmission and distribution projects
- Project advisor related to mass transportation and telecommunications
- At HMV he was Manager of the Generation, Transmission and Auditing Business Unit and Manager of the Proposals and Project Control Unit, he was also Quality Manager and Project Manager
- Manager of the International Electricity Sector Fair - FISE, initiative of the Cluster to promote the internationalization of the Industry ***(2007-2016)***
- *Director of The Energy* ***(2006-2014)***
- Design and Audit Engineer - Antioquia de Energía Company ***(1979-1981)***
- In Colombia Móvil SAESP (OLA) she was Director of the Licensing Area



Gabriel Ricardo Maya Maya

Legal Management

Specialist Lawyer in Economic Law.
Experience in legal and administrative consulting in the public and private sectors.
Member of Boards and Administrative Councils of companies from different sectors of the economy.

Member of the EPM Board of Directors
(From 22 / Jan / 2004 To 11 / August / 2020)
Independent

Education

- Law ***University of Medellín (Medellín-Colombia)***
- Specialization in Business Law ***Externado University of Colombia (Bogotá)***

Experience

- Legal advisor in business law
- Member of the administrative and advisory councils of: Promotora Piccolo SA, Qpros SAS., Transportes LAFE SAS. and Laminaire SAS
- Guild Director Fendipetroleo Antioquia
- Constituent of Antioquia in representation of the business and productive sector of Antioquia
- Technical Secretary of the Transparency Pact for the Mayor of Medellín and the Government of Antioquia ***(2004)***
- Departmental Police Judge - Departmental Government Secretariat, Government of Antioquia

Publications

- PRIMARY FOR UNDERSTANDING THE UGPP (Social Protection Pension Management and Parafiscal Contributions Unit) **DIKE Legal Editorial. Year 2016**
- REASONS AND BENEFITS TO CONSTITUTE OR BECOME A SAS (Simplified Stock Company, Law 1258 of 2008). **DIKE Legal Editorial. Year 2010**



Javier Genaro Gutiérrez P.

Public Services Management

Civil Engineer and Finance Specialist. Experience in senior management positions.
Member of the Board and Board of Directors of important national and international companies.

Member of the EPM Board of Directors
(From March 9, 2016 to August 11, 2020)
Independent

Education

- Civil Engineering **University of Los Andes (Bogotá-Colombia)**
- Specialization in Finance **EAFIT University (Medellín-Colombia)**

Experience

- President of Ecopetrol SA **(2007-2015)**
- General Manager - Interconectado Eléctrica SAESP – ISA **(1992-2007)**
- President of the Regional Electricity Integration Commission - CIER **(1995 -1997)**
- Teacher

Board of directors experience

He has been a member of the Board of Directors of Cementos Argos SA, Protección SA, Suramericana SA, Nutresa SA, Enka de Colombia SA, Constructora Capital SA, Tablemac SA, Edatel ESP, VIVA, ARUS SA, among others, in Colombia, and of several Boards of Directors in Mexico, Nicaragua, Panama, Peru and Chile. He is a member of the Boards of Bios SA, Everfit SA, Inversiones Umami SA

Acknowledgments

- Excellence Award- Category: Internationalization-América Economía Magazine **(2005)**
- One of the Ten Best Executives of the year-Diario La Republica **(2005)**
- Best Business Leader - Portfolio **(2002)**



Jesús Arturo Aristizábal Guevara

Project Management and Public Services

Civil Engineer with experience in senior management positions in the Public and private sectors.
Member of the Boards of Directors of companies in the residential Public services sector, infrastructure, construction, transportation and entities of the health sector.

Member of the EPM Board of Directors
(From 24 / January / 2020 To 11 / August / 2020)
Independent

Education

- Civil Engineering **National University (Medellín-Colombia)**

Experience

- Advisor and Consultant
- Vice Mayor of Habitat, Mobility, Infrastructure and Sustainability of Medellín **(2013-2015)**
- EPM Energy Director **(2006-2013)**
- Power Generation Manager **(2001-2006)**
- Assistant Manager EPM **(1998-2000)**
- Administrative Manager EPM **(1998)**

Other positions held

Rector of the University of Antioquia and of the Colombian Polytechnic Jaime Isaza Cadavid (Medellín), General Manager of the Antioqueña de Energía Company, EADE, Councilor of the Municipality of Medellín, General Manager (e) Medellín Metro, Administrative Manager and of the Medellín Metro Service, Antioquia Benefit Fund Manager, Antioquia Department. Secretary of Departmental Government, Department of Antioquia, Secretary of DEPARTMENTAL Public Works of Antioquia, Director Departmental Valuation of Antioquia. General Manager of Empresas Varias de Medellín, General Director CORPAUL - Healthcare Development Corporation of Hospital San Vicente de Paul, Medellín. General Manager Forestry Corporation of Antioquia - Corforestal SA, Medellín. Between 2013 and 2015, he was in charge of the Mayor's Office of Medellín and the Administrative Department of Planning of Medellín on several occasions.



Luis Fernando Álvarez Jaramillo

Law and Political Science

Doctor in Law and Political Science Legal, judicial and teaching experience

Member of the EPM Board of Directors
(From 27 / January / 2020 To 11 / August / 2020)
Independent

Education

- Law and Political Science **Universidad Pontifica Bolivariana**
- Specialization in Labor Relations **Universidad Pontifica Bolivariana**
- Specialization in Labor Law and Social Security **Universidad Pontifica Bolivariana**
- Specialization in Civil and Commercial Law **Universidad Pontifica Bolivariana**
- Specialization in Administrative Law **Universidad Pontifica Bolivariana**
- Master in Political Science and Administrative Law **Catholic University of Louvain-Belgium**
- Diploma in Constitutional Law **International Academy of Constitutional Law- Tunisia**
- PhD in Political Science **University of Louvain -Belgium**

Experience

- Legal Deputy Director of Fenalco- Antioquia **(1978-1983)**
- Legal Advisor in State Contracting at Integral SA **(1989-1991)**
- Legal Advisor of the Cooperativa de Periodistas de Colombia **(1989- 2004)**
- Legal Advisor of the Sociedad de Mejoras Publicas de Medellín **(1989- 2005)**
- Legal Advisor of ACIC (Colombian Association of Construction Engineers) **(1989 - 2000)**
- Legal Advisor to the Ministry of Government for Constitutional Affairs **(1989-1990)**



Manuel Santiago Mejía Correa
Business Management

Master in Business Administration with experience in senior management positions in the public and private sectors. Member of the Board of Directors of important national companies and Public Entities.

Member of the EPM Board of Directors
(From 30 / April / 2012 To 11 / August / 2020)
Independent

Education

- Economics **University of Antioquia (Medellín-Colombia)**
- MBA **Southern Illinois University (USA)**

Experience

- Gerente Colombiana de Comercio SA, also known as Corbeta.
- Secretary of the Treasury of Medellín (1980-1982)

Board of directors experience

He has been a member of the boards of directors of Public and private companies: National Association of Colombian Entrepreneurs ANDI, Proantioquia, Superior Council of the University of Antioquia, Jaime Isaza Cadavid Colombian Polytechnic, Acción Social, Colciencias and Colombia Humanitaria.



Oswaldo León Gómez Castaño

Social and Solidarity Management

Business Administrator, Specialist in Social Development Management and Banking Management.

Member of the EPM Board of Directors
(From 10 / March / 2020 Until 11 / August / 2020)
Independent

Education

- Business Administrator **Luis Amigó University (Medellín-Colombia)**
- Specialization in Social Development Management **EAFIT University (Medellín-Colombia)**
- Specialization in Banking Management **Universidad Cooperativa de Colombia (Medellín-Colombia)**

Other studies

- Diploma in Home Public Services.
- Diploma in Financial Management.
- Advanced Leadership Training - **FAD**
- Management and Leadership.
- Cuna Mutual Insurance Administration **(Madison Winsanson - USA)**
- Cooperative Management **(Mondragón-Spain)**
- Dejardins Popular Boxes Model **(University of Sherbrooke Québec - Canada)**

Experience

- Confiar Corporate Manager **(Since 1980)**

Board of directors experience

He has been a member of the Board of Directors of Previsora Social Cooperativa VIVIR, FOMENTAMOS Corporation for Microfinance, Fundación Cooperativas del Oriente Antioqueño –FUSOAN-, Casa Teatro del Poblado, Fundación CONFIAR, Sólida SAS Vivienda y Hábitat Solidarios; Various Companies of Medellín, SUMARED: Remittances, Antioqueña Association of Cooperatives –CONFECOOP ANTIOQUIA-, Quality Corporation, and member of the Luis Amigó University Foundation Superior Council

Acknowledgments

- Outstanding Graduate Luis Amigó University Foundation **(2007)**
- Civic Order Colima **(1999)**
- Confecoop Award, Francisco Luis Jiménez Business Management **(1997)**
- Golden Hands to the Manager of the Year-Uconal Insurance **(1991)**



Bernardita Pérez Restrepo

Member of the Board of Directors EPM
(Since 25/08/2020)

Education

- Law **University of Antioquia (Medellín-Colombia)**
- Specialization in Philosophy of Law **Castilla La Mancha University (Spain)**
- Master's student in Political Philosophy **Institute of Philosophy of the University of Antioquia**

Experience

She has served as a teacher at the Universidad de Antioquia, Universidad Pontificia Bolivariana, Universidad de Medellín, Universidad Nacional and Universidad Libre.

She has been a lecturer in constitutional law, political law and administrative law. She has extensive experience in the Public sector as a consultant in the Superior Council of the Judiciary, Advisor in the Presidency of the Senate of the REPublic, Defender of the Viewer in Teleantioquia, Joint Judge of the Superior Court of Medellín, Joint Judge of the Administrative Contentious Court and Judge of the Constitutional court.

In the private sector, she has been an advisor, consultant and board member of different companies in the infrastructure sector, as well as an academic collaborator with Non-Governmental Organizations.



Gildardo Antonio Correa Salazar

Member of the Board of Directors EPM
(Since 25/08/2020)

Experience

- Vocal of Control of the DOMICILIARY Public Services of the city of Medellín Comuna 1, **since 2013**
- Neighborhood animator of the Local Development Plan Commune 1 **(2006-2013)**
- Neighborhood delegate to the Participatory Budget (PP) of Commune 1 **(2005-2013)**
- Trainer of Community Action Trainers **(2008- 2012)**
- Coordinator of the Coexistence and Participation Commission of commune, **(2007-2008)**
- Twice President of the Popular Community Action Board 1 **(1996-2000)**
- Edil JAL Commune 1 **(1995-19979)**
- COPACO Board Member **(1994-1997)**
- General Secretary of the Informal Economy Union **(1966 - 1968)**



Guillermo León Diosa Pérez

Member of the Board of Directors EPM
(Since 25/08/2020)

Educación

- Mechanical Engineer **University of Antioquia (Medellín-Colombia)**
- Maintenance Management Specialist **University of Antioquia (Medellín-Colombia)**
- Specialist in Environmental Education **Universidad Pontificia Bolivariana**

Experience

Member of the control of DOMICILIARY Public services of the city of Medellín since 2003 (CODECOS).

He has served as Undersecretary of the Environment of the Municipality of Medellín and Secretary of the Environment (in charge); General Manager of Pontus Group SAS; Territorial Director of CORANTIOQUIA-PANZENÚ, Manager of Modial Ltda; Reviewer of the Comptroller General of the REPublic, and professor at the Pascual Bravo Technological Institute. He has extensive experience in environmental authority, environmental licensing of projects, structuring of hydroelectric projects, hydraulic infrastructure and administration of water networks, in forestry, property, contractual and legal management. He was a speaker at the forum on urban transformation, local development and sustainable cities as agents of change; advisor to International Certification and Training SA and Transtech; and advisor in the implementation of the quality system of the Institute of Physical Education of the University of Antioquia for sports initiation schools.

He has been a member of the boards of directors of Parque Arví, Joaquín Antonio Uribe Botanical Garden, Academic Extension Center of the Faculty of Engineering of the University of Antioquia (Ceset), Transtech. Member of committees of Corantioquia, International Certification and Training SA, Extension Committee of the Faculty of Engineering of the University of Antioquia, Committee for the formulation of the PGIRS of the Metropolitan Area of the Municipality of Medellín.

Current representative of the Graduates in the Council of the Faculty of Engineering of the University of Antioquia.



Jorge Andrés Carrillo Cardoso

Member of the Board of Directors EPM
(Since 25/08/2020)

Education

- Civil Engineering **University of Los Andes**
- Environmental engineering **University of Los Andes**
- Master in Environmental Management **University of Los Andes**

Experience

Extensive experience as a senior government official and as a business consultant, leading the formulation of public policies, regulation, projects and programs for public and private sector entities in sustainable management, water security and circular economy, structuring of projects and strategic direction of public coalitions. - private companies with excellent high-level relationships and obtaining results.

He has been Advisor to the Presidency of ANDESCO, Project Manager Water Coalition for Colombia of TNC (The Nature Conservancy); Construction Services Division Manager of Grupo Constructor Normandia SA; Vice Minister of Water and Basic Sanitation of the Ministry of Housing, City and Territory. President of the Commission for the Regulation of Water and Basic Sanitation (CRA); Counselor of the Board of Directors of the Colombian Geological Survey; Counselor of the National Water Council; Counselor of the National Environmental Council; and Member of the Intersectoral Commission on Climate Change. Advisor to the High Presidential Counselor for the Regions (Presidency of the Republic); Environment and Water Resources Coordinator for USAID's Orinoquia Master Plan; Delegate Superintendent for Aqueduct, Sewerage and Cleaning (Superintendency of Residential Public Services); Consultant for the Business Management Directorate of the United Nations Development Program (UNDP).



Jorge Iván Palacio Palacio

Member of the EPM Board of Directors
(Since 08/17/2020)

Education

- Law **Universidad Autónoma Latinoamericana**
- Master in Law **Universidad Sergio Arboleda**

Experience

Colombian lawyer and jurist, former president of the Constitutional Court of Colombia between 2013 and 2015. In his career he has served as Magistrate of the Constitutional Court, Joint Judge of the Supreme Court of Justice and Magistrate of the Supreme Court of Justice. He has been a professor at the Universidad de los Andes and an independent legal advisor.



Olmer Orlando Palacio Garzón

Member of the EPM Board of Directors
(Since 8/25/2020)

Education

- Bachelor of Preschool Education **Universidad San Buenaventura**

Experience

Vocal of control of DOMICILIARY Public services of the city of Medellín - Commune 3 (Conectémonos).

He has served as a teacher and social manager, always firm in the execution of his mission, demonstrating the commitment and leadership he has with the communities.



Omar Flórez Vélez

Member of the EPM Board of Directors
(Since 8/17/2020)

Education

- Administrative Engineering **National University**
- Specialization in Business Management and Competitiveness **American University Corporation**

Experience

Former Mayor of Medellín and Former President of the Board of Directors of EPM. He has served as Manager of the Antioquia Liquor Factory, Secretary of the Treasury of Antioquia, Secretary of the Government of Antioquia, Vice Minister and Minister of Communications, Representative to the Chamber and Senator of the REPublic, president of the National Association of Municipalities, among other positions in the private sector.



Pablo Felipe Robledo Del Castillo

Member of the EPM Board of Directors
(Since 21/08/2020)

Education

- Law **Externado University of Colombia**
- Specialist in Civil Procedural Law **Externado University of Colombia**
- Candidate for Master's Degree in Civil and State Contractual and Tort Liability, **Externado University of Colombia**

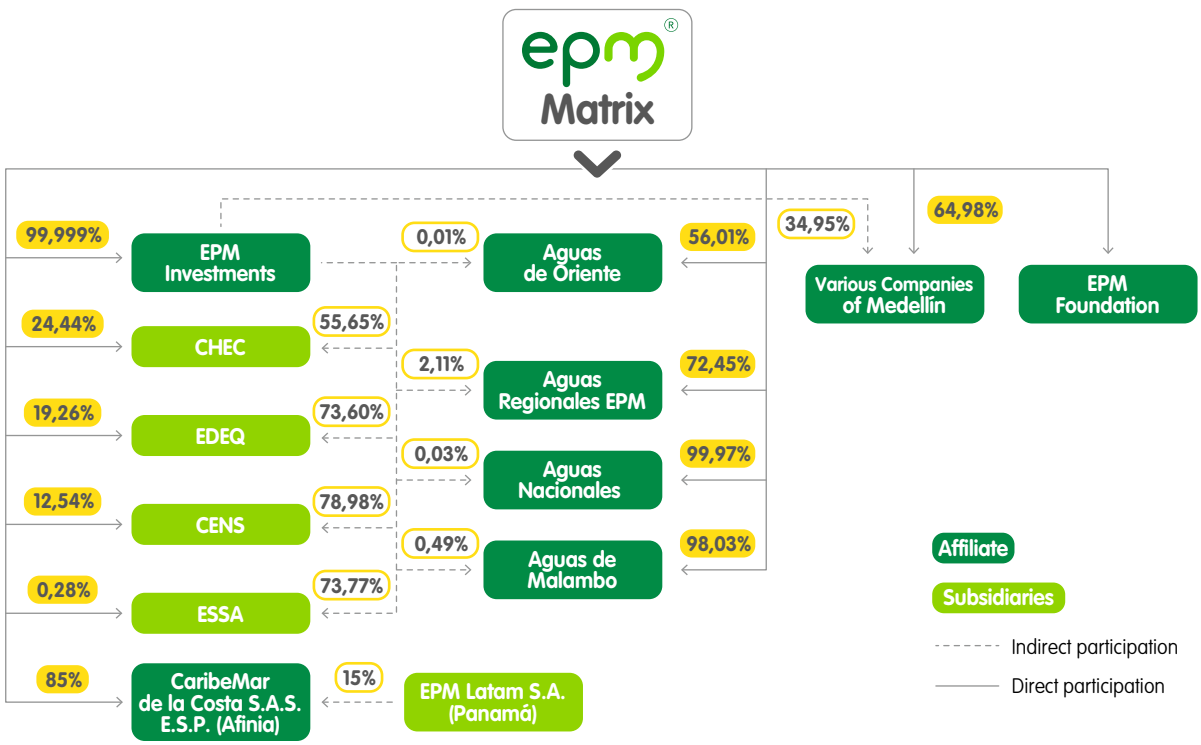
Experience

In the Public sector, he has served as Superintendent of Industry and Commerce, Vice Minister for the Promotion of Justice, Minister of Justice and Law (in charge), Vice Minister of Criminal Policy and Restorative Justice (in charge), Director of the National Agency for Legal Defense of the State (in charge), Deputy Minister of Justice and Law, Governor of the Department of Guaviare (in charge), among others. In the private sector, he has served as a trial attorney, advisor, consultant and partner of law firms. Teaching experience in Public and private educational institutions.

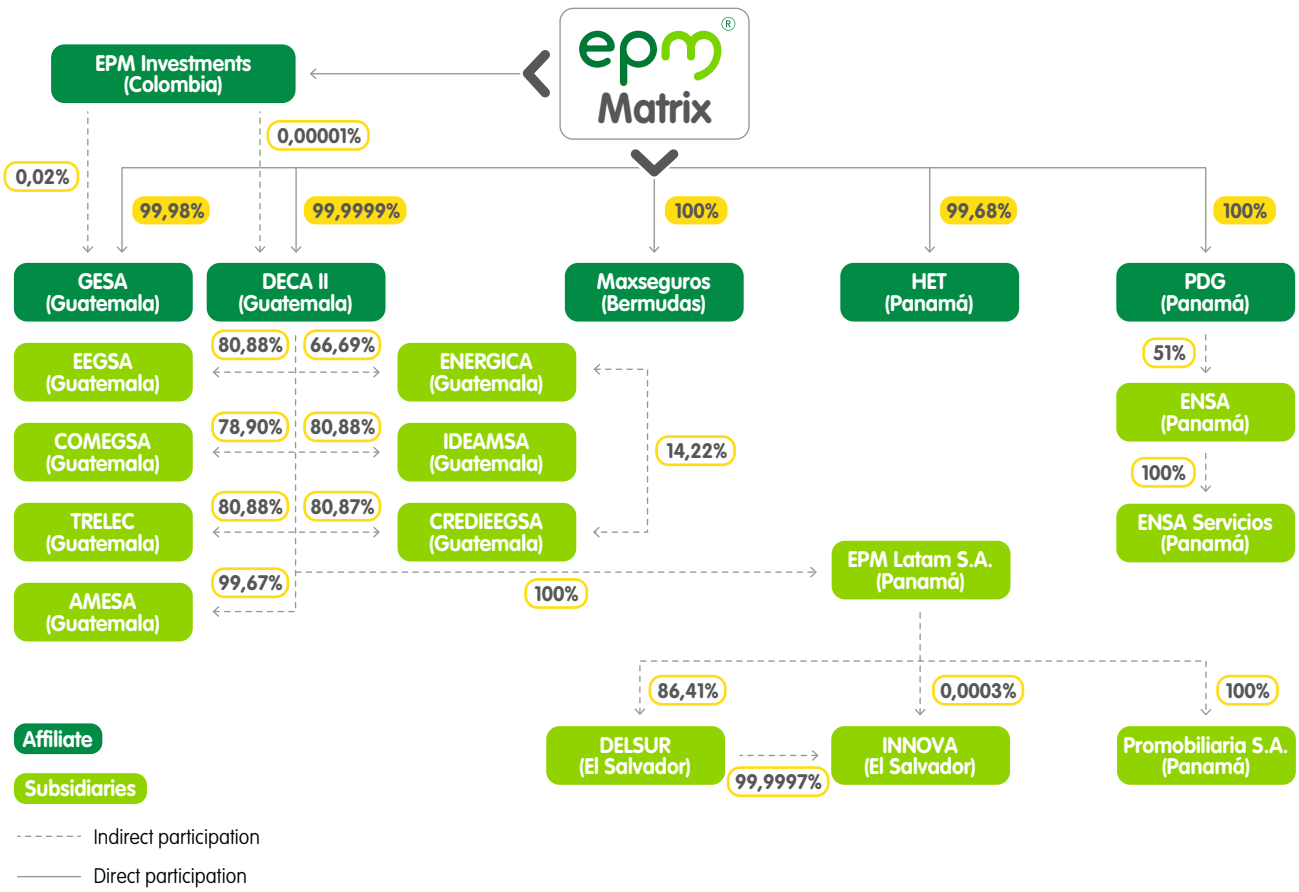
He participated as Alternate President of the Commission for the Review of the Draft Law of the General Process Code, Alternate President of the Inter-Institutional Commission for Constitutional Reform of Justice appointed by the President of the REPublic, member of the Drafting Commission of the Arbitration Law Project National and International, among others.

Annex 4:
Shareholding Composition of Grupo EPM

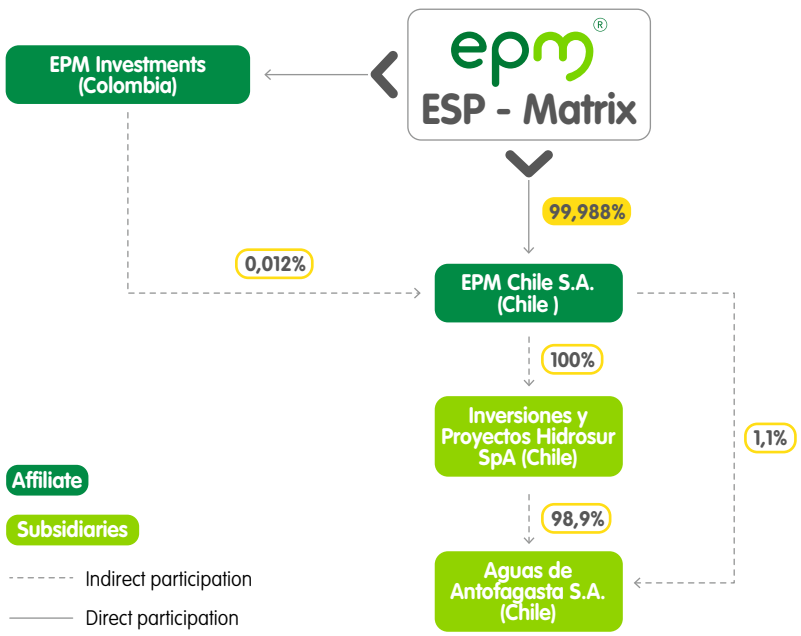
Affiliates and Subsidiaries in Colombia



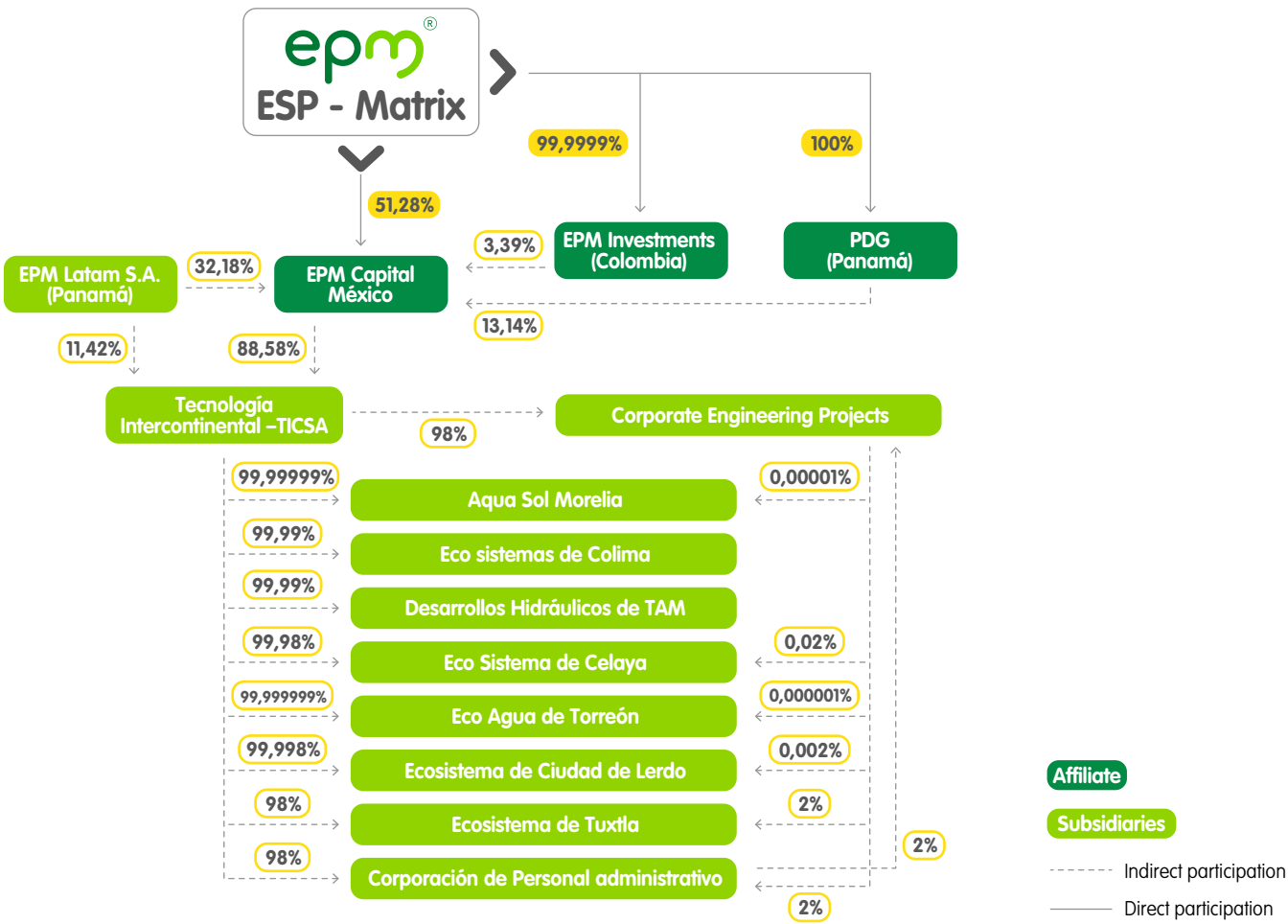
Affiliates and Subsidiaries in Central America and the Caribbean



Affiliates and Subsidiaries in Chile



Affiliates and Subsidiaries in Mexico





Sustainable management

Grupo·epm

General information

Back to content

Report profile

Back to content

Sustainability Report 2020

Report profile

EPM and Grupo EPM publish their sustainability management annually. **GRI 102-52 content.**

This report provides information from January 1 to December 31, 2020. **GRI 102-50 content.**

It was published on the website in May 2021. **GRI 102-51 content.**

This report has been prepared in accordance with the GRI Standards, Comprehensive option. **GRI 102-54 content**

It is the fifteenth EPM Sustainability Report prepared in accordance with the GRI methodology. See GRI content index

This report publishes financial and non-financial information on EPM and Grupo EPM. Social and environmental management includes information on the following Grupo EPM companies: **GRI 102-45 content.**

Company	Business
EPM	Water
	Sanitation
	Power generation
	Power transmission and distribution
	Natural gas
Aguas Nacionales EPM	Water
Empresa de Aguas de Oriente Antioqueño	
Aguas Regionales	
Aguas de Malambo	
Emvarias	Sanitation
Essa	Power transmission and distribution
Chec	Power generation / Power transmission and distribution
Edeq	Power transmission and distribution
Cens	
Delsur	
Eegsa	
Adasa	Water
Ticsa	Sanitation
HET	Power generation
Ensa	Power transmission and distribution

This report is aligned with the Sustainable Development Goals, the principles of the Global Compact, the ISO26000 standard, the framework of the International Integrated Reporting Council - IIRC and the Integrated Planning and Management Model - MIPG.

Sustainability Report 2020

The Sustainability Report includes the management report of the Manager, the management of corporate governance, the social and environmental management, the financial management of EPM and the Grupo EPM and the report of the Ituango hydroelectric project.

This information is disclosed annually to stakeholders, society in general, and specific audiences through face-to-face and virtual means.

The contents of the report were reviewed and approved by Company executives and externally verified by the firm KPMG, which performs the external audit of EPM and the tax audit in the companies of the Grupo EPM. **102-56 content**

For more information see External verification of the report.

The preparation of the report is coordinated by the Sustainable Development Management that is part of EPM's Strategy and Planning Vice Presidency.

Contact information: **102-53 content**

sostenibilidad.epm@epm.com.co
Telephone:
+57 4 3802630
Address of the parent company and headquarters of EPM:
Carrera 58 # 42 – 125 – Medellín – Antioquia (Colombia). **102-3 content**

GRI standards contents and own indicators

102 - 3	Headquarters location.
102 - 45	Entities included in the consolidated financial statements.
102 - 50	Period covered by the report.
102 - 51	Date of the last report.
102 - 52	Reporting cycle.
102 - 53	Contact point for questions about the report.
102 - 54	Statement of preparation of the report in accordance with the GRI Standards.
102 - 56	External verification.

Relevant sustainability topics - Materiality

Back to content

Relevant sustainability topics - Materiality

The Sustainable Development Goals mark the thematic path of the World Development Agenda that crystallizes the business-society relationship, to which the materiality of Grupo EPM is articulated. Articulation with the world development agenda - ODS, whose challenges have been increased by the COVID-19.

Materiality is the process that defines the priority material or management issues for the sustainability of companies and society. Matching business achievements with sustainable human development is the aspiration of a new line of business leadership in which the role of companies in the common challenges of humanity is recognized.

Materiality for the Grupo EPM is based on the GRI Standards and the stakeholder relationship model applied in EPM since 20101, which is aligned with the principles of completeness, relevance and responsiveness of the AA1000 standard.

The material topics of Grupo EPM were prioritized for each of the subsidiaries and were aligned with the SDGs and with the actions of the business plans. In the update of strategic thinking on sustainability with stakeholders carried out in 2018, the emphasis of material issues for the Group were identified, which are those aspects that guide the management of material issues according to the specific conditions in each territory. During 2020, the challenges defined for the management of these issues were monitored. **102-46 content**

Recent studies[2] show the speed and mobility of priority issues before and after Covid-19, within which health and safety are on the rise.

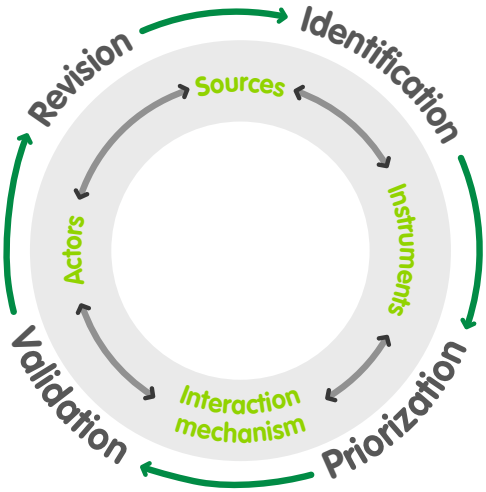
In 2021, the material or priority issues for the sustainability of the Grupo EPM and its stakeholders will be updated, which are part of the strategic direction, they feed the environmental analysis, comprehensive risk management and the business plan through the definition of challenges.

[1] The model is methodologically supported in the Manual for the practice of relations with stakeholders. Accountability Institute, UNEP and Stakeholders Research Associates.
[2] For example, "DIRSE-EY Barometer on DIRSE Relevance and Functions". December, 2020.

Material topics and their emphasis - Grupo EPM

Material topic	Emphasis
Access and affordability	Coverage of public services in rural areas
	Coverage of public services in urban areas
	Migratory phenomenon from Venezuela
	Population without service
Water and biodiversity	Areas of importance for water resources and environmental services
	Contamination prevention
Quality and safety of products and services	Continuity of service
	Education in responsible consumption and production
	Legal and safe use of services
Organizational climate	Adaptability
	Organizational clarity
Responsible procurement for local development	Recruitment criteria
	Generation of local capacities
Human rights	Decent work in the supply chain
Renewable energy	Offer of non-conventional renewable energies
Climate strategy	Mitigation
	Adaptation
Financial strength	Relations with the owner
	Financial health
Rates and prices	Education and communication of the factors that affect the rate
Transparency	Openness of information

Procedure to identify the materiality of Grupo EPM



Identification of issues

In the materiality procedure, the issues are a broad list of highlights for sustainability. The material topics are obtained from the prioritization of the topics on that list.

To construct the list of issues, the voices of the interest groups were approached through direct dialogues in some cases and in others through studies on expectations, needs, satisfaction or reputation, and also through transactional interaction mechanisms such as complaints and claims. The level of direct stakeholder participation is heterogeneous because it corresponds to the relationship dynamics of each of the Group's subsidiary companies that participated in the year, which are in different stages of evolution.

The voices of the interest groups were combined with the knowledge of the people of the Grupo EPM about their territories and with their experiences in the daily interaction through the different processes of the companies.

The issues identified were contrasted with elements of the Grupo EPM's strategic direction, as well as with relevant global sustainability issues, to be incorporated if they had not been identified in the previous steps, as long as they were pertinent in the environment and the strategy of the Grupo EPM. Among the sources were included: the thematic areas and Sustainable Development Goals of the 2030 world development agenda, the UNDP

2010-2017 human development reports, the international standard for social responsibility ISO26000, the Dow Jones sustainability index, the sustainability reports of leading companies in the sector, events on topics such as climate and Human Rights, and the GRI document that contains sustainability topics by sector. In this way, the principle of exhaustiveness proposed by the AA1000 APS was applied and adopted by EPM's relationship model with stakeholders.

The resulting list of issues and associated actors was subjected to successive processes of refinement, filtering, discussion and analysis, and also to a pre-selection according to possible economic, environmental and social impacts for the Grupo EPM and for society, at the discretion of people knowledgeable about the subsidiaries and the CORPORATE core of the Group. In this way, the relevance principle of the AA1000 APS was applied and the list of issues to be prioritized was obtained.

Topic prioritization

The prioritization was carried out with specialists from the Organization, using the prioritization criteria for material issues, its own instrument to estimate the level of social, economic and environmental value that potentially generates or destroys each issue for the Grupo EPM and its stakeholders. Thus, the relevance principle was applied.

The instrument favors the convergence of criteria. To correct the possibility that matters with high importance in only one of the three categories evaluated result with a low total score, although it has high repercussions for sustainability, an empirical contrast of the results is carried out with people who have the ability to visualize the incidence of priority sustainability issues for Grupo EPM, its stakeholders and society in general.

For the analysis of the issues and topics, qualitative techniques were used translated into numerical expressions that facilitate the understanding, comparison and visualization of certain qualities or tendencies, without forgetting that reality exceeds the limitations of the instruments that try to model it.

Prioritization criteria for material topics		
Importance of the topics for Grupo EPM Impact or value of the topic for Grupo EPM.	**Importance of topics for stakeholders** Impact or value of the topic for the stakeholders of Grupo EPM.	**Management potential of the topic** Possibilities or opportunities that the topic offers for its development.
It considers the strategic direction, the social, economic and environmental aspects underlying Grupo EPM's policies; the capabilities of companies and different time horizons.	It considers the expectations and needs of the interest groups, the magnitude, scale and urgency of the economic, social or environmental impact; the proximity of the impacted actor and different time horizons.	It considers the state of the subject in the environment, its development in the organization and the mobilization of interest groups around it.

The analysis of the management potential of the topic shows the application of the principle of "responsiveness", of the relationship model (the other two principles are "exhaustiveness" and "relevance").

Validation

With expert criteria, the Sustainable Development Management refines the final result. The Strategy and Planning Vice Presidency is responsible for ensuring that the material topics identified are reflected in the content of the Sustainability Report. The material topics are the axes for the agencies, depending on their function, to manage the relationship with each of the stakeholders, both in business and through cross-section processes.

The results of materiality, as part of the strategic direction, are inputs for the macro-process of integrated planning, including environmental analysis and comprehensive risk management.

In the core Committee of April 24, 2018, the highest-ranking decision-making body with scope for the Grupo EPM, the materiality of the Grupo EPM 2018-2021 was approved, that is, the relevant topics in terms of sustainability for the Grupo EPM and its stakeholders.

Revision

The exercise described above was reviewed and validated in 2015 by the Management Committee of the Board of Directors of EPM, and as consequence adjustments were made to the material topics that had been identified in 2014.

In 2017, the identification of emphasis on material topics allowed its review and included the vision of the stakeholders Clients and users, Community, and Suppliers and contractors, through dialogue for companies in Colombia and the provision of secondary information for subsidiaries international included in the exercise.

In 2018, the 11 material topics of Grupo EPM were defined and approved. During 2019 and 2020, the main challenges were managed Material topics.

102-47 content

Risks associated with material issues

In 2010, an identification of relationship risks was made for EPM. In 2014 the risk methodology for Grupo EPM was applied to material topics and in 2015 the risks associated with each of these issues were established.

In 2018 the risk map of the Comprehensive Risk Management Group was revised as a consequence of the contingency of the Ituango Hydroelectric Project. Managing the emphasis on material issues in 2019 helped to minimize the effects of Group risks, especially those associated with generating trust with stakeholders.
In 2019, an analysis of the main signals regarding the relationship with stakeholders was carried out, from which those that should be managed as causes of some risks of the Organization were determined.

On the subject of financial strength, emphasis on owner relations, it is highlighted that, as a consequence of the change in the municipal administration of Medellín, during 2020 there were movements in EPM's governing bodies (ownership, direction and management), which they always represent great challenges for corporate governance. On August 11, for reasons expressed in a written communication that was publicly known at the time, eight members of the Board of Directors resigned, which led to the appointment of new members by the mayor. More information in Corporate Governance Report.

COVID-19 risks and materiality

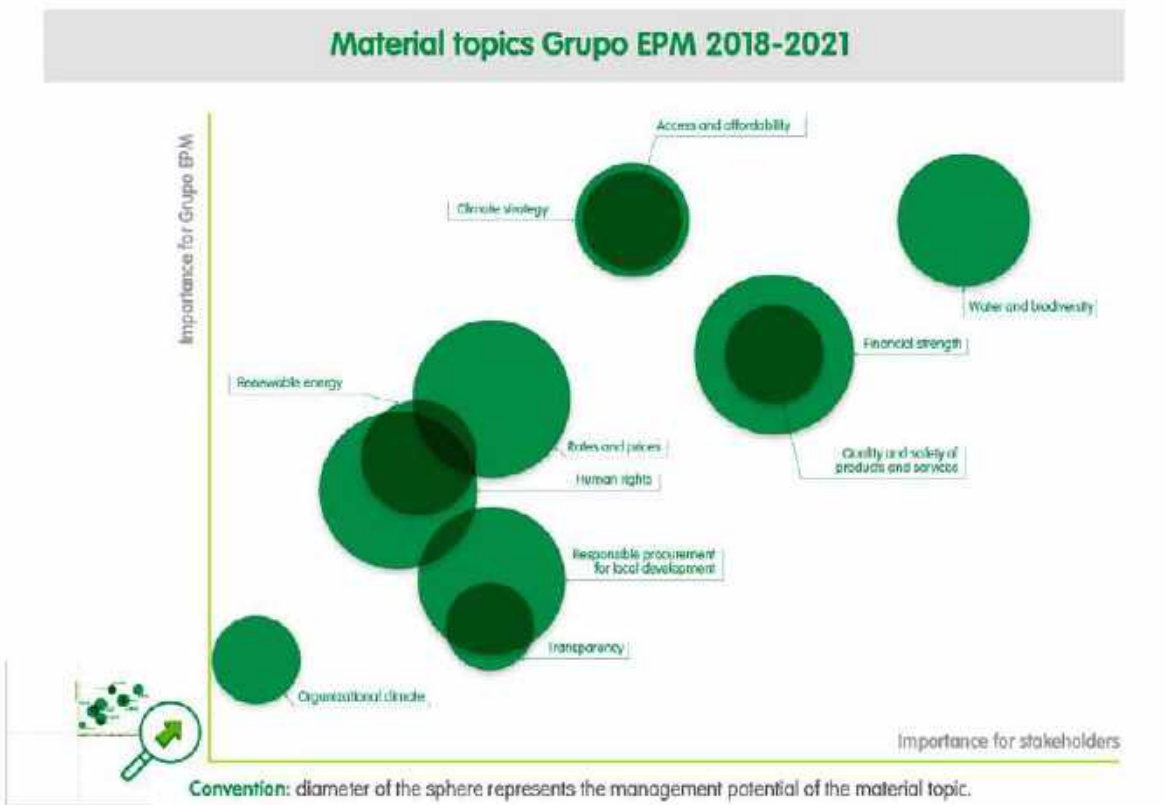
In 2020, the management of material topics is highlighted, which contribute to mitigating some effects exacerbated by COVID-19, such as access and affordability and organizational climate in its emphasis on adaptability.

Sustainability Report Coverage 103-1 content

The internal coverage or materiality of the issues for the different parts of the Organization was analyzed with the scope of the Group. In 2018, the emphasis of each material topic was established by territory in the different companies of the Group. For the management of these emphases, the most significant challenges were identified, whose management for 2019 can be consulted in the 2019 and 2020 Report on each of the material topics in the challenges section.

Material topics are the axes for managing sustainability and their management contributes to a better relationship with stakeholders.

External coverage, that is, the materiality of the subject outside the Organization is expressed through the association between interest groups and subjects, which can be consulted at: Stakeholder participation in the associated topics section.



The graph locates the topics according to their importance for the Grupo EPM and the stakeholders, based on the prioritization criteria for the material topics.

103-1 content

Complementary information within the Sustainability Report

The sustainability report includes as complementary information sustainability matters not classified as material topics. The report of these items is maintained as information of interest and because it responds to various commitments related to initiatives or measurements to which the Grupo EPM has voluntarily adhered, for which the public disclosure of information is necessary and the Sustainability Report is the most suitable means to provide it.

102-49 content

Reformulation and correction of data with respect to previous reports

The following are the adjustments made to data reported in previous years, as a result of refinements of the calculation methodologies or adjustments in the information systems:

102-48 content

In Access and affordability:

The following are the adjustments made to data reported in previous years, as a result of refinements of the calculation methodologies or adjustments in the information systems:

- **Rural Electrification:** the connected facilities in Delsur in 2018 were adjusted. In addition, the investment in EPM - Transmission and Distribution of electric energy in 2019 is adjusted.
- **Universalization and expansion of the service:** the percentages of universalization in the EPM and CENS companies in 2018 are adjusted.
- **Financing of accounts and default:** the reported values of financed clients, services in residential and non-residential default services, default percentage and financed value of the companies are adjusted: EPM, Aguas de Malambo, Aguas del Oriente, Aguas Regionales 2019.

In Quality and safety of products and services:

- **Loss management:** the percentage of the commercial loss ratio (IPERC) in the companies ESSA and Delsur in 2019 is adjusted.

  In addition, the regulated network operator loss ratio (IPORR) is adjusted in the companies EPM, Delsur and Eegsa in 2018 and in the companies: CENS, CHEC and Delsur of 2019.
- **Universalization and expansion of the service:** the percentages of universalization in the EPM and CENS companies in 2018 are adjusted.
- **Customer satisfaction:** the complaints indicator is adjusted in the Aguas del Oriente, Aguas Regionales, CENS and EDEQ companies in 2018 and in the companies: Aguas de Malambo, Aguas Regionales and Emvarias of 2019.

In Organizational climate:

The percentage of the organizational climate measurement in Delsur for 2018 and 2019 is adjusted.

In Work environment:

- **Work well-being and benefits:** the number of people benefited in Delsur in 2019 is adjusted.
- **Retirees and pensioners:** the number of pensioners in the year in EDEQ of 2018 is adjusted.
- **Employee plant:** the number of people is adjusted by seniority and age ranges, retirements for various reasons, the percentage of employee turnover and the basic salary by labor curve in CHEC of 2018.

  The number of people is adjusted by ranks of seniority in Aguas Nacionales of 2019.

In Human rights:

Due to adjustments in the calculation methodology, some figures were updated in the companies of the Grupo EPM for the years 2018 and 2019 in the concepts: hours of training, personnel trained and percentage of people trained, both employees and contractors.

In Innovation Management:

New records were added in the years 2018 and 2019 for companies that had not reported figures from previous years. Likewise, all the 2018 and 2019 reporting concepts were reclassified, to respond to the change in the structure of this issue and to have comparable figures between the years.

In Climate strategy:

- In the Balance of green energy certificates table that appears in the Strategy management action, the 2019 data was updated, since the redemptions of the certificates are according to the expired month.
- In the Other Grupo EPM emissions table that appears in the Mitigation action, corrections are presented in the 2019 figures due to adjustments in the information reported mainly by Emvarias, which recorded information on its fleet for the first time in that year.

Communication on Progress (CoP)- Global Compact

Back to content

Communication on Progress (CoP) - Global Compact

EPM manages its relationship and commitments with its stakeholders based on the guides offered in the Manual for diagnosis and practice of relationships with stakeholders, from UNEP, Accountability and Stakeholders Research Associates.

Grupo EPM incorporates the ten principles of the United Nations Global Compact as part of its commitment to global sustainability and to its stakeholders. This management is immersed in the strategic and operational challenges of the Organization, as follows:

- Human Rights management is mainly associated with the stakeholders Suppliers and contractors, Community, Clients and users and Grupo EPM People. It is reported in detail in Human rights.
- Labor rights management is associated with the Grupo EPM People stakeholder and is reported in detail in Organizational climate and Work environment.
- Environmental management is reported in detail in Water and biodiversity, Renewable energy, Climate strategy and Sustainable production and consumption.
- The management approach and issues related to anti-corruption are reported in Transparency, made up of the Practical actions of transparency and Information for stakeholders.

The alignment of EPM's social and environmental management issues with the principles of the Global Compact is contained in Alignment with sustainability initiatives.

This report responds to the requirements of the "Communication on Progress" to report on EPM's practices derived from its conviction and commitment to the ten principles on human rights, labor standards, the environment and anti-corruption.

We renew the will to remain adhered to the Global Compact of the United Nations, as we have done annually since 2006, the year of initial adherence, and to continue participating in the activities of the Global Compact Network in Colombia and in the Antioquia Node at the regional level.

This report welcomes the requirements of the Communication on Progress to honor EPM's commitment to the Global Compact to report on the disclosure and application of the principles in its strategy and operations, convinced of their value as a starting point towards common purposes.

The Global Compact Advanced Progress Statement Certificate can be viewed at: Communication on Progress (CoP) - Global Compact.

Commitment to external sustainability initiatives

Back to content

Commitment to external sustainability initiatives

External sustainability initiatives signed or adopted by EPM

	Sustainable Development Goals 2030 2030 Development Agenda, 17 goals focused on people, the planet, prosperity, peace and partnerships.
	Architecture for a better world Corporate sustainability; priorities of the post-2015 global development agenda, long-term business objectives, platforms for action and collaboration, market and social drivers and incentives, transparency and PUBLIC accountability.
	Principles of the Global Compact Labor rights, Human Rights, environment and anti-corruption.
	Business for peace - Global Compact Role of companies in peace matters in the territories where they have direct influence.
	The CEO Water Mandate - Global Compact Private sector commitment in water management.
	Rio Declaration • Sustainable development.
	COP 21 Paris Agreement Emission reduction.
	Global Reporting Initiative - GRI • Global report on sustainability.
	Guías Colombia • Human Rights and International Humanitarian Law.
	Transparency for Colombia • Transparency indicator in public service companies.
	AA1000 Stakeholder Engagement Standard • Relationship with stakeholders.
	ISO 26000 - International Guide for Social Responsibility • Governance, Human Rights, labor practices, environment, fair operating practices, consumer affairs, community participation and development.
	Ethos indicators • Values, transparency and corporate governance; internal public, environment, suppliers, consumers, community, government and society.
	ISO 14001 - Environmental Management • Pollution and environmental management.
	Equator Principles • Environmental and social management.

Participation in unions and associations

National and international guilds and associations	Acuerdo colectivo del sector eléctrico colombiano
	Agencia de Inversión and Cooperación de Medellín and el Área Metropolitana – ACI
	Asociación Centro de Estudios Tributarios de Antioquia – CETA
	Asociación Colombiana de Generadores de Energía Eléctrica – Acolgén
	Asociación Latinoamericana de Operadores de Agua and Sanitation – Aloas
	Asociación Nacional de Empresas de Servicios Públicos and Conexos – Andesco
	Asociación Nacional de Industriales – ANDI
	Asociación Colombiana de Relaciones de Trabajo – Ascort
	Asociación de Centros de Ciencia and Tecnología (Asssociation of Science - Technology Centers) - ASTC
	Asociación de Fundaciones Empresariales – AFE
	Asociación Colombiana de Distribuidores de Energía Eléctrica – Asocodis
	Asociación Nacional de Gas Natural – Naturgás
	Asociación Nacional de Organismos de Evaluación de la Conformidad – Asocec
	Cátedra del Agua
	Centro de Investigación and Desarrollo Tecnológico – Cidet
	Clúster Energía Eléctrica de Medellín
	Colombia Inteligente
	Comisión de Integración Energética Regional – CIER
	Comisión Nacional de Salud and Seguridad en el Trabajo del Sector Eléctrico – Ministerio de Trabajo
	Comité Asesor de Comercialización – CAC
	Comité Asesor de Planeamiento de la Transmisión – CAPT
	Comité Colombiano de la Comisión de Integración Energética Regional – Cocier
	Comité de Empleados and Oficiales de Cumplimiento del Sector Real
	Comité Interinstitucional de Bibliotecas
	Comité Interinstitucional de Educación Ambiental de Antioquia – Cidea
	Comité Interinstitucional de Educación Ambiental Municipal de Medellín - Cideam Medellín
	Comité Interinstitucional del Plan de Lectura, Escritura and Oralidad de la Secretaría de Cultura Ciudadana
	Comité Red Accesible Medellín
	Comité Internacional, Encuentro Latinoamericano de Bibliotecas, Archivos and Museos - EBAM
	Comité Temático Interinstitucional de cambio climático Municipio de Medellín
	Comité Universidad Empresa Condition – CUEE
	Consejo Internacional de Museos (International Council of Museums) - ICOM

National and international guilds and associations
Consejo Mundial de Energía Colombia (World Energy Council – WEC)
Consejo Nacional de Operación GAS - C.N.O.
Consejo Nacional de Operación - C.N.O.
Corporación Ruta N Medellín
Cuenta de Alto Costo
Grupo de trabajo en Human rights and Energía – Ministerio de Minas and Energía
G8 (Grupo de Bibliotecas Universitarias)
Innpulsa Colombia
Instituto Colombiano de Normas Técnicas and Certificación – Icontec
International Hydropower Association – IHA
Instituto de Auditores Internos de Colombia – IIA
Instituto Nacional de Metrología
Information Systems Audit and Control Association – Isaca
Mesa Ambiental del municipio de Copacabana
Mesa Cultural Alianza por el Centro
Mesa de Infancia and Adolescencia Municipio de Bello
Mesa de Juventud de la Alcaldía de Medellín
Mesa del Distrito de Innovación de Medellín
Mesa de Museos de Medellín – MMM
Mesas de núcleo educativo municipio de Medellín comunas 1, 3, 6, 7 and 8 and Bello
Mesa del Sector Eléctrico (SENA)
Mesas de seguridad zonales del municipio de Medellín
Mesa interinstitucional para la protección de derechos- Secretaría de Inclusión Social, Human rights and Familia de la Alcaldía de Medellín
Mesa Intersectorial contra la Explotación Sexual de Niños, Niñas and Adolescentes - ESCNNA
Mesa Nacional de Adaptación al Cambio Climático
Mesa Red de Infancia, Adolescencia and Familia de Medellín
Mesas zonales de cultura de Medellín
Movimiento global de emprendedores de alto impacto – Endeavor
Nodo Regional de Cambio Climático de Antioquia
Organismo Nacional de Acreditación de Colombia – ONAC
Plataforma Regional de la Alianza Global de Operadores de Agua (GWOPA) para América Latina and el Caribe - WOP-LAC
Red de Museos de Antioquia – RMA
Red de Popularización de la Ciencia and la Tecnología en América Latina and el Caribe – RedPop
Red Pacto Global – Colombia

Trade unions and associations	Fenalco
	Camacol
	Cámara de Comercio de Medellín
	Camacol Caldas
	Camacol Risaralda
	Cámara de Comercio La Dorada
	Cámara de Comercio Chinchiná
	Cámara de Comercio Dos Quebradas
	Cámara de Comercio Pereira

Synergy with other entities for environmental management

Back to content

Synergy with other entities for environmental management

Starting from the fact that the strategic management of the relationship builds trust, supports the business objectives and generates sustainable human development, the Grupo EPM, in the exercise of seeking an articulation of environmental and social management with a territorial perspective, during 2020 developed a Relationship strategy with those entities with which environmental and social issues were identified, whose fundamental purpose is to jointly seek to contribute to the development of the territories where the Group is present, as well as seek the viability of the projects and guarantee the operation of businesses in these territories, thus contributing to the harmony of life for a better world.

This relationship model with a territorial view was approved by the Relationship Committee of the Board of Directors, which also monitors its progress.

These inter-institutional relations tend to find and strengthen those common issues between the entities on which it is possible to reach agreements that lead to mutual benefit and that of the territories. Thus, taking into account the strategic focuses of Grupo EPM, relationships of trust and joint work were strengthened with the regional environmental entities Corantioquia, Cornare, Corpourabá, and AMVA in the department of Antioquia, as well as with environmental authorities in jurisdiction of the territories of the Group's subsidiaries.

In these relationships, a direct dialogue with high technical content was established in order to obtain the information required by the parties on the topics of interest, in a continuous interaction of mutual benefit.

The professionals of these entities and EPM also interacted permanently to discuss topics of interest, transfer of knowledge, development of programs for the benefit of the territories and obtain clarity on matters associated with environmental procedures, in order to broaden the context for decision making.

The development of permanent working groups continued, in which strategies and priorities were identified that allowed the materialization of strategic, relevant and interesting topics for the parties. This is how the signing of two new Inter-institutional Cooperation Framework Agreements with Cornare and Corantioquia was achieved, with lines of work focused on territorial development, such as: conservation of ecosystems, comprehensive management of water resources, sanitation, strategies for strengthening village aqueducts, risk management, propagation and promotion of native forest species, environmental education, communication, awareness on environmental issues and control actions, among others.

Regarding the entities of the national order, the Grupo EPM continued developing joint work actions with the Ministry of Environment and Sustainable Development, the Ministry of the Interior, the Colombian Institute of Anthropology and History - ICANH and others, with whom environmental matters and social are shared. Topics such as: regulatory management, air quality, NAMA (Nationally Appropriate Mitigation Action) Biogas, circular economy, PCB and prior consultation, among others.

GRI content index

Back to content

GRI content index

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	1. Organization profile	**102-1 Name of the organization.**	About us	✓
		102-2 Activities, brands, products and services.		
		102-3 Headquarters location.	Report Profile	✓
		102-4 Location of operations.	About us	✓
		102-5 Property and legal form.	Annex 4:Shareholding composition of Grupo EPM	✓
		102-6 Markets served.	About us	✓
		102-7 Size of the organization.	Grupo EPM People Employee plant Omission: the total number of employees is not reported by type of contract (permanent and temporary), nor by day, because the information is not considered necessary for management and therefore is not available.	✓
		102-8 Information about employees and other workers.	Purchasing and contracting The nature of the work carried out by the contractors corresponds to the operation, maintenance and commercialization of the products and services offered by the Grupo EPM.	✓

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	1. Organization profile	**102-9 Supply chain.**	Our supply cycle of goods and services	✓
			Our supply cycle of goods and services	
			Relationship with suppliers and contractors	
			Strengthening and development of suppliers	
			Purchasing and contracting	
		102-10 Significant changes in the organization and its supply chain.	Capital and ownership structure of Grupo EPM	✓
		102-11 Precautionary principle or approach.	Precautionary principle	✓
			Climate strategy	
			Water and biodiversity	
		102-12 External initiatives.	Water Conservation	✓
			EPM Foundation	
			Commitments to external sustainability initiatives	
			Synergy with other entities for environmental management	
		102-13 Membership of associations.	Commitments to external sustainability initiatives	✓
		EU1 Installed capacity broken down by primary energy source and by regulation regime.	About us EU1- Omission: Non-renewable energy sources are not specified, as the information is not available. EU3 - Omission: the information is not presented according to the type of customer account or the connection point, but the number of connections in the year is quantified, as the information is not available.	✓
		EU2 Net energy production broken down by primary energy source and by regulation regime.		✓
		EU3 Number of residential, industrial, institutional and commercial customers	Clients and users	✓

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	1. Organization profile	**EU4 Length of transmission and distribution lines (underground and overhead).**	About us EU4: the range of voltages used to categorize transmission and distribution lines is not identified. There is no information on the assumptions to estimate the length of the circuits, since the information is not available.	✓
			Universalization and expansion of the service	✓
		EU5 Allocation of allowed CO2 emissions, broken down according to the carbon trading framework.	EPM does not operate in markets where carbon credit trading works.	✓
	2. Strategy	**102-14 - Declaration of senior executives responsible for decision-making.**	Letter from the General Manager	✓
		102-15 - Main impacts, risks and opportunities.	Building vision of the future Strategic focuses	✓
	3. Ethics and integrity	**102-16 Values, principles, standards and norms of conduct.**	Ethical management of Grupo EPM	✓
			Transparency practices	
		102-17 Mechanisms for advice and ethical concerns.	Ethical management of Grupo EPM	✓
	4. Governance	**102-18 Governance structure.**	Formation of the Board of Directors	✓
			Management of the Board of Directors committees	
			Boards of directors Grupo EPM	
			Annex 4: CV of the members of the Board of Directors	
		102-19 Delegation of authority.	Management of the Board of Directors	✓

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	4. Governance	**102-20 Executive level responsibility for economic, environmental and social issues.**	Senior Management The Sustainable Development Management, attached to the Executive Vice Presidency of Strategy and Growth, has as its basic function "to lead the direction in matters of economic, human, social and environmental sustainability, and to ensure its deployment and alignment in the business plan of Grupo EPM, of in such a way that it enables the generation of value for the Grupo EPM and its stakeholders ".	✓
		102-21 Consultation with interest groups on economic, environmental and social issues.	Formation of the Board of Directors Composition of the Board of Directors	✓
		102-22 Composition of the highest governance body and its committees.	Member profiles and characteristics of the formation of the board	✓
			Annex 4:Formation of the Board of Directors	
		102-23 President of the highest governing body.	Management of the Board of Directors	✓
		102-24 Nomination and selection of the highest governance body.	Composition of the Board of Directors	✓
		102-25 Conflicts of interest.	Conflicts of interest	✓
		102-26 Role of the highest governance body in the selection of objectives, values and strategy.	Management of the Board of Directors The approval and updating of the purpose, values, mission, strategies, policies and goals is in charge of the support committees for the Management and the Board of Directors.	✓
			Management of the Board of Directors committees	✓
			Senior Management Performance	✓

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	4. Governance	**102 -26 Role of the highest governance body in the selection of objectives, values and strategy.**	Comprehensive risk management	✓
		102-27 Collective knowledge of the highest governance body.	Management of the Board of Directors committees Outstanding actions of the Board of Directors in the year 2020	✓
		102-28 Collective knowledge of the highest governance body.	Board of Directors Evaluation General Manager Evaluation	✓
		102-29 Identification and management of economic, environmental and social impacts.	Outstanding actions of the Board of Directors in the year 2020 Comprehensive risk management	✓
		102-30 Effectiveness of risk management processes.	The review of the effectiveness of the risk management system is the responsibility of the Vice Presidency of Risks. Management of the Board of Directors committees	✓
		102-31 Review of economic, environmental and social issues.	Outstanding actions of the Board of Directors in the year 2020 Schedule and typical agenda of Board of Directors Schedule and typical agenda of board of directors of the Grupo EPM Comprehensive risk management	✓
		102-32 Role of the highest governance body in the preparation of sustainability reports.	Relevant issues in sustainability - Materiality, specifically in the Validation phase. Corporate Governance Report \ Presentation	
		102-33 Communication of critical concerns.	Critical concerns Management of the Board of Directors committees Comprehensive risk management	✓

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	4. Governance	**102-34 Nature and total number of critical concerns.**	Critical concerns Management of the Board of Directors committees Comprehensive risk management	✓
		102-35 Remuneration policies.	Senior Management Remuneration Board of Directors remuneration Remuneration of the boards of directors of the companies of the Grupo EPM	✓
		102-36 Process for determining remuneration.		✓
		102-37 Involvement of stakeholders in remuneration.		✓
		102-38 Annual total compensation ratio.	Senior Management Remuneration	✓
		102-39 Ratio of the percentage increase in total annual compensation.		
	5. Stakeholder participation	**102-40 List of stakeholders.**	Identification of stakeholders	✓
		102-41 Collective bargaining agreements.	Trade union organizations	✓
		102-42 Identification and selection of stakeholders.	Identification of stakeholders	✓
		102-43 Approach for stakeholder participation.	Stakeholder participation Information for stakeholders	✓
		102-44 Key issues and concerns mentioned.	The topics that were expressed by each stakeholder are listed, in the exercise of emphasis on material topics. This can be found at: Clients and users Community Suppliers and contractors Grupo EPM People	✓

GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	External verification
GRI 102. General contents	5. Stakeholder participation	**102-44 Key issues and concerns mentioned.**	Owner Partners Investors Colleagues Condition	✓
	6. Reporting practices	**102 -45 Entities included in the consolidated financial statements.**	Report Profile	✓
		102-46 Definition of the contents of the reports and the coverage of the subject.	Relevant issues in sustainability - Materiality	✓
		102-47 List of material topics.		✓
		102-48 Restatement of information.	Relevant issues in sustainability - Materiality in the section on Reformulation and correction of data with respect to previous reports.	✓
		102-49 Changes in reporting.	Relevant issues in sustainability - Materiality \ Reformulation and correction of data regarding previous memories	✓
		102-50 Period covered by the report.	Report Profile	✓
		102-51 Date of the last report.		
		102-52 Reporting cycle.		
		102-53 Contact point for questions about the report.		
		102-54 Statement of preparation of the report in accordance with the GRI Standards.		
		102-55 GRI content index.	GRI content index	✓
		102-56 External verification.	External verification of the report	✓

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Access and affordability	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Access and affordability			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	GRI 200 Economic	GRI 203. Indirect economic impacts	203-2 Significant indirect economic impacts.	Universalization and expansion of the service		The number of people benefited is calculated from the information of people per household supplied by DANE or the business's own calculations.	✗
				Account financing and default			✓
				Rural Electrification			✗
				Housing Habilitation			✓
				Pay to your measure			✗
				Prepaid services			✗
				Community meters			✗
				Population without service			✓
				Relief Measures - COVID-19			✗
			EU26 Percentage of population not served in areas with distribution license.	Universalization and expansion of the service			✗
				Population without service	Information not available	The percentage of people without service in areas with the presence of electricity distribution, aqueduct and sewerage is not presented.	✓
	Does not apply	Does not apply	EPM-12 Solutions for existing homes without service.				✓

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Water and biodiversity	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Water and biodiversity			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	GRI 300. Environmental	GRI 303. Water	303-1 Interactions with water as a shared resource.	Water conservation and biodiversity Use of water and effluents Management of related impacts with water and biodiversity			✗
			303-2 Management of impacts related to water discharge.	Management of related impacts with water and biodiversity Use of water and effluents		There is no own standard guide for water quality and discharge, since everything is regulated by current environmental regulations in each of the countries where Grupo EPM has a presence.	✗
			303-3 Water extraction.	Use of water and effluents EPM does not have operations in areas of water stress that could pose a competition for the resource, since the Company provides basic aqueduct services.	Information not available	For this year, the water catchments will not be separated according to the concentration of total dissolved solids.	✓

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Water and biodiversity	GRI 300. Environmental	GRI 303. Water	303-4 Water discharge.	Use of water and effluents EPM does not have operations in areas of water stress that could pose a competition for the resource, since the Company provides basic aqueduct services.	Information not available	For this year, the water discharges will not be separated according to the concentration of total dissolved solids.	✓
			303-5 Water consumption.				✗
		GRI 304. Biodiversity	304-1 Operation centers owned, leased or managed, located within or next to protected areas or areas of great value for biodiversity outside protected areas.	Water conservation and biodiversity			✗
			304-2 Significant impacts of activities, products and services on biodiversity.	Management of related impacts with water and biodiversity			✓
			304-3 Habitats protected or restored.	Water conservation and biodiversity			✓
			304-4 Species that appear on the UINC Red List and on national conservation lists whose habitats are found in areas affected by operations.				✗
			EU13 Comparison of biodiversity between compensated habitats and that of affected areas.	Management of related impacts with water and biodiversity			✓
		GRI 306 Effluents and waste	306-1 Water discharge according to its quality and destination.	Use of water and effluents			✓
	Does not apply	Does not apply	EPM-01 Conservation areas.	Water conservation and biodiversity			✓
			EPM-10 Water protection.				

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Quality and safety of products and services	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Quality and safety of products and services			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	GRI 400. Social	Health and safety in the provision of the service	EU25 Number of injuries and deaths involving company assets, including legal judgments, settlements and pending legal cases due to illness.	Security in the provision of service			✗
		GRI 417. Marketing and labeling	417-3 Cases of non-compliance related to marketing communications.				✗
		GRI 418. Customer privacy	418-1 Substantiated complaints regarding violations of customer privacy and loss of customer data.	Customer service			✗
		GRI 419. Socioeconomic compliance	419-1 Non-compliance with laws and regulations in the social and economic spheres.	Security in the provision of service			✗

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Quality and safety of products and services	GRI 400. Social	Access	EU28 Average frequency of blackouts.	Quality and continuity of service			✓
			EU29 Average duration of blackouts.				✗
			EU30 Average availability of generation plants, by energy source and by regulatory regime.	About us			✗
	Does not apply	Does not apply	EPM-03 Loss index.	Loss management			✓
			EPM-04 Service channels.	Customer service			✗
			EPM-05 Complaints.	Customer satisfaction			✗
Organizational climate	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Organizational climate			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	Does not apply	Does not apply	EPM-02 Results of the organizational climate measurement.				
Responsible procurement for local development	GRI 102. General contents	1. Organization profile	102-9 Supply chain.	Responsible procurement for local development			✓
				Purchasing and contracting			
				Strengthening and development of suppliers			
				Relationship with suppliers and contractors			

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Responsible procurement for local development	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Responsible procurement for local development			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	GRI 200 Economic	GRI 204. Acquisition practices	204-1 Proportion of spending on local suppliers.				✓
	Does not apply	Does not apply	EPM-06 Number and value of social contracting contracts.	Purchasing and contracting			✓
			EPM-07 Number, value and type of contracts in the Grupo EPM.				
			EPM-08 External employment generated in the hiring of Grupo EPM.				
			EPM-09 Satisfaction of suppliers.	Relationship with suppliers and contractors			
Human rights	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Human rights			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Human rights	GRI 400. Social	Local communities	EU22 Number of physically or economically displaced persons and the compensation granted, detailed by type of project.	Human Rights Management in projects under construction Security and Human Rights The scope of this indicator corresponds only to the Ituango Hydroelectric Project.	Confidential information	The compensation offered to the displaced population is not reported.	✗
		GRI 406. No discrimination	406-1 Cases of discrimination and corrective actions taken.	Institutional management in Human Rights Human Rights in the supply chain		The reported scope corresponds only to EPM.	✓
		GRI 407. Freedom of association and collective bargaining	407-1 Operations and suppliers whose right to freedom of association and collective bargaining could be at risk.	Institutional management in Human Rights Human Rights in the supply chain			✗
		GRI 408. Child labor	408-1 Operations and suppliers with significant risk of cases of child labor.	Human Rights in the supply chain The risk associated with forced labor is minimized by incorporation of clauses in the contract documents.			✗
		GRI 409. Forced or compulsory labor	409-1 Operations and suppliers with significant risk of cases of forced or compulsory labor.				
		GRI 410. Security practices	410-1 Security personnel trained in Human Rights policies or procedures.	Security and Human Rights			✓

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Human rights	GRI 400. Social	GRI 411. Rights of indigenous peoples	411-1 Cases of violations of the rights of indigenous peoples.	Human Rights Management in projects under construction Institutional management in Human Rights Human Rights in the supply chain Security and Human Rights			✗
		GRI 412. Human Rights Assessment	412-1 Operations subject to reviews or impact assessments on Human Rights.	Human Rights Management in projects under construction Institutional management in Human Rights Human Rights in the supply chain Security and Human Rights			✗
			412-2 Training of employees in policies or procedures on Human Rights.	Institutional management in Human Rights Security and Human Rights			✓
			412-3 Significant investment agreements and contracts with clauses on Human Rights or subject to Human Rights evaluation.	Human Rights in the supply chain	Information not available	The investment agreements do not include human rights clauses.	✗
		GRI 413. Local communities	413-1 Operations with local community participation, impact evaluations and development programs.	Human Rights Management in projects under construction Security and Human Rights Human Rights in the supply chain			✗

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Human rights	GRI 400. Social	GRI 414. Social evaluation of suppliers	414-1 New suppliers that have passed selection filters according to social criteria.	Human Rights Management in projects under construction Security and Human Rights Human Rights in the supply chain	Not applicable	EPM does not have social criteria that serve as a filter in the selection process of new suppliers.	✗
		GRI 414. Social evaluation of suppliers	414-2 Negative social impacts in the supply chain and actions taken.		Information not available	- Number of suppliers evaluated in relation to social impacts. - Number and percentage of suppliers identified with negative social impacts. - Percentage of suppliers who have been granted improvement opportunities or a contractual relationship has been terminated.	✗
	Does not apply	Does not apply	EPM-30 Human Rights Management	Human Rights Management in projects under construction Institutional management in Human Rights Security and Human Rights			✗
Renewable energy	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Renewable energy			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Renewable energy	Does not apply	Does not apply	EPM-14 Resources allocated to renewable energies.	About us: Power generation mix			✗
				Biomass			✓
				Wind			
				Geothermal			
				Solar photovoltaic			
				Biogas			
				Small hydroelectric plants			
Climate strategy	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Climate strategy			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	GRI 200 Economic	GRI 201. Economic performance	201-2 Financial implications and other risks and opportunities derived from climate change.	Climate strategy management			✗
				Adaptation to natural variability and climate change			
	GRI 300. Environmental	GRI 305. Emissions	305-1 Direct GHG emissions (scope 1).	Climate strategy management Climate change mitigation The methodology used for the calculation of scope 1 and 2 emissions corresponds to the GHG Protocol and for scope 3 its complement corporate value change Accounting and reporting standard.			✓
			305-2 Indirect GHG emissions when generating energy (scope 2).				
			305-3 Other indirect GHG emissions (scope 3).				

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Climate strategy	GRI 300. Environmental	GRI 305. Emissions	305-4 Intensity of GHG emissions.	Scope 1 emissions include the gases CO2, CH4, N2O, SF6, and HCFC and include emissions of gases contemplated in the Montreal protocol. Scope 2 emissions include the total losses of electricity in the transmission and distribution of energy and the consumption of electricity. Emissions from combustion are obtained from the UPME (FECOC). For reservoirs, effluent treatment plants and anaerobic lagoons, the IPCC emission factors are used, and the electric power emission factors come from each of the countries. As assumptions, the following are held: i) In the case of reservoirs, the thermal floors Temperate - Warm - HUMID and Very HUMID tropical, since the IPCC guidelines do not have specific references for our region. ii) In the case of fuels, it is assumed from the FECOC Table: For ACPM and # 2 fuel oil, B2 diesel, for regular gasoline and premium gasoline, E10 gasoline (commercial mix), for natural gas.			✓
			305-5 Reduction of GHG emissions.				
			305-6 Emissions of substances that deplete the ozone layer (ODS).				✗

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Climate strategy	GRI 300. Environmental	GRI 305. Emissions	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions.	Climate change mitigation The calculations are made from the consumption of materials and emission factors obtained from the United States Environmental Protection Agency. (EPA); the emissions considered are: VOC (g / km), CO (g / km), CO^2 (g / km), NOx (g / km), SO^2 (g / km), PM (g / km) and benzene (g / km), which they are applied according to the type of vehicle, equipment and fuel.			✓
Financial strength	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Financial strength			✓
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	Does not apply	Does not apply	EPM – 21 Resources generated by liquidity strategies	Liquidity strategies			✗
			EPM–22 Ebitda EPM	Financial results			✗
			EPM–23 Ebitda Grupo EPM				
			EPM – 24 EPM Ebitda Margin				
			EPM–25 Grupo EPM Ebitda Margin				
			EPM – 26 EPM Net Margin				
			EPM – 27 Grupo EPM Net Margin				
			EPM-32 Covenant Grupo EPM (Debt / Ebitda)				

Material topics and GRI Standards							
Material topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Rates and prices	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage. 103-2 The management approach and its components. 103-3 Evaluation of the management approach.	Rates and prices			✓
	Does not apply	Does not apply	EPM-13 Rates by type of service.	Aqueduct rates and sewerage Sanitation fees Electricity rates Gas rates			✓
Transparency	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage. 103-2 The management approach and its components. 103-3 Evaluation of the management approach.	Transparency			✓
	GRI 200 Economic	GRI 205. Anti-corruption	205-2 Communication and training on anti-corruption policies and procedures.	Transparency practices	Information not available	- Number and percentage of members of governing bodies informed and trained on anti-corruption policies and procedures. - Number and percentage of employees informed and trained on anti-corruption policies and procedures. - Number and percentage of business partners informed and trained on anti-corruption policies and procedures.	✓

Sustainability Report 2020

Complementary matters and GRI Standards							
Complementary topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Corporate citizenship	GRI 200 Economic	GRI 203. Indirect economic impacts	203-1 Investments in infrastructure and supported services.	EPM Foundation			✗
				City projects			
			203-2 Significant indirect economic impacts.	Christmas lighting			
				Events and sponsorships			
				EPM Foundation			
				City projects			
Innovation Management	Does not apply	Does not apply	EPM-11 Innovation efficiencies EPM-19 New lines of business in innovation	Highly innovative company			✗
				Business platforms and services of the future			
				Distributed resources			
				Smart city services and sustainable mobility			
Work environment	GRI 102. General contents	1. Organization profile	102-8 Information about employees and other workers.	Purchasing and contracting			✓
				Employee plant			
		5. Stakeholder participation	102-41 Collective bargaining agreements.	Trade union organizations			✓
	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Work environment			✗
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				

Complementary matters and GRI Standards							
Complementary topic	GRI standard	GRI Standard Title	GRI Standards Contents	Location in the report / Response	Omissions	Comments	External verification
Work environment	GRI 400. Social	GRI 401. Work	401-1 New employee hires and staff turnover.	Employee plant			✕
			401-2 Full-time employee benefits that are not provided to part-time or temporary employees.	Work well-being and benefits			
			401-3 Parental leave.				
			EU14 Programs and processes to guarantee the availability of qualified labor.	Staff Selection			
			EU15 Percentage of employees entitled to retire in the next 5 and 10 years, broken down by category and region.	Retirees and pensioners			
			EU16 Policies and requirements regarding health and safety of workers, contractors and subcontractors.	Security and health at work			
			EU17 Work days of employees of contractors and subcontractors involved in construction, operation and maintenance activities.				

Complementary matters and GRI Standards							
Complementary topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Work environment	GRI 400. Social	GRI 401. Work	EU18 Percentage of contractors and subcontractors that have undergone relevant training on health and safety issues.	Security and health at work			✕
		GRI 403 Occupational health and safety	403-2 Types of accidents and accident frequency rates, occupational diseases, days lost, absenteeism and number of deaths due to work-related accidents or professional illness.				
			403-3 Workers with a high incidence or high risk of diseases related to their activity.				
			403-4 Health and safety topics covered in formal agreements with unions.				
		GRI 404. Training and teaching	404-1 Average hours of training per year per employee.	Training and development Work well-being and benefits			
			404-2 Programs to improve employee skills and transition assistance programs.				

Complementary matters and GRI Standards							
Complementary topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Work environment	GRI 400. Social	GRI 404. Training and teaching	404-3 Percentage of employees receiving periodic performance and career development reviews.	Labor performance			✕
		GRI 405. Diversity and equal opportunities	405-1 Diversity in governing bodies and employees.	Employee plant			
	Does not apply	Does not apply	EPM-16 Percentage of employees surveyed regarding quality of life and psychosocial risk.	Quality of life			
Social and environmental management in projects	GRI 200 Economic	GRI 203. Indirect economic impacts	203-1 Investments in infrastructure and supported services.	Ituango Hydroelectric Project Villages Program Intermediate projects			✕
			203-2 Significant indirect economic impacts.				
	GRI 400. Social	GRI 413. Local communities	413-1 Operations with local community participation, impact evaluations and development programs.				
			413-2 Operations with significant negative impacts –real and potential– on local communities.	Intermediate projects Impacts are measured in all projects and it is analyzed which of these are negative.			

Complementary matters and GRI Standards							
Complementary topic	**GRI standard**	**GRI Standard Title**	**GRI Standards Contents**	**Location in the report / Response**	**Omissions**	**Comments**	**External verification**
Sustainable production and consumption	GRI 103 Management Approach		103-1 Explanation of the material topic and its coverage.	Sustainable production and consumption			
			103-2 The management approach and its components.				
			103-3 Evaluation of the management approach.				
	GRI 300. Environmental	GRI 301. Materials	301-1 Materials used by weight or volume.	Other efficient consumptions and practices Energy consumption is measured directly. For the calorific powers of fuels, the values provided by the UPME are used.			✕
			301-2 Recycled supplies.				
		GRI 302. Energy	302-1 Energy consumption within the organization.	Energy consumption For the calorific powers of fuels, the values provided by the UPME are used. About us: Power generation mix			
			302-2 Energy consumption within the organization.				
			302-3 Energy intensity.		Information not available	Information is only reported for the Water and Sanitation business.	✕
			302-4 Reduction of energy consumption.				
			302-5 Reduction of energy requirements for products and services.				✕
		GRI 306. Effluents and waste	306-2 Waste by type and disposal method.	Waste management			
			306-4 Transportation of hazardous waste.				

External verification

Back to content

External verification

In accordance with the independence standards required by the Code of Ethics of the International Federation of Accountants (IFAC), the independent verification report issued by KPMG confirms their independence with EPM; In addition, it is mentioned that all its employees make annual updates to the ethics policy, in which it is declared that they have no conflicts of interest with EPM, its subsidiaries and its stakeholders.

The verification was carried out in accordance with ISAE 3000 - International Standard on Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standard Board (IAASB) of the International Federation of Accountants (IFAC).

The verification report lists, for each of the material topics, the contents of the GRI Standards or own indicators that were verified.
102-56 content

The independent verification report includes in its conclusion that NO aspect has been revealed that would lead to believe that the Sustainability Report contains significant errors or has not been prepared in accordance with the Global Reporting Initiative Standards for the Preparation of Sustainability Reports (GRI), with exhaustive conformity criteria.

This Sustainability Report has been externally verified by the firm KPMG, which performs the external audit of EPM and the tax audit in the companies of the Grupo EPM.

Read the certificate of the External verification in: Independent review report

Alignment with sustainability initiatives

Back to content

GRI - ISO 26000

Back to content

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Fundamentals GRI 101	GRI 101. Principles for reporting.	Accountability	Accountability
	GRI 101. Use of the GRI Standards for the preparation of sustainability reports.		
	GRI 101. Drafting of statements related to the use of the GRI Standards.		
General contents GRI 102	GRI 102 - 1. Organization profile	Human rights	Fundamental principles and rights at work
		Governance of the organization	Governance of the organization
		Labor practices	Working conditions and social protection
			Social dialogue
			Labor and work relations
	GRI 102 - 2. Strategy	Governance of the organization	Governance of the organization
	GRI 102 - 3. Ethics and integrity	Ethical behavior	Ethical behavior
	GRI 102 - 4. Governance	Governance of the organization	Governance of the organization
	GRI 102 - 5. Stakeholder participation		
	GRI 102 - 6. Practices for reporting	Accountability	Accountability
Management approach GRI 103	GRI 103-1. Explanation of the material topic and its coverage	Accountability	Accountability
	GRI 103-2. The management approach and its components		
	GRI 103-3. Evaluation of the management approach		

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Economic GRI 200	GRI 201. Economic performance	Environment	Mitigation and adaptation to climate change
		Active participation and community development	Generation of wealth and income
			Social investment
			Active participation and community development
	GRI 203. Indirect economic impacts	Consumer affairs	Access to essential services
		Human rights	Economic, social and cultural rights
		Active participation and community development	Job creation and skills development
			Development and access to technology
			Education and culture
			Generation of wealth and income
			Social investment
			Active participation and community development
		Fair operating practices	Promote social responsibility in the sphere of influence
			Respect for property rights
	GRI 204. Acquisition practices	Active participation and community development	Job creation and skills development
			Generation of wealth and income
		Fair operating practices	Promote social responsibility in the sphere of influence
	GRI 205. Anti-corruption		Anti-corruption

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Environmental GRI 300	GRI 301. Materials	Environment	Sustainable use of resources
	GRI 302. Energy		Sustainable use of resources
		Fair operating practices	Promote social responsibility in the sphere of influence
	GRI 303. Water	Environment	Sustainable use of resources
	GRI 304. Biodiversity		Protection of the environment, biodiversity and habitats
	GRI 305. Emissions		Mitigation and adaptation to climate change
	GRI 306. Effluents and waste		Contamination prevention
			Protection of the environment, biodiversity and habitats
			Sustainable use of resources
Social GRI 400	GRI 401. Work	Active participation and community development	Development and access to technology
		Labor practices	Working conditions and social protection
			Safety and health at work
			Labor and work relations
	GRI 403. Safety and health at work		Safety and health at work
	GRI 404. Training and teaching	Active participation and community development	Job creation and skills development
		Labor practices	Human development and workplace training

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Social GRI 400	GRI 405. Diversity and equal opportunities	Human rights	Discrimination and vulnerable groups
			Fundamental principles and rights at work
		Labor practices	Labor and work relations
	GRI 406. No discrimination	Human rights	Discrimination and vulnerable groups
			Fundamental principles and rights at work
			Conflict resolution
	GRI 407. Freedom of association and collective bargaining		Complicity in Human Rights
			Due diligence
			Civil and Political Rights
			Fundamental principles and rights at work
			Situations of risk for Human Rights
		Labor practices	Social dialogue
			Labor and work relations
	GRI 408. Child labor	Human rights	Complicity in Human Rights
			Due diligence
			Discrimination and vulnerable groups
			Fundamental principles and rights at work
			Situations of risk for Human Rights
		Fair operating practices	Promote social responsibility in the sphere of influence

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Social GRI 400	GRI 409. Forced or compulsory labor	Human rights	Complicity in Human Rights
			Due diligence
			Discrimination and vulnerable groups
			Fundamental principles and rights at work
			Situations of risk for Human Rights
		Fair operating practices	Promote social responsibility in the sphere of influence
	GRI 410. Security practices	Human rights	Complicity in Human Rights
		Fair operating practices	Promote social responsibility in the sphere of influence
		Labor practices	Labor and work relations
	GRI 411. Rights of indigenous peoples	Human rights	Civil and Political Rights
			Discrimination and vulnerable groups
			Conflict resolution
		Fair operating practices	Respect for property rights
	GRI 412. Human Rights Assessment	Human rights	Complicity in Human Rights
			Due diligence
			Situations of risk for Human Rights
		Fair operating practices	Promote social responsibility in the sphere of influence

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Social GRI 400	GRI 413. Local communities	Human rights	Economic, social and cultural rights
		Environment	Contamination prevention
			Protection of the environment, biodiversity and habitats
		Active participation and community development	Job creation and skills development
			Development and access to technology
			Education and culture
			Generation of wealth and income
			Social investment
			Active participation and community development
			Health
	GRI 414. Social evaluation of suppliers	Human rights	Complicity in Human Rights
			Due diligence
			Fundamental principles and rights at work
		Active participation and community development	Job creation and skills development
			Development and access to technology
			Education and culture
			Generation of wealth and income
			Social investment
			Active participation and community development
			Health

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Social GRI 400	GRI 414. Social evaluation of suppliers	Fair operating practices	Promote social responsibility in the sphere of influence
		Labor practices	Working conditions and social protection
			Human development and workplace training
			Social dialogue
			Safety and health at work
			Labor and work relations
	GRI 416. Customer health and safety	Consumer affairs	Sustainable consumption
			Health and safety protection
		Human rights	Economic, social and cultural rights
		Active participation and community development	Education and culture
			Active participation and community development
			Health
		Fair operating practices	Promote social responsibility in the sphere of influence
		Labor practices	Safety and health at work

Correspondence between GRI Standards used in the Sustainability Report with the ISO 26000 standard			
GRI standards		ISO 26000 standard	
		ISO 26000 fundamental principles and subjects	ISO 26000 matters
Social GRI 400	GRI 417. Marketing and labeling	Consumer affairs	Sustainable consumption
			Responsible marketing
			Health and safety protection
	GRI 418. Customer privacy		Customer service, support and conflict resolution
	GRI 419. Socioeconomic compliance		Access to essential services
			Education and awareness
			Responsible marketing
			Protection and privacy of consumer data
			Customer service, support and conflict resolution
		Active participation and community development	Generation of wealth and income
		Fair operating practices	Respect for property rights

Articulation with the world development agenda - SDG

Back to content

Sustainable Development Goals– SDG

The vision proposed from the "Architecture for a better world", for the achievement of the Sustainable Development Goals, both for companies and society, faces threats derived from the COVID-19 pandemic. These threats can be better addressed from the business purpose of Grupo EPM, which from an ecosystem perspective proposes to "Contribute to the harmony of life for a better world", with a MEGA that establishes as priorities the universalization of public services, caring for the environment through commitments to protect water and carbon neutral operations, which it deploys in its business actions.

"The 2020 Sustainable Development Goals Report brings together the latest data to show us that, prior to the COVID19 pandemic, progress continued to be uneven and we were not on track to meet the 2030 Goals. There was some progress: the proportion of children and young people not attending school had decreased, the incidence of many communicable diseases was decreasing, access to safe drinking water had improved, and the representation of women in managerial roles was increasing. At the same time, the number of people suffering from food insecurity was increasing, the natural environment continued to deteriorate at an alarming rate, and drastic levels of ineqQuality persisted in all regions. Change was not yet taking place at the necessary pace or scale. Now, due to COVID-19, an unprecedented health, economic and social crisis threatens lives and livelihoods, making it even more difficult to achieve the Goals." [1]

In the area of Latin America and the Caribbean[2] it is seen that the five SDGs most impacted by COVID-19 are: 10 Reduction of inequalities, 8 Work and economic growth, 1 End of poverty, 3 Health and well-being, 4 QQuality education. Likewise, there is a moderate negative impact on SDG 6 Clean water and sanitation and 7 Affordable and clean energy, with respect to the other SDGs. The study also concludes that a series of investments in the SDGs over the next decade, focused on social protection / welfare programs, governance, digitization, and a green economy, could not only prevent the increase in extreme poverty, but would overcome the development trajectory of the world, prior to the pandemic.

The management of the Sustainable Development Goals increases its priority as a platform to overcome the crisis derived from COVID-19 at the local and global level.

1 United Nations. The-Sustainable-Development-Goals-Report-2020_Spanish 2020. https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020_Spanish.pdf

2 CSDG. Center of Sustainable Development Goals SDG Index 2019 for LatinAmerica and the Caribbean. June 2020.

Correspondence of the Sustainable Development Goals with material issues and strategic objectives of Grupo EPM

Material topics	Purpose: Contribute to the harmony of life for a better world									
	Generation of value	Clients and markets			Operations				Learning and development	
	Increase value for stakeholders	Grow in markets and businesses	Harmonize relationships with external stakeholders	Comprehensively serve the client / user by delivering qQuality services	Ensure the required cash flow	Optimize processes	Assess and manage safety	Optimize project development	Develop organizational capabilities	Achieve cultural evolution
Access and affordability	✓	✓	✓	✓		✓	✓	✓		
Water and biodiversity	✓	✓	✓			✓	✓	✓		
Quality and safety of products and services	✓	✓	✓	✓	✓	✓	✓	✓		
Organizational climate	✓		✓	✓					✓	
Responsible hiring for local development	✓	✓	✓	✓			✓	✓		

SUSTAINABLE DEVELOPMENT GOALS	Material topics	Purpose: Contribute to the harmony of life for a better world									
		Generation of value	Clients and markets			Operations				Learning and development	
		Increase value for stakeholders	Grow in markets and businesses	Harmonize relationships with external stakeholders	Comprehensively serve the client / user by delivering qQuality services	Ensure the required cash flow	Optimize processes	Assess and manage safety	Optimize project development	Develop organizational capabilities	Achieve cultural evolution
5, 8, 10, 16	Human rights	✓		✓			✓	✓	✓		
7, 11, 12, 13	Renewable energy	✓	✓	✓							
6, 7, 12, 13	Climate strategy	✓	✓	✓		✓	✓	✓			
6, 7, 11	Financial strenght	✓	✓	✓		✓			✓	✓	
6, 7, 8	Rates and prices	✓		✓		✓					
16	Transparency	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17 PARTNERSHIPS FOR THE GOALS											

Sustainable Development Goals - Most relevant milestones on the SDGs in the global context and in Grupo EPM



	2016	2017	2018	2019	2020
	**First United Nations SDG report** It sets benchmarks for the work of the sustainable development agenda for the next 15 years.	**Second United Nations SDG report** Progress is uneven across regions, between genders, and between people of different ages, wealth, and locations. To deliver on the bold vision of the 2030 Agenda, progress must be faster and more inclusive.	**Third United Nations SDG report** Progress has been made in guaranteeing access to energy, especially in the least developed countries.However, national priorities and strengthened political ambitions are still needed to steer the world towards meeting the energy targets by 2030.	**Fourth United Nations SDG report 2019** Climate change threatens progress in all areas of sustainable development. The increase in ineqQuality between and within countries requires urgent attention. Progress has been slow on many SDGs, the global response to date has not been ambitious enough.	**United Nations SDG report 2020** Before 2020 there were uneven progress and delays in meeting the SDGs. The crisis stemming from COVID-19 threatens lives and livelihoods, making it even more difficult to achieve the Goals.
Grupo·epm	**Identifies priority SDG goals for Grupo EPM** Included in the SDGs highlighted in the image. Associates SDG with initiatives and the Balanced Scorecard of the Grupo EPM business plan. Strengthen the 2017-2020 business plan. Apply SDGs as drivers of challenges of material topics.	**Strengthens connections between material issues of Grupo EPM and SDG** The identification of emphasis or aspects of the specific material topics in the territories makes it possible to specify the connection with the goals of the SDGs and to act with greater relevance.	**Promulgates the SDGs, especially among its Suppliers and contractors,** and promotes its application in personal and business activities, through alliances with companies and institutions from different sectors that share their practices to contribute to sustainable human development.	**Starts measuring EPM's contribution to the SDGs** Based on the priority SDG targets for Grupo EPM, it seeks to express its contribution to these objectives.	**Extends the measurement of contribution to the SDGs** to other priority goals of the Group. **Contributes to the management of the pandemic crisis,** especially with actions in SDG 6, 7 and 8 towards Customers-users and Suppliers, in the midst of global threats.

EPM's contribution to the Sustainable Development Goals - SDG

Through its 17 objectives and 169 goals, the SDGs constitute a global agenda around the main challenges and opportunities of humanity, with a horizon to 2030, whose management come to life locally, and in what concerns the business sector through its deployment in business activities. The contribution to the Sustainable Development Goals is an inspiring element for the Grupo EPM's action and closes the circle that opens in its business purpose.

To measure Grupo EPM's contribution to the SDGs, the goals of greater proximity and affinity with the provision of its services were prioritized, which are the means by which the most significant contributions to sustainable human development are made. In 2019, the first contributions were measured and the measurements are gradually being extended from 2020 to the other prioritized goals and companies of the Group.

The measurement of the Grupo EPM's contribution to the SDGs includes the methodological parameters of the monitoring process within the Integrated Planning Macroprocess. The first reference proposed to measure the contributions to the SDGs are the national development plans of the countries where the Group's companies have a presence, for which the contributions for Colombian companies are expressed in most cases-except when indicated- with respect to the National Development Plan of Colombia 2018- 2022.[3]

3 Another reference that is explored to measure the contribution is the Global Indicator Framework, in cases where the proposed indicator is compatible with the contribution of Grupo EPM.

SDG Goals prioritized for Grupo EPM	
6.1	Achieve universal and equitable access to drinking water, at an affordable price for all
6.2	Achieve equitable access to adequate sanitation and hygiene for all and end open defecation
6.3	Improve water qQuality by reducing pollution and eliminating dumping
6.6	Protect and restore water-related ecosystems, including forests, mountains, wetlands, rivers, aquifers, and lakes
7.1	Ensure universal access to affordable, reliable and modern energy services
7.2	Substantially increase the share of renewable energies in the global energy matrix
7.3	Doubling the global rate of improvement in energy efficiency
8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneur-ship, creativity and innovation, and encourage the formalization, growth of micro, small and medium enterprises
8.8	Protect labor rights and promote a safe and secure work environment for all workers
9.5	Increase scientific research and improve the technological capacity of the industrial sectors of all countries
10.2	Strengthen and promote the social, economic and political inclusion of all, regardless of age, sex, disability, race, ethnicity, origin, religion or economic or other condition
12.5	Substantially reduce the generation of waste through prevention, reduction, recycling and reuse.
13.2	Incorporate climate change measures into national policies, strategies and plans
15.5	Take urgent and meaningful action to reduce the degradation of natural habitat, halt the loss of biodiversity, and protect and prevent the extinction of threatened species
16.6	Develop effective, accountable and transparent institutions at all levels
17.17	Encourage and promote the establishment of effective alliances in the public spheres, public-private and civil society

Contribution of Grupo EPM to the Sustainable Development Goals - SDG

SDG 6: Clean water and sanitation				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
6.1 Achieve universal and equitable access to drinking water, at an affordable price for all	People with access to adequate drinking water solutions	EPM	8.04 [1]	%
		Aguas Regionales	0.60 [1]	
		Aguas Malambo	0.16 [1]	
		Aguas Oriente	0.03 [1]	
		ADASA	181,058 [3]	Clients
6.2 Achieve equitable access to adequate sanitation and hygiene services for all	People with access to adequate solutions for wastewater management	EPM	8.21 [2]	%
		Aguas Regionales	0.48 [2]	
		Aguas Malambo	0.14 [2]	
		Aguas Oriente	0.04 [2]	
		ADASA	180,049 [3]	Clients
6.3 Improve water quality by reducing pollution and eliminating dumping	Percentage of urban wastewater treated	EPM	55.6	Mm^3
		Aguas Regionales	2.8	
		Aguas Nacionales	1.22	
6.6 Protect and restore water-related ecosystems, including forests, mountains, wetlands, rivers, aquifers, and lakes	Areas under sustainable conservation systems (restoration, agroforestry systems, sustainable forest management)	EPM	8.17 [4]	%
		CHEC	1.4 [4]	

1 Contribution to the National Development Plan Colombia 2018-2022. Colombia's goal to 2022: 47,244,643 people. The calculation is adjusted with respect to 2019 that included non-residential customers.
2 Contribution to the National Development Plan Colombia 2018-2022. Colombia's goal to 2022: 45,501,155 people. The calculation is adjusted with respect to 2019 that included non-residential customers.
3 Corresponds to the total number of clients of the company.
4 Own areas + accumulated execution Water Protection Indicator. See Water and biodiversity

SDG 7: Affordable and clean energy				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
7.1. Ensure universal access to affordable, reliable and modern energy services	Access to affordable and clean energy	EPM	2,317,142 [1]	Clients
		CHEC	508,414 [2]	
		CENS	552,985 [2]	
		ESSA	850,468 [2]	
		EDEQ	202,187 [2]	
		DELSUR	413,733 [3]	
		ENSA	487,282 [3]	
		EPM Guatemala	1,355,137 [3]	
	Average duration of electricity service interruptions per year (SAIDI)	EPM	11.46 [4]	Hours
		CHEC	17.39 [4]	
		CENS	22.47 [4]	
		ESSA	19.22 [4]	
		EDEQ	7.11 [4]	
		DELSUR	15.66 [4]	
		ENSA	9.87 [4]	
		EPM Guatemala	3.88 [6]	
	Average number of electricity service interruptions per year (SAIFI)	EPM	6.67 [5]	Times
		CHEC	16.19 [5]	
		CENS	7.65 [5]	
		ESSA	12.80 [5]	
		EDEQ	5.88 [5]	
		DELSUR	7.26 [5]	
		ENSA	5.65 [5]	
		EPM Guatemala	2.85 [6]	
7.2 Increase substantially the share of renewable energies in the global energy matrix	Committed electricity generation capacity from Non-Conventional Renewable Energy Sources.	EPM	1.27 [7]	%

1 Corresponds to active residential customers (excludes suspended and cut off)
2 Corresponds to the total customers of the company, excluding suspended and cut.
3 Corresponds to the company's total customers.
4 The goal of the Colombian National Development Plan for SAIDI by 2022 is 27 hours. See Quality and safety of products and services
5 The goal of the Colombian National Development Plan for SAIFI by 2022 is 35 times. See Quality and safety of products and services
6 At EPM Guatemala the quality and service continuity indicators are: the total interruption time per installed nominal kW (TTIK), expressed in hours per kW, and the average interruption frequency per installed nominal kW (FMIK), expressed in faults per kW. See Quality and safety of products and services
7 Contribution to the National Development Plan Colombia 2018-2022. Colombia's goal to 2022: 1,500 MW. See Generation Mix

SDG 8: Decent work and economic growth				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
8.3 Promote policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro, small and medium enterprises	Micro, small and medium-sized companies accompanied through business development strategies	EPM	9 [1]	Companies
8.8 Protect labor rights and promote a safe and secure work environment for all workers	Labor formality rate	EPM	100 [2]	%
		CHEC		
		CENS		
		ESSA		
		EDEQ		
		DELSUR		
		ENSA		
		EPM Guatemala		
		Aguas Regionales		
		Aguas Nacionales		
		Aguas Atrato		
		Aguas Malambo		
		Aguas Oriente		
		TICSA		
		ADASA		

1 See Responsible hiring for local development
2 Labor formality rate for employees and contractors. See Work environment and Responsible hiring for local development

SDG 9: Industry, innovation and infrastructure				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
9.5 Increase scientific research and improve the technological capacity of the industrial sectors of all countries	Investing in research and development	EPM	28,440	Million COP
		CHEC	2,042	
		CENS	47	
		ESSA	1,147	
		EDEQ	35	
		DELSUR	232	
		ENSA	1	
		EPM Guatemala	15,651	
		Aguas Regionales	2,340	

The figures reported correspond to investments in innovation. See Innovation management

SDG 10: Reduction of inequalities				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
10.2 Strengthen and promote the social, economic and political inclusion of all	Public policy action plans for sectors targeted for discrimination actions: migration, LGTBI, racial ethnic groups, people with disabilities and groups	EPM	100 [1]	%

1 Corresponds to the percentage of implementation of the institutional diversity and inclusion plan. See Human rights

SDG 12: Sustainable production and consumption				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
12.5 Reduce substantially the generation of waste through prevention, reduction, recycling and reuse	Recycling rate and new use of waste.[1]	EPM	64.81	%
		CHEC	4.56	
		CENS	15.49	
		ESSA	71.60	
		EDEQ	99.88	
		DELSUR	88.01	
		ENSA	63.82	
		EPM Guatemala	79.31	
		HET	54.78	
		Aguas Nacionales	0.18	
		ADASA	85.37	
		Aguas Oriente	41.95	

1 The goal of the Colombia National Development Plan for 2022 is 12%

SDG 13: Climate action				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
13.2 Incorporate climate change measures into national policies, strategies and plans	Cumulative reduction of greenhouse gas emissions, with respect to the national reference scenario.	EPM	1,211,878.40 [1]	Reduced tCO2e
		Aguas Nacionales	4,123.92 [1]	
		CHEC	254.56 [1]	
		CENS	353.97 [1]	
		ESSA	341.22 [1]	
		DELSUR	2.24 [1]	
		EPM Guatemala	182.14 [1]	

1 tCO2e reduced in 2020. See Climate strategy.

SDG 15: Terrestrial Ecosystem Life				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
15.5 Take urgent and significant measures to reduce the degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species	Declared protected area + Adjacent area + Undeclared high biodiversity area	EPM	57,100 [1]	Ha
		CHEC	6,491 [1]	
	Forest area in proportion to the total area of the country	EPM	0.1 [2]	%
		CHEC	0.02 [3]	

1 See Water and biodiversity
2 See Water and biodiversity. EPM's forest area figure is equivalent to 114,678 ha
3 See Water and biodiversity. The CHEC forest area figure is equivalent to 17,674 ha

SDG 16: Peace, justice and strong institutions				
GOAL	**Indicator**	**Company**	**Value**	**Unit**
16.6 Develop effective institutions, responsible and transparent at all levels	Percentage of obliged sub-jects included in the FURAG, that progress in the implementation of the Law of Transparency and access to public information.	EPM	88 [1]	Points
		CHEC	85 [1]	
		CENS	77 [1]	
		ESSA	87 [1]	
		EDEQ	80 [1]	
		Aguas Regionales	69 [1]	
		Aguas Nacionales	78 [1]	
		Aguas del Oriente	54 [1]	
		Aguas de Malambo	68 [1]	
		Emvarias	75 [1]	

1 Corresponds to the Institutional Performance Index

SDG 17: Partnerships to achieve the objectives			
Company	**Indicator**	**Consult in**	**Associated SDGs**
EPM	SDG 17: Partnerships to achieve the objectives Municipality of Medellín, Instituto Social de Vivienda y Hábitat de Medellín (Isvimed) and the Empresa de Desarro-llo Urbano (EDU) Connections for life: Access to aqueduct, sewerage, electricity and gas services in areas with special conditions.	Access and affordability	
	UNDP Improvement of sustainable practices and uses to reduce pressure on forests.	Water and biodiversity	
	Environmental authorities BanCO2: Payment for environmental services to protect natural ecosystems and improve the quality of life of communities.	Water and biodiversity	
	Government, CLUSTER, unions, PARES group, Suppliers and contractors Sustainable ecosystem of suppliers and contractors of the Grupo EPM: includes alliances with different organizations for the development of suppliers and contractors.	Responsible hiring for local development	
	Universidad de Antioquia Bio: Comprehensive management of biodiversity and its ecosystem services.	Water and biodiversity	
	Environmental authorities and other actors. Expand and strengthen the protected areas system.	Water and biodiversity	
	Cuenca Verde Protection of water resources and biodiversity.	Water and biodiversity	
	Invenergy Strategic alliance in renewable energies.	Renewable energy	
CHEC	Vivo Cuenca Structuring and creation of a mechanism for the comprehensive development of the Chinchiná River basin.	Water and biodiversity	
CENS	Financial support fund for the energization of non-interconnected areas - FAZNI Allocation of resources for rural electrification in the Catatumbo region, through solar solutions.	Management Report	
EDEQ	Investment Agency of Armenia and Quindío Installa-tion of two new companies that generated around 3,000 jobs during 2020.	Management Report	
ENSA	Inter-American Development Bank (IDB) and Rural Electrification Office (OER) Cartí Rural Electrification Project in the Guna Yala Region.	Access and affordability	

SDG 17: Partnerships to achieve the objectives			
Company	**Indicator**	**Consult in**	**Associated SDGs**
Aguas Regionales	Red de Líderes Virtual programs to educate users and the community about home public services.	Quality and safety of products and services	
	Telemetrik First regional aqueduct with Internet of Things (IoT) technology in Colombia.	Management Report	
ADASA	Regional government and residents Work plan of the Non-Billed Water (ANF) team, whose objective is to measure consumption in selected places and thereby assess losses and levels of ANF in community camps.	Access and affordability	
EPM, CHEC, CENS, EDEQ, ESSA	National Council of Operation and XM Collective agreement of the Electricity Sector, on the fight against corruption and promotion of free competition.	Transparency	
	Financial support fund for the energization of interconnected and private rural areas FAER Rural electrification.	Access and affordability	
Grupo EPM	Ministry of Mines and Energy of Colombia Carbon Neutral Electricity Sector Alliance by 2050.	Climate strategy	
	Ministry of Environment, Ministry of Mines and Energy of Colombia National and regional technical tables on climate change: climate action plans for 2050	Climate strategy	

Global Compact

Back to content

Correspondence of material issues with the principles of the Global Compact

	Principles of the Global Compact - GP									
	Human rights		Labor standards				Environment			Anti-corruption
Material topics	01 Protection of Human Rights	02 Non-complicity in human rights abuses	03 Freedom of association and collective bargaining	04 Eliminate forced labor	05 Abolish child labor	06 Non-discrimination	07 Prevention of environmental problems	08 Promote environmental responsibility	09 Promotion of harmless technologies	10 Fight corruption, extortion and bribery
Access and affordability	✓									
Water and biodiversity							✓	✓	✓	
Quality and safety of products and services	✓							✓		
Organizational climate	✓		✓	✓	✓	✓				
Responsible hiring for local development		✓		✓	✓					✓
Human rights	✓	✓	✓	✓	✓	✓				
Renewable energy							✓	✓	✓	
Climate strategy							✓	✓	✓	
Financial strenght										✓
Rates and prices	✓									
Transparency										✓

Correspondence of complementary matters with the principles of the Global Compact

	Principles of the Global Compact - GP									
	Human rights		Labor standards				Environment			Anti-corruption
Supplementary matters	01 Protection of Human Rights	02 Non-complicity in human rights abuses	03 Freedom of association and collective bargaining	04 Eliminate forced labor	05 Abolish child labor	06 Non-discrimination	07 Prevention of environmental problems	08 Promote environmental responsibility	09 Promotion of harmless technologies	10 Fight corruption, extortion and bribery
Corporate citizenship	✓	✓			✓		✓	✓	✓	
Innovation management							✓	✓	✓	
Work environment	✓	✓	✓	✓	✓	✓				✓
Social and environmental management in projects	✓	✓			✓		✓	✓	✓	
Sustainable production and consumption							✓	✓	✓	

Integrated Report (IIRC)

Back to content

Correspondence of the Integrated Report (IIRC) with the 2020 Sustainability Report

Content of the Integrated Report - IIRC	Location in the Sustainability Report
Overview of the organization and its external environment	About us
	How we are organized
	Staff
	Trade union organizations
	Control environment of Grupo EPM
	Growth / Portfolio Management
	Stakeholders
	Our supply cycle of goods and services
	Report Profile
Corporate Governance	Corporate Governance Report
Business model	About us
	Our history
	Strategic focuses
	Building vision of the future
Risks and opportunities	Strategic focuses
	Risk management
Strategy and resource allocation	Manager's management report
Performance	Access and affordability
	Water and biodiversity
	Organizational climate
	Quality and safety of products and services
	Responsible hiring for local development
	Human rights
	Renewable energy
	Climate strategy
	Financial strenght
	Rates and prices
	Transparency
	Corporate citizenship
	Innovation management
	Work environment
	Social and environmental management in projects
	Sustainable production and consumption
	Financial management.

Content of the Integrated Report - IIRC	Location in the Sustainability Report
Future perspectives	Challenges
	Strategic focuses
	Building vision of the future
Basis for preparation and presentation	Relevant issues in sustainability - Materiality

Principles of Integrated Reporting - IIRC	Location in the Sustainability Report
Strategic focus and future direction	Strategic focuses
	Building vision of the future
Information connectivity	Correspondence between the capitals of the Integrated Report - IIRC with the material topics
Relationship with stakeholders	Our stakeholders
Materiality	Report Profile
	Relevant issues in sustainability - Materiality
Conciseness	The process for preparing this report is led by EPM's Sustainable Development Management, from which guidelines are established to identify the information to be reported. The identification of material topics and complementary matters ensures that the report focuses on the most relevant aspects of management. The report on the Web allows you to navigate and establish links between the different topics presented, avoiding duplication.
Reliability and integrity	The process of preparing the report is based on an interlocution network made up of people from the different businesses, companies and dependencies of the business group, which favor the reliability and traceability of the information reported. See also: External verification
Comparability and consistency	Alignment with sustainability initiatives
	Relevant issues in sustainability - Materiality

Correspondence between the capitals of the Integrated Report - IIRC with the material topics

	Capitals					
Material topics	**Natural**	**Human**	**Social**	**Intellectual**	**Financial**	**Operational**
Access and affordability			✓		✓	✓
Water and biodiversity	✓					
Quality and safety of products and services			✓			✓
Organizational climate		✓				
Responsible hiring for local development		✓	✓			✓
Human rights			✓			
Renewable energy	✓			✓		
Climate strategy	✓					
Financial strenght					✓	
Rates and prices			✓		✓	
Transparency		✓	✓			

Capitals	Meaning
Natural	All renewable and non-renewable environmental resources and processes that provide the goods and services that sustain the past, current, or future prosperity of an organization.
Human	Competences, capacities and experience of people, and their motivations to innovate.
Social	Institutions and relationships within and between communities, interest groups and other networks and the ability to share information to improve individual and collective well-being.
Intellectual	Intangibles based on knowledge of the organization.
Financial	Set of funds available in organizations for use in the production of goods or the provision of services obtained through financing, such as debt, capital or grants, or generated through operations or investments.
Operational	Manufactured physical objects that are available to an organization for use in the production of goods or the provision of services.

Monitoring and evaluation of institutional performance

Back to content

Integrated Planning and Management Model - MIPG		
MIPG	**Company language**	**2020 Sustainability Report Correlation**
1. Human Talent Dimension	• Work well-being and benefits. • Quality of life. • Organizational climate • Training and development. • Selection of Personnel. • Safety and health at work. • Ethics and values. • Health care and health contingency.	EPM People Organizational climate Work environment Our Group (Ethics and values) Pandemic Management Transparency practices (Ethics and values)
2. Strategic Direction and Planning Dimension	• Strategic direction-Strategic focuses- Challenges. • Corporate business and service plans. • Corporate Governance • Business projects • Strategic objectives - CMI. • Risk management • Information technology	Strategic focuses Strategic targeting Corporate Governance Report Expansion projects Social and environmental management in projects Ituango Hydroelectric Project Strategic objectives - CMI Comprehensive risk management Information technology
3. Management with Values for Results Dimension	• Organizational structure. • Stakeholders • Processes (Control of non-conforming product). • Digital Government. • Anti-corruption and citizen service plan and Rationalization of procedures. • Budget management. • Regulations and legal defense. • Citizen participation. • Accountability	How we are organized Our stakeholders Security in the provision of the service Transparency practices (includes Digital Government) Rates and prices Digital Government Accountability Information for stakeholders Stakeholder participation Budget management Integrated Planning and Management Model - MIPG

Integrated Planning and Management Model - MIPG		
MIPG	**Company language**	**2020 Sustainability Report Correlation**
4. Results Evaluation Dimension	• Results of customer satisfaction surveys. • Complaints and claims (product, service). • Monitoring and evaluation of institutional performance (results of internal SGC EPM audits and improvement plans). • Process indicators. • Monitoring individual performance. • Accountability	Customer satisfaction Security in the provision of the service Customer service Integrated Planning and Management Model - MIPG Optimization of operations: Operation of our businesses Financial management. EPM Suppliers and contractors Accountability Accountability to Stakeholder Relationship with Suppliers and Contractors Labor performance
5. Information and Communication Dimension	• Communication with stakeholders. • Transparency and access to information. • Document management. • Information management. • Budget management. • Financial results • Digital transformation. • Information management.	Information for stakeholders Stakeholder participation Education and communication to Clients, users and the community Transparency practices Financial results Document management Services of the future within the framework of smart cities and the fourth industrial revolution
6. Change management	• Innovation Management • Future services.	Innovation management Building vision of the future
7. Internal control	• Independent audit results (internal audit and external audit). • Comprehensive risk management. • Lines of defense.	Internal control Accountability Comprehensive risk management

Stakeholders

Back to content

Identification of stakeholders

Back to content

Identification of stakeholders

In order to identify the stakeholders in the Grupo EPM, three criteria are taken into account Content 102-42:

- **The legitimacy** of the stakeholder is evaluated within the framework of desirable, proper or appropriate actions within the system of norms, values, beliefs and definitions of society. In operational terms, the level of legitimacy is estimated based on the existence of standards, contracts, partnerships and agreements, regarding the issues that relate it to the Organization.
- **Power** is evaluated in terms of coercive power (that of force or arms), utilitarian power (direct or indirect economic power) over the Organization. Indirect is, for example, the power of information and knowledge and symbolic power (that of relationships, political support and social and cultural recognition).
- **The urgency** or dependency is evaluated in terms of the criticality of the urgency (magnitude of the dependency or the demand for response that it has on the Organization), and the required speed of response to the urgency.

For EPM, the stakeholders identified based on these criteria Content 102-40 are:

- Clients and users
- Colleagues
- Community
- Owner
- State
- Grupo EPM people
- Investors
- Suppliers and contractors
- Partners / Shareholders

Stakeholders are groups of people or entities that have a high impact or are impacted by the Grupo EPM and have relatively stable and common interests with it. In more technical terms, they are social groups with high legitimacy, power and urgency, which have a certain homogeneity and stability in their interests with respect to Grupo EPM.

The priority issues for the sustainability of Grupo EPM and its stakeholders are detailed in Material topics.

The effects of the COVID-19 pandemic have further highlighted the interdependencies between the network made up of stakeholders and companies, and between the variables that mediate the relationship. They also show that solutions in search of collective sustainability are necessarily collaborative and with an exhaustive vision of the actors.

Our Stakeholders

Back to content

Clients and Users

Composition

People, companies and other organizations with which there is a relationship based on the provision of services.

Grupo EPM Facilities			
Service	**2018**	**2019**	**2020**
Energy	6,579,750	6,756,355	8,559,030
Gas	1,196,467	1,260,940	1,307,628
Aqueduct	1,561,140	1,600,225	1,642,179
Sewerage	1,493,835	1,540,873	1,593,299
Cleaning	818,098	868,335	885,589
Source: Commercial Vice Presidency			

** This table quantifies the facilities that are served with some of the public services.*
** Energy includes 1,597,303 from the subsidiary Afinia.*
** The subsidiary Ticsa indirectly serves 1,450,440 clients through the operation of nine wastewater treatment plants, three of the nine plants were only operated by Ticsa from January to September 2020. At the end of 2020 they are no longer part of the Ticsa Group.*

EPM Facilities			
Companies	**2018**	**2019**	**2020**
Energy	2,437,797	2,508,552	2,578,536
Gas	1,196,467	1,260,940	1,307,628
Aqueduct	1,228,667	1,266,504	1,329,343
Sewerage	1,192,580	1,233,212	1,306,606
EPM Facilities*	**2,477,761**	**2,549,957**	**2,621,326**
Source: Commercial Vice Presidency			

** This table quantifies the facilities that are served with some of the public services.*
** Corresponds to the number of facilities that have at least one service.*

Relations objective

Improve the experience of our customers and users by facilitating their interaction with the Company and providing them with solutions that respond to their needs and expectations and that demonstrate our permanent concern for their well-being and sustainability.

Relationship plan leader

Commercial Vice Presidency

Associated topics

Associated material topics (GRI Standard 102-44)	Access and compatibility
	Water and biodiversity
	Quality and safety of products and services
	Organizational climate
	Human rights
	Renewable energy
	Climate strategy
	Financial strength
	Rates and prices
	Transparency
Associated complementary matters (GRI Standard 102-44)	Development and innovation
	Social and environmental management in projects
	Sustainable production and consumption

Management indicators

102-44 Key issues and concerns mentioned.

Colleagues

Composition
Entities dedicated to providing the services offered by Grupo EPM.

Relations objective
Jointly manage issues of common interest that strengthen the development and sustainability of the sector and its environment.

Relationship plan leader
External Relations Manager.

Associated topics

Associated material topics (GRI Standard 102-44)	Water and biodiversity
	Quality and safety of products and services
	Responsible contracting for local development
	Human rights
	Renewable energy
	Climate strategy
	Rates and prices
	Transparency
Associated complementary matters (GRI Standard 102-44)	Innovation Management

Management indicators

102-44 Key issues and concerns mentioned.

Community

Composition
Population located in the areas where the Grupo EPM companies have a presence through their projects and operations.

Relations objective
Establish and meet multidirectional commitments with the community and its representatives in the territories where the Grupo EPM companies have a presence, which favor the sustainability of the environments and a better quality of life in the communities.

Relationship plan leader
Head of the Customer and Community Education Unit.

Associated topics

Associated material topics (GRI Standard 102-44)	Access and compatibility
	Water and biodiversity
	Quality and safety of products and services
	Responsible contracting for local development
	Human rights
	Renewable energy
	Climate strategy
	Rates and prices
	Financial strength
	Transparency
Associated complementary matters (GRI Standard 102-44)	Corporate citizenship
	Development and innovation
	Work environment
	Social and environmental management in projects
	Sustainable production and consumption

	2018	2019	2020
Value distributed in EPM to Community	COP 272,904 million **(3%)**	COP 261,189 million **(3%)**	COP 220,930 million **(2%)**

The distributed value is taken from the financial statement by stakeholders, prepared according to the methodology of the Fourth Financial Statement of the Uruguayan Luis Perera Aldama.

Management indicators

102-44 Key issues and concerns mentioned.

201-1 Direct economic value generated and distributed.

Owner

Composition
Owner, which for EPM is the Municipality of Medellín and for the subsidiaries it is EPM.

Relations objective
Promote compliance with the framework of action established between EPM and the Municipality of Medellín, through which the principles and obligations that define the relationship: owner - company are defined, attending to the primary purpose for which each one was created, in order to have an adequate corporate governance and contribute to the sustainability of the Company.

Relationship plan leader
Corporate Governance Unit.

Associated topics

Associated material topics (GRI Standard 102-44)	Access and compatibility
	Water and biodiversity
	Quality and safety of products and services
	Responsible contracting for local development
	Organizational climate
	Human rights
	Renewable energy
	Climate strategy
	Financial strength
	Rates and prices
	Transparency
Associated complementary matters (GRI Standard 102-44)	Corporate citizenship
	Development and innovation
	Social and environmental management in projects

	2018	2019	2020
Value distributed in EPM to the owner	COP 1,503,504 million **(17%)**	COP 1,289,652 million **(12%)**	COP 1,488,319 million **(13%)**

The distributed value is taken from the financial statement by interest group, prepared according to the methodology of the Fourth Financial Statement of the Uruguayan Luis Perera Aldama.

Management indicators

102-44	Key issues and concerns mentioned.
201-1	Direct economic value generated and distributed.

State

Composition

State entities and organizations of the national, departmental and municipal order, as well as the state entities of other countries and supranational organizations whose actions could have effects on matters of interest to the Grupo EPM.

Relations objective

Establish and maintain a close relationship with the State, so that actions can be aligned and joined efforts in pursuit of the economic, environmental and social sustainability of the territories where the Grupo EPM has a presence or interest, and the achievement of the strategic objectives of both of them.

Relationship plan leader

External Relations Manager.

Associated topics

Associated material topics (GRI Standard 102-44)	Access and compatibility
	Water and biodiversity
	Quality and safety of products and services
	Responsible contracting for local development
	Human rights
	Renewable energy
	Climate strategy
	Financial strength
	Rates and prices
	Transparency
Associated complementary matters (GRI Standard 102-44)	Corporate citizenship
	Development and innovation
	Social and environmental management in projects
	Sustainable production and consumption

	2018	2019	2020
Value distributed in EPM to the State	COP 500,795 million **(6%)**	COP 1,104,460 million **(11%)**	COP 920,081 million **(8%)**

The distributed value is taken from the financial statement by stakeholders, prepared according to the methodology of the Fourth Financial Statement of the Uruguayan Luis Perera Aldama.

Management indicators

102-44	Key issues and concerns mentioned.
201-1	Direct economic value generated and distributed.

Grupo EPM people

Composition

Servants, beneficiaries, retirees, pensioners, SENA apprentices and practice students from Grupo EPM.

Grupo EPM people			
	2018	2019	2020
Executive staff	488	512	562
Professional staff	4,830	5,017	5,495
Non-professional staff	7,600	8,431	8,388
Total servers	**12,918**	**13,960**	**14,445**
Retired[1]	3,604	3,547	3,967
Apprentices and practitioners	692	860	687
Total Grupo EPM people	**17,214**	**18,367**	**19,099**

[1] There are no data on pensioners from private pension funds or public funds.

EPM People			
	2018	2019	2020
Executive staff	212	226	224
Professional staff	2,817	2,942	3,157
Non-professional staff	4,117	4,346	4,410
Total servers	**7,146**	**7,514**	**7,791**
Beneficiaries	12,351	12,021	13,794
Retired[1]	2,135	2,098	2,019
Apprentices and practitioners	411	394	408
Total EPM People	**22,043**	**22,027**	**24,012**

[1] There are no data on pensioners from private pension funds or public funds.

Relations objective

Strengthen the Grupo EPM people - Organization relationship to promote trust and enhance the sustainable human development of stakeholders, and thus achieve compliance with business objectives.

Relationship plan leader

Vice President of Human Talent and Organizational Development.

Associated topics

Associated material topics (GRI Standard 102-44)	Quality and safety of products and services
	Organizational climate
	Human rights
	Financial strength
	Transparency
Associated complementary matters (GRI Standard 102-44)	Work environment
	Innovation Management
	Sustainable production and consumption

	2018	2019	2020
Value distributed in EPM People	COP 1,344,782 million **(16%)**	COP 1,469,552 million **(14%)**	COP 1,601,895 million **(14%)**

The distributed value is taken from the financial statement by stakeholders, prepared according to the methodology of the Fourth Financial Statement of the Uruguayan Luis Perera Aldama.

Management indicators

102-44	Key issues and concerns mentioned.
201-1	Direct economic value generated and distributed.

Investors

Composition

Determining actors for the provision of long-term financial resources for the Grupo EPM, which act directly or indirectly in the capital market, and in a manner completely unrelated to sharing ownership in EPM or its subsidiaries; among them, national and international bondholders, long-term financing providers, facilitators and government entities.

Relations objective

Consolidate trust with investors and other actors in the national and international stock market, through a relationship that is based on good management in economic, social and environmental matters.

Relationship plan leader

Director of Capital Management.

Associated material topics (GRI Standard 102-44)	Water and biodiversity
	Human rights
	Climate strategy
	Renewable energy
	Financial strength
	Rates and prices
	Transparency
Associated complementary matters (GRI Standard 102-44)	Social and environmental management in projects
	Sustainable production and consumption

Main achievements

2020 Goals	2020 Achievements	Compliance
14th version of the Grupo EPM annual investor event.	The annual event was held on May 7 virtually, due to the COVID-19 pandemic. It was attended by 152 people from Colombia, PERU, Chile, Argentina, Mexico and the United States. This event highlighted the management, performance and achievements of the business group during the year immediately preceding and the expectations and challenges of the current year.	**Total**
Quarterly consolidated financial results teleconferences.	Four teleconferences scheduled quarterly consolidated results for national and international investing public (in Spanish and English) were performed.	**Total**
Participation in annual "non-deal roadshow" international capital market events organized by commercial banks.	Participated in four "non-deal roadshow" events, organized by national and international banks. The Executive Vice President of Finance and Investments presented the main topics of the business group of interest to investors. Two face-to-face events were held between January and February 2020 and the other two virtually, due to the pandemic.	**Total**
Keep both versions of the web portal aimed at investors updated and improve navigation to facilitate access to content.	Both versions of the portal were updated throughout the year.	**Total**
Comply with the requirements of the Colombian Stock Exchange.	The IR Recognition was received from the Colombian Stock Exchange for the period 2020-2021.	**Total**
Realization of virtual roadshow	A virtual roadshow was held within the framework of EPM's international bond issuance, in which investors from the United States, Canada, Europe, Asia, Chile, PERU and Colombia participated, demanding 3.4 times the amount offered by EPM. With this issuance, the Company successfully made its sixth foray into the international capital market through the award of bonds for COP 635,000 million and USD 575 million. With this operation, EPM becomes the largest issuer of bonds denominated in Colombian pesos in this market.	**Total**

Challenges

Challenges 2021	Compliance indicator
15th version of the Grupo EPM annual investor event.	Holding the annual investor event in a virtual way, highlighting the management, performance and achievements of the business group during the immediately preceding year and the expectations and challenges of the current year.
Quarterly consolidated financial results teleconferences.	Holding of four quarterly results teleconferences
Participation in annual *non-deal roadshow* international capital market events organized by commercial banks.	Participation in events organized by international banks as well as national banks.
Keep both versions of the web portal aimed at investors updated and improve navigation to facilitate access to the contents.	Updating of both versions of the portal throughout the year.
Participate in the initiative of the Colombian Stock Exchange on IR Recognition to issuers.	Compliance with the requirements of the Colombian Stock Exchange that are included in the IR Recognition.

Management indicators

102-44 Key issues and concerns mentioned.

Suppliers and contractors

Composition

Natural and legal persons that provide or are able to provide goods or services to any of the Grupo EPM companies. Suppliers of labor, small suppliers of goods and services, suppliers of knowledge, strategic suppliers and large suppliers of goods and services.

	2018	2019	2020
Number or of suppliers registered in the information system of Suppliers and contractors of EPM	5,290	7,514	9,184

** This report corresponds to the suppliers registered in the Ariba system as of December 31 of each year.*

Relations objective

Establish, through the acquisition of goods and services, relationships for the construction and conjunction of capacities in order to achieve the sustainable development of the environment and the generation of value for each of the parties and society in general.

Relationship plan leader

Vice President of Shared Supplies and Services.

Associated topics

Associated material topics (GRI Standard 102-44)	Water and biodiversity
	Quality and safety of products and services
	Responsible contracting for local development
	Human rights
	Climate strategy
	Rates and prices
	Financial strength
	Transparency
Associated complementary matters (GRI Standard 102-44)	Work environment
	Sustainable production and consumption

Value distributed from EPM to:	2018	2019	2020
Goods and service suppliers	COP 1,389,542 million **(16%)**	COP 1,513,734 million **(15%)**	COP 1,470,286 million **(13%)**
Financial providers	COP 1,236,127 million **(14%)**	COP 1,231,287 million **(12%)**	COP 1,470,666 million **(13%)**
Total Suppliers and Contractors	**COP 2,625,669 million (30%)**	**COP 2,745,021 million (26%)**	**COP 2,940,952 million (26%)**

The distributed value is taken from the financial statement by stakeholders, prepared according to the methodology of the Fourth Financial Statement of the Uruguayan Luis Perera Aldama.

Management indicators

102-44	Key issues and concerns mentioned.
201-1	Direct economic value generated and distributed.

Partners

Composition

Natural and legal persons that have non-controlling property rights in the affiliated companies that are part of the Grupo EPM, both in national and international companies.

Partners applies for EPM. For the subsidiaries of Grupo EPM they are called shareholders.

Relations objective

Ensure respect for the rights of shareholders and fulfillment of commitments to facilitate decision-making and strengthen trust, within the framework of corporate governance practices.

Relationship plan leader

Head of Corporate Governance Unit.

Associated topics

Associated material topics (GRI Standard 102-44)	Access and compatibility
	Quality and safety of products and services
	Renewable energy
	Financial strength
	Rates and prices
	Transparency
Associated complementary matters (GRI Standard 102-44)	Corporate citizenship
	Innovation Management

Management indicators

102-44 Key issues and concerns mentioned.

Stakeholder participation

Back to content

Stakeholder participation

The materiality exercise that incorporates stakeholder voices is described in Relevant issues in sustainability - Materiality.

This exercise guides the Grupo EPM's sustainability management based on 11 material topics and their emphasis in each territory. For the management of said emphasis, the most significant challenges were identified, which can be consulted in each of the Material Topics in the challenges section.

Relevant topics for stakeholders

Relevant topics for stakeholders

Material topic	Clients and users	Community	Suppliers and contractors	Grupo EPM people	Partners / Shareholders	Owner	Investors	State	Colleagues
Access and compatibility	✓	✓			✓	✓		✓	✓
Water and biodiversity	✓	✓	✓				✓	✓	✓
Quality and safety of products and services	✓	✓	✓		✓	✓		✓	✓
Organizational climate				✓		✓			
Responsible contracting for local development		✓	✓					✓	
Human rights	✓	✓	✓	✓		✓	✓	✓	✓
Renewable energy	✓	✓			✓	✓	✓	✓	✓
Climate strategy	✓	✓	✓				✓	✓	✓
Financial strength	✓	✓	✓		✓	✓	✓		
Rates and prices	✓	✓	✓		✓	✓	✓	✓	✓
Transparency	✓	✓	✓	✓	✓	✓	✓	✓	✓

Stakeholder concerns

Some of the concerns of the Grupo EPM's stakeholders									
Subjects	Clients and users	Community	Suppliers and contractors	Investors	Partners	Grupo EPM people	Colleagues	Owner	State
Migratory phenomena due to the situation in Venezuela that generate pressure on services.	✓	✓					✓		
Internal migration situations in the country.	✓	✓					✓		
Illegal connections and implications for clients and users as a result of migratory phenomena.	✓								
Progress in the recovery works of the Ituango Hydroelectric Project.		✓		✓	✓			✓	✓
Modification to the corporate purpose of EPM.				✓	✓			✓	
Compliance with the corporate governance of the Organization by all stakeholders.				✓	✓	✓		✓	✓
Impact on the organizational climate.						✓			
Conciliation process with the consortia of the Ituango Hydroelectric Project				✓	✓			✓	✓
Performance of Grupo EPM as a new energy operator in the municipalities of Bolívar, Cesar, Córdoba, Sucre and Sur del Magdalena.	✓	✓		✓	✓			✓	✓
Financial situation of Grupo EPM and effects due to the pandemic.				✓	✓			✓	✓
Support measures carried out by Grupo EPM during the isolation due to COVID-19 and reflected in the rates.	✓	✓	✓						
Measures to facilitate adaptation to the situation generated by COVID-19.						✓			
Rating of the financial risk of Grupo EPM.				✓	✓			✓	✓
Making wrong financial and economic decisions.				✓	✓			✓	✓
Generation of local capacities through responsible contracting.			✓						

Dialogues with EPM stakeholders

Content 102-43

Accountability

Thursday May 7, 2020 the event called **Public accountability** EPM, as a practice of transparency and openness of information based on the 2019 management report was made.

This event was broadcast live on the regional television channels Telemedellín and Teleantioquia and through EPM's social networks. It could not be done in person as every year, given the contingency of COVID-19.

A broad summons was made through different media such as social networks, EPM website, EPM intranet, newsletters, direct mailings, EPM radio program, among others, inviting different stakeholders to connect to the broadcast.

In this **Public Accountability,** the **General Manager, Álvaro Guillermo Rendón López,** presented to stakeholders and the community in general, **the main performance results of 2019,** as well as the **focus of action carried out during the first 100 days 2020.**

The event was **covered** in internal and external media where informative content on these results was presented. Similarly, **a section was built on the EPM web portal** with all the information on the public Accountability: the 2019 Management Report, the Balance of the first 100 days 2020, photographs and recording of the transmission, videos associated with the eight management focuses and main initiatives developed in 2019.

Through the available WhatsApp 301 667 1241, 90 messages were received between **comments and questions from the audiences,** which were answered by official EPM spokespersons and the responses were published on the web section of the PUBLIC Accountability.

In Teleantioquia, 530 average households tuned in to the program at any time during the broadcast, and 430 people on average watched the entire broadcast.

After the broadcast, **a press release was sent to all the news media.** It was not possible to hold a press conference or media attention as every year, given the contingency of COVID-19. As of this press release, there was coverage of public Accountability in media such as: Teleantioquia, Blu Radio, Telemedellín, Emisora Cámara de Comercio – Noticiero Económico Antioqueño and RCN radio, among others.

Other spaces were held with prioritized interest groups, in which the results of the 2019 management were also announced:

Investors

- On Thursday, May 7, the 14th Meeting of Investors of the Grupo EPM was held virtually, given the contingency of COVID-19. This event had the participation of 152 guests from Colombia, PERU, Chile, Argentina, Mexico and the United States, of which 133 were connected by videoconference and the rest via audioconference.
- At this meeting, the General Manager of EPM, Álvaro Guillermo Rendón López, presented the main results of the performance of the year 2019 and the focuses of action carried out during the first 100 days of 2020. Similarly, the Vice President of Corporate Finance presented the main financial results.
- Once the meeting was over, a press release was shared with journalists.
  https://2019.informedesostenibilidadepm.com.co/
  https://www.epm.com.co/site/home/sostenibilidad-epm/informe-de-sostenibilidad

Medellín Council

- Between February and May 2020, there were three meetings with the Council of Medellín, in which the General Manager of EPM referred to topics such as the following: management focuses of his administration, main results in matters related to Caribe Mar, COVID- 19 in Ituango, and the draft agreements on future validity and expansion of the corporate purpose of EPM, among others. A visit was also made with the councilors to the Ituango Hydroelectric Project, to learn about their progress on the site.

Antioquia Assembly

- On Tuesday, February 11, 2020, a meeting was held with the Board of Directors of the Antioquia Assembly. In this space, the General Manager presented the management focuses and some topics and results of the Company of departmental interest, with special emphasis on water and energy.

Antioquia Congressmen

- On Friday, July 17, 2020, a meeting was held with Congressmen from Antioquia, to whom the General Manager presented the main results of business management.

Business unions

- On Thursday, February 13, 2020, a meeting was held with representatives of trade union organizations. In this space, attended by the presidents of more than 20 unions or associations with a presence throughout the national territory, the General Manager presented the management focuses defined for the four-year period, as well as some results and progress of the Ituango Hydroelectric Project.

Meetings with journalists

- Three meetings were held with local and regional journalists and national correspondents, who were presented with the strategic management focuses of EPM in the four-year period, the ANLA decision regarding the continuity of the works in the Ituango Hydroelectric Project and the program United for Gas, the LATTER in the company of the Mayor of Medellín and president of the Company's Board of Directors.
- Similarly, regional talks were held with representatives of the media in the Aburrá Valley, Bajo Cauca and Urabá.

Meeting with mayors of municipalities of Valle de Aburrá and Rionegro

- On March 4, 2020, a meeting was held with the mayors of the municipalities of Valle de Aburrá and Rionegro, who were presented with different topics framed in the management focuses, especially the one called City / Region, as well as the main results of the Company in the period.

Other spaces for dialogue Meetings with journalists

State

- Meetings and work tables with the ministries of Mines and Energy and of Environment and Sustainable Development, as well as with ART, ANI, the superintendencies of Transportation and home public Services, the Government of Antioquia, ANLA, the autonomous corporations regional Cornare, Corantioquia and Corpurabá; the National University, the AMVA, the Metro and METROPLÚS, the municipal administrations of Antioquia, the climate leadership group C40 and the World Bank, among others, seeking to provide sufficient information to state actors, so that programs and projects of interest to the Organization or the territorial entities in the territory.

- High-level meetings with the Congress and the Presidency of the Republic, the ministries of Mines and Energy, of Finance and of Transportation; the ANI, the Superintendency of Transportation, the AMVA, the Metro and the Medellín Council, to report on progress in projects, programs and operations of general interest.

- Conversations with the governments of the departments of Bolívar and Sucre and with the Cartagena Mayor's Office to report on progress in projects, programs and operations within the framework of the Caribe Mar negotiation.

- Technical visits with the Medellín Council and Antioquia businessmen to the Ituango Hydroelectric Project. Likewise, with the municipal councils of the municipalities of Bello and Copacabana and the secretariats of Bello to the WWTP Aguas Claras, and with the mayor of the municipality of Envigado to the WWTP El Retiro, to provide first-hand information about the progress and the operation of these projects.

- Participation in sessions and debates of the municipal councils of Antioquia, the Congress of the Republic and the Assembly of Antioquia, to render accounts and deliver information on matters of public interest and of the Organization.

- Participation in accidental commissions programmed by the Medellín Council and the Antioquia Assembly in order to be present in the conversation spaces led by these corporations to deliver official information of the Company to the aforementioned audiences.

Colleagues

- Invitation to unions to own events to share relevant information; participation in some of its union events and presentation of matters of interest to EPM to the boards of directors of those where it has a seat.
- Participation in the legislative committees of the main business associations, to jointly build concepts related to legislative projects that impact the interests of Grupo EPM, so that it can contribute to favorable legislative management.
- High-level meetings with unions from the department of Bolívar to report on progress in projects, programs and operations of general interest, within the framework of the Caribe Mar negotiation.
- Meeting of the General Manager with leaders of the main unions and associations to publicize the strategic focus of Grupo EPM for the coming years.

Media, columnists and journalists

- Talks were held through virtual media with columnists and journalists and media requirements were met through press conferences, bulletins and interviews. Likewise, training and knowledge exchange activities were developed in order to build an informed opinion about EPM that allows a better understanding of the Organization's work. One of these activities was the seminar on home public services in its water component, carried out jointly with the Press Club and which was extended to other associations such as the Circle of Journalists of Antioquia CIPA and independent and alternative journalists.
- A virtual conversation was held with the media and community leaders of Bajo Cauca Antioqueño and the municipalities in the area of influence of the Ituango Hydroelectric Project, so that they could learn more about the Organization's management and understand how a power generation plant operates, as well as the environmental and social management carried out by EPM in its areas of influence.

Suppliers and contractors

- Different actions were carried out aimed at strengthening the relationship and communication with suppliers and contractors, with a focus on the management of biosafety protocols related to the COVID-19 pandemic. Virtual meetings were strengthened with the support and involvement of companies such as ARL Sura and Colmena, the Mayor's Office of Medellín and the Chamber of Commerce, among others. Likewise, service channels were strengthened and an additional one, WhatsApp Business, was created. Finally, communication campaigns associated with gender equality and Inclusion, and electronic invoicing were developed.
- With the support of Grupo Pares, six virtual talks were held with Suppliers and contractors on issues related to the reactivation of companies from the COVID-19 emergency.
- 68 internal communications were sent with information of interest on topics such as: supply chain, COVID-19, electronic invoicing, invitations to virtual events, gender equality and inclusion campaigns, among others.
- 24 virtual events were held in which information was shared about the hiring of Grupo EPM, the information systems that support it, health and safety at work and asset management, among other topics.
- As of July 21, 2020, the WhatsApp Business channel for P&C was activated, with five categories: goods, works, maintenance and operation, professional services and social contracting. Through this channel, newsletters, invitations to events, COVID-19 campaigns, gender equality, diversity and Inclusion have been shared.
- During 2020, 11 newsletters were shared to Ariba's P&C database.
- Two specialized articles on Interoperability and the Inauguration of the first School of Skills in the Water Sector were published on LinkedIn.

- The events held during 2020 by EPM and its national subsidiaries of energy, waters and Emvarias are listed below, as spaces for dialogue, relationship and communication to publicize various topics of interest and feedback with P&C.

Number of events	Number of assistants	Company
24 virtual events	4,595	EPM
23 virtual events	2,952	National subsidiaries

- **Strengthening and development of suppliers and contractors**

  During 2020, three supplier development strategies were managed included in the so-called "Program for the Industrialization of the Water Sector

  -PISA", which includes the certification of competences under Resolution 0330 of 2017, the School of face-to-face and virtual skills for the water sector and the training courses in thermo and electrofusion techniques, in order to qualify and improve the competencies of the own staff and contractors who attend activities associated with this sector, in order to increase the quality and productivity in the provision of this service. Likewise, through Grupo Pares, we worked, in the company of more than 40 anchor companies, on initiatives for the economic reactivation of the business sector that meets the needs for goods and services that these companies require to operate.

- **Program for the Industrialization of the Water Sector (PISA)**

  It is an initiative that aims to improve the productivity and competitiveness of the P&C and EPM staff that are linked to the water sector (aqueduct and sewerage), based on the training of their human resources at different levels (operational, technical, technologist, professional and expert). During 2020, five cohorts of the thermo and electrofusion welding program were carried out, with the participation of 227 people who approved the program.

  Work was carried out on the identification of six standards for the certification of competencies of personnel working in activities of operation, maintenance and installation of aqueduct and sewer networks, to comply with Resolution 0330 of 2017, and the estimated inventory of contractor personnel who are not certified in each of these standards was collected. Likewise, the validation of documents of the personnel nominated by the contractor companies was carried out with SENA for the

training of trainers as evaluators for the process of certification of labor competencies, to whom a survey was applied in order to quantify the training needs in this subject and start their training in January 2021.

- **School of Waters Skills Training– EDA**

  Initiative that originated from evidencing reprocessing, higher cost and time in the execution of activities of construction, maintenance and operation of aqueduct and sewerage networks, whose solution was identified from the strengthening of skills in the operating personnel of the contracted companies and EPM. The school emerges as a training space where people prepare for a week by performing various theoretical and practical exercises with the advice of an instructor assigned by SENA, who identifies fine, gross and precision skills to redirect them to the optimal job according to the results of the tests.

  The first school of skills in the water sector in Colombia, with a training strategy that combines virtual with face-to-face, was officially inaugurated on November 12, 2020.

- **Development program with Grupo Pares**

  "Together for the strengthening of our suppliers" is the slogan that defines more than 40 anchor companies of Grupo Pares, united around collaborative work. These companies are interested in promoting the development and strengthening of P&C, in order to improve their productivity and competitiveness. During 2020, as a result of the contingency caused by COVID-19, and with the interest of helping the P&C interest group in the reactivation of business activity, six talks were held through the Teams Live platform, with assistance approximately 1,490 participants from these companies, with the aim of strengthening relations with them and providing them with information and knowledge to overcome the crisis.

- **Special visits to the main works of the Ituango Hydroelectric Project**

  In order to inform authorities, leaders, business leaders and academia, among others, about the progress towards the recovery of the project since 2019 and after the contingency occurred, the experiential strategy of visits to the main works was carried out with businessmen, union leaders, Medellín councilors, deputies, congressmen, officials of the National Government, local, regional and national news media, university students, authorities and the community of the area of influence and Bajo Cauca, among others, for a total of 9,000 visitors.

  In 2020, due to the COVID-19 pandemic, visits to the project were restricted and only some were made with the Regional Prosecutor's Office, the President of the

Republic, the Ministry of Mines and Energy and some representatives of the National Government, the Mayor's Office of Medellín and the Government of Antioquia, complying with all biosafety protocols. Some virtual visits were also made with the Medellín Council, the SAI and the CCI.

Financial statement by stakeholders

Content 102-43

A quantitative expression of the impact on stakeholders is expressed in the graph of the value generated and distributed based on the methodology of the Fourth Financial Statement of the Uruguayan Luis Perera Aldama.

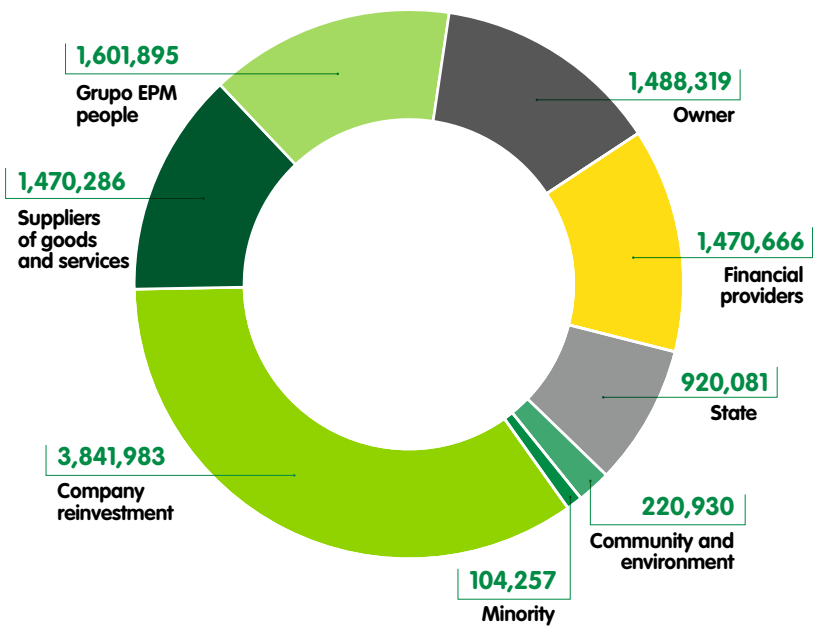
Financial statement by stakeholders Grupo EPM 2020
Value generated and distributed = COP 11,118,417 million

	2020	Participation
Total Generated Value (TVG)	**11,118,417**	**100%**
Generated Operational Value (VOG)	**10,477,317**	**94%**
Income	19,780,893	178%
Direct costs	(9,303,576)	-84%
Generated Added Value (VAG)	**641,100**	**6%**
Subsidiaries and associates	1,416,445	13%
Accounting items	(775,345)	-7%
Total Distributed Added Value (VAD)	**11,118,417**	**100%**
Company reinvestment	3,841,983	35%
Goods and service suppliers	1,470,286	13%
Grupo EPM people	1,601,895	14%
Owner	1,488,319	13%
Financial providers	1,470,666	13%
State	920,081	8%
Community and environment	220,930	2%
Minority	104,257	1%

Source: Executive Vice President Finance and Investment Management

** The main concepts included in each group are listed below.*

Income	Operating income, difference in net exchange of the own position and financial returns of debtors.
Direct costs	Costs of the merchandise sold, of the commercial operation and of direct inputs used for the provision of public services.
Subsidiaries and associates	Net result of the equity participation method, dividend income and other results associated with the acquisition or disposal of equity investments.
Accounting items	Ineffective income and expenses associated with asset impairment and liability provisions
Reinvestment in the company	Depreciation, maintenance, repairs, quality control costs, undistributed surpluses.
Owner	Ordinary and extraordinary transfers, effectively paid.
Financial providers	Net result of income and expenses for interests, commissions, other results and exchange difference with financial entities.
Grupo EPM people	Costs and expenses associated with personnel and actuarial calculation.
Goods and service suppliers	Costs and expenses associated with the contracting of goods and services not directly related to the other stakeholders.
State	National and territorial taxes, rates and contributions.
Community and environment	Act 56 of 1981 - Regulations on public works, Act 99 of 1993 - General Environmental Act of Colombia, FAZNI, FAER, environmental taxes and contributions to the Grupo EPM Foundation.
Minority	Effective payment of dividends to shareholders and group partners in EPM's direct and indirect controlled companies.



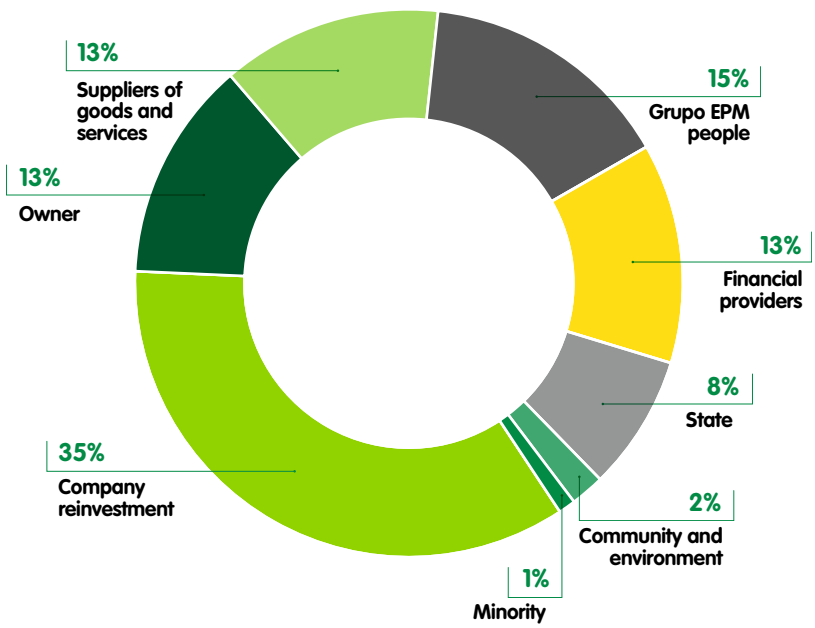
Financial statement by stakeholders - Historical behavior - Grupo EPM (million COP)

	2013	2014	2015	2016	2017	2018	2019	2020
Total Generated Value (TVG)	**7,266,391**	**7,721,717**	**8,180,633**	**7,395,881**	**8,388,647**	**8,648,962**	**10,363,723**	**11,118,417**
Generated Operational Value (VOG)	**7,866,383**	**7,066,843**	**8,501,525**	**8,048,649**	**8,771,017**	**9,308,234**	**10,668,666**	**10,477,317**
Income	13,306,570	12,443,064	15,424,867	15,280,241	15,155,519	16,573,026	18,543,069	19,780,893
Direct costs	(5,440,187)	(5,376,221)	(6,923,342)	(7,231,592)	(6,384,502)	(7,264,792)	(7,874,403)	(9,303,576)
Generated Added Value (VAG)	**(599,992)**	**654,874**	**(320,891)**	**(652,767)**	**(382,370)**	**(659,272)**	**(304,943)**	**641,100**
Subsidiaries and associates	22,798	950,978	(192,709)	(177,432)	(67,137)	(112,095)	(149,273)	1,416,445
Accounting items	(622,790)	(296,104)	(128,183)	(475,335)	(315,234)	(547,177)	(155,670)	(775,345)
Total Distributed Added Value (VAD)	**7,266,391**	**7,721,717**	**8,180,633**	**7,395,881**	**8,388,647**	**8,648,962**	**10,363,723**	**11,118,417**
Company reinvestment	1,412,901	1,480,818	1,091,010	2,322,245	2,333,287	2,274,919	3,390,688	3,841,983
Owner	1,234,557	1,984,566	991,139	816,521	1,309,136	1,503,504	1,289,652	1,488,319
Goods and service suppliers	1,318,933	1,034,034	1,299,596	1,288,590	1,312,193	1,389,542	1,513,734	1,470,286
Grupo EPM people	1,410,574	883,283	1,016,864	1,117,763	1,255,589	1,344,782	1,469,552	1,601,895
Financial providers	768,475	1,123,480	2,583,090	512,808	822,031	1,236,127	1,231,287	1,470,666
State	909,354	946,341	776,462	1,065,965	1,057,387	500,795	1,104,460	920,081
Community and environment	131,563	163,043	254,066	193,958	212,695	272,904	261,189	220,930
Minority	80,035	106,152	168,405	78,031	86,328	126,389	103,161	104,257

Source: Executive Vice President Finance and Investment Management

** The main concepts included in each group are listed below.*

Income	Operating income, difference in net exchange of the own position and financial returns of debtors.
Direct costs	Costs of the merchandise sold, of the commercial operation and of direct inputs used for the provision of public services.
Subsidiaries and associates	Net result of the equity participation method, dividend income and other results associated with the acquisition or disposal of equity investments.
Accounting items	Ineffective income and expenses associated with asset impairment and liability provisions
Reinvestment in the company	Depreciation, maintenance, repairs, quality control costs, undistributed surpluses.
Owner	Ordinary and extraordinary transfers, effectively paid.
Financial providers	Net result of income and expenses for interests, commissions, other results and exchange difference with financial entities.
Grupo EPM people	Costs and expenses associated with personnel and actuarial calculation.
Goods and service suppliers	Costs and expenses associated with the contracting of goods and services not di-rectly related to the other stakeholders.
State	National and territorial taxes, rates and contributions.
Community and environment	Act 56 of 1981 - Regulations on PUBLIC works, Act 99 of 1993 - General Environmen-tal Act of Colombia, FAZNI, FAER, environmental taxes and contributions to the Grupo EPM Foundation.
Minority	Effective payment of dividends to shareholders and group partners in EPM's direct and indirect controlled companies.



Financial statement by interest groups and business segments Grupo EPM 2020 (million COP)

	Total Grupo EPM	Energy Business	Water Business	Other segments	Eliminations between segments
Total Generated Value (TVG)	**11,118,417**	**7,150,023**	**2,261,826**	**1,875,586**	**(169,018)**
Generated Operational Value (VOG)	**10,477,317**	**7,971,406**	**2,318,653**	**352,332**	**(165,074)**
Income	19,780,893	17,149,990	2,487,446	366,520	(223,063)
Direct costs	(9,303,576)	(9,178,584)	(168,793)	(14,188)	57,989
Generated Added Value (VAG)	**641,100**	**(821,383)**	**(56,827)**	**1,523,254**	**(3,944)**
Subsidiaries and associates	1,416,445	(149,701)	(2,975)	1,573,065	(3,944)
Accounting items	(775,345)	(671,682)	(53,852)	(49,811)	0
Total Distributed Added Value (VAD)	**11,118,417**	**7,150,023**	**2,261,826**	**1,875,586**	**(169,018)**
Company reinvestment	3,841,983	2,024,519	998,980	841,587	(23,103)
Goods and service suppliers	1,470,286	1,021,325	465,953	81,880	(98,872)
Grupo EPM people	1,601,895	1,090,357	375,548	148,312	(12,322)
Owner	1,488,319	966,106	74,363	447,850	0
Financial providers	1,470,666	932,218	231,203	343,177	(35,932)
State	920,081	819,261	89,178	10,431	1,211
Community and environment	220,930	194,328	26,601	1	0
Minority	104,257	101,909	0	2,348	0

Source: Executive Vice President Finance and Investment Management

Financial statement by stakeholder and countries Grupo EPM 2020 (million COP)

	Total Grupo EPM	Colombia	Chile	El Salvador	Guatemala	Panamá	Mexico	Bermudas	Eliminations between countries
Total Generated Value (TVG)	**11,118,417**	**8,968,043**	**534,944**	**233,010**	**888,783**	**418,332**	**138,572**	**26,126**	**(89,393)**
Generated Operational Value (VOG)	**10,477,317**	**8,311,043**	**550,985**	**242,644**	**712,625**	**566,186**	**157,101**	**26,126**	**(89,393)**
Income	19,780,893	13,383,323	638,703	922,326	2,583,929	2,149,908	159,712	32,385	(89,393)
Direct costs	(9,303,576)	(5,072,280)	(87,718)	(679,682)	(1,871,304)	(1,583,722)	(2,611)	(6,259)	0
Generated Added Value (VAG)	**641,100**	**657,000**	**(16,041)**	**(9,634)**	**176,158**	**(147,854)**	**(18,529)**	**0**	**0**
Subsidiaries and associates	1,416,445	1,283,672	(9)	(5,002)	185,565	(43,731)	(4,050)	0	0
Accounting items	(775,345)	(626,672)	(16,032)	(4,632)	(9,407)	(104,123)	(14,479)	0	0
Total Distributed Added Value (VAD)	**11,118,417**	**8,968,043**	**534,944**	**233,010**	**888,783**	**418,332**	**138,572**	**26,126**	**(89,393)**
Company reinvestment	3,841,983	2,792,515	276,824	77,124	549,132	132,438	(11,013)	25,288	(325)
Owner	1,488,319	1,488,319							
Goods and service suppliers	1,470,286	1,113,582	58,701	32,431	91,362	84,937	87,302	5,616	(3,645)
Grupo EPM people	1,601,895	1,283,941	65,510	55,190	89,512	71,455	35,747	540	0
Financial providers	1,470,666	1,243,705	123,825	8,600	65,215	92,395	27,667	(5,318)	(85,423)
State	920,081	758,186	9,993	50,592	66,870	35,571	(1,131)	0	0
Community and environment	220,930	218,736	91	0	568	1,535	0	0	0
Minority	104,257	69,059	0	9,073	26,124	1	0	0	0

Source: Executive Vice President Finance and Investment Management

Precautionary principle

Back to content

Precautionary principle

According to the precautionary principle 1, the lack of absolute scientific certainty is not an excuse to postpone the adoption of effective and early measures in the face of the degradation of the environment and human health.

At the Grupo EPM, the cautious attitude to protect the environment and human health is incorporated from its strategic direction, guided under the precepts of sustainable human development.

The business purpose of Grupo EPM highlights an ecosystem outlook with interest in the whole: "Contribute to the harmony of life for a better world".

This widening of the field of vision is an invitation to recognize the ecosystem, to see beyond the individual interest to have a vision of the group, of territories, of humanity, including future generations and life in all its dimensions.

The purpose, consistent with the precautionary principle, means for the companies of the Grupo EPM to be aware of their relationship with all parts of that ecosystem and of the impact that they may generate. The Group has undertaken actions based on national environmental and risk management policies, associated with the loss of biodiversity, climate change and risks to people.

Content GRI 102-11

During 2020, given the environment of uncertainty and expectation generated by the arrival of COVID-19 in the country, Grupo EPM, committed to caring for public health, implemented a series of actions in response to the declaration of the health emergency in Colombia to minimize the negative effects on the health of servers, contractors, clients and users, the community and all its stakeholders and society in general.

The scale of values for decision-making continues to be applied, which prioritizes safeguarding people's lives, protecting the environment and finally recovering the Ituango Hydroelectric Project, with the conviction that all the activities undertaken have been carried out under strict security and control conditions.

[1] Declaration of Rio de Janeiro, United Nations Conference on Environment and Development, 1992.

The actions undertaken in 2020 associated with the project can be seen in Ituango Hydroelectric Project.

Other Grupo EPM actions consistent with caution and caution are mentioned in Climate strategy and Water and biodiversity.

In times of crisis such as the one generated by COVID-19, the Grupo EPM must ensure access to public services for all, with quality and continuity, since they are essential for overcoming the crisis and therefore provide basic sanitation, the provision of water and energy to health, competitiveness (work at home), education (study at home) and well-being (culture, recreation).

Material topics

Grupo·epm

Access and affordability

Back to content



Access and affordability

Greater availability of public services through solutions that promote human development and that of the territories. It includes bringing the service to populations settled in places with technical or legal limitations for the provision, as well as offers for clients and users to permanently enjoy home public services.

Availability of Public services through conventional and unconventional solutions that promote human development and that of the territories.

Complying with regulations and standards, access implies the availability of the service through infrastructure solutions that also aim to bring the service to populations settled in places with technical or legal limitations for the provision of the service, that is, the population without service.

The affordability is related to the options and solutions available for customers and users to permanently enjoy HOME Public services, satisfying their tastes, preferences and needs and in consideration of their payment and availability capabilities.

Importance

Universalization, understood as access and affordability solutions, is a focus of the Corporate Social Responsibility Policy of the Organization, it is at the core of the business, it is the essential contribution of the Grupo EPM to the development of the territories and represents high social value for the Company and its stakeholders.

Lack of access to public services is a determining factor of poverty with ethical, reputational and economic implications directly related to the Grupo EPM's businesses.

Main achievements

The achievements are cut to December 31, 2020.

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Rural Electrification	Coverage of public services in rural zones	Electrify 4,000 homes in rural areas.	**ESSA**	**Number of connected facilities:** 1,175 **Number of people benefited:** 3,642 **Investment in infrastructure:** COP 5,397 million **Monto de financiación:** COP 1,247 million: Due to the emergency due to the COVID-19 pandemic, it was necessary to adjust the documentation of the contracting process of the Tips and Tails programs and the Network Operator's Coverage Expansion Plan - PECOR that were being carried out, including the biosecurity regulations and request Again the market study, a situation that moved the estimated start date of the contracts to 2021.	**Not accomplished**
Pay to your measure	Unconventional solutions for affordability	Enroll 18,000 clients to the Pay to Your Measure program.	**EPM**	**Enrolled customers:** 29,616 **Compliance:** 165%	**Total**
		Enroll 5,000 clients to the Pay to Your Measure program.	**ESSA**	**Enrolled customers:** 1,620 In the 2020 term, it was not possible to manage face-to-face relationships and through social managers in the same proportion as the previous year, due to the restrictions and measures due to COVID-19, a situation that affected the fulfillment of the challenge.	**Not accomplished**
		Enroll 1,716 clients to the Pay to Your Measure program.	**CENS**	**Enrolled customers:** 1,189 **Compliance:** 69.29%	**Not accomplished**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Population without service	Population without service	Connect 3,000 homes that do not have the aqueduct service, that are in high-risk areas or outside the perimeters of the Territorial Ordering Plan - POT.	**EPM**	**Households connected to the aqueduct service:** 3,432 **Compliance:** 114%	**Total**
		Connect 11,500 homes that do not have the sewer service, that are in high-risk areas or outside the perimeters of the POT.		**Households connected to the sewerage service:** 8,375 **Compliance:** 72.83%	**Not accomplished**
		Connect 1,500 homes that do not have energy service, that are in high-risk areas or outside the perimeters of the POT.		**Households connected to the energy service:** 2,754 **Compliance:** 184%	**Total**
		Connect 1,344 homes that do not have gas service, that are in high-risk areas or outside the perimeters of the POT.		**Households connected to gas service:** 2,286 **Compliance:** 170%	**Total**
		Connect 17,344 homes that do not have energy, gas and water services, that are in high-risk areas or outside the perimeters of the POT.		**Households connected to energy, gas and water services:** 16,847 **Compliance:** 97.13%	**Partial**
Prepaid services	Unconventional solutions for affordability	Enroll 1,000 clients to the Prepaid Water program.	**EPM**	**Customers linked to Prepaid Water:** 711 **Compliance:** 71%	**Not accomplished**
		Enroll 14,000 clients to the Prepaid Energy program.		**Customers linked to Prepaid Energy:** 11,398 **Compliance:** 81.41%	**Not accomplished**
		Enroll 2,800 clients to the Prepaid Energy program.	**CENS**	**Customers linked to Prepaid Energy:** 3,568 **Compliance:** 127%	**Total**
		Enroll 4,000 clients to the Prepaid Energy program.	**ESSA**	**Customers linked to Prepaid Energy:** 4,995	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Universalization and expansion of the service	Coverage of public services in urban and rural areas	Achieve an indicator of universalization of the aqueduct service 97.41%	EPM	**Aqueduct service indicator:** 97.38% **Compliance:** 99.97%	Partial
		Achieve an indicator of universalization of the aqueduct service, in the subsidiaries of Grupo EPM in Colombia = 96.95%.	Grupo EPM	**Aqueduct service indicator:** 96.92% Also includes EPM. **Compliance:** 99.97%	Partial
		Achieve an indicator of universalization of the energy service in Grupo EPM in Colombia= 96.57%.		**Energy service indicator:** 97.18% **Compliance:** 101%	Total
		Achieve an indicator of universalization of the energy service = 96.82%.	EPM	**Energy service indicator:** 97.41% **Compliance:** 100.6%	Total
		Connect 36,714 new families to gas service through different commercial strategies.	EPM	**New families connected to the gas service:** 48,215 **Compliance:** 131%	Total
		Achieve an indicator of universalization of the solid waste service = 99.37%.	Emvarias	**Solid waste service indicator:** 99.33% **Compliance:** 100%	Total
		Achieve an indicator of universal sewerage service = 95.60%.	EPM	**Sewerage service indicator:** 93.53% **Compliance:** 99.93%	Partial
		Achieve an indicator of universalization of the sewerage service in Grupo EPM in Colombia = 93.93%.	Grupo EPM	**Sewerage service indicator:** 93.82%. **Compliance:** 99.89%	Partial
		Achieve an indicator of universalization of the gas service = 87.82%.	EPM	**Gas service indicator:** 85.29%. **Compliance:** 97.12%	Partial
		Achieve an indicator of universal sewerage service = 79.4%.	Aguas de Malambo	**Sewerage service indicator:** 77.2% **Compliance:** 97.2%	Partial
		Achieve an indicator of universalization of the aqueduct service = 91.84%		**Aqueduct service indicator:** 91.75% **Compliance:** 99.9%	Partial

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Universalization and expansion of the service	Coverage of public services in urban and rural areas.	Achieve an indicator of universal sewerage service = 100%.	Aguas del Oriente	**Sewerage service indicator:** 100% **Compliance:** 100%	Total
		Achieve an indicator of universalization of the aqueduct service = 100%.		**Aqueduct service indicator:** 100% **Compliance:** 100%	Total
		Achieve an indicator of universalization of the sewerage service = 75.97%.	Aguas Regionales	**Sewerage service indicator:** 75.24% **Compliance:** 99.0%	Partial
		Achieve an indicator of universalization of the aqueduct service = 92.10%		**Aqueduct service indicator:** 92.22% **Compliance:** 100.1%	Total
		Reach a total of connected customers in the household segment = 4,516	CENS	**Enrolled customers:** 4,757 **Compliance:** 105.3%	Total
		Achieve an indicator of universalization of the energy service = 92.49%		**Energy service indicator:** 93.86% **Compliance:** 101.5%	Total
		Achieve an indicator of universalization of the energy service = 98.92%	EDEQ	**Energy service indicator:** 99.19% **Compliance:** 100.3%	Total
		Reach a total of connected customers in the household segment = 9,000	ESSA	**Enrolled customers:** 6,615 **Compliance:** 73.5%	Not accomplished
		Achieve an indicator of universalization of the energy service = 96.56%		**Energy service indicator:** 97.21% **Compliance:** 100.7%	Total
		Reach a total of connected customers in the household segment, through the Pay to Your Measure, Energy and Prepaid Water offers= 33,000.	EPM	**Enrolled customers:** 41,725 **Compliance:** 126.4%	Total
		Achieve an indicator of universalization of the energy service = 99.06%	CHEC	**Energy service indicator:** 98.96% **Compliance:** 99.9%	Partial

Challenges 2021

Program, project, initiative or action	Management emphasis	Challenges	Company	Deal	Geography
Rural Electrification		Electrify 4,000 homes in rural areas.	**ESSA**	Energy - T&D	**Colombia - Santander**
Pay to your measure	Unconventional solutions for affordability	Enroll 1,083 clients to the Pay to Your Measure program.	**CENS**	Energy - T&D	**Colombia - North of Santander**
		Enroll 3,000 clients to the Pay to Your Measure program.	**ESSA**		**Colombia - Santander**
Population without service	Population without service	Connect 1,500 homes that do not have energy service, that are in high-risk areas or outside the perimeters of the POT.	**EPM**	Energy - T&D	**Colombia - Antioquia**
		Connect 2,000 homes that do not have aqueduct service, that are in high-risk areas or outside the perimeters of the POT.		Water and sanitation	
		Connect 5,500 homes that do not have the sewer service, that are in high-risk areas or outside the perimeters of the POT.			
		Connect 9,000 homes that do not have energy, gas and water services, that are in high-risk areas or outside the perimeters of the POT.		All businesses	
Prepaid services	Unconventional solutions for affordability	Enroll 1,000 clients to the Prepaid Water program.	**EPM**	Water and sanitation	**Colombia - Antioquia**
		Enroll 4,000 clients to the Prepaid Energy program.	**ESSA**	Energy - T&D	**Colombia - Santander**
		Enroll 15,200 clients to the Prepaid Energy program.	**EPM**		**Colombia - Antioquia**
		Enroll 2,200 clients to the Prepaid Energy program.	**CENS**		**Colombia - North of Santander**

Program, project, initiative or action	Management emphasis	Challenges	Company	Deal	Geography
Universalization and expansion of the service	Coverage of public services in urban and rural areas	Connect 6,000 clients with the Connections for Life program.	EPM	Energy - Gas	Colombia - Antioquia
		Establish the plan for the execution of the coverage project.	EDEQ	Energy - T&D	Colombia - Quindío
		Achieve an indicator of universalization of the aqueduct service = 97.42%	Grupo EPM	Water and sanitation	Colombia - Antioquia
		Achieve an indicator of universalization of the sewerage service = 97.43%			Colombia
		Achieve an indicator of universalization of the energy service in the subsidiaries of Grupo EPM in Colombia = 97.08%	EPM	Energy - T&D	Colombia
		Achieve an indicator of universalization of the aqueduct service, in the subsidiaries of Grupo EPM in Colombia = 96.98		Water and sanitation	
Universalization and expansion of the service		Achieve an indicator of universalization of the sewerage service = 78.58%	Aguas de Malambo	Water and sanitation	Colombia - Malambo
		Achieve an indicator of universalization of the aqueduct service = 91.85%			Colombia - Malambo
		Achieve an indicator of universalization of the sewerage service = 100%	Aguas del Oriente	Water and sanitation	Colombia - Antioquia
		Achieve an indicator of universalization of the aqueduct service = 100%			
		Achieve an indicator of universalization of the sewerage service = 76.45%	Aguas Regionales	Water and sanitation	Colombia - Antioquia
		Achieve an indicator of universalization of the aqueduct service = 92.45%			
		Achieve an indicator of universalization of the solid waste service = 99.70%	Emvarias	Water and sanitation	Colombia - Antioquia
		Achieve an indicator of universalization of the sewerage service = 95.63%	EPM	Water and sanitation	Colombia
		Achieve an indicator of universalization of the gas service = 86.54%		Energy - Gas	Colombia - Antioquia

Program, project, initiative or action	Management emphasis	Challenges	Company	Deal	Geography
Universalization and expansion of the service	Coverage of public services in urban and rural areas	Achieve an indicator of universalization of the energy service = 93.12%	CENS	Energy - T&D	Colombia - North of Santander
		Achieve an indicator of universalization of the energy service = 99.03%	CHEC		Colombia - Caldas
		Achieve an indicator of universalization of the energy service = 99.07%	EDEQ		Colombia - Quindío
		Reach a total of connected customers in the household segment, through the Pay to Your Measure and Prepaid Energy offers = 4,023	CENS		Colombia - North of Santander
		Achieve an indicator of universalization of the wastewater service in the subsidiaries of Grupo EPM in Colombia = 93.99%	Grupo EPM	Water and sanitation	Colombia
		Achieve an indicator of universalization of the energy service = 97.15%	ESSA	Energy - T&D	Colombia - Santander
		Connect 48,095 new families to gas service through different commercial strategies.	EPM	Energy - Gas	Colombia - Antioquia
	Population without service	Connect 3,700 homes to the aqueduct and sewerage services, through the Connections for Life program that is carried out with the Municipality of Medellín.	EPM	Water and sanitation	Colombia - Antioquia

Sustainability Report 2020

Sustainable Development Goals











Associated stakeholders

- Clients and Users
- Community
- Owner
- State
- Partners

GRI standards Contents and own indicators

103 - 1	Explanation of the material topics and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
203 - 2	Significant indirect economic impacts.
EU 26	Percentage of population not served in areas with distribution license.
EPM - 12	Solutions for homes without service.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Water Company of Eastern Antioquia

Aguas de Malambo

Various Companies of Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del North of Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Elektra Northeast - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – North of Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Business

Water
Sanitation
Electric power
Gas

Universalization and expansion of service

Back to content

Universalization and expansion of service

The social purpose of Grupo EPM is the universalization of its services in the territories where it has a presence, under a joint and coordinated work with variables such as the connection of new clients and populations that are without service because they are located in places with technical or legal limitations for the provision of the service.

Performance in 2020

In 2020, the percentage of universalization of EPM's aqueduct, sanitation and energy services increased compared to the previous year, despite the situation generated by the COVID-19 pandemic.

EPM is committed to improving the quality of life of customers and users and one way to do this is the universalization of public services in the territories where it has coverage.

With the aqueduct service there is a presence in two countries, in Colombia with EPM, Aguas Regionales, Aguas de Malambo, Aguas del Oriente and Aguas Nacionales, reaching a 96.92% universalization of the service equivalent to 1,461,121 clients; and internationally, there is a presence in Chile with Adasa - Aguas de Antofagasta, with 181,058 clients.

Regarding the sewerage service, it has a presence in three countries; in Colombia with EPM, Aguas Regionales, Aguas de Malambo and Aguas del Oriente, reaching 93.82% in the universalization of the service, equivalent to 1,413,250 clients. In Mexico with Ticsa and in Chile with Aguas de Antofagasta, serving 180,049 clients.

The Aguas de Oriente subsidiary stands out, in the Antioquia municipality of El Retiro, which has already reached 100% universalization in the aqueduct and sewerage services.

The transmission of electricity in Colombia is done with the companies EPM, ESSA, CENS and CHEC and in Guatemala through Transportista Eléctrica Centroamericana SA -Trelec.

The distribution and commercialization of electricity in Colombia is in charge of the companies of the Group: EPM, ESSA, CENS, CHEC, EDEQ and Afinia, which has allowed a universalization of the energy service in Colombia of 97.18%. In Panama with ENSA, in Guatemala with EPM Guatemala made up of Eggsa, Comegsa and Trelec and in El Salvador with Delsur, reaching 8,559,030 clients.

The EDEQ subsidiary in the Quindío region reached 99.19%, becoming the first region in Colombia where access to energy service is universal.

The positive results of the universalization of water and energy in the Colombian companies of the Group, was due to an atypical behavior as a result of the COVID-19 pandemic, the decrease in new customers to be enrolled, especially in the second quarter of the year and the increase of clients who currently enjoy the service given the reconnections and reinstatements of delinquent services, generated universalization results higher than those of 2019.

Regarding EPM's gas service, it reached 85.29% universalization in 2020, equivalent to 1,307,628 customers. Universalization decreased 0.55 points compared to the previous year, due to the fact that during 2020 the database of potential customers to connect was updated, increasing the room for maneuver to manage them during 2021.

For the provision of the aqueduct service, the Grupo EPM has 39 water treatment plants with an installed capacity of 21.63 m3 / second, 225 storage tanks and about 6,400 km of aqueduct networks.

In the aqueduct, EPM has built 298 km of primary distribution networks and 3,961 km of secondary distribution networks.

Aguas del Oriente carried out with telemetry systems the modernization of the infrastructure of the storage tanks and Las Flores pump station, in the Antioquia municipality of El Retiro.

Aguas Regionales, expanded the drinking water treatment plant of San Jerónimo (Antioquia) thus doubling its capacity, going from 30 to 60 liters per second, which allows guaranteeing the attention of the current and future demand for water and the continuity of the service. Additionally, the enrollment channel for housing developers was developed, which contributed to the connection of 940 new clients.

Aguas de Malambo (Atlántico department) increased coverage, thanks to the reestablishment of delinquent services that were suspended and cut off, in compliance with what was decreed by the Colombian National Government as a result of COVID-19.

In Chile, the company Adasa (Antofagasta) started the operation of the Tocopilla desalination plant, with a capacity of 75 liters / second, which benefits 9,329 clients. The design engineering and project execution were carried out directly by the subsidiary. In addition, the construction of phase II of the North-PDN Desalination Plant began to increase its capacity by 380 liters / second, for a total 1,436 liters / second.

For the provision of the sewerage service, the Grupo EPM has 18 wastewater treatment plants with a treatment capacity of 11.33 m³ / second and more than 6,500 km of sewerage networks.

EPM has built 414 km of networks for the transport of wastewater and 4,446 km of networks for collection and transport.

The continuity in the treatment of the wastewater received, with the operation of the Aguas Claras wastewater treatment plant, allowed to serve 99.8% and deliver 100% in quality of the treated wastewater, effectively contributing to sanitation of the river Aburrá Medellín. Aguas Nacionales managed to implement the 36 actions defined in the emergency and contingency care plan for the mitigation of odors generated at the Aguas Claras plant (Bello -Antioquia), presenting a decrease in odor events.

Regarding the solid waste service, there is a presence in Medellín with the subsidiary Emvarias, reaching 885,589 clients and 99.26% universalization. 1,176,878 tons from 40 municipalities in Antioquia entered the La Pradera landfill for final disposal and 333,755 m³ of leachate were treated at the leachate treatment plant.

Emvarias strengthened the waste utilization strategy through the containerization program associated with the "Medellín Futuro" Development Plan, to achieve this, 421 containers were installed. Likewise, progress was made in the procedures for the licensing of the La Piñuela basin, which will allow the USEFUL life of the La Pradera landfill to be extended.

The Grupo EPM has more than 250 thousand kilometers of energy distribution networks. EPM has built 55,868 km of primary distribution networks and 43,612 of secondary distribution. The increase in primary networks is due to different service expansion projects. Additionally, the georeferencing process that is being implemented in some subsidiaries has allowed some additional kilometers to be included in the system.

In El Salvador, Delsur supported the service from the effects left by tropical storms Amanda and Cristóbal, with the recovery in record time of the energy service in more than 70% of the affected area of influence.

In Panama, the ENSA company managed to put the Cartí project into operation: energy for more than 300 families in the Guna Yala region, the Model School with more than 1,000 students and four ports, thanks to a joint investment with the Inter-American Development Bank (IDB) and the Rural Electrification Office (OER).

CENS with financing from FAZNI - Financial Support Fund for the Energization of Non-Interconnected Zones, achieved the allocation of resources for the rural electrification of 282 homes in the Catatumbo region, through the development of solar solutions.

For the Gas service, EPM built 129 km of networks, achieving 8,448 accumulated km in Antioquia. The variation compared to the previous year is lower, this is due to the execution of the infrastructure plan defined for the year and the current consolidation stage in which the business is in. EPM ranks as the second distributor of natural gas in Colombia, in terms of the number of clients.

Universalization of the aqueduct service - Grupo EPM

Companies	2018	2019	2020
EPM	97.15%	97.24%	97.38%
Aguas del Oriente	100.00%	100.00%	100.00%
Aguas Regionales	91.41%	91.75%	92.22%
Aguas de Malambo	91.49%	91.23%	91.75%
Adasa	100.00%	100.00%	99.80%
Grupo EPM	**96.66%**	**96.75%**	**96.92%**

Source: Commercial Vice Presidency

** The percentage of universalization of the year 2020 of EP Rio is calculated in the percentage of EPM, since in 2019 the subsidiary was absorbed by the Company.*
The Adasa percentage corresponds to coverage.

Universalization of the sewerage service - Grupo EPM

Companies	2018	2019	2020
EPM	95.15%	95.30%	95.53%
Aguas del Oriente	100.00%	100.00%	100.00%
Aguas Regionales	73.19%	74.20%	75.24%
Aguas de Malambo	76.18%	75.82%	77.20%
Adasa	99.86%	99.38%	99.44%
Grupo EPM	**93.30%**	**93.50%**	**93.82%**

Source: Commercial Vice Presidency

** The percentage of universalization of the year 2020 of EP Río is calculated in the percentage of EPM, since in 2019 the subsidiary was absorbed by the Company.*
The Adasa percentage corresponds to Coverage.

Universalization of the energy service - Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM	96.42%	96.50%	97.41%
CHEC	98.73%	99.05%	98.96%
ESSA	95.89%	96.47%	97.21%
CENS	91.94%	92.83%	93.86%
EDEQ	98.88%	99.08%	99.19%
Delsur	95.60%	95.60%	95.00%
EPM Guatemala	99.32%	98.59%	98.72%
ENSA	95.10%	94.70%	90.60%
Grupo EPM	**96.14%**	**96.43%**	**97.18%**

Source: Commercial Vice Presidency

** The percentages of Delsur, EPM Guatemala and ENSA correspond to coverage.*

Universalization of gas service - EPM			
Companies	**2018**	**2019**	**2020**
EPM	84.63%	85.84%	85.29%

Source: Commercial Vice Presidency

Aqueduct networks - Primary distribution Accumulated Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM	283	284	298
Aguas del Oriente	2	2	0
Aguas Regionales	144	77	77
EP Río	10	14	N.A.
Aguas de Malambo	15	20	20
Adasa	164	167	167
Grupo EPM	**618**	**564**	**562**

Source: Water and Sanitation Vice Presidency

** Figures are expressed in Km.*
In 2020 EPM includes the aqueduct networks of EP Rio, since in 2019 the subsidiary was absorbed by the Company.

Aqueduct networks - Secondary distribution - Accumulated Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM - Agua y Sanitation	3,627	3,641	3,961
Aguas del Oriente	30	30	31
Aguas Regionales	601	559	568
EP Río	348	343	N.A.
Aguas de Malambo	162	151	145
Aguas Nacionales			
Adasa	1,126	1,129	1,130
Grupo EPM	**5,894**	**5,853**	**5,836**

Source: Water and Sanitation Vice Presidency

** Figures are expressed in Km.*
In 2020 EPM includes the aqueduct networks of EP Rio, since in 2019 the subsidiary was absorbed by the Company.

Sewerage networks - Transportation - Accumulated - Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM - Agua y Sanitation	392	394	414
Aguas del Oriente	16	2	2
Aguas Regionales	81	49	50
EP Río	20	20	N.A.
Aguas de Malambo	23	27	27
Aguas Nacionales	0	14	14
Adasa	181	181	185
Grupo EPM	**713**	**687**	**692**

Source: Water and Sanitation Vice Presidency

** Figures are expressed in Km.*
In 2020 EPM includes the sewerage networks of EP Rio, since in 2019 the subsidiary was absorbed by the Company.

Sewer networks - Collection and transport (secondary) - Accumulated - Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM - Water and Sanitation	4,261	4,299	4,446
Aguas del Oriente	4	25	25
Aguas Regionales	41	384	387
EPRio	133	133	N.A.
Aguas de Malambo	93	99	99
Aguas Nacionales	0	1	1
Adasa	899	902	902
Grupo EPM	**5,431**	**5,843**	**5,861**

Source: Water and Sanitation Vice Presidency

** Figures are expressed in Km.*
In 2020 EPM includes the sewerage networks of EP Rio, since in 2019 the subsidiary was absorbed by the Company.

Energy networks - Primary distribution - Accumulated Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM	53,085	54,218	55,868
CHEC	12,220	10,121	10,180
ESSA	22,502	22,754	22,858
CENS	13,890	12,645	12,752
EDEQ	2,458	2,466	2,476
Delsur	5,014	5,058	5,095
EPM Guatemala	8,920	9,009	9,070
ENSA	4,780	4,860	4,911
Grupo EPM	**122,869**	**121,131**	**123,210**

Source: Energy Transmission and Distribution Vice Presidency

** Total medium, high and ultra-high voltage networks: Nominal voltage between 1 kW and 500 kW. Figures are expressed in Km.*

Energy networks - Secondary distribution - Accumulated Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM	41,512	42,383	43,612
CHEC	13,025	13,136	13,394
ESSA	33,576	33,980	34,470
CENS	13,890	14,074	14,207
EDEQ	2,781	2,768	2,730
Delsur	5,650	5,686	5,708
EPM Guatemala	8,681	8,843	8,948
ENSA	7,121	7,281	7,414
Grupo EPM	**126,236**	**128,151**	**130,483**

Source: Energy Transmission and Distribution Vice Presidency

** Total low voltage networks: Nominal voltage less than 1kW.*
Figures are expressed in Km.

Gas Networks - EPM			
Companies	**2018**	**2019**	**2020**
Artery in steel - built	88	88	88
Polyethylene nets - built	215	165	129
Polyethylene nets - accumulated	8,154	8,319	8,448

Source: Gas Vice Presidency

** Figures are expressed in Km.*

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

EU 26 Percentage of population not served in areas with distribution license.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Electrificadora de Santander - ESSA

Centrales Eléctricas del North of Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Aguas de Antofagasta - Adasa

Elektra Northeast - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – North of Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Business

Water
Sanitation
Electric power
Gas

Financing of accounts and delinquencies

Back to content

Financing of accounts and delinquencies

The financing of accounts is one of the payment facilities that our users have available and that aims at the normalization of delinquent clients through the financing of overdue items, at low interest rates and long terms.

There are other facilities such as terms (deferred), credits, restructuring, refinancing and partial payments.

Customers are late in paying their bills and, by law, the service must be suspended until the situation normalizes.

In the related data we include information on both financing and other aides.

Performance in 2020

In 2020, there was a deterioration in the delinquency indicators of the Grupo EPM, whose main factor is the health, socio-political and economic crisis caused by the COVID-19 pandemic.

During 2020 the Grupo EPM presented an increase of 55% in the number of delinquent clients (clients with debt of more than 60 days), this negatively impacted the delinquency indicator, going from 3.02% in 2019 to 4.67% in 2020 ending with 516,144 clients in default; that is, 182,960 more clients than the previous year.

The NPL ratio in EPM showed a slight deterioration, going from 3.74% in 2019 to 3.99% in 2020 with 104,508 delinquent clients.

The mandatory reinstallation and reconnection of services in default, the non-suspension and withdrawal of services due to non-payment, the application of automatic deferred payments, the freezing of deferred fees, among others, were some of the relief measures decreed in Colombia by the National Government that the national companies of the Group implemented to guarantee the supply of services and thus allow all citizens to adopt hygiene and health measures during the time of confinement. These actions, added to the contraction of the economy, especially in the second quarter of 2020, directly affected the results of the delinquency and account financing indicators.

The generation of automatic deferred payments impacted the growth of both delinquent clients and the balance of the deferred portfolio in Grupo EPM. It went from 168,734 clients in 2019 to 2,243,405 in 2020. Likewise, the deferred balance increased by 492%, going from COP 75,222 million in 2019 to COP 445,368 million in 2020. For debts before and after the contingency, payment alternatives with more flexible conditions were also offered.

Despite the impact of the indicators generated by the COVID-19 pandemic, EPM implemented a series of actions that led to normalizing the delinquency indicator in the LAST quarter of the year. The main actions carried out were:

- Pre-suspension visits to offer payment facilities to clients who qualified for suspension of the service.
- Generation of payment agreements through the customer service line and other digital channels.
- In August, suspension and shutdown operations were resumed for energy, residential and non-residential gas and non-residential water services.
- Entry into operation of the offer of payment facilities in the field, avoiding the displacement of clients to the branches to materialize payment alternatives that allow clients to continue with the service.
- All clients (without enrollment process) were offered the alternative of payment by installments of the utility bill.

Financing of accounts and delinquencies

Concept		2018	2019	2020
Services in default	Residential customers	307,341	296,564	451,309
	Non-residential customers	36,076	36,620	64,835
Total services in default		**343,417**	**333,184**	**516,144**
Financed customers		175,451	168,734	2,243,405
Financed value		83,379	81,911	472,271

Source: Commercial Vice Presidency

** Financed value expressed in millions of COP.*

Non-performing loans - Water and sanitation Grupo EPM (%)			
Companies	**2018**	**2019**	**2020**
EPM	1.96%	1.81%	2.25%
Aguas del Oriente	1.51%	1.29%	1.74%
Aguas Regionales	8.18%	7.95%	6.97%
EP Rio*	2.35%	0.73%	N.A.
Aguas de Malambo	44.86%	47.49%	52.06%
Adasa	4.39%	4.90%	8.18%
Emvarias	0.00%	0.00%	3.26%
Source: Commercial Vice Presidency			

** As of January 1, 2020, EP Río clients became EPM clients, including both delinquent clients and the subsidiary's total clients in EPM's indicators. The subsidiary EP Río was absorbed by EPM.*

Delinquency - Energy Grupo EPM (%)			
Companies	**2018**	**2019**	**2020**
EPM	2.85%	2.58%	2.81%
CHEC	1.68%	1.61%	1.01%
ESSA	4.97%	4.62%	5.87%
CENS	7.46%	6.33%	10.62%
EDEQ	1.36%	1.45%	2.32%
Delsur	1.02%	1.00%	2.32%
Eegsa	0.91%	1.07%	3.60%
ENSA	12.71%	13.80%	27.57%
Source: Commercial Vice Presidency			

Delinquency - Energy Grupo EPM (%)			
Companies	**2018**	**2019**	**2020**
EPM	1.84%	1.80%	1.92%
Source: Commercial Vice Presidency			

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Water Company of Eastern Antioquia

Aguas de Malambo

Various Companies of Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del North of Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Northeast - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – North of Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Business

Water
Sanitation
Electric power
Gas

Rural Electrification

Back to content

Rural Electrification

The Rural Electrification program is being developed in all the Colombian companies of the Grupo EPM to expand the coverage of the Energy service to rural areas. Investments are made with own resources and with the participation of Public institutions, the FAER (Financial Support Fund for the Energization of Interconnected Rural Zones) and private ones.

Performance in 2020

In 2020, Grupo EPM invested COP 35,322 million in connecting 6,796 facilities in rural areas, benefiting approximately 26,075 people.

EPM's Rural Electrification program has benefited 116 municipalities that are located in its regional market in the department of Antioquia, as well as the Carmen de Atrato, Carmen del Darién and Riosucio municipalities in the department of Chocó and has contributed to increasing the coverage of the service, which has benefited 610,590 inhabitants.

In 2020, the Rural Electrification connections showed a negative variation with respect to the previous year, due to the early termination of the contracts of the Financial Support Fund for the Energization of rural areas (FAER) and the emergency situation caused by the pandemic COVID-19, which caused the displacement of the start of contracts for the year 2021. Thus, the execution was 90% with respect to the goal set, since the contracts were suspended for a period of two months and their restart implied a decrease in the yields due to alteration of Public order in some territories, a situation that limited the circulation of the crews.

The municipalities of Antioquia benefited with energy connections were: Segovia, San Pedro de Urabá, Tarazá, Carmen del Darién, Cáceres, Guarne, Arboletes and Yondó, with investments in excess of COP 1,000 million per municipality.

It must be highlighted that in the Panama affiliate ENSA, a milestone was reached in 2020 with the Cartí Rural Electrification project in the Guna Yala region, which consisted of extending the distribution lines, installation of Public lighting and installations in homes in that sector. It energized more than 300 homes in that region, the Escuela Modelo with more than 1,000 students and four ports, thanks to a joint investment with the Inter-American Development Bank (IDB) and the Office of Rural Electrification (OER).

Rural Electrification Grupo EPM			
Concept	**2018**	**2019**	**2020**
Connected facilities	12,373	12,162	6,796
People benefited	61,110	38,487	26,075
Investment	79,149	51,617	35,322
EPM			
Connected facilities	4,807	6,074	5,036
People benefited	19,228	18,829	20,144
Investment	30,900	29,924	24,820
CENS			
Connected facilities	81	121	0
People benefited	324	375	0
Investment	1,361	1,622	0
CHEC			
Connected facilities	126	80	90
People benefited	504	248	279
Investment	775	540	537
ESSA			
Connected facilities	6,472	5,116	1,175
People benefited	25,888	15,860	3,642
Investment	44,310	17,254	6,643
EDEQ			
Connected facilities	0	0	7
People benefited	0	0	21
Investment	0	346	33
Delsur			
Connected facilities	279	590	120
People benefited	12,608	2,360	480
Investment	471	1,449	658
Eegsa			
Connected facilities	126	181	68
People benefited	630	815	309
Investment	413	482	400
ENSA			
Connected facilities	482	0	300
People benefited	1,928	0	1,200
Investment	919	0	2,231

Source: Energy Transmission and Distribution Vice Presidency

** Value of the investment expressed in millions COP.*

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Electrificadora de Santander - ESSA

Centrales Eléctricas del North of Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Northeast - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – North of Santander
El Salvador
Guatemala
Panamá

Business

Electric power

Housing Habilitation

Back to content

Housing Habilitation

The Grupo EPM's Housing Habilitation program is a social commitment of the Organization to finance the basic infrastructure of water, sanitation, energy and gas services to the most vulnerable households, in order to improve their living conditions. It began in the 1960s and it is one of the programs to which the high coverage rates that today are registered by Public services in the Aburrá Valley are attributed. The Colombian companies of the Group: CHEC, CENS, ESSA and EDEQ also have this social responsibility program.

Performance in 2020

In 2020, Grupo EPM, with an investment of COP 78,627 million, connected 109,143 homes to the aqueduct, sewerage, energy and gas services, managing to transform the lives of 335,764 people.

For the aqueduct service in the Housing Habilitation Program, EPM made investments for COP 20,077 million, which benefited 71,070 people from the following sectors of Medellín: Santo Domingo, Paris Los Sauces, Bocana Oasis Tropical (Moravia), La Cruz and Brisas del Edén. For a total of 22,926 new connected facilities.

In the energy service, 38,614 connections were made in Colombia, exceeding the goal in some subsidiaries, a total investment of COP 41,117 million, thereby benefiting 117,063 people.

With an investment of COP 13,602 million, the connection of 48,215 new installations to the gas service was achieved, for a compliance of 85% compared to the budgeted goal and 149,467 people benefited.

The impact of the COVID-19 pandemic, the adjustment in budgets and the displacement of some activities in the field, decreased the execution in all services compared to the previous year.

Housing Habilitation Grupo EPM			
Concept	**2018**	**2019**	**2020**
Connected facilities	139,871	125,936	109,143
People benefited	481,903	397,398	335,764
Investment (million COP)	87,979	101,270	78,627
Source: Executive Vice Presidency Business management			

Enabling Housing Aqueduct and Sewerage EPM			
Concept	**2018**	**2019**	**2020**
Connected facilities	38,498	36,739	22,926
People benefited	115,494	113,891	71,071
Investment (million COP)	30,706	57,929	20,077
Source: Water and Sanitation Vice Presidency			

** GRI standards Contents and own indicators*

Enabling Housing Energy			
Concept	**2018**	**2019**	**2020**
EPM			
Connected facilities	20,564	19,836	25,783
People benefited	82,256	61,492	77,349
Investment (million COP)	31,309	20,457	38,744
CENS			
Connected facilities	6,979	8,727	7,457
People benefited	27,916	27,054	23,117
Investment (million COP)	1,534	1,613	1,268

Enabling Housing Energy			
Concept	**2018**	**2019**	**2020**
CHEC			
Connected facilities	1,253	1,286	972
People benefited	5,012	3,978	3,013
Investment (million COP)	723	978	886
ESSA			
Connected facilities	7,706	4,910	3,641
People benefited	49,208	15,221	11,287
Investment (million COP)	4,437	2,946	3,952
EDEQ			
Connected facilities	1,015	560	149
People benefited	4,060	1,736	461
Investment (million COP)	508	498	98
Source: Energy Transmission and Distribution Vice Presidency			

** Value of the investment expressed in millions COP.*

Enabling Housing Gas EPM			
Concept	**2018**	**2019**	**2020**
Connected facilities	63,856	53,878	48,215
People benefited	197,957	174,026	149,467
Investment (million COP)	18,762	16,849	13,602
Source: Vicepresidencia Gas			

** GRI standards Contents and own indicators*

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del North of Santander - CENS

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – North of Santander

Business

Water
Sanitation
Electric power
Gas

Pay to your measure

Back to content

Pay to your measure

It is the program that allows customers and users to pay the EPM bill in up to five partial payments during each month, each with a minimum amount depending on the territory. The customer must go to one of the authorized payment points indicating the EPM contract number (it is not necessary to present the invoice).

With this alternative, EPM seeks to improve the quality of life of customers and users by offering them the possibility of paying for public services in the way that best suits the family budget, reducing the time without access to the service due to non-payment and reduce suspension and reconnection operating costs for users.

Performance in 2020

The Pay to Your Measure program was one of the payment alternatives most used by clients and users during the time of health and socioeconomic emergency, decreed by the National Government as a result of COVID-19.

During 2020 EPM linked 29,616 clients to the Pay to Your Measure program. As of June 2020, there was a 56% increase in the Number of enrolled customers compared to enrolled customers in the first 5 months of the year. From the beginning of the program until December 2020, there is a cumulative 225,269 linked customers.

EPM launched in October 2020, a special installment payment program for up to three payments of the utility bill aimed at all customers, in support of the COVID-19 emergency. Through this alternative, 22,658 clients benefited.

In Colombia, the subsidiaries CENS and ESSA enrolled 1,189 and 1,620 clients to the Pay to Your Measure program respectively, reaching accumulated 6,956 and 9,638 clients.

The Grupo EPM reached a total of 241,863 clients enrolled to Pay to Your Measure.

Linked customers - Pay to your measure Grupo			
Companies	**2018**	**2019**	**2020**
EPM	42,375	32,570	29,616
ESSA	1,638	6,380	1,620
CENS	4,419	1,347	1,189
Grupo EPM	**48,432**	**40,297**	**32,425**

Source: Commercial Vice Presidency

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Centrales Eléctricas del North of Santander - CENS

Electrificadora de Santander - ESSA

Geography

Colombia – Antioquia
Colombia – Santander
Colombia – North of Santander

Business

Water
Sanitation
Electric power
Gas

Prepaid services

Back to content

Prepaid services

Prepaid is a method of purchasing Public services that has the purpose of dealing with disconnection due to payment difficulties. This offer allows users to control consumption in accordance with their income and make more efficient and conscious use of Public Services.

The prepaid offer includes the delivery of the meter on loan, installation at no cost to the user and social support, among other facilities, so that customers and users can continue to enjoy the service.

Performance in 2020

As a result of the state of health and socioeconomic emergency decreed in Colombia by the National Government, the Public services that were pending payment were reconnected and reinstalled, therefore, the Prepaid Water and Energy offers, as they were left without a target market, presented decrease in the Number of enrolled customers.

During 2020 EPM enrolled 711 customers to the Prepaid Water offer for a 71% compliance with respect to the goal set, reaching 25,922 customers linked from the start of the offer. In Prepaid Energy, it linked 11,398 customers, a compliance of 81% with respect to the annual goal, for a cumulative 287,431 linked customers.

The subsidiaries CENS and ESSA linked 3,568 and 4,995 clients and users respectively, to the Prepaid Energy service, reaching accumulated 18,141 and 32,007 clients.

Grupo EPM reached a total of 337,579 clients linked to Prepaid Energy.

At the time of initiating the state of emergency due to COVID-19, the National Government decreed in Colombia to connect the services that were suspended and cut due to non-payment, in this way EPM efficiently guaranteed the provision of the service to all customers who they had payment difficulties.

Prepaid Water Service - EPM			
Concept	**2018**	**2019**	**2020**
Connected facilities	2,168	2,834	711
People benefited	9,756	7,308	2,204
Investment	6,279	7,308	0
Average consumption per prepaid installation	7.65	7.41	11.70
Average consumption per postpaid installation	12.80	11.80	11.79
Source: Commercial Vice Presidency			

** Investment in million COP.*

Prepaid Energy Service - EPM			
Concept	**2018**	**2019**	**2020**
Connected facilities	15,550	17,527	11,398
People benefited	62,200	70,108	35,337
Investment	8,271	10,060	0
Average consumption per prepaid installation	115	116	137.37
Average consumption per postpaid installation	129	127	143.08
Source: Commercial Vice Presidency			

** Investment in million COP.*

Prepaid Energy Service - ESSA			
Concept	**2018**	**2019**	**2020**
Connected facilities	7,826	5,335	4,995
People benefited	31,304	16,539	15,485
Investment	1,620	3,794	5,677
Average consumption per prepaid installation	79	83	88
Average consumption per postpaid installation	187	191	178
Source: Commercial Vice Presidency			

** Investment in million COP.*

Prepaid Energy Service - CENS			
Concept	**2018**	**2019**	**2020**
Connected facilities	5,630	3,885	3,568
People benefited	25,335	12,043	11,060
Investment	522	430	795
Average consumption per prepaid installation	90	108	81
Average consumption per postpaid installation	120	149	189
Source: Commercial Vice Presidency			

** Investment in million COP.*

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Centrales Eléctricas del North of Santander - CENS

Electrificadora de Santander - ESSA

Geography

Colombia – Antioquia
Colombia – North of Santander
Colombia – Santander

Business

Water
Sanitation
Electric power

Community meters

Back to content

Community meters

Community meters for aqueduct is an unconventional mode of service provision for sectors in which, due to restrictions to extend networks, it is not possible to provide the service with individual meters. These collective meters allow the service to be extended to homes and receive the average consumption bill for the corresponding socioeconomic stratum.

Performance in 2020

Grupo EPM connected 68 community meters, with which 4,251 homes and 16,073 people benefited.

Community meters Grupo EPM

Concept	2018	2019	2020
Installed meters	65	60	68
Benefited home	6,560	7,120	4,251
People benefited	24,384	24,455	16,073
Investment	11,138	17,692	6,405

Source: Water and Sanitation Vice Presidency

** Investment in million COP.*

EPM Community Meters

Concept	2018	2019	2020
Installed meters	23	14	4
Benefited home	2,352	4,472	1,035
People benefited	9,408	13,863	3,209
Investment	11,138	17,692	6,405

Source: Water and Sanitation Vice Presidency

** Investment in million COP.*

Community Meters Adasa			
Concept	**2018**	**2019**	**2020**
Installed meters	33	46	64
Benefited home	2,352	2,648	3,216
People benefited	9,408	10,592	12,864
Investment	0	0	0
Source: Water and Sanitation Vice Presidency			

** Investment in million COP.*

In Chile, the subsidiary Adasa installed 64 meters in 2020, thanks to the work plan of the Non-Billed Water (ANF) team, whose objective is to measure consumption in selected places and thereby assess losses and levels of ANF in community camps (intakes irregular terrain made by people). This is a job that has been done year after year in conjunction with the Chilean regional government and the residents themselves.

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Chile

Business

Water

Sanitation

Population without service

Back to content

Population without service

Populations without service are considered to be those settled in places with technical or legal limitations for the provision, such as those located in high-risk areas or outside the perimeters of land use plans, whose solutions usually exceed the exclusive scope of the service providers and this requires the intervention of Multiple actors.

Performance in 2020

EPM contributed to the improvement of the quality of life of 16,847 homes with access to energy, gas, aqueduct and sewerage services, complying with high quality and continuity parameters. Thus, it favors the development of the communities, the mitigation of the environmental, health and geological risk of the intervened areas and promotes a civic culture of taking care of the infrastructure, the legality and the efficient use of HOME Public services.

During 2020, the aqueduct and sewerage connections were achieved through the Connections for Life program, attached to the Medellín Mayor's Office Development Plan and the Closing Gaps program, which has two lines of intervention called Community Supply in difficult-to-manage areas and Housing Habilitation (HV) and Socio-economic status 1,2 and 3 Connections.

The Closing Gaps program contributes to the decontamination of tributaries to the Aburrá Medellín River and to guarantee greater coverage in the collection, transport and treatment of the wastewater generated.

Connected homes - EPM			
Concept	**2018**	**2019**	**2020**
Water	10,519	15,390	3,432
Sewerage	9,455	14,291	8,375
Electric energy - T&D	2,349	4,157	2,754
Gas	2,945	3,333	2,286
Total	**25,268**	**37,171**	**16,847**

Source: Commercial Vice Presidency

Thanks to the supply of drinking water and the evacuation of wastewater through unconventional networks in the intervention sectors, at no cost to users and temporarily, EPM connected 3,432 homes to the aqueduct service and 8,375 to the sewerage service. The benefited sectors in Medellín were: La Honda, La Cruz etapa 2, Bello Oriente, Versalles II, Brisas del Jardín, Brisas del Edén, San José la Cima II, Unión de Cristo, Luz del Mundo, Altavista, Oasis Tropical (Moravia), Esfuerzos de Paz 1 and 2, Santo Domingo, El Compromiso, Los Mangos, Pinares de Oriente and Ciudadela Bocaná.

The energy service connections were achieved thanks to the identification of homes that are connected to the networks in an irregular way. 2,754 were the connections that were legalized in the year, achieving a compliance of 184% in relation to the goal set. One of the sectors with the highest number of benefited homes was Nueva Jerusalen El Cortado, a difficult-to-manage sector located between the municipalities of Medellín and Bello, where many low-income families are settled.

The gas service connections were achieved thanks to the management of the Municipality of Medellín to enable the Golondrinas sector, located in the Llanaditas neighborhood, and also to the development of the Connections for Life program. In 2020, 2,286 households were benefited with gas service, mostly families from socio economic levels 1, 2 and 3. Other areas benefited in Medellín were: Villa Hermosa, Belen, Buenos Aires, San Javier, Robledo, Manrique, Doce de Octubre, Aranjuez, Popular, Castilla, Santa Cruz, Guayabal, La Candelaria, La América, El Poblado and Laureles, as well as the townships of San Cristóbal and San Antonio of Prado.

GRI standards Contents and own indicators

EPM - 12 Solutions for homes without service.

EU 26 Percentage of population not served in areas with distribution license.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Geography

Colombia – Antioquia

Business

Water
Sanitation
Electric power
Gas

COVID-19 relief measures

Back to content

COVID-19 relief measures

EPM applied its own relief measures and those decreed in Colombia by the National Government for its clients and users, in order to ensure that they continue to receive Public services in the midst of the contingency caused by COVID-19 and thus mitigate the economic effects caused by the same.

EPM informed clients of the implementation of these measures and their benefits, through a comprehensive communication and relationship strategy, with massive reach and metropolitan and regional coverage.

Performance in 2020

In the Socio-economic benefits of Public **services section of the Manager's Performance Report,** the relief measures applied to customers and users and their main management figures are detailed.

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Geography

Colombia – Antioquia

Business

Water
Sanitation
Electric power
Gas

Water and biodiversity

Back to content

Water and biodiversity

The Grupo EPM is aware of its interdependence with water and biodiversity and is committed to the task of contributing to their care in the hydrographic basins supplying its systems and reservoirs, to managing the impacts generated by its direct operations and protecting the ecosystems located in the areas of its property in the territories where it has a presence.

Likewise, by carrying out a comprehensive management of water resources and biodiversity, it contributes to the sustainability of Grupo EPM and the territories through joint action with other actors considering the territorial organization, the characteristics of the territories, the conservation of ecosystems, supply, demand and risks associated with water and biodiversity.

The comprehensive management of the water resource and the biodiversity of the Grupo EPM starts from the recognition of its interdependence with these resources and the importance of contributing to their care, complying with the mandatory commitments and implementing various voluntary initiatives to protect the hydrographic basins of interest of the Group companies and the areas of influence of their businesses, both with their own actions and in alliance with other actors, for the benefit of the territories and their communities.

Importance

The economic, social and environmental value is affected by the water deficit that generates problems of availability, shortage and rationing of water, with its consequent harmful effects on the quality of life of the population, its economic activities and the health of ecosystems. The most critical aspects of availability are related to the supply of drinking water for the population, industrial processes, the generation of electrical energy and the maintenance of the functionality of the ecosystems.

The economic, social and environmental value is also affected when there are excesses and alterations to the quality of the water. In general, supply and distribution systems can be affected; likewise, there are impacts on the availability, continuity and quality of the water to be supplied, and economic costs caused by water losses, recovery works, rehabilitation, reconstruction of systems and protection of ecosystems.

Regarding biodiversity, which has value in itself, it generates high economic, environmental and social value for the Grupo EPM as it is the functional basis for the maintenance and support of the ecosystem services necessary for the regulation of the climate, the hydrological cycle, rain regime, soil protection, erosion control and conservation of the structure and composition of species of fauna and flora, among others, while contributing to the availability of water resources.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Conservation of water and biodiversity	Areas of importance for water resources and environmental services	Implement watershed protection initiatives in priority conservation areas to meet the annual goal established for the Water Protection Indicator (HPI) for Grupo EPM in 2020: 9,519 hectares. Includes (grouped): the Cauca, Porce, Nare, Aburrá basins, Chinchiná rivers and others and some supply basins for the Aguas Regionales subsidiary. Likewise, the energy subsidiaries contribute to the goal in other basins.	**Grupo EPM**	In 2020, initiatives were developed that affected the protection of 21,022 hectares in hydrographic basins supplying the business group's systems and reservoirs.	**Total**
		Optimize the water quality monitoring network for reservoirs Porce II and Porce III: • Reduce or relocate current monitoring stations. • Reduce # of parameters	**EPM**	The water quality monitoring network for the Porce II and Porce III reservoirs was optimized. In Porce II it went from 14 to 9 stations and in Porce III it was considered that the nine existing stations are representative. Monitoring frequencies were standardized, in Porce III it went from monthly to quarterly and in Porce II from semiannual to quarterly. Regarding variables, it is proposed to eliminate heavy metals, water matrix for Porce II, change chlorophyll methodology for Porce II and Porce III. **Note:** This proposal must be sent to ANLA for approval.	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Conservation of water and biodiversity	Areas of importance for water resources and environmental services	Evaluate the importance of the lower basin of the Porce River as a possible migratory route for fish species.	**EPM**	The evaluation was carried out and it was found that the Mata River and Porce River tributaries are spawning areas due to the presence of embryos and newly hatched larvae of migratory species. 3 of 4 campaigns were carried out to determine the richness and abundance of ichthyoplankton in the Nechí river basin.	**Total**
Use of water and effluents	Contamination prevention	Modernize the El Retiro wastewater treatment plant to achieve tertiary treatment of wastewater in 2019 and compliance with the parameters of the discharge standard in 2020, and thus contribute to the protection of the Negro River as a supply source for aqueducts.	**EPM**	At the end of March 2020, the stabilization of the new treatment train was completed. The effluent from the EL Retiro WWTP is complying with the maximum discharge parameters established in Resolution 631 of 2015.	**Total**
		Receive for operation the Aguas de Malambo WWTP in 2019 and achieve its stabilization in 2020.	**Aguas de Malambo**	The WWTP has not been received by the Aguas de Malambo company and is subject to the decision made by the current Malambo Municipal Administration. The legal part between the Mayor's Office of Malambo and Aguas de Malambo SA ESP is under review. The WWTP La Milagrosa was built with ABC resources and delivered by the Ministry to the Mayor's Office of Malambo.	**Partial**
Management of impacts related to water and biodiversity	Contamination prevention	Reduce the pollutant load in the water sources as a result of the leachate generated in the La Pradera landfill, through the assembly of the equipment corresponding to the second phase of treatment in 2019, to improve the quality of the discharge by 60% once the second phase of the leachate treatment plant is operating and stabilized in 2020.	**Emvarias**	In 2019, the second stage of the leachate treatment plant of the La Pradera landfill was stabilized, thereby reducing the concentration of pollutants, during 2020 there were NO breaches of any parameter established in Resolution 0631.	**Total**

Challenges

Program, project, initiative or action	Management emphasis	Challenge	Year of Compliance	Scope and coverage		
				Company	Business	Geography
Management of impacts related to water and biodiversity	Water suitable for human consumption	Evaluate the impact on water quality of the floating solar panel infrastructure in the Peñol-Guatapé reservoir.	2021	**EPM**	Energy - Generation	**Colombia - Antioquia**
Conservation of water and biodiversity	Areas of importance for water resources and environmental services	Apply the hydrosedimentological model in the basins contributing to the Playas reservoir in order to define the priority areas for the conservation strategy.	2021	**EPM**	Energy - Generation	**Colombia - Antioquia**
		Implement watershed protection initiatives in priority conservation areas to meet the annual goal established for the Water Protection Indicator (HPI) for Grupo EPM in 2021: 9,425 hectares. Includes (grouped): the Cauca, Porce, Nare, Aburrá basins, Chinchina rivers and others and some supply basins for Aguas Regionales. Likewise, the energy subsidiaries will contribute to the goal in other basins.		**Grupo EPM**	All Businesss	**Colombia**
	Coverage of public services in urban areas	Connect 4,359 users to the sewerage service in areas of difficult collection, contributing to the sanitation of water sources and promoting environmental and health improvement in the intervened areas.		**EPM**	Water and sanitation	**Colombia - Antioquia**

Program, project, initiative or action	Management emphasis	Challenge	Year of Compliance	Scope and coverage: Company	Scope and coverage: Business	Scope and coverage: Geography
Management of impacts related to water and biodiversity	Contamination prevention	Implement studies, instrumentation and methodologies that allow progress in the knowledge of the dynamics and control of cyanobacteria in EPM power generation reservoirs: • Installation of 3 ultrasound equipment in the Porce III reservoir. • Cinaboacteria ecommunication video. • Model with data analytics caoba alliance.	2021	**EPM**	Energy - Generation	**Colombia - Antioquia**
Conservation of water and biodiversity	Areas of importance for water resources and environmental services	Updating of the cartographic information of the areas of influence of the power generation reservoirs.	2022	**EPM**	Energy - Generation	**Colombia - Antioquia**
Management of impacts related to water and biodiversity	Areas of importance for water resources and environmental services	Daily resolution monitoring of in situ parameters in the Porce II and Porce III hydroelectric chain, temperature, conductivity, dissolved oxygen, PH, turbidity and chlorophyll.	2022	**EPM**	Energy - Generation	**Colombia - Antioquia**
Conservation of water and biodiversity	Areas of importance for water resources and environmental services	Provide a detailed account of the current state and changes in vegetation cover and land uses through the measurement of different parameters and indicators and their multitemporal analysis Porce II, Porce III, Riogrande I and Miraflores. Monitor the flora and fauna associated with the ecosystems of the protection areas of the energy generation reservoirs.	2022	**EPM**	Energy - Generation	**Colombia - Antioquia**

Program, project, initiative or action	Management emphasis	Challenge	Year of Compliance	Scope and coverage		
				Company	Business	Geography
Conservation of water and biodiversity	Areas of importance for water resources and environmental services	Implement conservation strategies for threatened species, with emphasis on gray marmosets and neotropical otters.	2022	**EPM**	Energy - Generation	**Colombia - Antioquia**
Management of impacts related to water and biodiversity	Contamination prevention	Reduce the pollutant load contributed to the watersheds of the Urabá region, so that in 2022 the wastewater treatment plants of the municipalities of Apartadó, Carepa and Turbo will be operating, guaranteeing compliance with the standards established in the discharge regulations after the stabilization of biological processes. In 2019, the Conditional Contribution resources for the construction of the WWTP will be managed. The fulfillment of this challenge depends on the management of resources to be able to make the investment, either under conditional contributions or under the figure of taxes for works.	2022	**Aguas Regionales**	Water and sanitation	**Colombia - Antioquia**

For the definition of indicators, challenges and goals associated with water and biodiversity, the strategic direction of the Grupo EPM, the Mega, CSR and Environmental policies, the Comprehensive Management of Water Resources and Biodiversity strategy, territorial studies and analysis, identification of synergies with allies for the development of initiatives, historical information and compliance with associated environmental regulations, among others are taken into account.

On the other hand, the goals of efficient water use of the facilities are defined taking into account the historical data of water consumption, its variations, the state of the infrastructure, technological possibilities for its improvement and cultural issues. Some facilities have already reached higher levels of efficiency in the use of water; therefore, they continue to be monitored. If necessary, improvement plans are established in those facilities that have not YET made progress, according to the technological and economic possibilities. The Grupo EPM has indicators and goals associated with water and biodiversity in the Balanced Scorecard (BSC) and in its different plans, which are periodically monitored at different levels of the Organization.

Sustainable Development Goals



Associated stakeholders

- Clients and users
- Grupo EPM people
- Colleagues
- Investors
- Community
- Suppliers and contractors
- State

Contents GRI standards and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
303 - 1	Water extraction by source.
303 - 2	Management of impacts related to water discharge.
303 - 3	Recycled and reused water.
303 - 4	Water discharge.
303 - 5	Water consumption.
304 - 1	Operation centers owned, leased or managed located within or next to protected areas or areas of great value for biodiversity outside protected areas.
304 - 2	Significant impacts of activities, products and services on biodiversity.
304 - 3	Habitats protected or restored.
304 - 4	Species that appear on the UINC red list and on national conservation lists whose habitats are found in areas affected by operations.
EU13	Comparison of biodiversity between compensated habitats and that of affected areas.
306 - 1	Water discharge according to its quality and destination.
EPM - 01	Conservation areas.
EPM - 10	Water protection.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

EPM Chile

Aguas de Antofagasta - Adasa

Aguas Nationales EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Compañía de Energía del Quindío - EDEQ

Tecnología Intercontinental - Ticsa

Distribuidora de Electricidad del Sur - Delsur

Compañía Eléctrica de Guatemala - Eegsa

Hidroecológica del Caribe - HET

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Malambo, Atlántico

Colombia – Norte de Santander

Colombia – Quindío

Colombia – Santander

Chile

El Salvador

Guatemala

Panamá

México

Businesss

Water

Sanitation

Electricity

Gas

Conservation of water and biodiversity

Back to content

Conservation of water and biodiversity

The protection and improvement of hydrographic basins and the environmental services they provide are a priority to guarantee the availability of water resources, the diversity of flora and fauna, the sustainability of the territories and the quality of life of their communities.

The environmental conditions of the hydrographic basins have a direct impact on the water supply sources of the Group's aqueduct and reservoir systems. To contribute to its improvement and prevent the risks associated with the availability of water for the operations and the populations it serves, Grupo EPM undertakes programs and projects for the comprehensive management of water resources and biodiversity, directly and with other actors, with the development of initiatives related to supporting the system of protected areas, restoration and reforestation, promotion of sustainable practices and uses, environmental compensation, payment for environmental services, environmental awareness for the protection of environmental services that river basins and their ecosystems provide.

Performance in 2020

In 2020, progress continued in the deployment of the roadmap of the Comprehensive management of water resources and biodiversity strategy of the Grupo EPM: "Agua and biodiversidad, para la vida and la sostenibilidad".

Progress was made in meeting the Mega's environmental goal, related to the contribution to 2025 with the water protection of 137,000 hectares in hydrographic basins supplying the Grupo EPM's systems and reservoirs. In 2020, it was possible to contribute with the protection of 21,022 hectares, for an accumulated in the 2016-2020 period of 97,527 hectares, equivalent to 71% of the MEGA goal.

Likewise, the Grupo EPM contributed to the care of water and biodiversity with the conservation of properties of its property in a total area of 800 km^2 , of which 93% are in declared protected areas, in their buffer zones or in areas with high biodiversity that HAVE not YET been declared. Of this total, 654.2 km^2 correspond to forest cover (forests, natural ecosystems and forest plantations).

It should be noted that the companies of the Grupo EPM report 685 species in some category of threat in their operation centers (ACCORDING TO IUCN, national lists and CITES); For this reason, the protection of forest cover and other associated ecosystems constitute refuges, habitats and essential resources for their survival.

Water protection and conservation areas

In compliance with the water protection goal established in the Grupo EPM's MEGA, various strategies are developed for the protection of water resources in the hydrographic basins of the Porce, Grande, Aburrá, Porce-Alto Nechí and Nare rivers (including La Fe and Negro-Nare). Likewise, in the Cauca basin (includes areas of influence of the Ituango Hydroelectric Project), that of Chinchiná and others in areas of influence of the CHEC subsidiary, as well as in some basins supplying areas of influence of Aguas Regionales in Urabá and other basins in areas of influence of EPM and the subsidiaries CENS, ESSA, CHEC and EDEQ.

In 2020 the contribution to the protection of 21,022 hectares (210.22 km 2) was achieved through the implementation of strategies and initiatives such as:

- **Forest conservation:** includes support to public and private protected areas and payment programs for environmental services: 13,071 hectares (130.71 km^2)
- **Restoration and reforestation:** include restoration and the forest development program: 5,879 hectares (58.79 km^2).
- **Sustainable practices and uses:** includes silvopastoral and agroforestry systems, fences and living barriers, good agri-environmental practices, erosion control and rural basic sanitation systems: 1,263 hectares (12.63 km^2)
- **Compensation and new protection areas:** includes purchase of land for compensation and new areas for reservoir protection: 809 hectares (8.09 km^2).

Likewise, on land owned by the Grupo EPM, it preserves natural forests and favors the recovery of plant cover through ecological restoration activities (active and passive), enrichment with native species and the establishment of forest plantations. In addition, in these areas biological information is recorded and applied studies are carried out to advance in the implementation of the strategy of comprehensive management of water resources and biodiversity.

- REDD + EPM project, biodiversity monitoring was carried out in the protection forests of the Miraflores and Riogrande I reservoirs and the calculation of the estimate of carbon stored there. The foregoing, together with the results of the monitoring around the Porce II and Porce III reservoirs in 2019, show the current state of the composition and structure of the flora and fauna of these natural forests in an area of 6,935 ha. Additionally, forestry promotion continued through the delivery of seedlings from EPM's nurseries and from the 12 municipalities in the area of influence, within the agreement between EPM and the municipalities. Likewise, socio-environmental management was carried out through an alliance with the UNDP to improve practices and sustainable uses that reduce the pressure on forests, in addition to the joint contribution in the formation of new reserve areas of civil society in Gómez Silver. Finally, the project was publicized through radio spots on radio stations with a reach in 8 municipalities in the area of influence.

- Contribution to the National Development Plan and the National Restoration Plan. The President of the REpublic pledged to plant 180 million trees by 2022, based on the restoration of more than 300,000 hectares of degraded soil. The Grupo EPM has been linked to the fulfillment of this goal through the delivery of trees to third parties with the Forestry Promotion Program, the planting of trees in voluntary programs and plantings that are part of the compensation of infrastructure projects. In 2020 the delivery / planting of 3,089,000 trees was reported as part of this program.

- Payment for Environmental Services (BanCO2 and other schemes), Aguas Regionales, EPM, CHEC, EDEQ, CENS and ESSA are the companies of the Grupo EPM that in Colombia support peasant families to guarantee the protection of natural ecosystems, helping to improve their quality of life and that of their communities. Through agreements that include the year 2020, with other actors, 372 families have been supported through payment schemes for environmental services, both voluntary and mandatory, to contribute to the conservation of 7,345 hectares of forest.

- Reservoir management: by 2020, within the instrumentation program associated with water resource management for EPM's reservoirs, 6 pieces of equipment were acquired that allow online data to be obtained on 7 water quality variables (dissolved oxygen, oxygen percentage, turbidity, pH, temperature, chlorophyll a and phycocyanin) at hourly resolution. Additionally, studies were completed for the optimization of the water quality monitoring network for reservoirs in the Porce basin and an impact study on the water

quality of floating photovoltaic infrastructure. Likewise, it was prevented that nearly 5,000 tons of waste will reach the sea due to the proper management of wood, ordinary, usable and dangerous waste that reaches the reservoirs through their tributary basins.

- Semiannual monitoring of flows and water quality in the main tributaries of EPM's reservoirs, and monthly in the supply sources of the water supply systems that EPM operates. Instrumentation of the minor sources of supply of the water supply system in the Aburrá Valley to improve the control of concessioned and environmental flows.

- Evaluation of the importance of the lower basin of the Porce River as a possible migratory route for fish species, it was found that the Mata River and Porce River tributaries are spawning areas due to the presence of embryos and newly hatched larvae of migratory species. Likewise, campaigns were carried out to determine the richness and abundance of ichthyoplankton in the Nechí river basin.

- Protection of properties owned by EPM, during the development of this program, activities such as solid waste collection on properties and in reservoirs, extraction of invasive aquatic plants, felling and pruning of trees at risk, restoration,

- In the BIO Agreement, between EPM and the University of Antioquia, during 2020 the joint work associated with the comprehensive management of biodiversity and its ecosystem services was completed, which was developed through seven management lines: Terrestrial flora and fauna; Ichthyofauna, habitat and ecosystem services; public health surveillance; Management of cyanobacteria and mollusks; Environmental education; Comprehensive Management of Water Resources and Monitoring and conservation of the hydrobiological resources of the Cauca River, with which EPM complied with environmental licenses and environmental management plans, additionally, technical-scientific studies were generated through 23 investigations that allow to propose conservation actions and environmental management in the territories. Additionally, the results have been socialized with communication strategies and social appropriation of knowledge, two diploma courses (community water management and biodiversity conservation) and a symposium on comprehensive management of biodiversity were developed through digital platforms. The activities of the agreement were developed in 42 municipalities located within the areas of influence of the Porce II, Porce III, Guadalupe, Peñol-Guatapé and Playas hydroelectric complexes, La Sierra thermoelectric plant and downstream of the Ituango Hydroelectric Project.

- The EPM - Cuenca Verde Agreement contributed to the protection of 592 hectares with conservation and restoration actions on 171 hectares and with good practices for sustainable production and basic sanitation on 421 hectares. Additionally, 23 agroecological gardens with 19 irrigation systems were implemented to contribute to the efficiency of the water resource and as a strategy for adaptation to climate change, 63 meliponiculture systems and 6 septic tanks were also installed on the farms of peasant

families; the design, monitoring and analysis of a new network of 75 water resource quality sampling points was carried out and the supervision of 31 supplying sub-basins continued to identify impacts associated with the water resource.

Within the management of this agreement, it was possible to complete the flora baseline in the La Fe and Riogrande hydrographic basins, which will allow determining the impact of the restoration in the areas intervened by the agreement. 1,289 individuals corresponding to 279 species, 191 genera and 89 botanical families were registered, of which 25 endemic species stand out (4% of those reported for Antioquia), two species cataloged in a vulnerable state, and 24 species on regional protected lists (8% of those reported for Antioquia), among these species are 18 orchids, 2 tree ferns, 2 bromeliadds and two trees.

- VIVO CUENCA: CHEC participated in the structuring and creation of a mechanism that will allow to unite actors in front of a COMMON purpose such as the comprehensive development of the Chinchiná river basin, obtain financial, technical and operational resources and work under the principles of transparency, efficiency and compliance with the rules and competences. In 2020, the guidelines for the execution of the activities of the Plan of Ordination and Management of the Hydrographic Basin (POMCA) of the Chinchiná River were consolidated.

- In the management of wild and domestic fauna in EPM's administrative headquarters, measures were established for their protection, including the delivery of wild fauna to the competent environmental authority and domestic fauna to the bodies created for the protection of animals.

- Awareness programs and promotion of caring for the environment aimed at the communities in the areas of influence of the projects and operations of the companies of the Grupo EPM. It was possible to develop pedagogical activities in efficient use of water, good environmental practices and celebration of environmental dates, which in turn were complemented with communication actions on social networks, press bulletins, radio and television programs, workshops and events. The realization of the "Cuidamundos" events in virtual format is highlighted, to adapt to the new conditions incorporated by the health emergency of COVID-19.

Main hydrographic basins supplying reservoirs and Grupo EPM systems

Main Hydrographic basins supplying Systems and Reservoirs of Grupo EPM

Company	Power Plants/ DWPT	Basin	Reservoir	Main tributaries	Max volume technical million m^3 (hm^3)	Location in an area with water stress Water Vulnerability Index (IVH)	Use
EPM	DWPT Manantiales Hydroelectric Power Plant La Tasajera Niquía Power Plant	Río Grande	Riogrande II	Río Chico - Río Grande	185.87	ENA 2018 IVH for year mean: medium IVH for dry year: medium	Multiple use • Provision of water • Energy generation
	DWPT Villa Hermosa and La Montaña	Piedras Blancas	Piedras Blancas	Quebrada Piedras Blancas - Quebrada Chorrillos	*0.5	POMCA Río Aburrá IVH for medium year: medium IVH for dry year: medium	Provision of water
	DWPT San Antonio DWPT San Cristóbal	San Antonio de Prado San Cristóbal	N.A.	Doña María La Iguaná	N.A.	POMCA Río Aburrá IVH for year mean: low IVH for dry year: medium	
	DWPT Caldas DWPT Barbosa	La Valeria La López	N.A.	La Valeria La López	N.A.	POMCA Río Aburrá IVH for year mean: medium IVH for dry year: medium	
	DWPT Aguas Frías DWPT La Cascada	Aguas frías Santa Elena	N.A.	Quebrada La Picacha Santa Elena	N.A.	POMCA Río Aburrá IVH for year mean: low IVH for dry year: low	
	DWPT La Ayurá	La Fe	La Fe	Q. Las Palms - Q. Espíritu Santo - Q Potreros - Río Pantanillo	11.33	POMCA Rionegro IVH for year mean: medium IVH for dry year: medium	

Main Hydrographic basins supplying Systems and Reservoirs of Grupo EPM

Company	Power Plants/ DWPT	Basin	Reservoir	Main tributaries	Max volume technical million m^3 (hm^3)	Location in an area with water stress Water Vulnerability Index (IVH)	Use
EPM	DWPT Palmitas	Palmitas	N.A.	Chachafruto and los azules	N.A.	No	Provision of water
	DWPT Rio Negro	Rio Negro	N.A.	Rionegro	N.A.	POMCA Rionegro IVH for year mean: high IVH for dry year: high	
		Quebradas Abreo and Malpaso	Abreo Malpaso Reservoir	Q. Abreo and Q. Malpaso	N.A.	POMCA Rionegro IVH for year mean: high IVH for dry year: high	
Aguas Regionales	DWPT Turbo	Río Turbo - Currulao	N.A.	Río Turbo - Currulao	0.21	POMCA Average IVH under normal conditions High IVH in dry season	Provision of water
	DWPT Apartadó	Río León	N.A.	Río Apartadó	0.42		
	DWPT Carepa		N.A.	Río Carepa	0.13		
	DWPT Chigorodó		N.A.	Río Chigorodó	0.13	POMCA Average IVH under normal conditions High IVH in dry season	
	DWPT Santa Fe de Antioquia	Río Cauca	N.A.	Quebrada La Pena	0.2	ENA 2018 Average IVH under normal conditions High IVH in dry year	
	DWPT Olaya		N.A.	Quebrada La Barbuda	0.003	ENA 2018 Average IVH in dry season Low IVH under normal conditions	

Main Hydrographic basins supplying Systems and Reservoirs of Grupo EPM

Company	Power Plants/ DWPT	Basin	Reservoir	Main tributaries	Max volume technical million m^3 (hm^3)	Location in an area with water stress Water Vulnerability Index (IVH)	Use
Aguas Regionales	DWPT Sucre	Río Cauca	N.A.	Quebrada La Tahamí	0.00243	ENA 2018 Average IVH in dry season Low IVH under normal conditions	Provision of water
	DWPT Sopetrán		N.A.	Quebrada La Sopetrana	0.1	POHR Average IVH under normal conditions Average IVH in dry season	
	DWPT San Jerónimo	Río Aurra	N.A.	Quebrada La Muñóz	0.0605	POHR Rio Aurra Low IVH under normal conditions Average IVH in dry season	
	DWPT Mutatá	Río León	N.A.	Río Mutatá	0.021	POHR Average IVH under normal conditions Average IVH in dry season	
				Quebrada Sabaleta	0.018		
Aguas de Malambo	DWPT Tesoro	Río Magdalena	N.A.	Río Cauca	N.A.	ENA 2018 Average IVH in dry season Low IVH under normal conditions	Provision of water
	DWPT El Concorde						

Main Hydrographic basins supplying Systems and Reservoirs of Grupo EPM

Company	Power Plants/ DWPT	Basin	Reservoir	Main tributaries	Max volume technical million m^3 (hm^3)	Location in an area with water stress Water Vulnerability Index (IVH)	Use
CHEC	Central Insula and La Esmeralda	Río Chinchiná	Cameguadua	Chinchiná River and Campoalegre River and downstream for the Quebrada la Estrella chain	N.R.	ENA 2018 IVH for year mean: medium IVH for dry year: high	Energy generation
	San Francisco	Río San Francisco	San Francisco	Río San Francisco	N.R.	ENA 2018 Otun River and others direct to Cauca IVH for year mean: medium IVH for dry year: high	
EPM	Troneras, Guadaluppe III and IV	Río Tenche	Miraflores	Río Tenche	102.22	ENA 2018 IVH for year mean: medium IVH for dry year: medium	Energy generation
		Río Guadalupe	Troneras	Ríos Nechí, Pajarito, Dolores, Concepción, Tenche and Guadalupe	28.91		
	Central Mocorongo	Río Grande	Quebradona	Río Grande	1.93		
	Guatapé	Río Nare	Peñol - Guatapé	Ríos Pantanillo - Negro - Nare	1071.69		
	Playas	Río Guatapé	Playas	Ríos Nare and Guatapé	69.57		

Main Hydrographic basins supplying Systems and Reservoirs of Grupo EPM							
Company	**Power Plants/ DWPT**	**Basin**	**Reservoir**	**Main tributaries**	**Max volume technical million m^3 (hm^3)**	**Location in an area with water stress Water Vulnerability Index (IVH)**	**Use**
EPM	Porce II	Río Porce	Porce II	Río Porce	142.71	ENA 2018 IVH for medium year: medium IVH for dry year: medium	Energy generation
	Porce III		Porce III	Ríos Guadalupe and Porce	155.9		
ESSA	Palms	Río Lebrija	Linderos	Río Lebrija	N.R.	ENA 2018 IVH for medium year: medium IVH for dry year: high	Energy generation
HET	Bonyic	Río Teribe	Bonyic	Quebrada Bonyic	N.R.	he IIVH has not been established for the Region	Energy generation
Other							
Emvarias	N.A.	Río Porce	N.A.	Quebrada la Piñuela Quebrada San Carlos	N.A.	ENA 2018 IVH dry year: medium IVH medium year: medium	Solid waste management

Note: The referenced water sources have the category of Fresh water, dissolved solids <1000 mg / L

The main hydrographic basins supplying the reservoirs destined for the provision of water and the generation of hydroelectric energy of the Grupo EPM are presented. These hydrographic basins also supply the populations and communities settled in them, as well as other productive sectors that use the water resources they provide.

This table does not include the reservoir of the Ituango Hydroelectric Project because it is in the construction stage.

(*) The usable volume of the Piedras Blancas reservoir for operation was established at 0.5 million m3 due to the age of the infrastructure and for safety reasons of the dam.

Areas owned by Group companies - Land use

Grupo EPM's contribution to the protection of ecosystems is relevant, since of the 800 km^2 of operational properties 654.2 km^2 have different types of plant cover, of these 43.5% correspond to natural forests (284.3 km^2), while the 56.5% (369.8 km^2) has been recovered under various strategies, for passive restoration, property management and administration are carried out with fences and surveillance, as well as biological connectivity actions that facilitate the flow and mobility of species between the own properties and neighboring ecosystems for a passive restoration area of 285.4 km^2 with vegetation cover in different successional states. On the other hand, planting activities are also implemented mainly of native species, as well as their maintenance and monitoring, if applicable, for the restoration, rehabilitation and recovery of ecosystems and degraded areas in 14.09 km^2 , and FINALLY it is mainly in EPM 70.3 km^2 of forest plantations around some of the power generation and water supply reservoirs.

It is important to highlight the effort that has been made in the Ituango Hydroelectric Project, with an active restoration of 0.9 km^2 since 2018 through pilot tests in HUMID to very HUMID tropical forest through the alliance with the Department of Forest Sciences of the National University of Colombia.

On the other hand, Grupo EPM makes a great contribution to conservation, adding 748.47 km^2 of its operational properties to declared protected areas, via municipal agreements or resolutions of environmental authorities, or that are part of the amortization area of the declared protected area or that correspond to ecosystems with high biological diversity according to studies carried out by Grupo EPM or secondary sources of information.

Areas and land uses (km²) - Grupo EPM							
Company / Business	Reservoirs	Built area	Natural coverage area	Forest plantation area	Unclassified area	Total area	Geographic location
CHEC - Energy Transmission and Distribution	1.0	1.1	64.9	0.0	0.0	67.0	Caldas, Colombia
EMVARIAS - VP Water and Sanitation	0.0	0.4	3.4	0.0	0.6	4.5	Antioquia, Colombia
EPM - VP Power Generation	107.7	6.3	211.4	55.8	1.7	382.9	Antioquia, Colombia
EPM - Ituango Hydroelectric Project	21.2	2.6	281.3	0.0	0.0	305.1	Antioquia, Colombia
EPM - VPE Projects and Engineering	0.0	0.0	0.2	0.0	0.0	0.2	Antioquia, Colombia
HET - VP Power Generation	0.1	0.4	9.3	0.0	0.0	9.9	Panamá
EPM - VP Water and Sanitation	1.6	0.3	13.2	14.5	0.9	30.5	Antioquia, Colombia
Grand Total	**131.5**	**11.1**	**583.9**	**70.3**	**3.3**	**800.0**	

Source: Areas and Land Uses Worksheets

Protected, adjacent and other areas

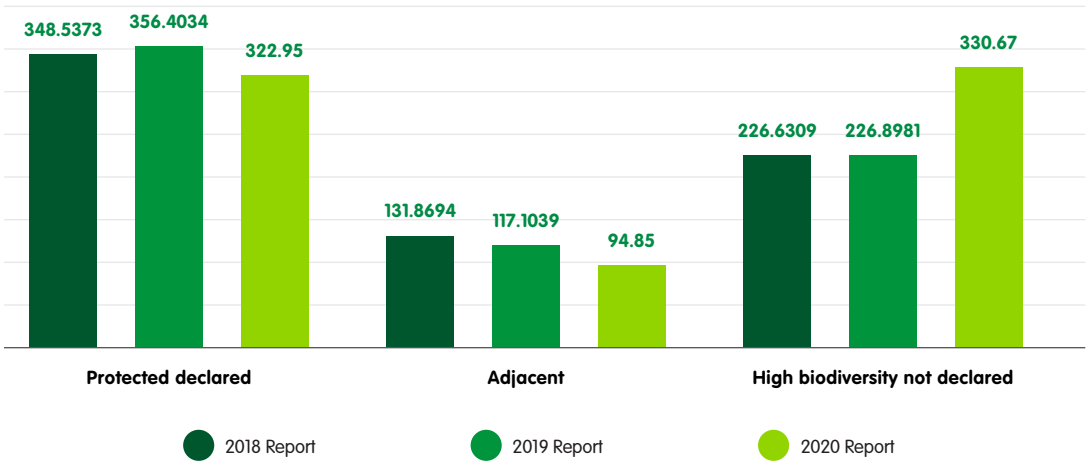
Protected areas, adjacent or with high biodiversity (km²) Grupo EPM 2020							
Company/ Business	Protected areas, adjacent or with high biodiversity				Other areas	Total Areas	Reference Protected Area
	Declared protected area	Adjacent	High biodiversity not declared	Total			
CHEC - Energy Transmission and Distribution	50	11	3	64	0	64	CHEC forests, buffer zone National Natural Park Los Nevados
Emvarias - VP Water and sanitation	1	2	0	3	2	4	Does not apply
EPM - VP Power Generation	181	34	121	335	48	383	Forest Reserve Protecotra Playas and some municipal forest reserves. DRMI Reservoir Peñol Guatape, DRMI Cacica Noria
EPM - Ituango Hydroelectric Project	53	45	207	305	0	305	DRMI Peque
HET - VP Power Generation	12	0	0	12	0	12	Protective forest Palo Seco
EPM - VP Water and sanitation	27	3	0	30	1	31	Nare Forest Reserve
Grand Total	**322.95**	**94.85**	**330.67**	**748.47**	**50.17**	**798.64**	

Note: Only protected areas declared by the competent environmental authority are referenced

For the companies of the Grupo EPM, 799 km² were reported in operational areas, 93% of this value corresponds to protected areas, adjacent or of high biodiversity and 40% It is within a protected area figure, 11% is in buffer zones adjacent to protected areas and 41% is considered an important ecosystem for the conservation of biodiversity not included in

declared protected areas. Grupo EPM continued working with environmental authorities and other stakeholders to expand and strengthen the protected area system, contributing to the conservation of ecosystems and the species that inhabit them.

Protected areas, adjacent or with high biodiversity (Km²) 2018-2019-2020



With respect to previous years, in 2020 there is a slight decrease in declared and adjacent areas, due to the fact that in the Ituango Hydroelectric Project a review of participation in declared protected areas was carried out, showing that an area that had been reporting did not have the figure of a protected area, so this area was reclassified as of great importance for biodiversity, but not declared.

Conservation of threatened species

During 2020 the Grupo EPM collected information on the biodiversity of different typical fauna and flora groups of the different biogeographic regions of the Neotropics where it operates: Colombia, Panama, El Salvador and Guatemala, places where it protects biological diversity in 65,415 ha and has contributed to the protection of species, genetic, landscape and ecosystem diversity.

- The Grupo EPM reaffirms its commitment to the comprehensive management of biodiversity and ecosystem services, for this it joins efforts with various institutional actors and communities to carry out different initiatives based on conservation, such as: ecological restoration, addition of own properties to protected areas, acquisition

of new properties and protection of areas of high biological diversity for guarantee its habitat and refuge, as well as the collection of biological information through various studies, monitoring and research, the contribution to environmental education for the social appropriation of knowledge, the implementation of conservation strategies for threatened species, among others.

- From the perspective of the protection of habitats, it is very relevant for the Group to report the diversity of threatened species found in the areas where its operations are carried out, for this the lists of threatened species according to national regulations, the International Union for Conservation of Nature (IUCN) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are taken into account.
- During 2020, Grupo EPM obtained 1,800 records of threatened species in operational areas located in four countries (Colombia, Guatemala, El Salvador and Panama) corresponding to 13 different types of ecosystems. 685 species were reported IN SOME threatened status, 139 according to IUCN, 136 in national lists, 108 reported in CITES and 449 in national and / or regional closure. The most representative biological groups were epiphytes represented by orchids, bromeliadds, mosses, lichens and ferns (1,290 species) followed by birds (226 species).
- For the year 2020, a total of 644 threatened species were reported for Colombia, most of these through the studies carried out in EPM by VP Projects and Engineering (348 species), and by follow-up and monitoring in VP Power Generation (265 species). In turn, for Panama, through the subsidiaries HET and ENSA, 32 threatened species, followed by Guatemala, where 17 species were recorded through Eegsa, while DelSur in El Salvador recorded 4 threatened species.
- The following tables show the number of species for each of the companies in each of the threat status and the number of species per biological group.

Species report by threat list

Report on the number of species by Threat List, Country, Company and Business of Grupo EPM Year 2020

Country	Business	Qty.	IUCN*					National Regulations					PROTECTED***			
			CR	EN	NT	VU	Total	CR	EN	NT	VU	Total	CITES	National	Regional	All
Colombia	**Aguas Nationales EPM** - VP Water and sanitation	**30**				2	2				1	1	27			
	Aguas Regionales EPM - VP Water and sanitation	**4**	2			1	3	1	1		2	4	4			
	CENS - VP Transmission and distribution of energy	**4**			1	1	2	1	1		1	3	1	1		
	CHEC - Power Generation	**46**		5	15	13	33	1	7		15	23	20			
	Emvarias - VP Water and sanitation	**32**		1	2	11	14	3	4		7	14	4	1	6	12
	EPM - VP Water and sanitation	**20**	1	1	1	3	6	4	5		7	16	1	4		3
	EPM - VP Power Generation	**265**		5	8	34	47	1	10		16	27	55	118	8	10
	EPM - Ituango Hydroelectric Project	**25**	1	1	3	10	25	1	1		10	12	13			2
	EPM - VP Proyectos e Ingeniería	**348**	2	5	9	16	32	2	7		15	24	20	288	6	6
	ESSA - VP Transmission and distribution	**12**	2	1		4	7	2	4		5	11	3	1	1	
	Sub-total Colombia	**644**	**8**	**16**	**32**	**63**	**119**	**13**	**29**		**52**	**94**	**98**	**407**	**21**	**33**

Report on the number of species by Threat List, Country, Company and Business of Grupo EPM Year 2020																
Country	Business	Qty.	IUCN*					National Regulations					PROTECTED***			
			CR	EN	NT	VU	Total	CR	EN	NT	VU	Total	CITES	National	Regional	All
El Salvador	**Delsur** - VP Transmission and distribution of energy	**4**	1			3	4	1	1		1	3	2			
	Sub-total El Salvador	**4**	**1**			**3**	**4**	**1**	**1**		**1**	**3**	**2**			
Guatemala	**Eegsa** - Power distribution	**17**				1	1		1	6	9	16	2			
	Sub-total Guatemala	**17**				**1**	**1**		**1**	**6**	**9**	**16**	**2**			
Panamá	**ENSA** - VP Transmission and distribution of energy	**11**			1	5	6		1		8	9	6			
	HET - VP Energy generation	**21**		1	2	14	17	1	1		14	16	11			
	Sub-total Panamá	**32**		**1**	**3**	**19**	**23**	**1**	**2**		**22**	**25**	**17**			
Total species:		**685**	**9**	**16**	**34**	**80**	**139**	**15**	**33**	**6**	**82**	**136**	**108**	**407**	**20**	**23**
Total records:		**1,800**	**9**	**21**	**46**	**156**	**232**	**18**	**48**	**9**	**1**	**135**	**275**	**1,282**	**21**	**43**

Source: Endangered species template 2020

Categories: Critically Endangered (CR), Endangered (EN), Vulnerable (VU), and Near Threatened (NT). Threat Status (UICN: https://www.iucnredlist.org/ ; CITES: http://checklist.cites.org/ ; Colombia: Resolution 1912 de 2017; Chile: National Inventory of Species http://especies.mma.gob.cl/ ; Guatemala: List of Threatened Species, LEA, 2008 ; Panamá: Resolution DM-0657 de 2016), El Salvador: https://historico.elsalvador.com/historico/129130/los-10-animales-en-peligro-de-extincion-en-el-salvador.html

The categories of National and Regional protected species are applied for Colombia according to INDERENA and regional autonomous corporations.

In the lists, species with wide distribution are found, with reports in more than two countries in common, such as *Alouatta palliata* (howler monkey), *Aniba perutilis* (cumin), *Cariniana pyriformis* (embraco), *Cedrela odorata* (red cedar, a species reported in all countries), *Iguana iguana* (iguana), *Leopardus pardalis* (ocelot), *Leopardus tigrinus* (tigrillo), Lontra longicaudis (neotropical otter), *Pecari tajacu* (saino), *Puma concolor* (puma) and *Sylvilagus brasiliensis* (sabanero rabbit). There are also records of migratory species such as *Setophaga cerulea* (cerulean warbler), *Buteo platypterus* (wide - winged hawk), *Falco peregrinus* (peregrine falcon), as well as other endemics such as *Andinobates opisthomelas* (Andean poison frog), *Bolitoglossa ramosi* (salamander), *Niceforonia latens* (thief frog of Boqueron), *Saguinus leucopus* (marmoset gray), *Saguinus oedipus* (cotton - top tamarin), *Hypopyrrhus pyrohypogaster* (cacique candela), *Magnolia yarumalensis* (darksoul), *Scytalopus stilesi* (tapaculo Siles), *Prochilodus magdalenae* (bocachico), *Pseudoplatystoma magdaleniatum* (striped catfish), among others.

In the 2020 report nine species were identified as critically threatened with extinction according to IUCN, such as *Saguinus oedipus* (white-headed marmoset), *Ateles hybridus hybridus* (spider monkey), *Pimelodus grosskopfii* (bearded or capaz), *Eretmochelys imbricata* (hawksbill turtle), *Podocnemis lewyana* (river turtle), *Ara ambiguus* (lemon-green macaw), *Magnolia espinalii* (spinal leaf) and *Iryanthera megistocarpa* (jack). In the same critical category according to national lists are 15 species *Tapirus bairdii* (tapir), *Saguinus oedipus* (white-headed marmoset), *Odocoileus cariacou* (deer), *Ateles hybridus hybridus* (spider monkey), *Pseudoplatystoma magdaleniatum* (striped catfish), *Dermochelys coriacea* (cana), *Podocnemis lewyana* (river turtle), *Vultur gryphus* (condor de los Andes), *Aniba perutilis* (cumin), *Cariniana pyriformis* (embraco), *Swietenia macrophylla* (caobo), *Licania cabrerae* (caimo), *Magnolia espinalii* (spinal leaf), Magnolia sp. nov.2 and *Pitcairnia lindae* (bromeliad).

75% of the records corresponded to floristic groups, although the contribution made by epiphytes is noteworthy, since by 2020 there were 1,290 records in a total of 413 species, a group that in turn for the Colombian territory is It is protected by Resolution 0213 of 1977 of INDERENA. In fact, the species with the highest number of individuals corresponded to this floristic group. Likewise, tree ferns (*Cyatheas and Alsophilas*) are also a relevant and protected group in Colombia. Among the 75 threatened tree and Shrub species, the presence of endemic species stands out, mostly timber species, which occur in several of the lists of threatened species and are subject to protection such as *Vitex cooperi* (cuajao), *Virola megacarpa* (miguelario), *Pachira quinata* (ceiba tolúa), *Caesalpinia ebano* (ébano), *Licania cabrerae* (caimo), *Aniba perutilis* (cumin), *Cariniana pyriformis* (embraco), *Cedrela odorata* (red cedar) among others. Also noteworthy is the report of 9 palm species, including *Bactris gasipaes, Wettinia hirsuta, Elaeis oleífera, Dipteryx oleífera and Wettinia microcarpa.* It is also important to highlight the presence of a Zamyaceae reported in Panama (*Zamia neurophyllidia*).

Below, you can see the records and species by group and their threat status

Number of species by biological group

NUMBER of species by biological group - Total threatened species ACCORDING TO IUCN and CITES, 2020

Groups	No. Records	No. Species	IUCN*					National Regulations					PROTECTED***		
			CR	EN	NT	VU	Total	CR	EN	NT	VU	Total	CITES		National
													I	II	
Amphibians	25	17		3	4	8	15		2		3	5		3	
Birds	226	99	1	2	18	25	46	1	10		18	29	10	60	
Mammals	75	30	2	2	4	14	22	4	4		13	21	11	9	
Fishes	19	13	1	1	2	4	8	1	1		9	11	2		1
Reptiles	27	13	2	1		3	6	2	1		3	6		9	1
Sub Total threatened fauna	**372**	**172**	**6**	**9**	**28**	**54**	**97**	**8**	**18**	**-**	**46**	**72**	**23**	**81**	**2**
Flora - Árboles and arbustos	98	75	3	6	5	17	31	6	11	6	29	52		4	18
Flora -Epífitas	1,290	413		1			1	1	3			4		8	413
Flora - Palms	9	8				6	6		1		6	7	2	1	1
Flora - Helecho arbóreo	30	16				3	3					-		16	15
Flora - Zamia	1	1				1	1				1	1	1		
Sub Total threatened flora	**1,428**	**513**	**3**	**7**	**5**	**27**	**42**	**7**	**15**	**6**	**36**	**64**	**3**	**29**	**447**
Total threatened flora and fauna species	**1,800**	**685**	**9**	**16**	**33**	**81**	**139**	**15**	**33**	**6**	**82**	**136**	**26**	**110**	**449**

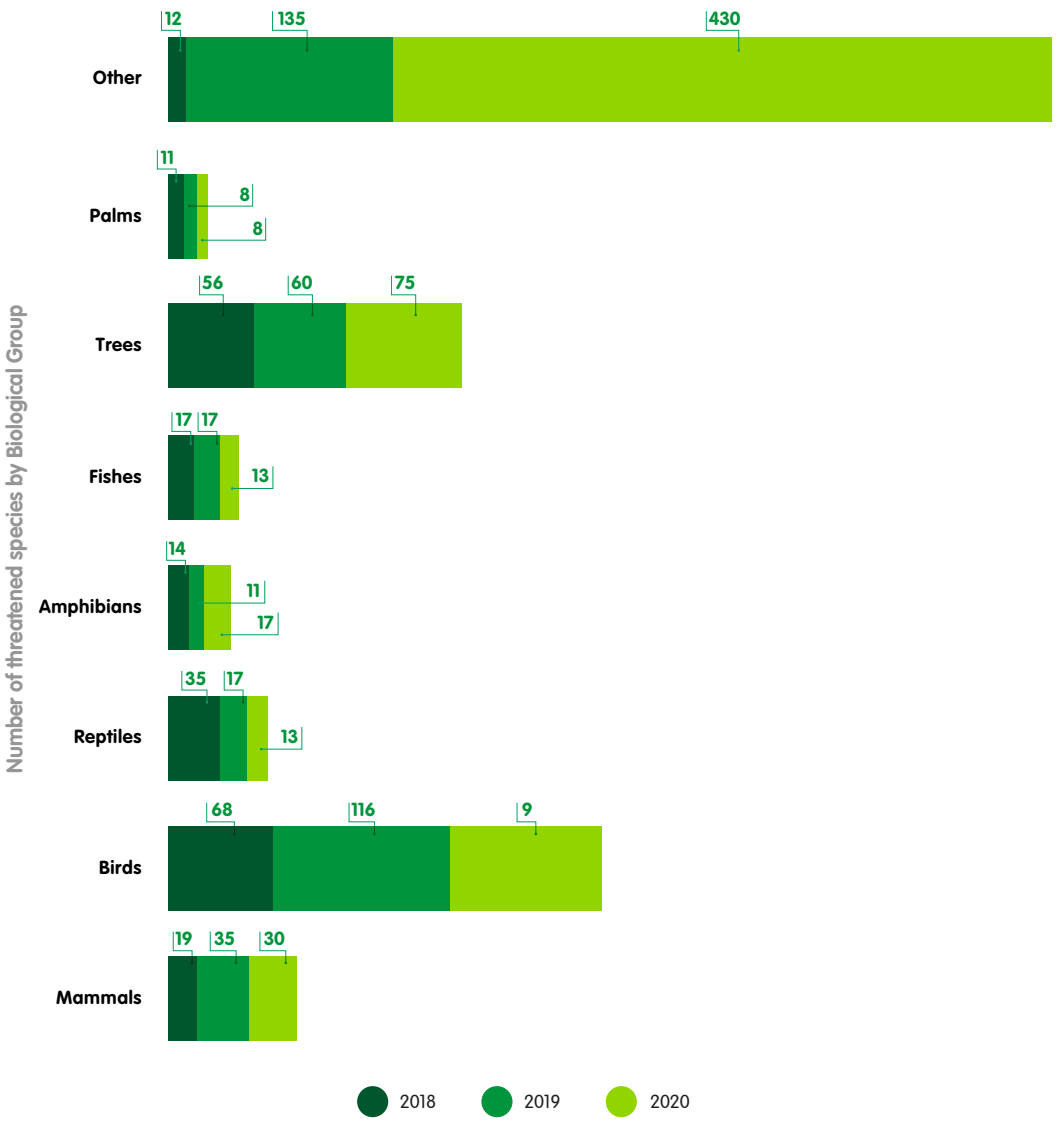
Source: Endangered species template 2020

On the other hand, the faunal groups had a representation of 25% of the total species, of which 99 species are birds that are mostly classified in appendix I and II of CITES (71%). Notable in this group of fauna is the presence of rare species and / or that are found both in national and IUCN lists such as *Ognorhynchus icterotis* (yellow-eared parrot), *Capito hypoleucus* (white-capped bull), *Bangsia melanochlamys* (aurinegra tanager), *Dysithamnus occidentalis* (western ant), *Chloropipo flavicapilla* (yellow-headed springer), *Dysithamnus mentalis* (sooty anthill), *Spatula cyanoptera* (red duck) and *Vultur gryphus* (cóndor de Los Andes), on the latter CHEC has been consolidating a tourist route under the tourism scheme community with the name of La Ruta del Cóndor (https://larutadelcondor.com/).

In addition, 30 species of mammals were reported, some in several of the lists of threatened species and that are also protected from international traffic such as *Alouatta seniculus* (red howler monkey), *Aotus lemurinus and Aotus griseimembra* (night monkeys or martees), *Saguinus leucopus, Saguinus geoffroyi and Saguinus oedipus* (the marmosets), *Lontra longicaudis* (neotropical otter), *Leopardus wiedii and Leopardus pardalis* (tigrillos), *Tapirus bairdii and Tapirus pinchaque* (tapir), *Tayassu pecari and Pecari tajacu* (saínos), among others. In amphibians within the 17 species reported, the presence of the *Osornophryne percrassa* (moorland toad), *Andinobates bombetes* (Cauca poison frog), *Pristimantis aff. Scoloblepharus and Pristimantis scoloblepharus* (rain frogs) and *Rhinella nicefori*. In reptiles, the report of 13 species stands out, highlighting the presence of several species *Podocnemis lewyana, Trachemys callirostris, Kinosternon leucostomum, Chelonoidis carbonarius and Eretmochelys imbricata* (turtles) and *Crocodylus acutus* (needle caiman). Finally, 13 species of fish among the most relevant I*chthyoelephas longirostris* (jetudo), *Pimelodus grosskopfii* (capaz), *Andinobates bombetes* (striped catfish), *Pseudoplatystoma magdaleniatum, Ichthyoelephas longirostris* (pataló) and *Brycon moorei* (dorada).

Given that the companies of the Grupo EPM are located in different countries, thermal floors, among other peculiarities of each territory, the threatened species present in areas of the operational centers have different characteristics of ecosystem, habitat, refuge and resources for their survival. In this report 13 types of ecosystems are reported: urban areas and mostly altered areas, mountain forest, tropical humid forest, dry forest, mangrove, artificial water body, farmland, grasslands and shrubs, wetlands, moorlands, pastures, forest plantations and secondary vegetation.

Number of threatened species by Biological Group



With respect to the records of the LAST three years, a noticeable increase in the number of species associated with floristic groups is identified, and among them mainly epiphytes, of these the report in 2019 was 99 species while the record for the year 2020 was 413.

See Annex with list of Threatened Species

Contents GRI standards and own indicators

EPM-01	Conservation areas.
EPM-10	Water Protection (IPH).
303-1	Interactions with water as a shared resource.
304-1	Operation centers owned, leased or managed located within or next to protected areas or areas of great value for biodiversity outside protected areas.
304-3	Habitats protected or restored.
304-4	Species that appear on the UINC red list and on national conservation lists whose habitats are found in areas affected by operations.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM
Aguas Regionales EPM
Central Hidroeléctrica de Caldas - CHEC
Compañía de Energía del Quindío - EDEQ
Electrificadora de Santander - ESSA
Centrales Eléctricas del Norte de Santander - CENS
Empresas Varias de Medellín - Emvarias
Aguas Nationales EPM
Aguas de Malambo
Compañía Eléctrica de Guatemala - Eegsa
Distribuidora de Electricidad del Sur - Delsur
Elektra Noreste - ENSA
Hidroecológica del Teribe - HET

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia - Norte de Santander
Colombia - Atlántico
Guatemala
Panamá

Businesss

Water
Sanitation
Electric power

Use of water and effluents

Back to content

Use of water and effluents

The water supply of the companies of the Grupo EPM is made mainly from surface sources, which are used in their production processes: water supply and hydroelectric power generation. On the other hand, the supply of the companies' facilities for domestic use comes mainly from aqueducts and surface sources.

The companies of the Grupo EPM analyze how they use water in their production processes and facilities, as well as the type of sources from which they are supplied, in order to implement initiatives and projects that allow better management of its use and contribute to its sustainability.

On the other hand, the subsidiaries manage their effluents: discharges of water used in the generation of hydroelectric energy and wastewater from their own facilities and those collected from their customers and users by providing the sanitation service, to avoid direct dumping, without treatment, millions of m^3 of wastewater to water sources and to the ground.

(*) In Colombia, Decree 1076 of 2015 defines that discharge is the final discharge to a body of water, a sewer or to the ground, of elements, substances or compounds contained in a liquid medium.

Performance in 2020

The total volume of water used for the productive activities, cooling and domestic use of the Grupo EPM was 18,788,275 Mm^3 , equivalent to 18.7 million megaliters, which are distributed as a percentage as follows:

- 99.85% of the total volume of water used was surface water.
- 99.21% of the total volume of water is for productive use, mainly for power generation and water supply.
- 85.64% of the total volume of water is used by EPM.
- 14.36% of the total volume of water is used by the subsidiaries.

In the reporting period, it was possible to save 2.7 million m^3 of the water used in the purification process, thanks to the use of recirculated water from the backwashing of filters. Likewise, in the hydroelectric power generation process, 35 million m^3 of water were reused, thereby optimizing its use in these processes.

Management in the use of water and effluents

During the reporting year, Grupo EPM developed projects and initiatives associated with the efficient use of water and management of discharges, with which it not only contributes to the efficiency and quality in the provision of domestic public services but also to the improvement of the quality of life and the environment in the territories where it is present.

Some relevant initiatives and projects are highlighted below:

- Implementation of the Plan of Sanitation and Management of Discharges (PSMV), is a planning tool articulated with the objectives and quality goals defined by the environmental authority, to guarantee the collection, transport and treatment of the wastewater that is generated in the Aburrá Valley. Since the implementation of the plan began, more than 4,600 kilometers of sewerage networks have been built, the existing networks have been maintained, the San Fernando plant has been built and modernized, and the Aguas Claras plant has been built and put into operation, which in 2020 achieved its stabilization to comply with the discharge standard. With the implementation of the PSMV of the Aburrá Valley, EPM reiterates its commitment to the decontamination of the Medellín Aburrá River and its tributaries, as well as to the improvement of the quality of life of the inhabitants of the

- Modernization of the El Retiro wastewater treatment plant that allows tertiary treatment of wastewater from this town in eastern Antioquia. In 2020, the stabilization of the plant was achieved and compliance with the parameters of the discharge standard, with that, it contributed to the care of the Negro River, the main source that supplies the aqueduct system of several towns.

- Management of unaccounted for water, includes activities of control of commercial losses, relations and communication. In 2020 the volume of water loss in the system was 92.65 million m^3 this volume includes the Metropolitan System and the Rionegro System that was annexed in 2020 (Metropolitan Area of Vallé de Aburrá: 90.71 million m^3; Rionegro System: 1.94 million m^3).

- Recirculation, monitoring and permanent recording of the water produced by washing filters in the La Ayurá, La Cascada, La Montaña, Manantiales, San Antonio de Prado, San Cristóbal, Villa Hermosa and Aguas Frías water treatment plants, in order to reduce losses and contribute to the efficient use of water in the purification process.

- Implementation of plans for saving and efficient use of water in the facilities of EPM and its national and international subsidiaries; it is worth mentioning, among others, infrastructure inspection, water consumption analysis, leakage control, storage of rainwater for irrigation and the awareness of personnel on the use and care of water.

Risk management associated with water

To manage risks associated with water shortages in the sites where the Grupo EPM has its operations, reservoirs or supply systems for the provision of the water supply service and the generation of hydroelectric energy, studies are carried out, hydrometeorological stations are installed and operated, indicators and hydrometeorological models are used, both owned and from governmental entities such as Ideam and environmental authorities.

Among the activities carried out, the following can be highlighted:

- The National Water Study (ENA), versions 2014 and 2018, presents, among others, the Water Vulnerability Index (IVH) for Colombia and its different regions, which shows that the department of Antioquia, where most of the EPM plants / production sites (power generation and provision of drinking water), presents a moderate IVH in an average year. On the other hand, in areas such as La Guajira there is a moderate to high aridity index, but in this region EPM generates wind energy that does not require water for its production.

- Regarding the provision of the aqueduct service, EPM has 10 water treatment plants for which no significant impact has been identified. However, the smaller supply basins La Iguaná, La Valeria and Piedras Blancas present a medium water vulnerability index (HVI) in dry years, according to the update of the POMCA of the Aburrá River 2018, and the same happens with the Pantanillo River according to the Rio Negro POMCA. For its part, Aguas Regionales has a HVI with medium and high values in the Turbo River basin, but in no case is there a high level of vulnerability to shortages according to the POMCA diagnosis of the León River, carried out by Corpourabá. On the other hand, the update report on the state of water resources in Antioquia 2018, found that some supplying sources in the Western region present values for this indicator between medium and high.

- The subsidiary Adasa, located in the Antofagasta region in Chile, is related to a scenario of extreme aridity determined by geography and climate; however, 45% of the total water consumption for its purification processes comes from sea water, a resource that is abundant there compared to other types of water sources.

- To manage the risk associated with the availability of water resources, EPM has a hydrometeorological information system that supports the planning, construction and operation of potable water supply and electricity generation projects. The system consists of approximately 200 hydroclimatic stations installed in the basins and tributaries of all its reservoirs and projects, located in the departments of Antioquia and La Guajira. These stations capture the information of various hydroclimatic variables in real time, using sensors, and transmitting it through various systems such as goes and Skada, among others.

- The Grupo EPM has a climate strategy in whose deployment it has carried out studies with the National University of Colombia for climate modeling in the areas where it has its systems and reservoirs. These studies allow progress in resilient management and articulate mitigation and adaptation issues with the Comprehensive Management of Water Resources and Biodiversity strategy.

- For their part, EPM and Aguas Regionales managed the risks associated with water availability by carrying out the "Study of alternatives for new catchment sources for the Urabá subregion of Antioquia." They also have contingency plans to mitigate the impacts generated by the dry season on current sources, and they carried out awareness-raising activities on efficient use and care of water.

- It is important to highlight that in Colombian regulations, the use of water resources for human consumption has priority over any other use, so the risks for water supply associated with the competition of the resource with other sectors are low.

- Finally, the studies, indicators and models are important inputs for the definition of strategies, goals, infrastructure needs (modernization, expansion, interconnection, new projects) or new studies, among other matters.

Water extraction

Grupo EPM water supply (Thousands of m³) *			
2020	**18,788,275**	↓	-7%
2019	20,146,579	↓	-15%
2018	23,697,825	↑	38%

Superficial Group			
2020	**18,760,719**	↓	-7%
2019	20,136,221	↓	-15%
2018	23,689,239	N.A.	

Aqueduct Group			
2020	**940**	↓	-19%
2019	1,162	↓	-29%
2018	1,626	N.A.	

Underground Group			
2020	**2,457**	↑	80%
2019	1,362	↓	-32%
2018	2,007	N.A.	

Marina Group			
2020	**24,158**	↑	208%
2019	7,833	↑	58%
2018	4,952	N.A.	

Superficial EPM			
2020	**16,090,276**	↓	-9%
2019	17,656,024	↓	-19%
2018	21,823,471	N.A.	

Aqueduct EPM			
2020	**499**	↓	-4%
2019	519	↑	3%
2018	503	N.A.	

Underground EPM			
2020	**5**	↑	80%
2019	3	↑	49%
2018	2	N.A.	

**** Other Sources:*** *2020 providing for Group was 396 m³ and 384 m³ EPM, includes* ***water*** *tank car, air (rain) and bottled.*

99.85% of the total volume of water used by Grupo EPM companies in 2020 was from surface sources. The 7% decrease in the use of this type of source compared to 2019 was due to lower power generation in some hydroelectric plants and improvements in drinking water treatment plants with corrective maintenance of meters and leaks that imply less water consumption and better filter performance.

Likewise, there was a decrease in water consumption in the facilities and headquarters of the Grupo EPM companies mainly due to its low occupancy caused by preventive and confinement measures due to COVID-19.

On the other hand, the increase in precipitation in Urabá affected the quality of surface water due to turbidity, so Aguas Regionales increased the consumption of underground sources to guarantee the provision of the aqueduct service. Likewise, some power generation camps increased their consumption of groundwater due to the increase of personnel for maintenance work and a greater demand for water in these camps to guarantee compliance with biosecurity measures for COVID-19, including permanent hand washing.

Finally, the increase in seawater supply is due to the operation of the new Tocopilla de Adasa desalination plant in Chile.

Water consumption and use

Grupo EPM water use (Thousands of m³)*		
2020	**18,788,275**	-12%
2019	20,146,579	-15%
2018	23,697,825	N.A.

*** 1 Megaliter** = 1,000 m³

Productive Group		
2020	**18,640,859**	-7%
2019	20,119,357	-15%
2018	23,694,132	N.A.

Cooling Group		
2020	**146,465**	454%
2019	26,457	800%
2018	2,941	N.A.

Domestic Group		
2020	**950**	22%
2019	765	2%
2018	752	N.A.

Productive EPM		
2020	**15,943,687**	-10%
2019	17,629,519	-19%
2018	21,820,509	N.A.

EPM cooling		
2020	**146,462**	454%
2019	26,454	800%
2018	2,941	N.A.

Domestic EPM		
2020	**632**	10%
2019	573	9%
2018	526	N.A.

** **Other Sources:** 2020 providing for Group was 396 m³ and 384 m³ EPM, includes **water** tank car, air (rain) and bottled. On the other hand, it is important to highlight that the total productive use water of the Grupo EPM, including cooling, is 18,787,324 thousand m³ and for EPM it is 16,090,149 thousand m³.*

99.21% of the total volume of water used by Grupo EPM is for its production processes, of this percentage 97.58% was used to generate energy (non-consumptive use), 1.63% for water supply and the remaining 0.79% was used in wastewater treatment plants, laboratories and cooling processes.

The decrease in the consumption of water for productive use compared to 2019 is due to the lower generation of water in some hydroelectric plants, for its part, the increase in the use of water for cooling is due to greater generation of the thermal power plants of EPM and CHEC, by operational and commercial criteria.

EPM uses 84.85% of the Group's total volume of water for its production processes, mainly for power generation and water supply.

Recirculated or reused water

Recirculated or reused water in Grupo EPM processes (Thousands of m³)

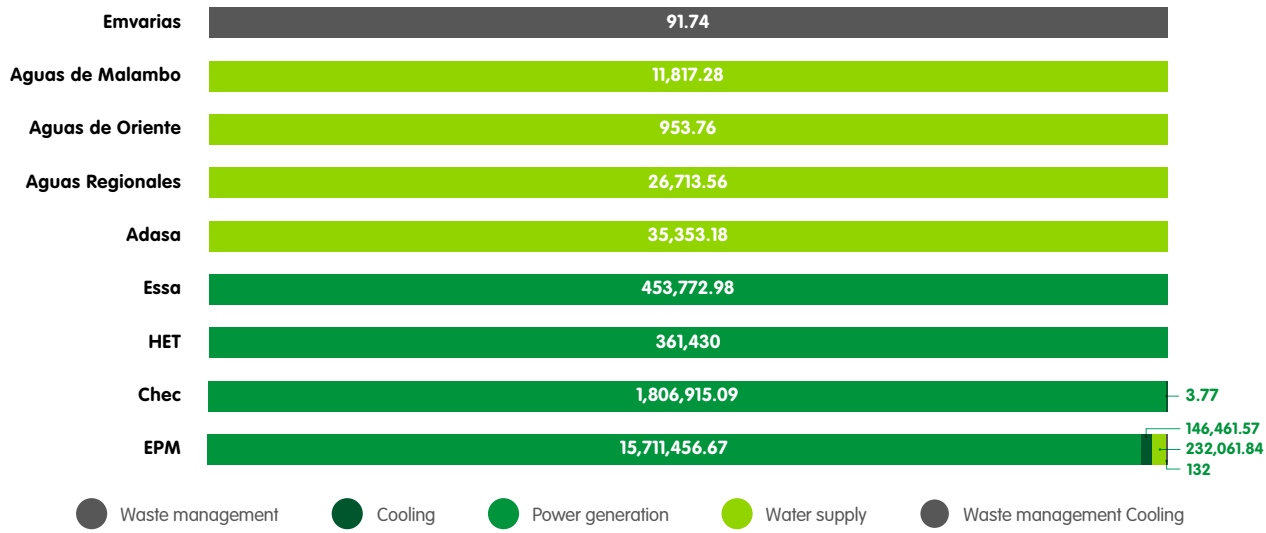
Process	2018	2019	2020	Variation 2020/2019	
Hydroelectric generation	24,561	32,710	35,026	↑	7%
Thermal generation	0.61	2	13	↑	549%
Provision of water	1,926	3,148	2,696	↓	-14%
Administrative and customer service facilities	72	44	425	↑	874%
Total *	**26,560**	**35,904**	**38,286**	↑	**7%**

Source: Idsos application.

The increase in water reuse is mainly due to the need for cooling of the hydraulic and thermal power generation units in the Guatapé and Playas hydroelectric plants and in the La Sierra thermoelectric plant, which are the ones that use this process in the greatest proportion.

The decrease in recirculated water in the water supply process is mainly due to the fact that the volume of water used for the recirculation of water in the DWPT depends on the quality of the sources captured, the water is recirculated as long as it does not affect the quality of drinking water produced at the plant.

Productive water use by company thousands of m³/2020



** In 2020, in addition to the indicated uses, EPM used 37 thousand m³ of water in the Thermal District.*

The largest volume of water used by the companies of the Grupo EPM is destined for the generation of hydroelectric energy, followed by the use for the provision of drinking water.

Water discharges and dumping

Power generation - Grupo EPM Water discharge Thousands m³

Discharges	2018	2019	2020
EPM - Hydroelectric Generation Plants	21,524,726	17,312,798	15,694,914
HET - Hydroelectric Generation Plant	395	499,460	361,430
CHEC - Hydroelectric Generation Plant	1,817,391	1,473,863	1,806,915
Essa - Hydroelectric Generation Plant		468,193	453,772
Total	**23,342,512**	**19,754,314**	**18,317,031**

The largest volume of effluents comes from hydroelectric power generation discharges, which corresponds to the same volume of water used for this production process. This process has a non-consumptive use of water. Discharges are not reported as dumping because in this process the quality of the water is not affected; on the contrary, this process generally helps to improve the quality of the receiving sources. The decrease in the total volume of water discharged compared to the previous year was due to the decrease in hydroelectric power generation in 2020.

Origin of discharges Grupo EPM (Thousands of m³)		
2020	**473,830**	↑ 456%
2019	85,195	↑ 59%
2018	53,709	N.A.

Productive Group EPM		
2020	**77,225**	↑ 33%
2019	58,165	↑ 16%
2018	50,315	N.A.

Cooling Group EPM		
2020	**261,337**	↑ 889%
2019	26,429	↑ 799%
2018	2,941	N.A.

Domestic Group EPM		
2020	**135,267**	↑ 22407%
2019	601	↑ 33%
2018	453	N.A.

Productive EPM		
2020	**55,363**	↑ 3%
2019	53,862	↑ 17%
2018	46,147	N.A.

EPM cooling		
2020	**261,337**	↑ 889%
2019	26,429	↑ 799%
2018	2,940	N.A.

Domestic EPM		
2020	**1,081**	↑ 148%
2019	436	↑ 31%
2018	333	N.A.

55% of the volume of discharges corresponds to the cooling of the La Sierra thermoelectric plant, the increase in discharge was due to the increase in the generation of energy from said plant compared to 2019.

Likewise, it is important to highlight the volume of dumping from the Grupo EPM's wastewater treatment plants. In these plants, the volume of water treated and dumped with better quality parameters to the receiving sources was 63.69 million m³.

On the other hand, the increase in domestic dumping corresponds to the entry of a new facility, the Tocopilla desalination plant, in Chile.

Receptor source of dumping Grupo EPM (Thousands of m³)			
2020	**473,830**	↑	456%
2019	85,195	↑	59%
2018	53,709	N.A.	

Superficial Grupo EPM			
2020	**470,033**	↑	487%
2019	80,116	↑	60%
2018	50,100	N.A.	

Soil Grupo EPM			
2020	**165**	↓	-1%
2019	166	↑	44%
2018	115	N.A.	

Sewerage Grupo EPM			
2020	**3,632**	↓	-26%
2019	4,913	↑	41%
2018	3,487	N.A.	

Superficial EPM			
2020	**314,429**	↑	312%
2019	76,357	↑	64%
2018	46,440	N.A.	

Soil EPM			
2020	**18**	↓	-5%
2019	19	↓	-21%
2018	24	N.A.	

Sewerage EPM			
2020	**3,289**	↓	-24%
2019	4,351	↑	47%
2018	2,957	N.A.	

99% of discharges are discharged to surface sources, mainly due to discharges from drinking water and wastewater treatment plants. The discharges from the WWTPs correspond to 13% of the total discharges, these are treated before being discharged to surface water sources, which allows to improve the quality of the effluents that are treated in these plants. Discharges from the Aguas Regionales WWTPs are not reported because their projects are in different stages: designs, purchase of properties, construction, etc., in accordance with the schedules of the PSMV.

The facilities of the Grupo EPM companies discharge their domestic wastewater into the sewerage systems of the towns where they are located, and those facilities that do not have access to these services treat their discharges in their own wastewater treatment systems.

On the other hand, there are also discharges to surface water sources used in the cooling process of the Guatapé plant and La Sierra thermoelectric plant. The water used from this process does not suffer alterations in its quality.

Contents GRI standards and own indicators

303-1	Interactions with water as a shared resource (Action Chapter: water conservation and biodiversity).
303-2	Management of impacts related to water discharge.
303-3	Water extraction
303-4	Water discharge
303-5	Water consumption.
306-1	Water discharge according to its quality and destination.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM
Aguas Regionales EPM
Empresa de Aguas del Oriente Antioqueño
Aguas de Malambo
Empresas Varias de Medellín - Emvarias
Central Hidroeléctrica de Caldas - CHEC
Electrificadora de Santander - ESSA
Compañía de Energía del Quindío - EDEQ
Centrales Eléctricas del Norte de Santander - CENS
Distribuidora de Electricidad del Sur - Delsur
Compañía Eléctrica de Guatemala - Eegsa
Hidroecológica del Teribe - HET
Elektra Noreste - ENSA
Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Malambo, Atlántico
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia - Norte de Santander
Chile
El Salvador
Guatemala
Panamá

Businesss

Water
Sanitation
Electricity
Gas

Management of impacts related to water and biodiversity

Back to content

Management of impacts related to water and biodiversity

The Grupo EPM from the early phases of its different projects carries out environmental impact assessments in order to qualify them and establish the actions required to prevent, mitigate, control, compensate and correct the possible negative effects or impacts and enhance the positive ones. Thus, based on the analysis of environmental restrictions (ARA), environmental diagnosis of alternatives (DAA), feasibility study and environmental impact study (EIA), environmental management plans (PMA) or management activities of impacts on projects are established. These measures are implemented from the early phases of the construction of works and during the operation of the projects, in some cases framed in the environmental licensing or permits granted by the respective authority.

Performance in 2020

Grupo EPM provides a contribution to the conservation of biodiversity in various ecosystems, such as the 654.1 km^2 represented in forests and other vegetation cover, 131.5 km^2 of reservoirs and 70.3 km^2 of forest plantations.

To manage the impacts on water and biodiversity, Grupo EPM made the compensation of 7.9 km^2, achieving a cumulative progress of 96.6% with respect to the compensation goal of 186.3 km^2. On the other hand, several actions were undertaken such as the rescue and relocation of 190 epiphytes, the restoration of ecosystems and the protection of 284.3 km^2 of natural forests, the technological improvement for the protection of fauna, the protection of their own properties of 654 km^2 located in protected and / or high biodiversity areas, as well as the addition of new protection areas under the scheme of payments for environmental services.

The unfavorable environmental impacts on water and biodiversity in the Grupo EPM are mainly produced in the construction activity of new projects, or works of repowering or modernization of existing projects; and they are mainly related to changes in sound pressure levels, changes in terrestrial and aquatic ecosystems, as well as in the composition and structure of terrestrial flora and fauna communities and hydrobiota. These negative impacts are managed by businesses via implementation of environmental management plans and control, follow-up and monitoring and / or compensation actions.

Among the measures implemented during 2020, the following stand out:

- Rescue and relocation of 199 epiphytes. As well as activities and works to drive away, rescue and relocate fauna, actions that were accompanied by follow-up and monitoring.

- The energy companies, subsidiaries of the Group, carry out wildlife protection activities such as the implementation of plastic anti-bee caps on Trelec transmission poles. In turn, EPM in the distribution networks carried out approximately 100 rescue and relocation activities of bee hives.

- Trelec, in Guatemala, carried out the installation of bird repellers in electrical substations. While EPM installed 186.6 km of covered cable to avoid wildlife accidents.

- In the development of infrastructure projects, EPM compensated 222 tree individuals of the 796 that are part of the compensation goal.

- CENS in its own nurseries has reproduced 37,500 seedlings of 90 native species, which has allowed the ecological rehabilitation of 35 hectares of tropical dry forest, 31 hectares in strategic areas between CUCUTA and Ocana municipalities and in 15 hectares of tropical RAINFOREST in the Catatumbo region in the municipality of TIBÚ. Among its efforts, it also signed a new agreement with BanCO2, to make financial compensation to 53 peasant families from the municipalities of Cucutilla, Salazar de las Palms and Arboledas that are settled in strategic areas of the Santurbán páramo and Sisavita Natural Park, thanks to these 1,051 more hectares of forest conservation were increased, for a total of 2,083 hectares conserved.

- Emvarias carried out ecological rehabilitation as part of the compensation for non-vascular epiphytes, during 2020 it planted some tree species in some category of threat, among them: *Cariniana pyriformis, Pachira quinata, Swietenia macrophylla, Aniba perutilis, Caryocar glabrum and Handroantchus chrysanthus.*

- Regarding the impacts associated with water, the Grupo EPM in its Water and Sanitation business continued with the treatment of the wastewater transported by in the sewerage system that it operates, and with the monitoring of the physical-chemical parameters to evaluate the alteration on the quality of surface water resources, actions that generated a positive impact by avoiding the direct discharge, without treatment, of millions of m3 of wastewater to water sources and to the ground.

- In the reservoirs for the generation of energy and drinking water supply, the management of some impacts of the projects in operation continued, such as the management of solid waste that reaches these bodies of water and the proliferation of macrophytes generated by excess nutrients, managing this seeks to improve water quality during operation. The management of impacts on water generates benefits for the ecosystems

and for the communities where these projects operate, in the availability of good quality water, which affects human health.

- The companies of the Grupo EPM developed communication, pedagogy and awareness actions with clients, users and the community, on the efficient use of water and the protection of biodiversity, which included educational content on public utility bills , participation in television programs, holding environmental workshops and conferences, as well as training processes, among which the diploma courses oriented to community management of water and biodiversity that were held with the University of Antioquia in 12 municipalities in the north and northeast of Antioquia stand out, as part of the management agreement Comprehensive Biodiversity Management and the Virtual Symposium on Comprehensive Biodiversity Management. Likewise, training and workshops with suppliers and contractors were conducted.

Compensations and restoration

Impacted and compensated areas (km²) - Grupo EPM - 2020

Business	Impacted area	Compensation goal	Reporting period compensation	Accumulated compensation	% Advance
Emvarias - VP Water and sanitation	0.40	0.84	0.26	0.78	93%
EPM - Ituango Hydroelectric Project	54.61	174.62	0.00	177.91	102%
EPM - VPE Proyectos e ingeniería	0.01	0.02	0.00	0.00	0%
CENS - VP Transmission and distribution of energy	6.49	0.56	6.65	0.16	29%
Eegsa - VP Transmission and distribution of energy	2.38	0.00	0.02	0.17	
EPM - VP Transmission and distribution of energy	0.52	5.08	0.99	1.01	20%
EPM - VPE Proyectos e ingeniería	0.01	1.55	0.00	0.00	0%
ESSA - VP Transmission and distribution of energy	2.66	3.59	0.00	0.00	0%
Grand Total	**67.08**	**186.27**	**7.93**	**180.04**	

Source: land use and area spreadsheets

The companies of the Grupo EPM developed compensation through actions to purchase new areas for the protection and / or the implementation of ecological restoration activities in 2020. It was possible to compensate 7.93 km², for an accumulated of 180.04 km²; of the total goal of 186.27 km², 96.6% of the total has been met.

Restored areas and forest protection (km²) - Grupo EPM - 2020					
Companies	**Active restoration**	**Passive restoration**	**Functional restoration**	**Total restored areas**	**Forest protection**
CHEC	1.2	11.2	0.0	12.4	52.5
Emvarias	0.3	2.6	0.0	2.9	0.5
EPM	12.6	271.6	70.3	354.5	221.9
HET	0.0	0.0	0.0	0.0	9.3
Total restored areas / forests (km²)	**14.1**	**285.4**	**70.3**	**369.8**	**284.3**

Source: land use and area spreadsheets

The classification of the Restoration was carried out ACCORDING TO the following criteria:

- Active restoration: Implementation of actions for the restoration, rehabilitation and / or recovery of areas through the planting of seedlings of native or mixed species (native and exotic).
- Passive restoration: Areas restored through activities that promote the advancement of natural regeneration.
- Functional Restoration: implementation of recovery of areas through the planting of seedlings of exotic species.

Thus, the Grupo EPM in 2020 restored 14.1 km² through active restoration actions, for a cumulative figure of 369.8 km² restored.

Additionally, Grupo EPM continues to protect approximately 284.3 km² in natural forests.

Impacts related to discharges and dumpings

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
EPM	WWTP Aguas Claras	Río Aburrá	POMCA Río Aburrá IVH for year mean: medium IVH for dry year: medium	Odors produced by the WWTP process that affect neighboring communities	Different strategies have been implemented for the control of odors product of the WWTP processes, the control of 70% was achieved	Does not apply	Does not apply
				Alteration in the quality of surface water resources	Secondary treatment of the wastewater transported by in the sewerage system operated by EPM of the Aburrá valley, the wastewater of its clients and users is collected and treated, thus avoiding the direct discharge, without treatment, of millions of m^3 of wastewater to water sources and to the ground.	pH, temperature, COD, BOD5, total suspended solids, active substances to methylene blue (SAAM), Aluminum (Al)	0
	WWTP San Fernando	Río Aburrá	POMCA Río Aburrá IVH for medium year: medium IVH for dry year: medium	Alteration in the quality of surface water resources	Secondary treatment of the wastewater transported by in the sewerage system operated by EPM of the Aburrá valley, the wastewater of its clients and users is collected and treated, thus avoiding the direct discharge, without treatment, of millions of m^3 of wastewater to water sources and to the ground.	pH, temperature, COD, BOD5, total suspended solids, active substances to methylene blue (SAAM), Aluminum (Al), Otofosphates (P-PO43-), Total phosphorus (P), Nitrates (N-NO3-),Nitrites (N-NO2-), Ammonia Nitrogen (N-NH3), Total Nitrogen (N)	0

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
EPM	WWTP El Retiro	Río Aburrá	POMCA Rionegro IVH for medium year: medium IVH for dry year: medium	Alteration in the quality of surface water resources	Secondary treatment of wastewater transported by in the sewerage system of the municipality of El Retiro operated by Aguas de Oriente	pH, temperature, COD, BOD5, total suspended solids, active substances to methylene blue (SAAM), Aluminum (Al)	0
	CH Tasajera	Not reported	ENA 2018 IVH Average year: Mean IVH for dry year: Mean	Improvement of the water quality of the Medellín river (DO before discharge: 1.04 mg / l and after discharge: 3.81 mg / l)	Tracking and monitoring	Does not apply	0
	Large hydroelectric plants	Not reported	ENA 2018 IVH Average year: Mean IVH for dry year: Mean	Decrease in the concentration of some nutrients and other variables between seasons before the reservoir and after the reservoir	Tracking and monitoring	Does not apply	0
	Thermoelectric	Not reported	ENA 2018 IVH Average year: Low IVH Dry year: Mean	No impact but temperature monitoring is done	Tracking and monitoring	Does not apply	0

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
Aguas Regionales	DWPT Turbo	Río Turbo	POMCA Average IVH under normal conditions High IVH in dry season	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	Programming of a new sludge hazard characterization for all ARE systems	NA	0
	DWPT Apartadó	Río Apartadó					
	DWPT Carepa	Río Carepa					
	DWPT Chigorodó	Río Chigorodó					
	DWPT Mutatá	Río Mutatá	POMCA Average IVH under normal conditions Average IVH in dry season	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	1. Hazard characterization of sludge 2. Programming of a new sludge hazard characterization for all ARE systems	Sludge	0
	DWPT Santa Fe de Antioquia	Cañada La Guanábana - Cuenca Río Cauca (De acuerdo con TR facturada)	ENA 2018 IVH low in normal conditions Average IVH in dry year	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	1. Treatability tests of sludge from the DWTP of Santa Fe de Antioquia 2. Sludge hazard characterization programming for all ARE systems	Sludge	0
	DWPT Olaya	Acequia El Mono	ENA 2018 IVH low in normal conditions Average IVH in dry year	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	Programming of a new sludge hazard characterization for all ARE systems	NA	0

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
Aguas Regionales	DWPT Sucre	Río la La Tahamí	ENA 2018 IVH low in normal conditions Average IVH in dry year	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	Programming of a new sludge hazard characterization for all ARE systems	NA	0
	DWPT Sopetrán	Acequia Chagualar	PORH Q. La Sopetrana IVH medium under normal conditions Average IVH in dry year	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	Programming of a new sludge hazard characterization for all ARE systems	NA	0
	DWPT San Jerónimo	Quebrada La Muñoz	PORH Río Aurra Low IVH under normal conditions Average IVH in dry year	Detriment to the quality of the water of the receiving source and increase in the pollutant load as a result of the dumping	1. Hazard characterization of sludge 2. Programming of a new sludge hazard characterization for all ARE systems	Sludge	0

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
Aguas Regionales	WWTP Santa Fe de Antioquia	Acequia Gualí – Cuenca Río Cauca (According to invoiced TR)	ENA 2018 IVH low in normal conditions Average IVH in dry year	1. Community nuisance due to concentration of offensive odors 2. Water quality of the receiving source and the polluting load of the dumping	1. Every year between 1 and 2 field olfactometries are performed, to identify the impact of odors in neighboring sectors. Likewise, biodegradable chemical producers are used, which stimulate the reduction of gases that generate offensive odors. 2. Periodic monitoring of dumping is carried out, in order to identify the impact and know the operation of the WWTP 3. New sludge characterization programming for all ARE systems 4. Secondary treatment of wastewater, prior to discharge. With a removal percentage of 70% of the pollutant load	pH Temperature Chemical Oxygen Demand COD Biochemical Oxygen Demand BOD5 Total suspended solids Active substances to methylene blue (SAAM) Aluminum (Al)	There have been requirements when some parameters are not reached, AS defined in the SMP schedules, the necessary management measures are established and it is fulfilled in the following period.

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
Aguas de Malambo	DWPT Tesoro - Sludge Plant	Malambo marsh	ENA-IVH medium year Very high	Alteration in the quality of surface water resources	3.Physicochemical characterization and legal parameters, in laboratories certified by IDEAM 4.Weekly monitors for dumping, odors and discharges 5.Maintenance and removal of solids 3 times per year with ECPS	In the last characterization of the current year, the system complies with acceptable parameters according to current environmental regulations, resolution 0631 of 2015 Article 8, Dumping of wastewater (ARD) of the public service providers of sewerage to bodies of surface waters with a load less than or equal to 625.00 kg / day BOD5	0

Impacts associated with effluents - Grupo EPM 2020
Discharges from the WWTP Generation and Dumping Plants and others.

Company	Central Generation / DWPT / WWTP	Surface source into which it is discharged	Area with water stress	Significant positive or negative impacts	Impact Management	Indicate priority substances of concern	Number or incidents reported
Aguas del Oriente	Fafa los salados	Río Pantanillo	Very low according to IVH IDEAM, in the area of influence for a dry year and a half	Alteration in the quality of surface water resources	Characterization, diagnosis	The dumping complies with the recommended values for sedimentable solids and fats and oils and suspended solids in terms of permissible limits ACCORDING TO Resolution 631 of 2015	0
	Fafa Villa Elena I	Río Pantanillo	Very low according to IVH IDEAM, in the area of influence for a dry year and a half	Alteration in the quality of surface water resources	Characterization, diagnosis	The temperature and pH range found at the sampling points are within the acceptable limits according to Resolution	0
	Fafa Villa Elena II	Río Pantanillo	Very low according to IVH IDEAM, in the area of influence for a dry year and a half	Alteration in the quality of surface water resources	Characterization, diagnosis	The temperature and pH range found at the sampling points are within the acceptable limits according to Resolution	0

Impacts associated with effluents - Grupo EPM 2020 Discharges from the WWTP Generation and Dumping Plants and others.							
Company	**Central Generation / DWPT / WWTP**	**Surface source into which it is discharged**	**Area with water stress**	**Significant positive or negative impacts**	**Impact Management**	**Indicate priority substances of concern**	**Number or incidents reported**
Essa	PCH Palms	Not reported	ENA 2018 Mean year: Medium Dry Year: high	Improvement of physicochemical characteristics of water	Return to the riverbed with floating solids removed	N/A	0
	PCH La Cascada	Not reported	ENA 2018 Mean year: Low Dry Year: Mean				
CHEC	Intermediate	Rio Chinchiná	ENA 2018 IVH Average year: Medium IVH for dry year: high	There are no negative impacts due to the discharges of turbine waters, no monitoring is done	N/A	N/A	0
	Municipal	Rio Chinchiná	ENA 2018 IVH Average year: Medium IVH Dry year: high				
	Guacaica	Rio Chinchiná	ENA 2018 IVH Average year: Medium IVH Dry year: high				

Impacts associated with effluents - Grupo EPM 2020 Discharges from the WWTP Generation and Dumping Plants and others.							
Company	**Central Generation / DWPT / WWTP**	**Surface source into which it is discharged**	**Area with water stress**	**Significant positive or negative impacts**	**Impact Management**	**Indicate priority substances of concern**	**Number or incidents reported**
CHEC	Insula	Rio Campoalegre	ENA 2018 IVH Average year: Low IVH Dry year: high	There are no negative impacts due to the discharges of turbine waters, no monitoring is done	N/A	N/A	0
	Esmeralda	Rio Cauca	ENA 2018 IVH Average year: Medium IVH Dry year: high				
	San Francisco	Rio Cauca	ENA 2018 IVH Average year: Medium IVH Dry year: Medium				
Emvarias	Leachate treatment plant	Not reported	ENA 2018 IVH medium Porce River	Alteration in the quality of surface water resources	The leachate treatment plant mitigates the impact that the direct discharge of leachate into the river would cause	During 2020 there were no alerts in the characterization of the dumping in accordance with the provisions of Resolution 0631	0
	Medellín sewer		ENA 2018 IVH medium Porce River	Alteration in the quality of surface water resources	Treatment by Grupo EPM's WWTPs	BOD, COD, TSS, fats and oils according to the limits established in the 0631 regulation	1

The main discharges and dumpings generated by the operations of the Grupo EPM companies and the most relevant impacts associated with them are listed.

Contents GRI standards and own indicators

303-1	Water extraction by source.
303-2	Management of impacts related to water discharge
304-2	Significant impacts of activities, products and services on biodiversity
EU13	Comparison of biodiversity between compensated habitats and that of affected areas.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Elektra Noreste - ENSA

Hidroecológica del Teribe - HET

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Compañía Eléctrica de Guatemala - Eegsa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia - Norte de Santander

Colombia – Santander

Guatemala

Panamá

Businesss

Water

Sanitation

Electric power

Annexes

Back to content

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Andinobates bombetes	Amphibians	Colombia
Andinobates opisthomelas	Amphibians	Colombia
Bolitoglossa lozanoi	Amphibians	Colombia
Bolitoglossa ramosi	Amphibians	Colombia
Centrolene antioquiense	Amphibians	Colombia
Dendrobates truncatus	Amphibians	Colombia
Hyloscirtus antioquia	Amphibians	Colombia
Hyloxalus lehmanni	Amphibians	Colombia
Niceforonia adenobrachia	Amphibians	Colombia
Niceforonia latens	Amphibians	Colombia
Osornophryne percrassa	Amphibians	Colombia
Pristimantis aff. scoloblepharus	Amphibians	Colombia
Pristimantis dorsopictus	Amphibians	Colombia
Pristimantis scoloblepharus	Amphibians	Colombia
Pristimantis simoterus	Amphibians	Colombia
Rhinella nicefori	Amphibians	Colombia
Rulyrana susatamai	Amphibians	Colombia
Accipiter collaris	Birds	Colombia
Adelomyia melanogenys	Birds	Colombia
Aglaiocercus kingii	Birds	Colombia
Amazilia tzacatl	Birds	Colombia
Amazona amazonica	Birds	Colombia
Amazona autumnalis	Birds	Colombia
Amazona ochrocephala	Birds	Colombia
Andigena hypoglauca	Birds	Colombia
Anthracothorax nigricollis	Birds	Colombia
Ara ambiguus	Birds	Colombia
Ara ararauna	Birds	Colombia
Ara militaris	Birds	Colombia
Ara severus	Birds	Colombia
Asio stygius	Birds	Colombia
Bangsia melanochlamys	Birds	Colombia
Boissonneaua flBirdscens	Birds	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Bolborhynchus ferrugineifrons	Birds	Colombia
Brotogeris jugularis	Birds	Colombia
Buteo albonotatus	Birds	Colombia
Buteo brachyurus	Birds	Colombia
Buteo platypterus	Birds	Colombia
Buteogallus meridionalis	Birds	Colombia
Calidris subruficollis	Birds	Colombia
Campylopterus falcatus	Birds	Colombia
Capito hypoleucus	Birds	Colombia
Caracara cheriway	Birds	Colombia
Chaetocercus mulsant	Birds	Colombia
Chauna chavaria	Birds	Colombia
Chloropipo flavicapilla	Birds	Colombia
Chlorostilbon melanorhynchus	Birds	Colombia
Chondrohierax uncinatus	Birds	Colombia
Chrysolampis mosquitus	Birds	Colombia
Ciccaba nigrolineata	Birds	Colombia
Ciccaba virgata	Birds	Colombia
Coeligena coeligena	Birds	Colombia
Coeligena torquata	Birds	Colombia
Colibri coruscans	Birds	Colombia
Colibri delphinae	Birds	Colombia
Contopus cooperi	Birds	Colombia
Doryfera ludovicae	Birds	Colombia
Dysithamnus mentalis	Birds	Colombia
Dysithamnus occidentalis	Birds	Colombia
Elanus leucurus	Birds	Colombia
Eriocnemis derbyi	Birds	Colombia
Eubucco bourcierii	Birds	Colombia
Eupsittula pertinax	Birds	Colombia
Falco femoralis	Birds	Colombia
Falco peregrinus	Birds	Colombia
Falco rufigularis	Birds	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Falco sparverius	Birds	Colombia
Forpus conspicillatus	Birds	Colombia
Gallinago nobilis	Birds	Colombia
Gampsonyx swainsonii	Birds	Colombia
Geranoaetus albicaudatus	Birds	Colombia
Glaucis hirsutus	Birds	Colombia
Grallaria milleri	Birds	Colombia
Grallaria rufocinerea	Birds	Colombia
Grallaricula lineifrons	Birds	Colombia
Habia guturalis	Birds	Colombia
Hapalopsittaca amazonina	Birds	Colombia
Haplophaedia aureliae	Birds	Colombia
Herpetotheres cachinnans	Birds	Colombia
Hypopyrrhus pyrohypogaster	Birds	Colombia
Iridosornis porphyrocephalus	Birds	Colombia
Lafresnaya lafresnayi	Birds	Colombia
Leptosittaca branickii	Birds	Colombia
Megascops choliba	Birds	Colombia
Metallura tyrianthina	Birds	Colombia
Milvago chimachima	Birds	Colombia and Panamá
Ocreatus underwoodii	Birds	Colombia
Odontophorus hyperythrus	Birds	Colombia
Ognorhynchus icterotis	Birds	Colombia
Oxypogon stuebelii	Birds	Colombia
Oxyura jamaicensis	Birds	Colombia
Pandion haliaetus	Birds	Colombia
Passerina ciris	Birds	Colombia
Patagioenas subvinacea	Birds	Colombia
Phaethornis syrmatophorus	Birds	Colombia
Pionus menstruus	Birds	Colombia
Psittacara wagleri	Birds	Colombia
Pyroderus scutatus	Birds	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Ramphastos vitellinus	Birds	Colombia
Ramphastus ambiguus	Birds	Colombia
Rupornis magnirostris	Birds	Colombia and Panamá
Saltator cinctus	Birds	Colombia
Saucerottia saucerottei	Birds	Colombia
Scytalopus stilesi	Birds	Colombia
Sericossypha albocristata	Birds	Colombia
Setophaga cerulea	Birds	Colombia
Spatula cyanoptera	Birds	Colombia
Spizaetus isidori	Birds	Colombia
Spizaetus tyrannus	Birds	Colombia
Touit dilectissimus	Birds	Colombia
Tyto alba	Birds	Colombia
Uranomitra franciae	Birds	Colombia
Vermivora chrysoptera	Birds	Colombia
Vultur gryphus	Birds	Colombia
Abarema callejasii	Trees-Shrubs	Colombia
Aniba muca	Trees-Shrubs	Colombia
Aniba perutilis	Trees-Shrubs	Colombia
Aniba puchury-minor	Trees-Shrubs	Colombia
Annona deminuta	Trees-Shrubs	Colombia
Aptandra tubicina	Trees-Shrubs	Colombia
Brunellia subsessilis	Trees-Shrubs	Colombia
Caesalpinia ebano	Trees-Shrubs	Colombia
Cariniana pyriformis	Trees-Shrubs	Colombia
Caryocar glabrum	Trees-Shrubs	Colombia
Cavanillesia platanifolia	Trees-Shrubs	Colombia
Cedrela odorata	Trees-Shrubs	Colombia, Guatemala, El Salvador and Panamá
Clathrotropis brunnea	Trees-Shrubs	Colombia
Cnemidaria horrida	Trees-Shrubs	Colombia
Compsoneura claroensis	Trees-Shrubs	Colombia
Conostegia extinctoria	Trees-Shrubs	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Cordia protracta	Trees-Shrubs	Colombia
Dacryodes colombiana	Trees-Shrubs	Colombia
Dendrobangia boliviana	Trees-Shrubs	Colombia
Dussia macroprophyllata	Trees-Shrubs	Colombia
Dussia sp.	Trees-Shrubs	Colombia
Elaeagia pastoensis	Trees-Shrubs	Colombia
Geonoma chlamydostachys	Trees-Shrubs	Colombia
Graffenrieda grandifolia	Trees-Shrubs	Colombia
Gustavia dubia	Trees-Shrubs	Colombia
Gustavia romeroi	Trees-Shrubs	Colombia
Gustavia speciosa	Trees-Shrubs	Colombia
Handroantchus chrysanthus	Trees-Shrubs	Colombia
Hyptidendron arboreum	Trees-Shrubs	Colombia
Iryanthera megistocarpa	Trees-Shrubs	Colombia
Jacaranda mimosifolia	Trees-Shrubs	Colombia
Juglans neotropica	Trees-Shrubs	Colombia
Lecythis tuyrana	Trees-Shrubs	Colombia
Licania cabrerae	Trees-Shrubs	Colombia
Magnolia espinalii	Trees-Shrubs	Colombia
Magnolia sp. nov.2	Trees-Shrubs	Colombia
Magnolia yarumalensis	Trees-Shrubs	Colombia
Myroxylon balsamum	Trees-Shrubs	Colombia
Pachira quinata	Trees-Shrubs	Colombia
Peltogyne purpurea	Trees-Shrubs	Colombia
Podocarpus oleifolius	Trees-Shrubs	Colombia
Quercus humboldtii	Trees-Shrubs	Colombia
Retrophyllum rospigliosii	Trees-Shrubs	Colombia
Salvia pauciserrata subsp. Lasiocalycina	Trees-Shrubs	Colombia
Stephanopodium aptotum	Trees-Shrubs	Colombia
Swartzia oraria	Trees-Shrubs	Colombia
Swietenia macrophylla	Trees-Shrubs	Colombia
Vantanea cf. magdalenensis	Trees-Shrubs	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Acanthothecis sp.	Epiphytes	Colombia
Acianthera cf. Capillaris	Epiphytes	Colombia
Acroporium estrellae	Epiphytes	Colombia
Acroporium pungens	Epiphytes	Colombia
Aechmea longicuspis Baker	Epiphytes	Colombia
Amandinea brugierae	Epiphytes	Colombia
Anathallis acuminata	Epiphytes	Colombia
Anisomeridium sp.	Epiphytes	Colombia
Anthurium scandens	Epiphytes	Colombia
Archilejeunea parviflora	Epiphytes	Colombia
Arthonia cinnabarina	Epiphytes	Colombia
Arthonia sp	Epiphytes	Colombia
Arthopyrenia sp.	Epiphytes	Colombia
Astrothelium nitidiusculum	Epiphytes	Colombia
Astrothelium sp	Epiphytes	Colombia
Bacidia rubella	Epiphytes	Colombia
Bacidia sp.	Epiphytes	Colombia
Bacidiopsora squamulosula	Epiphytes	Colombia
Bathelium mastoideum	Epiphytes	Colombia
Bazzania cf. cuneistipula	Epiphytes	Colombia
Brassavola nodosa	Epiphytes	Colombia
Brigantiae leucoxantha	Epiphytes	Colombia
Bromeliadceae sp	Epiphytes	Colombia
Bryopteris filicina	Epiphytes	Colombia
Bryum argenteum	Epiphytes	Colombia
Bryum densifolium	Epiphytes	Colombia
Buellia sp.	Epiphytes	Colombia
Bulbothrix chowoensis	Epiphytes	Colombia
Bulbothrix laevigatula	Epiphytes	Colombia
Bulbothrix sp1	Epiphytes	Colombia
Bulbothrix sp2	Epiphytes	Colombia
Bulbothrix suffixa	Epiphytes	Colombia
Callicostella pallida	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Caloplaca cf. Luteominia	Epiphytes	Colombia
Caloplaca sp	Epiphytes	Colombia
Calymperes afzelii	Epiphytes	Colombia
Calymperes guildingii	Epiphytes	Colombia
Calymperes palisoti	Epiphytes	Colombia
Calymperes palisotii	Epiphytes	Colombia
Calypogeia Cf. tenax	Epiphytes	Colombia
Calypogeia peruviana	Epiphytes	Colombia
Campylocentrum polystachyum	Epiphytes	Colombia
Campylopus arctocarpus	Epiphytes	Colombia
Campylopus richardii	Epiphytes	Colombia
Canomaculina aff. conferenda	Epiphytes	Colombia
Canoparmelia sp	Epiphytes	Colombia
Catasetum cf tabulare	Epiphytes	Colombia
Catasetum sp.	Epiphytes	Colombia
Catopsis sessiliflora	Epiphytes	Colombia
Ceratolejeunea cornuta	Epiphytes	Colombia
Ceratolejeunea cubensis	Epiphytes	Colombia
Chapsa alborosella	Epiphytes	Colombia
Cheilolejeunea fragrantissima	Epiphytes	Colombia
Cheilolejeunea holostipa	Epiphytes	Colombia
Cheilolejeunea rigidula	Epiphytes	Colombia
Cheilolejeunea trifaria	Epiphytes	Colombia
Cheilolejeunea xanthocarpa	Epiphytes	Colombia
Chryso-hypnum diminutivum	Epiphytes	Colombia
Chrysothrix candelaris	Epiphytes	Colombia
Chrysothrix cf. candelaris	Epiphytes	Colombia
Chrysothrix xanthina	Epiphytes	Colombia
Cladonia aff macilenta	Epiphytes	Colombia
Cladonia confusa	Epiphytes	Colombia
Cladonia sp1	Epiphytes	Colombia
Cladonia sp2	Epiphytes	Colombia
Cladonia subdelicatula	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Coccocarpia erythroxili	Epiphytes	Colombia
Coccocarpia pellita	Epiphytes	Colombia
Coenogonium isidiiferum	Epiphytes	Colombia
Coenogonium sp.	Epiphytes	Colombia
Cololejeunea minutissima	Epiphytes	Colombia
Cololejeunea sp.	Epiphytes	Colombia
Comparettia falcata	Epiphytes	Colombia
Cresponea proximata	Epiphytes	Colombia
Cresponea sp.	Epiphytes	Colombia
Crossomitrium cf. patrisiae	Epiphytes	Colombia
CryWWTPrhena guatemalensis	Epiphytes	Colombia
Cryptothecia candida	Epiphytes	Colombia
Cryptothecia scripta	Epiphytes	Colombia
Cryptothecia sp	Epiphytes	Colombia
Cyrtochilum meirax	Epiphytes	Colombia
Dibaeis sp1	Epiphytes	Colombia
Dichaea angustisegmenta	Epiphytes	Colombia
Dichaea sp	Epiphytes	Colombia
Dictyonema glabratum	Epiphytes	Colombia
Dimerandra emarginata	Epiphytes	Colombia
Diplasiolejeunea cavifolia	Epiphytes	Colombia
Diplasiolejeunea cf. Pellucida	Epiphytes	Colombia
Dirinaria aff. Leopoldii	Epiphytes	Colombia
Dirinaria applanata	Epiphytes	Colombia
Dirinaria picta	Epiphytes	Colombia
Drepanolejeunea araucariae	Epiphytes	Colombia
Drepanolejeunea sp	Epiphytes	Colombia
Dyplolabia afzelii	Epiphytes	Colombia
Ectropothecium leptochaeton	Epiphytes	Colombia
Elleanthus cf. maculatus	Epiphytes	Colombia
Elleanthus purpureus	Epiphytes	Colombia
Elleanthus sp1	Epiphytes	Colombia
Encyclia sp.	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Entodontopsis leucostega	Epiphytes	Colombia
Epidendrum dentiferum	Epiphytes	Colombia
Epidendrum igneum	Epiphytes	Colombia
Epidendrum incomptum	Epiphytes	Colombia
Epidendrum melinanthum	Epiphytes	Colombia
Epidendrum ruizianum	Epiphytes	Colombia
Epidendrum scharfii	Epiphytes	Colombia
Epidendrum sp1	Epiphytes	Colombia
Epidendrum sp2	Epiphytes	Colombia
Epidendrum sp3	Epiphytes	Colombia
Epiphyllum phyllanthus	Epiphytes	Colombia
Erpodium coronatum	Epiphytes	Colombia
Fabronia ciliaris	Epiphytes	Colombia
Fissidens crispus	Epiphytes	Colombia
Fissidens steerei	Epiphytes	Colombia
Fissurina cf. incrustans	Epiphytes	Colombia
Fissurina dumastii	Epiphytes	Colombia
Fissurina sp	Epiphytes	Colombia
Frullania atrata	Epiphytes	Colombia
Frullania caulisequa	Epiphytes	Colombia
Frullania ericoides	Epiphytes	Colombia
Frullania exilis	Epiphytes	Colombia
Frullania kunzei	Epiphytes	Colombia
Frullania riojaneirensis	Epiphytes	Colombia
Frullania riojaneirensis	Epiphytes	Colombia
Frullania sp1.	Epiphytes	Colombia
Frullanoides densifolia	Epiphytes	Colombia
Gassicurtia rufofuscescens	Epiphytes	Colombia
Glyphis cicatricosa	Epiphytes	Colombia
Glyphis cicatricosa	Epiphytes	Colombia
Gomphichis cf. viscosa	Epiphytes	Colombia
Gongora gratulabunda	Epiphytes	Colombia
Graphidaceae sp2	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Graphis acharii	Epiphytes	Colombia
Graphis cf. arbusculaeformis	Epiphytes	Colombia
Graphis cf. isidiza	Epiphytes	Colombia
Graphis cf. gloriosensis	Epiphytes	Colombia
Graphis lineola	Epiphytes	Colombia
Graphis pilarensis	Epiphytes	Colombia
Graphis puiggarii	Epiphytes	Colombia
Graphis sp	Epiphytes	Colombia
Graphis sp2	Epiphytes	Colombia
Graphis superans	Epiphytes	Colombia
Graphis timidula	Epiphytes	Colombia
Graphis aff. Modesta	Epiphytes	Colombia
Guzmania lingulata	Epiphytes	Colombia
Guzmania mitis	Epiphytes	Colombia
Guzmania patula	Epiphytes	Colombia
Habenaria trifida	Epiphytes	Colombia
Harpalejeunea oxyphylla	Epiphytes	Colombia
Harpalejeunea tridens	Epiphytes	Colombia
Helicodontium capillare	Epiphytes	Colombia
Heliconia latispatha	Epiphytes	Colombia
Heliconia sp 1	Epiphytes	Colombia
Heliconia sp 2	Epiphytes	Colombia
Heliconia wagneriana	Epiphytes	Colombia
Helicophyllum torquatum	Epiphytes	Colombia
Henicodium geniculatum	Epiphytes	Colombia
Herpothallon antillarum	Epiphytes	Colombia
Herpothallon cf. Rubromaculatum	Epiphytes	Colombia
Herpothallon echinatum	Epiphytes	Colombia
Herpothallon rubrocinctum	Epiphytes	Colombia
Herpothallon sp	Epiphytes	Colombia
Herpothallon sp.	Epiphytes	Colombia
Herpothallon sp.	Epiphytes	Colombia
Heterodermia leucomelos	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Heterodermia leucomelos	Epiphytes	Colombia
Heterodermia reagens	Epiphytes	Colombia
Heterodermia sp	Epiphytes	Colombia
Heterodermia sp.2	Epiphytes	Colombia
Heterodermia speciosa	Epiphytes	Colombia
Hyperphyscia sp	Epiphytes	Colombia
Hypotrachyna sp	Epiphytes	Colombia
Isopterygium tenerum	Epiphytes	Colombia
Jacquiniella globosa	Epiphytes	Colombia
Lecanactis epileuca	Epiphytes	Colombia
Lecanora sp.	Epiphytes	Colombia
Lejeunea aff deplanata	Epiphytes	Colombia
Lejeunea cf lusoria	Epiphytes	Colombia
Lejeunea cf reflexistipula	Epiphytes	Colombia
Lejeunea flava	Epiphytes	Colombia
Lejeunea laetevirens	Epiphytes	Colombia
Lejeunea lusoria	Epiphytes	Colombia
Lejeunea phyllobola	Epiphytes	Colombia
Lejeunea sp1	Epiphytes	Colombia
Lejeunea sp2	Epiphytes	Colombia
Lejeunea sp3	Epiphytes	Colombia
Lejeunea sp4	Epiphytes	Colombia
Lejeunea trinitensis	Epiphytes	Colombia
Lepanthopsis acuminata	Epiphytes	Colombia
Lepidolejeunea cf cordifissa	Epiphytes	Colombia
Lepidolejeunea involuta	Epiphytes	Colombia
Lepidopilum scabrisetum	Epiphytes	Colombia
Lepraria incana	Epiphytes	Colombia
Lepraria sp.	Epiphytes	Colombia
Lepraria sp.	Epiphytes	Colombia
Leptogium cyanescens	Epiphytes	Colombia
Leptogium denticulatum	Epiphytes	Colombia
Leptogium isidiosellum	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Leptogium phyllocarpum	Epiphytes	Colombia
Leptogium sp.	Epiphytes	Colombia
Leptolejeunea elliptica	Epiphytes	Colombia
Leucobryum martianum	Epiphytes	Colombia
Lobaria peltigera	Epiphytes	Colombia
Lobaria sp	Epiphytes	Colombia
Lopezaria versicolor	Epiphytes	Colombia
Lophocolea bidentata	Epiphytes	Colombia
Lophocolea liebmanniana	Epiphytes	Colombia
Lopholejeunea subfusca	Epiphytes	Colombia
Lopholejeunea nigricans	Epiphytes	Colombia
Macromitrium guatemalense	Epiphytes	Colombia
Macromitrium podocarpi	Epiphytes	Colombia
Malaxis andicola	Epiphytes	Colombia
Malmidea ceylanica	Epiphytes	Colombia
Malmidea sp1	Epiphytes	Colombia
Masdevallia anisomorpha	Epiphytes	Colombia
Masdevallia fasciata	Epiphytes	Colombia
Masdevallia molossus	Epiphytes	Colombia
Masdevallia picturata	Epiphytes	Colombia
Maxillaria meridensis	Epiphytes	Colombia
Maxillaria porrecta	Epiphytes	Colombia
Maxillaria sp1 (sect. Mormolyca)	Epiphytes	Colombia
Maxillaria sp2	Epiphytes	Colombia
Maxillaria aequiloba	Epiphytes	Colombia
Maxillaria uncata	Epiphytes	Colombia
Maxillariella brevifolia	Epiphytes	Colombia
Mazosia sp.	Epiphytes	Colombia
Megalospora sp	Epiphytes	Colombia
Megalospora tuberculosa	Epiphytes	Colombia
Meteorium nigrescens	Epiphytes	Colombia
Metzgeria conjugata	Epiphytes	Colombia
Metzgeria sp1	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Microchilus sp	Epiphytes	Colombia
Microgramma percussa	Epiphytes	Colombia
Microlejeunea bullata	Epiphytes	Colombia
Microlejeunea cf. bullata	Epiphytes	Colombia
Mittenothamnium reptans	Epiphytes	Colombia
Monoblastia aff. Cypressi	Epiphytes	Colombia
Neckeropsis disticha	Epiphytes	Colombia
Neckeropsis undulata	Epiphytes	Colombia
Niphidium crassifolium	Epiphytes	Colombia
Notylia incurva	Epiphytes	Colombia
Ocellularia cocosensis	Epiphytes	Colombia
Ocellularia vezdana	Epiphytes	Colombia
Octoblepharum albidum	Epiphytes	Colombia
Oeceoclades maculata	Epiphytes	Colombia
Oncidium adelaidae	Epiphytes	Colombia
Oncidium obryzatum	Epiphytes	Colombia
Opegrapha sp.	Epiphytes	Colombia
Opegrapha viridis	Epiphytes	Colombia
Orchidaceae sp1	Epiphytes	Colombia
Orthostichella pentasticha	Epiphytes	Colombia
Pannaria sp.	Epiphytes	Colombia
Parmeliella cf. triptophylla	Epiphytes	Colombia
Parmeliella sp	Epiphytes	Colombia
Parmotrema tinctorum	Epiphytes	Colombia
Parmotrema conformatum	Epiphytes	Colombia
Parmotrema eciliatum	Epiphytes	Colombia
Parmotrema endosulphureum	Epiphytes	Colombia
Parmotrema perlatum	Epiphytes	Colombia
Parmotrema praesorediosum	Epiphytes	Colombia
Parmotrema sp	Epiphytes	Colombia
Parmotrema tinctorum	Epiphytes	Colombia
Pelekium minutulum	Epiphytes	Colombia
Pelekium involvens	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Pepinia pectinata	Epiphytes	Colombia
Peristeria elata	Epiphytes	Colombia
Pertusaria albescens	Epiphytes	Colombia
Pertusaria cf. multipuncta	Epiphytes	Colombia
Pertusaria sp1	Epiphytes	Colombia
Pertusaria sp2	Epiphytes	Colombia
Pertusaria sp3	Epiphytes	Colombia
Phaeographis aff. Fusca	Epiphytes	Colombia
Phaeographis cf. dendritica	Epiphytes	Colombia
Phaeophyscia aff. Hirsuta	Epiphytes	Colombia
Philonotis sp	Epiphytes	Colombia
Phlebodium decumanum.	Epiphytes	Colombia
Phyllobaeis imbricata	Epiphytes	Colombia
Phyllopsora cf. buettneri	Epiphytes	Colombia
Phyllopsora corallina	Epiphytes	Colombia
Phyllopsora sp.	Epiphytes	Colombia
Physcia aipolia	Epiphytes	Colombia
Physcia atrostriata	Epiphytes	Colombia
Physcia convexa	Epiphytes	Colombia
Physcia integrata	Epiphytes	Colombia
Physcia sp.	Epiphytes	Colombia
Physcia sp.	Epiphytes	Colombia
Pilosium chlorophyllum	Epiphytes	Colombia
Pilotrichella flexilis	Epiphytes	Colombia
Pilotrichum bipinnatum	Epiphytes	Colombia
Pilotrichum fendleri	Epiphytes	Colombia
Pitcairnia lindae	Epiphytes	Colombia
Pitcairnia megasepala	Epiphytes	Colombia
Pitcairnia sp	Epiphytes	Colombia
Plagiochila aerea	Epiphytes	Colombia
Plagiochila sp1	Epiphytes	Colombia
Plagiochila sp2	Epiphytes	Colombia
Plagiochila sp3	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Plagiochila sp4	Epiphytes	Colombia
Plagiochila sp5	Epiphytes	Colombia
Plagiochila vincentina	Epiphytes	Colombia
Platygramme colubrosa	Epiphytes	Colombia
Platygramme sp	Epiphytes	Colombia
Platystele consobrina	Epiphytes	Colombia
Platystele densiflora	Epiphytes	Colombia
Platystele misasiana	Epiphytes	Colombia
Pleurothallis batillaceae	Epiphytes	Colombia
Pleurothallis cordata	Epiphytes	Colombia
Pleurothallopsis aff. striata	Epiphytes	Colombia
Polystachya foliosa	Epiphytes	Colombia
Polystachya foliosa	Epiphytes	Colombia
Polystachya sp	Epiphytes	Colombia
Porella crispata	Epiphytes	Colombia
Porina conspersa	Epiphytes	Colombia
Porotrichum sp	Epiphytes	Colombia
Prescottia stachyodes	Epiphytes	Colombia
Prionolejeunea cf muricatoserrulata	Epiphytes	Colombia
Prosthechea grammatoglossa	Epiphytes	Colombia
Psygmorchis sp.	Epiphytes	Colombia
Pyrenula mamillana	Epiphytes	Colombia
Pyrenula dermatodes	Epiphytes	Colombia
Pyrenula erumpens	Epiphytes	Colombia
Pyrenula massariospora	Epiphytes	Colombia
Pyrenula microcarpa	Epiphytes	Colombia
Pyrenula nitidula	Epiphytes	Colombia
Pyrenula pyrenuloides	Epiphytes	Colombia
Pyrenula sp1	Epiphytes	Colombia
Pyrenula sp2	Epiphytes	Colombia
Pyrrhobryum spiniforme	Epiphytes	Colombia
Pyxine cocoes	Epiphytes	Colombia
Pyxine subcinerea	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Racinaea adpresa	Epiphytes	Colombia
Racinaea spiculosa	Epiphytes	Colombia
Racinaea tenuispica	Epiphytes	Colombia
Racopilum tomentosum	Epiphytes	Colombia
Radula sp1	Epiphytes	Colombia
Radula sp2	Epiphytes	Colombia
Ramalina sp	Epiphytes	Colombia
Rectolejeunea berteroana	Epiphytes	Colombia
Rectolejeunea cf berteroana	Epiphytes	Colombia
Rhetinantha acuminata	Epiphytes	Colombia
Rhizocarpon aff lecanorinum	Epiphytes	Colombia
Riccardia sp	Epiphytes	Colombia
Rodriguezia granadensis	Epiphytes	Colombia
Rudolfiella sp.	Epiphytes	Colombia
Scaphyglottis cf. aurea	Epiphytes	Colombia
Scaphyglottis cf. Boliviensis	Epiphytes	Colombia
Scaphyglottis modesta	Epiphytes	Colombia
Scaphyglottis violacea	Epiphytes	Colombia
Sematophyllum subpinnatum	Epiphytes	Colombia
Sematophyllum subsimplex	Epiphytes	Colombia
Sobralia virginalis	Epiphytes	Colombia
Sphagnum sparsum	Epiphytes	Colombia
Squamidium leucotrichum	Epiphytes	Colombia
Stanhopea sp	Epiphytes	Colombia
Stelis maderoi	Epiphytes	Colombia
Stelis sp1	Epiphytes	Colombia
Stelis sp2	Epiphytes	Colombia
Stelis sp3	Epiphytes	Colombia
Stereocaulon sp	Epiphytes	Colombia
Sticta beauvoisii	Epiphytes	Colombia
Sticta pseudobeauvoisii	Epiphytes	Colombia
Sticta sp1	Epiphytes	Colombia
Sticta sp2	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Stictolejeunea squamata	Epiphytes	Colombia
Stirtonia byssoidea	Epiphytes	Colombia
Symbiezidium transversale	Epiphytes	Colombia
Symphyogyna aspera	Epiphytes	Colombia
Symphyogyna brasiliensis	Epiphytes	Colombia
Syntrichia sp.	Epiphytes	Colombia
Syringothecium sprucei	Epiphytes	Colombia
Syrrhopodon cf rigidus	Epiphytes	Colombia
Syrrhopodon gaudichaudii	Epiphytes	Colombia
Syrrhopodon hornschuchii	Epiphytes	Colombia
Syrrhopodon incompletus var. berteroanus	Epiphytes	Colombia
Syrrhopodon parasiticus	Epiphytes	Colombia
Syrrhopodon prolifer	Epiphytes	Colombia
Taxithelium planum	Epiphytes	Colombia
Telaranea diacantha	Epiphytes	Colombia
Thelotrema conveniens	Epiphytes	Colombia
Thelotrema sp1	Epiphytes	Colombia
Thelotrema sp2	Epiphytes	Colombia
Thelotremoidea sp	Epiphytes	Colombia
Thuidium peruvianum	Epiphytes	Colombia
Tillandsia cf. Fendleri	Epiphytes	Colombia
Tillandsia clavigera	Epiphytes	Colombia
Tillandsia complanata	Epiphytes	Colombia
Tillandsia confinis	Epiphytes	Colombia
Tillandsia elongata	Epiphytes	Colombia
Tillandsia elongata	Epiphytes	Colombia
Tillandsia fasciculata	Epiphytes	Colombia
Tillandsia fendleri	Epiphytes	Colombia
Tillandsia flexuosa	Epiphytes	Colombia
Tillandsia recurvata	Epiphytes	Colombia
Tillandsia recurvata	Epiphytes	Colombia
Tillandsia sp 1	Epiphytes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Trichosteleum fluviale	Epiphytes	Colombia
Trigonidium egertonianum	Epiphytes	Colombia
Trigonidium seemannii	Epiphytes	Colombia
Trizeuxis falcata	Epiphytes	Colombia
Trypethelium eluteriae	Epiphytes	Colombia
Trypethelium eluteriae	Epiphytes	Colombia
Trypethelium eluteridae	Epiphytes	Colombia
Trypethelium tropicum	Epiphytes	Colombia
Usnea ceratina	Epiphytes	Colombia
Usnea flavocardia	Epiphytes	Colombia
Usnea sanctae-ritae	Epiphytes	Colombia
Usnea sp	Epiphytes	Colombia
Vanilla planifolia	Epiphytes	Colombia
Vesicularia vesicularis	Epiphytes	Colombia
Vriesea cf. elata	Epiphytes	Colombia
Vriesea incurva	Epiphytes	Colombia
Xanthoparmelia sp	Epiphytes	Colombia
Zelometeorium patulum	Epiphytes	Colombia
Bactris gasipaes var. Chichagui	Palms	Colombia
Ceroxylon vogelianum	Palms	Colombia
Dypsis lutescens	Palms	Colombia
Elaeis oleifera	Palms	Colombia
Syagrus sancona	Palms	Colombia
Wettinia hirsuta	Palms	Colombia
Wettinia microcarpa	Palms	Colombia
Alsophila cuspidata	Tree ferns	Colombia
Alsophila erinacea	Tree ferns	Colombia
Cyathea a horrida	Tree ferns	Colombia
Cyathea andina	Tree ferns	Colombia
Cyathea aurea	Tree ferns	Colombia
Cyathea ebenina	Tree ferns	Colombia
Cyathea horrida	Tree ferns	Colombia
Cyathea lockwoodiana	Tree ferns	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Cyathea microdonta	Tree ferns	Colombia
Cyathea mucilagina	Tree ferns	Colombia
Cyathea paisa sp.	Tree ferns	Colombia
Cyathea poeppigii	Tree ferns	Colombia
Cyathea pungens	Tree ferns	Colombia
Cyathea sp.	Tree ferns	Colombia
Cyathea squamipes	Tree ferns	Colombia
Cyathea poeppigii	Tree ferns	Colombia
Alouatta palliata	Mammals	Colombia and Panamá
Alouatta seniculus	Mammals	Colombia
Aotus griseimembra	Mammals	Colombia
Aotus lemurinus	Mammals	Colombia
Ateles hybridus hybridus	Mammals	Colombia
Bassaricyon neblina	Mammals	Colombia
Cerdocyon thous	Mammals	Colombia
Cuniculus taczanowskii	Mammals	Colombia
Dinomys branickii	Mammals	Colombia
Herpailurus yagouaroundi	Mammals	Colombia
Leopardus pardalis	Mammals	Colombia and Panamá
Leopardus tigrinus	Mammals	Colombia
Leopardus wiedii	Mammals	Colombia and Panamá
Lontra longicaudis	Mammals	Colombia
Mazama rufina	Mammals	Colombia
Mazama sp.	Mammals	Colombia
Mustela felipei	Mammals	Colombia
Odocoileus cariacou	Mammals	Colombia
Pecari tajacu	Mammals	Colombia and Panamá
Puma concolor	Mammals	Colombia and Panamá
Saguinus leucopus	Mammals	Colombia
Saguinus oedipus	Mammals	Colombia
Sylvilagus brasiliensis	Mammals	Colombia and Panamá
Tapirus pinchaque	Mammals	Colombia
Abramites eques	Fishes	Colombia

List of threatened species - Grupo EPM - IDSOS 2020		
Scientific name	**Biological group**	**Countries**
Ageneiosus pardalis	Fishes	Colombia
Brycon henni	Fishes	Colombia
Brycon moorei	Fishes	Colombia
Characidium phoxocephalum	Fishes	Colombia
Curimata mivartii	Fishes	Colombia
Cynopotamus magdalenae	Fishes	Colombia
Ichthyoelephas longirostris	Fishes	Colombia
Pimelodus grosskopfii	Fishes	Colombia
Prochilodus magdalenae	Fishes	Colombia
Pseudoplatystoma magdaleniatum	Fishes	Colombia
Salminus affinis	Fishes	Colombia
Sorubim cuspicaudus	Fishes	Colombia
Boa constrictor	Reptiles	Colombia
Chelonoidis carbonarius	Reptiles	Colombia
Clelia clelia	Reptiles	Colombia
Epicrates maurus	Reptiles	Colombia
Iguana iguana	Reptiles	Colombia and Panamá
Kinosternon leucostomum	Reptiles	Colombia
Podocnemis lewyana	Reptiles	Colombia
Riama columbiana	Reptiles	Colombia
Trachemys callirostris	Reptiles	Colombia

Organizational climate

Back to content

Organizational climate

It refers to the collective perception of employees regarding the Company's practices, policies, structure, processes and systems, which impact the human environment in which daily work takes place.

Importance

It allows identifying the perception of employees, their commitment and productivity in their work environment, and therefore in the achievement of business objectives and their contribution to the organizational purpose. It generates social value for the Grupo EPM People interest group and the subsidiaries of the business group, and extends it to other interest groups in terms of trust and legitimacy.

Management in 2020

In the business field, 2020 invited us to review, frame and adapt organizational contexts to a new reality.

The situation generated by the health emergency of COVID-19 generated challenges in the development of skills to act in transitory and continuously changing scenarios.

The conversation was undoubtedly a mobilizer that allowed, among other issues, to wonder about the sense that unites and articulates the EPM Group and challenged the entire Organization to act in transitory and continuously revisable scenarios, fostering spaces for co-inspiration and co-creation for the realization of common projects, thus strengthening the adaptability capacity.

Although the organizational climate is important, as a material issue, today the Organization has other mechanisms to identify and manage relevant aspects regarding the perception, commitment, productivity and risk of the employees. Understanding its impact, since 2019 a meticulous, interdisciplinary and networked work has been carried out, in conjunction

with the entire business group, with the aim of making the transition towards a mechanism of greater scope and impact that, in addition to measuring, effectively contributes to the organizational purpose.

During 2020, the subsidiaries carried out this analysis internally and generated spaces for conversation and co-creation that significantly added to this process. A roadmap was proposed to review adaptability as a material issue and all the aspects associated with it. It was a powerful and enriching exercise, even so, the review and analysis process CONTINUES, always with the aim of reaching agreements and achieving the best results from the sustainability point of view for Grupo EPM People.

Result of the organizational climate measurement

Companies	2018	2019	2020
Adasa	0%	0%	70%
Emvarias	0%	0%	75%
Delsur	81%	81%	81%
ENSA	74%	76%	86%

Source: Human Talent and Organizational Development Vice Presidency

** Taking into account that it is in a transition process, and respecting some particular needs, the subsidiaries Delsur, ENSA, Adasa and Emvarias, carried out climate measurements during 2020, collecting valuable findings that are added to the networking that is being carried out.*

Sustainable Development Goals



Associated stakeholders

- Clients and users
- Grupo EPM people
- Community
- Suppliers and contractors

GRI standards Contents and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
EPM - 02	Results of the organizational climate measurement.

Scope and coverage

Companies

Elektra Northeast - ENSA

Distribuidora de Electricidad del Sur - Delsur

Aguas de Antofagasta - Adasa

Various Companies of Medellín - Emvarias

Geography

Colombia – Antioquia

Panama

El Salvador

Chile

Businesses

Water

Sanitation

Electric power

Responsible procurement for local development

Back to content

Responsible procurement for local development

Procurement criteria and practices that promote sustainable development and competitiveness in the territories where Grupo EPM has a presence.

Develop local capacities and promote sustainability with practices that encourage the local business fabric.

Importance

It is a fundamental tool to leverage the sustainability and competitiveness of the territories. Potentially strengthens the economic dynamics with income for the community and promotes local business fabric. It contributes to improving the confidence and reputation of the Grupo EPM before its stakeholders, as well as avoiding pressure from demands outside its business scope that generate less value in terms of development.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Purchasing and procurement	Generation of local capacities	Comply with the supplier development plan identified for the year and promote external collaboration networks with companies from different economic sectors.	**EPM**	Through the PARES Group and as a result of the contingency caused by COVID-19, 6 virtual conversations are held with approximately 1,490 participants, to help this interest group in the reactivation of business activity and the proper implementation and use of biosafety protocols.	**Total**
Strengthening and development of suppliers	Generation of local capacities	Put the water skills school into operation and start level II training of the thermofusion and electrofusion courses to achieve accreditation in labor competencies.	**EPM**	The first school of skills in the water sector in Colombia was inaugurated on November 12, 2020, with this, the training processes in which the employees of contractor companies and private installers participated. Videos and app were made in the different school modules.	**Total**

Challenges 2021

Program, project, initiative or action	Management emphasis	Challenges	Company	Business	Geography
Strengthening and development of suppliers	Generation of local capacities	Execute the supplier development work plan defined for 2021 through the procurement of a consulting process.	**EPM**	Energy and Gas	**Colombia-Antioquia**
Human Rights in the supply chain		Execute the work plan identified with Guias Colombia for the strengthening of Human Rights in the supply chain.	**EPM**	Energy T&D	**Colombia**

Sustainable Development Goals





Related stakeholders

- Community
- State
- Suppliers and contractors

GRI standards Contents and own indicators

102 - 9	Supply chain.
103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
204 - 1	Proportion of spending on local suppliers.
EPM - 06	Number and value of social procurement contracts.
EPM - 07	Number, value and type of contracts in the Grupo EPM.
EPM - 08	External employment created in Grupo EPM contracts.
EPM - 09	Suppliers' satisfaction.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas de Malambo

Aguas Nacionales EPM

Aguas Regionales EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Empresa de Aguas del Oriente Antioqueño

Electrificadora de Santander - ESSA

Empresas Varias de Medellín - Emvarias

Aguas de Antofagasta - Adasa

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Tecnología Intercontinental - Ticsa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

México

Guatemala

El Salvador

Panamá

Business

Agua

Sanitation

Electricity

Gas

Engagement with suppliers and contractors

Back to content

Engagement with suppliers and contractors

The engagement plan with suppliers and contractors, known as Recyproco, promotes interaction, communication and implementation of different mechanisms for dialogue, consultation and participation of the Grupo EPM with its suppliers and contractors.

Performance in 2020

Work was done on different actions aimed at strengthening the relationship and communication with suppliers and contractors, with a special emphasis on what is related to COVID-19 through monitoring with biosafety protocols and holding virtual meetings, with the support of the entities ARL Sura y Colmena, Mayor's Office of Medellín, Chamber of Commerce of Medellín, among others.

Service channels were strengthened, a WhatsApp Business was created for suppliers, and communication campaigns associated with specific topics such as gender equality and inclusion and electronic invoicing were carried out.

The events held during 2020 are listed below to promote dialogue, relationships, information and feedback with suppliers and contractors, both in EPM and in the subsidiaries in Colombia of energy, waters and Emvarias.

Number of events	Number of attendees	Company
24 virtual events	4,595	EPM
23 virtual events	2,952	Subsidiaries in Colombia

The contractor loyalty study was carried out, where a result of 54.89 points was obtained, as a result of the perception of suppliers and contractors regarding satisfaction in their interaction with the processes, the continuity of an ongoing interaction with EPM and the level of recommendation with peer companies.

Compared to 2019, there was a decrease in the result, due to the effects that the health emergency of COVID-19 created in some contracts.

In the contractor satisfaction study, the Organization obtained a result of 89.53 points, which placed it in a "Good" range in terms of the scale used by the study.

Indicator	Result 2019	Result 2020
Contractor loyalty	60.9	54.89
Contractor satisfaction	89.7	89.53

Actions taken in relation to the emergency created by COVID-19

- 6 virtual talks held with the support of Grupo Pares related to the reactivation of companies from the health emergency caused by COVID-19.
- 68 communications sent with information of interest on matters related to the supply chain, measured by COVID-19, electronic invoicing, virtual events, gender equality and inclusion, among others.
- 24 virtual events in EPM and 23 in the national subsidiaries in which information related to the procurement of the Grupo EPM, the information systems that support it, health and safety at work, asset management, among others, was shared.
- Activation of the WhatsApp Business channel from July 21, with 5 categories: goods, works, maintenance and operation, professional services and social procurement. Through this medium, newsletters, invitations to events, communication and educational campaigns related to COVID-19, gender equality, diversity and inclusion were shared.
- 11 newsletters posted to Ariba's supplier and contractor database.
- 2 articles on interoperability and the inauguration of the first School of Skills in the Water Sector, published on the social network LinkedIn.

Various actions were developed to strengthen the relationship between suppliers and contractors, including:

- Enabling the website www.grupopares.com.co in order to offer a platform that will link the supply and demand of goods and services related to the COVID-19 emergency as an option to address the crisis. This initiative was led with Grupo Pares, in which

EPM participates together with other anchor companies in Colombia to promote the development of suppliers.

- Self-diagnosis based on what is proposed by Guías Colombia for the due diligence of Human Rights risks (HR) in the supply chain. EPM, EDEQ, CHEC, CENS and Emvarias participated.
- 8 incidents served at EPM related to the mechanism for handling complaints related to human rights for contractor employees. In the energy subsidiary CENS, the mechanism was implemented, the process was documented and operations began in August 2020. Likewise, work began with the subsidiaries ESSA and CHEC to initiate the documentation associated with the mechanism.
- Enabling the weekly COVID-19 questionnaire for companies with active contracts with EPM, to monitor contagion weekly and define improvement actions with each company.
- Virtual event "Did you know that the evaluation of the performance of contractors will impact the evaluation of offers in the procurement and purchasing processes?", Where the new way of evaluating the offers and the impact of the evaluation of the performance of contractors was explained.
- Support communication strategy so that contractors could provide their services in the face of the restrictions created by the national regulations associated with the management of COVID-19.
- 4 events held on "Do you know how to contract with Grupo EPM?". With this same format, there was participation in FISE, the International Electricity Sector Fair, held in September.
- Development of the "AMI (Advanced Measurement Infrastructure) EPM Interoperability Challenge" with the formation of 18 teams and the participation of 27 potential suppliers.
- Realization of the event "Asset Management for suppliers and contractors".
- Annual event with suppliers and contractors of the Grupo EPM, virtual modality, in which nearly a thousand people participated.





GRI standards Contents and own indicators

102 - 9 Supply chain.
EPM - 09 Suppliers' satisfaction.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas de Malambo

Aguas Nacionales EPM

Aguas Regionales EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Empresa de Aguas del Oriente Antioqueño

Electrificadora de Santander - ESSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico

Business

Water
Electricity
Sanitation
Gas

Strengthening and development of suppliers and contractors

Back to content

Strengthening and development of suppliers and contractors

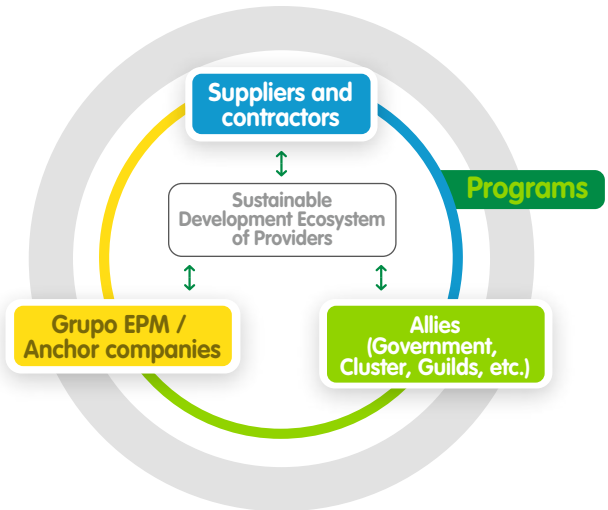
The Grupo EPM encourages the strengthening of the local business fabric in the regions where it has a presence, through the procurement and development of capacities in its suppliers and contractors.

For EPM, the objective of strengthening and developing suppliers and contractors is to increase, in the short, medium and long term, the competitiveness and sustainability of the production chains through the proactive relationship between the Grupo EPM and this interest group, generating trust to create processes of specialization and complementation that benefit the parties, articulating the strategic direction of both to improve economic, social and environmental conditions.

The "sustainable supplier development ecosystem" was consolidated through the implementation of different initiatives, connection with allies and creation of workspaces with suppliers, to leverage in them the development of capacities and fulfill the purpose of promoting competitiveness and sustainability of the parties through strategies such as the Water Sector Industrialization Program - PISA, and the participation of private and government allies, unions, clusters, among others.

Sustainable ecosystem of suppliers and contractors of Grupo EPM

Development program for suppliers and contractors in 2020



Water Sector Industrialization Program - PISA

- Electro and thermofusion course - 5th cohort with eight people trained. Total people trained in the five cohorts 227.
- School of water skills, face-to-face modality. Inauguration event on November 22, 2020.
- School of water skills, face-to-face modality. Enabling modules through SENA's *Google Class Room* platform.
- Resolution 0330 of 2017 - Labor competencies of the water sector. Training process for evaluators of the personnel of the contractor companies.

Grupo Pares (six virtual conversations during the contingency for COVID-19) Total attendees: 1.490.

572

PISA: Water Sector Industrialization Program

- Initiative that calls on companies linked to the water sector (aqueduct and wastewater) to improve the productivity and competitiveness of these organizations and the country based on the training and specialization of human resources from suppliers and contractors, including EPM personnel in the different levels (operational, technical, technological, professional and specialist). In this program, 227 people were trained in three sections on the topics of electro and thermofusion. Likewise, the validation process of the documentation of the personnel nominated by the procurement firms for the training of coaches as evaluators in the process of certification of labor competencies required for the sector was carried out with SENA.

EDA: Skills Training School

- It allows to improve the skills and abilities of officers and assistants in the construction, operation and maintenance of the EPM sewer and aqueduct networks. The school operates through a training camp, with 12 modules, where the staff is trained and develops skills in trades such as: shoring, electro and thermofusion, filling, paving, handling of basic tools, among others, complying with technical standards and health and safety at work specific for this type of activities. On November 12, 2020, the first School of Skills of the Water Sector in Colombia was officially inaugurated.

Supplier development program with Grupo Pares

- Its objective is to promote external collaboration networks with companies from different economic sectors with active programs aimed at the development and strengthening of suppliers, to implement strategies that contribute to improving the productivity and competitiveness of the sectors and the country through the strengthening of suppliers and contractors. Grupo Pares is made up of about 40 anchor companies. During 2020 with the contingency caused by COVID-19, and in order to help the interest group Suppliers and contractors in the reactivation of business activity, 6 virtual talks were held with an attendance of approximately 1,490 participants.





Photographs PISA Training. Electro and thermofusion courses with SENA.

GRI standards Contents and own indicators

102 - 9 Supply chain.
EPM - 09 Suppliers' satisfaction.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas de Malambo

Aguas Nacionales EPM

Aguas Regionales EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Empresa de Aguas del Oriente Antioqueño

Electrificadora de Santander - ESSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico

Business

Water
Electricity
Sanitation
Gas

Purchasing and procurement

Back to content

Purchasing and procurement

The purpose of procurement goods and services is to satisfy the needs of the Organization's operation and administration, and to support social and environmental policies to contribute to the sustainable development of the territories where Grupo EPM has a presence.

Performance in 2020

The participation in the Governance projects of Guatemala and El Salvador in order to strengthen the supply chain of those countries is highlighted, as well as the different transactions with the subsidiaries ENSA (Panama), Distribuidora Eléctrica Delsur (El Salvador) and Empresa Eléctrica de Guatemala SA - Eegsa, to make joint purchases.

Support for the Ituango Hydroelectric Project through the temporary importation and re-export of equipment to continue service to the contingency and support through advisory services and economic evaluations in the acquisition of new equipment.

Grupo EPM procurement

	2018	2019	2020
Number of contracts	31,694	48,333	48,454
Value of contracts (COP millions)	5,724,682	4,646,121	6,911,572

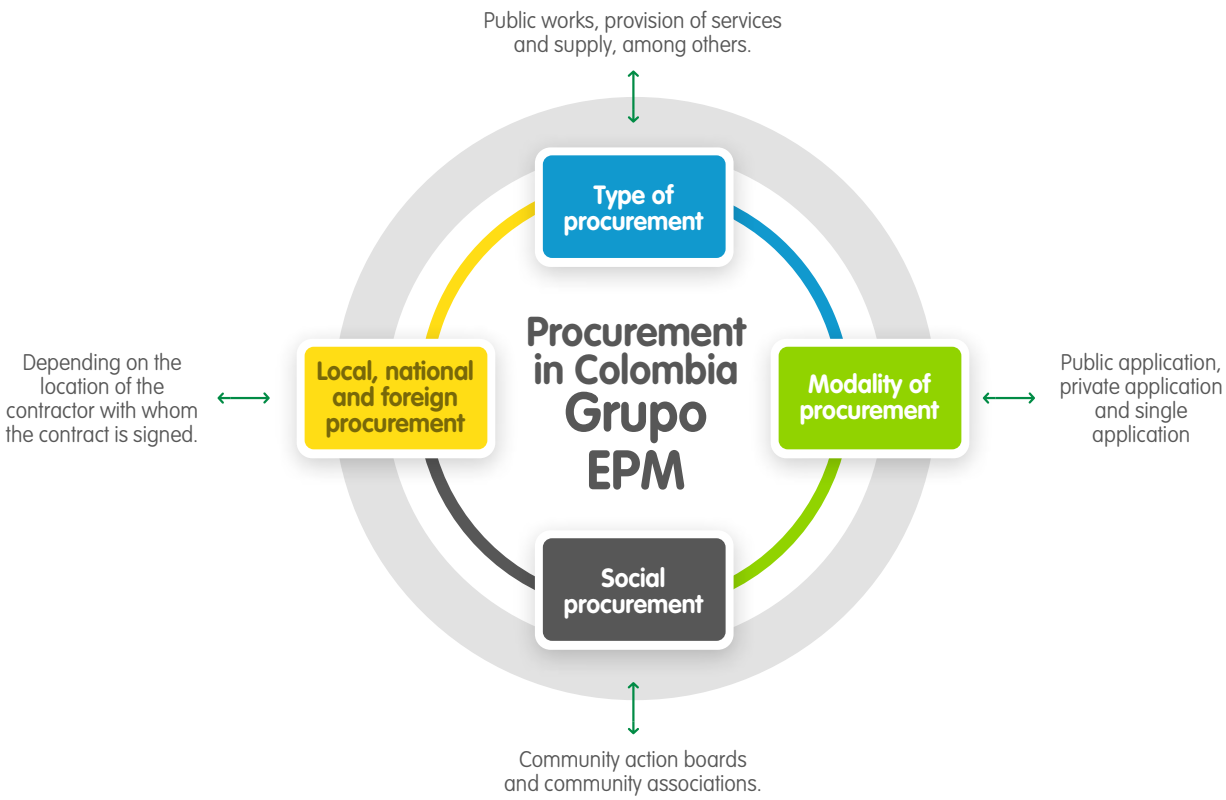
EPM procurement in 2020 was mainly related to contracts for the supply of goods and services, provision of services and consulting.

Grupo EPM total procurement						
Activity	2018		2019		2020	
	Number of Contracts	Contract value (million COP)	Number of Contracts	Contract value (million COP)	Number of Contracts	Contract value (million COP)
EPM	27,551	4,251,922	39,270	3,320,730	42,879	5,425,266
Aguas de Malambo	109	39,335	115	17,367	93	6,638
Aguas Nacionales EPM	35	13,415		0	456	41,253
Aguas Regionales	100	25,253	193	32,489	189	45,041
Empresa de Aguas de Oriente Antioqueño	31	1,006	37	1,885	59	2,134
Emvarias	190	178,667	166	154,066	213	163,615
CHEC	1,472	114,830	1,232	115,290	1,226	131,022
CENS	411	212,711	328	86,545	398	149,692
ESSA	531	528,674	614	181,636	471	271,124
EDEQ	240	31,680	486	110,117	371	49,155
EPRio	52	14,627	31	137,272	NA	NA
Adasa	109	123,581	153	183,298	154	191,977
Delsur - El Salvador	46	14,022	36	7,838	27	20,714
Eegsa - Guatemala	651	24,797	5,534	164,441	1,763	160,567
ENSA - Panamá	83	66,156	86	107,292	110	243,164
EPM Chile	8	729	NA	NA	NA	NA
HET - Panamá	0	0	4	1,815	8	3,205
Ticsa - México	75	83,277	48	24,041	37	7,006
Total procurement of Grupo EPM	**31,694**	**5,724,682**	**48,333**	**4,646,121**	**48,454**	**6,911,572**

Source: Shared Services and Supplies Vice Presidency

Efficient practices have been incorporated that allow adding greater value to the different areas of the Company with specialized purchasing methodologies, management by categories, eligibility lists, strategic allies, supply contracts, operational purchases (with greater participation of local suppliers) and joint purchases (Grupo EPM companies). In this way, the capacities of different local, regional and national actors were involved, with the final purpose of obtaining goods and services in the required time, at a fair price, in efficient quantities and with compliance with the requested technical specifications. This is how the Organization seeks the integration of economic, social, ethical and environmental criteria in the acceptance of contracts.

Classification of Grupo EPM procurement in Colombia



The amount and values correspond to what was signed in each of the years by the Grupo EPM companies located in Colombia. The values are expressed in millions of Colombian pesos.

Type of procurement in Colombia

Type of procurement in companies of Grupo EPM in Colombia

Type of contract	2018		2019		2020	
	Number of Contracts	Contract value (million COP)	Number of Contracts	Contract value (million COP)	Number of Contracts	Contract value (million COP)
Supply of goods and services	28,204	2,589,588	39,979	1,965,685	43,562	3,468,968
Provision of services	1,325	1,077,302	1,539	1,025,709	1,743	1,278,432
Others	672	756,779	492	333,815	285	380,785
Works contracts	134	722,129	143	621,575	196	971,915
Personal property and minor purchases	251	164,656	172	74,094	415	23,507
Consultancy	102	81,405	108	71,326	101	109,086
Advertising agreements and relationships	34	20,261	40	65,193	53	52,246
Total	**30,722**	**5,412,120**	**42,473**	**4,157,397**	**46,355**	**6,284,940**

Source: Shared Services and Supplies Vice Presidency

Procurement by modality - Colombia

Modality	2018		2019		2020	
	Number of contracts	Contract value	Number of contracts	Contract value	Number of contracts	Contract value
Public request for offers	7,678	3,477,936	7,155	2,050,233	7,821	4,607,181
Private request for offers	21,634	1,086,614	33,981	363,003	36,801	406,806
Single offer resquest	1,410	847,569	1,337	1,744,161	1,733	1,270,953
Total	30,722	5,412,120	42,473	4,157,397	46,355	6,284,940

The increase in the public request for an offer was mainly due to the purchase of energy in the regulated market. The amount and the values correspond to what was signed in each of the years by the Grupo EPM companies located in Colombia. The values are expressed in millions of Colombian pesos.

In 2020, managed procurement modalities were: PUBLIC solicitation of an offer by 73%, ONLY 20% RFP and RFP private 6%.

The modalities are combined with other purchases that, due to their characteristics, are not processed directly through the supply chain but directly with specialized areas, such as: energy purchase, gas transportation, real estate and special projects, among others.

Procurement is a fundamental lever that seeks to promote sustainable development and competitiveness in the territories where Grupo EPM is present, improving economic dynamics and generating local capacities.

Social procurement

Strategy with which Grupo EPM contracts works and services with community action boards and associations of community action boards, with the purpose of contributing to the strengthening of communities and the sustainable development of the territories in which it operates.

It is supported by normative, procedural and management resources that, without detriment to transparency, economic convenience and technical and legal rigor, favor the inclusion of suppliers and contractors from the base of the pyramid, which otherwise could not be taken into account.

In social procurement, the following is sought:

- Concentric action for the generation of employment, that is, in the area of influence of the project or service required, in such a way that it effectively contributes to the leverage of the development of the communities in the areas of influence of the national companies of the Grupo EPM.
- Reinvestment of surpluses in the community impacted by the project or service required to improve their level of quality of life and development.

In the development of the Ituango Hydroelectric Project, EPM has strengthened community organizations in the area of influence through social procurement with community action boards and community associations for the execution of works and services that are required in the territory, as part of the of the environmental and social management of the Project.

Social procurement	2018		2019		2020	
Company	Number of contracts	Value (million COP)	Number of contracts	Value (million COP)	Number of contracts	Value (million COP)
EPM	60	40,204	116	37,662	70	31,776
Emvarias	36	3,251	28	2,018	31	6,101
ESSA	0	0	5	80	0	0
CENS	0	0	0	0	1	61
Total	**96**	**43,455**	**149**	**39,760**	**102**	**37,939**

Source: Shared Services and Supplies Vice Presidency

Through social procurement during 2020, 102 contracts were signed for COP 37,939 million, of these COP 31,776 million correspond to contracts signed by EPM.

The main contracts made were with the different community action boards such as for tasks such as: construction of fences and landmarks on the Ituango Hydroelectric Project, cleaning and sanitation, as well as agronomic activities. Other contracts signed with community action boards correspond to solid waste collection and pruning activities, executed with Emvarias.

The amounts and values correspond to the signed value of the contracts.

Local, national and foreign procurement

Provenance refers to the place of origin of the suppliers with whom it is contracted. Indicates if the provider is local, regional, national or foreign.

For the Grupo EPM, a local supplier is the one located in the municipalities, townships and villages that cover the metropolitan area of the company that is being evaluated.

Regional is understood to be the provider domiciled outside the metropolitan area.

National is understood to be the provider domiciled in various departments of Colombia.

Foreign is understood to be the provider that is outside of Colombia.

In 2020, the companies of the Grupo EPM in Colombia signed contracts for COP 6,284,940 million, of which 66% were awarded to local suppliers, 28% to national suppliers, 5% correspond to foreign suppliers and 2% to regional suppliers.

Origin of the contractors	2018		2019		2020	
	Number of contracts	Contract value	Number of contracts	Contract value	Number of contracts	Contract value
Local	14,840	3,185,484	36,414	1,653,036	37,321	4,151,812
Regional	9,379	128,347	1,605	288,047	1,680	97,100
National	6,444	2,027,896	4,415	2,166.515	7,295	1,729,207
Foreign	59	70,393	39	49,799	59	306,821
Total	**30,722**	**5,412,120**	**42,473**	**4,157,397**	**46,355**	**6,284,940**

The number and values of the contracts correspond to those signed during 2020 by Grupo EPM companies in Colombia. The values are expressed in millions of Colombian pesos.

External jobs created

Corresponds to the information on external jobs created in Colombia, in the contracts in force during 2020.

External jobs created in Colombia

Company	2020
EPM	22,519
CENS	1,863
CHEC	1,657
EDEQ	418
ESSA	2,732
Aguas de Malambo	104
Aguas del Oriente	1
Aguas Nacionales	230
Aguas Regionales	259
Emvarias	3,464
Total external employment created	**33,248**

Source: Shared Services and Supplies Vice Presidency

The jobs created correspond to the number of people outside the Grupo EPM linked to contracts and subcontracts for work, provision of services and consulting, among others, who have a high component of labor.

For the business group it is important to determine this type of measurement because it allows a vision of the quality, stability and equity of the employment created, in accordance with its sustainability purpose and its relationship with this stakeholder group.

GRI standards Contents and own indicators

102 - 9	Supply chain.
204-1	Proportion of spending on local suppliers.
EPM - 06	Number and value of social procurement contracts.
EPM - 07	Number, value and type of contracts in the Grupo EPM.
EPM - 08	External employment created in Grupo EPM contracts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas de Malambo

Aguas Nacionales EPM

Aguas Regionales EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Empresa de Aguas del Oriente Antioqueño

Electrificadora de Santander - ESSA

Aguas de Antofagasta - Adasa

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Tecnología Intercontinental - Ticsa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

México

Guatemala

El Salvador

Panamá

Business

Water

Sanitation

Electricity

Gas

Human Rights

Back to content



Human Rights

Commitment that the Grupo EPM assumes to respect Human Rights in the relationship with its stakeholders, both in its own operations and in those carried out by third parties in the development of activities derived from an agreement signed with the Organization.

Vision of stakeholders

As of the promulgation of its institutional Human Rights policy, the Grupo EPM makes public its commitment to assume in its own operations and promote in the operations of third parties with which it is related, compliance with the provisions of the Universal Charter of the Human Rights and its protocols, conventions and binding agreements, including International Humanitarian Law, the Political Constitution and the legal framework of each country in which it is present.

For the Organization, it is a challenge in terms of its own sustainability and it assumes it with the conviction that respect for human dignity is a fundamental commitment in the sustainable human development agenda.

Importance

The practices of respect and promotion of Human Rights are a business imperative based on the recognition of people's dignity. This is the starting premise for the Group's companies. Additionally, the Organization is aware that this approach can lead to important results on the viability of operations.

In terms of risk management, it allows handling of matters associated with: reputation, operation, finances and legal matters.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Human Rights in the supply chain	Decent work in the supply chain	Define the identified work plan based on the evaluation carried out with Guias Colombia and implement the actions defined in 2020 for the Supply Chain.	EPM	The programmed activities were carried out (includes identification of critical suppliers in human rights, unification of the procedure of the mechanism attentive to human rights and the RIC for breaches of the Code of Conduct, sharing information on human rights and the code of conduct through newsletters sent to suppliers and contractors, among others).	Total
		Prepare a self-diagnosis evaluation to identify human rights gaps in the supply chain.	CENS	An agreement with Guias Colombia was advanced and the self-diagnosis in human rights for the supply chain was carried out, the report of recommendations was received to build the work plan to close gaps.	Total
			ESSA	Challenge postponed to 2021	Not accomplished

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Human Rights in the supply chain	Decent work in the supply chain	Prepare a self-diagnosis evaluation to identify human rights gaps in the supply chain.	**EDEQ**	An agreement with Guias Colombia was advanced and the self-diagnosis in human rights for the supply chain was carried out, the report of recommendations was received to build the work plan to close gaps.	**Total**
			CHEC	An agreement with Guias Colombia was advanced and the self-diagnosis in human rights for the supply chain was carried out, the report of recommendations was received to build the work plan to close gaps.	**Total**
Institutional management in human rights	Not applicable	Update the risk map in human rights and the formulation of treatment plans to address them.	**CENS**	Given the health contingency and its impact on the financial situation of the company, this challenge was postponed until 2021, since it implies the hiring of an external consultant to carry it out.	**Not accomplished**
		Formulate and design a grievance mechanism attentive to Human Rights.	**CHEC**	The result of the work carried out regarding the design of the grievance mechanism attentive to human rights was delivered to the CHEC Management Committee, together with the actions for its implementation.	**Total**
			EDEQ	The result of the work carried out regarding the design of the grievance mechanism attentive to human rights was delivered to the EDEQ Management Committee, together with the actions for its implementation.	**Total**
			ESSA	The result of the work carried out regarding the design of the grievance mechanism attentive to human rights was delivered to the ESSA Management Committee, together with the actions for its implementation.	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Institutional management in human rights	Not applicable	Formally incorporate the Guide for relations with communities of ethnic peoples in the company's operations.	CENS	The Guide for relations with communities of ethnic peoples was formally incorporated, which was uploaded to the Integrated Management System (Synergy) associated with the infrastructure planning process, taking into account that this process is responsible for the planning, study, identification of actors and analysis of social alerts for the viability of new projects.	Total
			CHEC	The Guide was presented at the CHEC Social RIC to bosses, leaders, workers and contractors responsible for social and educational management and relations with communities and customers in the Generation, Distribution and commercial area businesses. It was incorporated into the CHEC Comprehensive Management System in the Social and Educational Management process, as a guide for the management and development of activities in said process.	Total
			ESSA	The Guide for relations with communities of ethnic peoples was presented to the Management Committee, for its subsequent appropriation. Awareness was carried out with the ESSA HR team. Appropriation from the SGI was carried out for internalization of the guide and subsequent promulgation and communication.	Total

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Institutional management in human rights	Not applicable	Carry out the due diligence procedure on human rights defined for the Grupo EPM, which includes the risk map, formulation of treatment plans, adoption of the policy and the training course on human rights.	ENSA	The work to identify and prioritize risks in human rights was carried out, treatment plans were defined for the prioritized risks and the institutional policy on human rights was approved by the Board of Directors. Additionally, training sessions were held for company personnel.	Total
			TICSA	Given the pandemic situation and its impact on the financial situation of these companies, this challenge was postponed, since it implies the hiring of an external consultant to carry it out.	Not accomplished
			HET		

Challenges 2021

Program, project, initiative or action	Management emphasis	Challenge	Year of compliance	Scope and coverage: Company	Scope and coverage: Business	Scope and coverage: Geography
Institutional management in human rights	Property management	Design a plan and implement actions derived from Self-Diagnosis Guides Colombia in Human Rights for Property Management.	2021	**EPM**	All businesses	**Colombia**
	Not applicable	Update the risk map in human rights and the treatment plans for prioritized risks.				
		Update the risk map in human rights and the treatment plans for prioritized risks.	2021	**CHEC**	Energy – T&D	**Colombia**
				EDEQ		
				CENS		
				ESSA		
		Initiate the human rights due diligence procedure with the risk map and treatment plans.	2021	**Adasa**	Water and Sanitation	**Chile**

Program, project, initiative or action	Management emphasis	Challenge	Year of compliance	Scope and coverage		
				Company	Business	Geography
Institutional management in human rights	Not applicable	Design a grievance mechanism for human rights.	2021	**Emvarias**	Sanitation Service	**Colombia**
				Aguas Regionales	Water and Sanitation	
				Aguas de Malambo	Water and Sanitation	
		Adopt the Guide for relations with communities of ethnic peoples.	2021	**Aguas Regionales**	Water and Sanitation	**Colombia**
				Aguas de Malambo		
	Decent work in the supply chain	Carry out the self-diagnosis to identify human rights gaps in the supply chain.	2021	**Essa**	Energy - T&D	**Colombia**
				Delsur		**El Salvador**
				Eegsa		**Guatemala**

Sustainability Report 2020

Sustainable Development Goals



Related stakeholders

- Clients and users
- Community
- Grupo EPM people
- Suppliers and contractors

GRI standards contents and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
406 - 1	Cases of discrimination and corrective actions taken.
407 - 1	Operations and suppliers whose right to freedom of association and collective bargaining could be at risk.
408 - 1	Operations and suppliers with significant risk of cases of child labor.
409 - 1	Operations and suppliers with significant risk of cases of forced or compulsory labor.
410 - 1	Security personnel trained in Human Rights policies or procedures.
411 - 1	Cases of violations of the rights of indigenous peoples.
412 - 1	Operations subject to reviews or impact assessments on Human Rights.
412 - 2	Training of employees in policies or procedures on Human Rights.
412 - 3	Significant investment agreements and contracts with clauses on Human Rights or subject to Human Rights evaluation.
413 - 1	Operations with local community participation, impact evaluations and development programs.
414 - 1	New suppliers that have passed selection filters in accordance with social criteria.
414 - 2	Negative social impacts in the supply chain and actions taken.
EU22	Number of physically or economically displaced persons and the compensation granted, detailed by type of project.
EPM - 30	Human Rights Management

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Aguas de Antofagasta - Adasa

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Human rights in the supply chain

Back to content

Human rights in the supply chain

Since the beginning of the institutional approach to human rights, EPM has focused a good part of its efforts on promoting its management in the supply chain, with the interest that all those companies with which the Organization maintains contractual relationships are aligned with the commitment of respecting human rights, based on the recognition of the risks that the operations carried out by third parties in developing commercial agreements with the Company may entail.

With this approach and considering that it is important to strengthen said management in business practice, the Organization has been gradually working on the conceptual approach, the diagnosis of management in the supply chain, as well as the adoption of respectful practices with the contractors of the companies that are part of the Group.

In the energy and water subsidiaries in Colombia and in other Latin American countries, the awareness and training for suppliers and contractors is being maintained on the way of formally incorporating the issue of human rights in operations, as well as performance evaluation in matters of human rights, labor practices, social impact and environmental impact. A key element in the whole approach is related to the implementation of mechanisms for monitoring, follow up and activating early warnings in order to comply with these practices.

Performance in 2020

The grievance mechanism for suppliers and contractors that has been operating at EPM since 2014 was reviewed and adjusted. As part of the adjustment, two new typologies were added associated with situations of workplace and sexual harassment in the workplace and possible behaviors of disrespect for the rights, customs and culture of ethnic communities.

The grievance mechanism operates as a resource for the identification of early warnings, as well as to detect and address probable effects on the matter, involving workers from contractor companies. It is an instrument designed to guarantee coherence in the institutional management of respect for human rights, encompassing practices in the supply chain. At EPM, it is coordinated by the Diversity and Supplier Development Unit, an area that, according to the specificities of each incident, forms an investigation and analysis team in which different dependencies of the Company participate.

As part of the review process, it was further defined to unify the process of this mechanism with the procedure to manage non-compliance with the Code of Conduct for Suppliers and Contractors, for this task the Company maintains an Integration and Coordination Meeting-RIC- in operation, which it functions as a control mechanism to attend to cases that involve suppliers and contractors in practices that affect third parties. The RIC receives the alerts through the institutional line of Transparent Contact or by notification of the Compliance Unit of the Organization.

In 2020, a work plan was established in order to close the gaps identified in the diagnosis of human rights management with the companies that are today EPM's contractors, this was carried out with the Ideas para la Paz Foundation. The plan includes the definition of a methodology to identify critical suppliers in human rights and training actions on the subject for contractor companies, among others.

Risk management

EPM carries out periodic exercises to assess risks and impacts on human rights, accepting the recommendations of the United Nations Guiding Principles. Based on the results of these exercises, the Organization prioritizes by applying the institutional risk methodology and, based on this prioritization, treatment plans are defined with specific actions, those responsible, a schedule and associated resources.

Due to the considerable volume of contracts, an individualized analysis of suppliers has not been carried out, however a cross-sectional analysis of the risks associated with the operation of the companies that are part of the supply chain has been made, in which they have been identified different risks, such as discrimination for various reasons, health and safety at work and in general decent work conditions, which is one of the explicit commitments of the institutional human rights policy, as well as the prohibition of the employment of child labor. In this way, a 100% evaluation coverage is considered in the operation through third parties.

Although the Organization does not have today within the supplier selection process a criterion for granting scores to firms that mitigate social impacts, it does manage compliance with and respect for human rights in the supply chain through different controls. Among the actions carried out, the Code of Conduct for Suppliers and Contractors of the Grupo EPM is currently included, which is incorporated into the contracting specifications and that each supplier must accept to continue in the process, in order to commit each company in the management of different issues, including respect for human rights. Different controls are being implemented so that, in the event of non-compliance, EPM can eliminate an offer or terminate a contract early.

In the contracting processes, EPM is concerned with taking care of the social impacts, seeking that in those contracts, according to their level of risk, the characteristics of the activity to be contracted and the dangers to which the workers are exposed, controls such as those associated with the care for occupational health and safety (OSH) and job creation in the regions when applicable. During the monitoring of the execution of the contracts, EPM validates the compliance with the OSH requirements month by month through standardized formats in which compliance with current regulations and the contractual provisions established to guarantee safe working conditions is consolidated, the fulfillment of the payments of the labor obligations of the contractors and when applicable, validates the employment of labor in the regions. No processes or activities of suppliers and contractors with risk of forced labor or child labor were identified.

On the route to the deployment of the work scheme in all the companies of the Grupo EPM, during 2020 the grievance mechanisms were designed attentive to human rights in the Colombian subsidiaries CHEC, ESSA and EDEQ, which will come into operation in 2021. In the subsidiary CENS, this mechanism came into operation, the design of which was delivered in 2019.

With the support of the Ideas para la Paz Foundation, human rights diagnoses were carried out in the management with suppliers and contractors for the companies EDEQ, CENS and CHEC. For this, the Colombia Supply Chain Guide designed by Guías Colombia was used, which includes the guidelines for companies in the exercise of due diligence in human rights, through responsible and transparent management.

Grievance mechanism for suppliers and contractors of EPM

Concept	2018	2019	2020
Complaints received	14	9	7
Complaints resolved	14	8	6
Complaints in analysis	0	1	1

Source: Shared Services and Supplies Vice Presidency

** Only includes incidents entered into the Grievance Mechanism attentive to Human Rights for suppliers and contractors in EPM.*

Cases handled due to breach of the Grupo EPM Code of Conduct			
Concept	**2018**	**2019**	**2020**
Cases received in the year	14	13	10
Cases resolved in the year	14	12	9
Cases under analysis	0	1	1

Source: Shared Services and Supplies Vice Presidency

GRI standards contents and own indicators

407 - 1 Operations and suppliers whose right to freedom of association and collective bargaining could be at risk.

408 - 1 Operations and suppliers with significant risk of cases of child labor.

409 - 1 Operations and suppliers with significant risk of cases of forced or compulsory labor.

412 - 1 Operations subject to reviews or impact assessments on human rights.

412 - 3 Significant investment agreements and contracts with clauses on Human Rights or subject to human rights evaluation.

414 - 1 New suppliers that have passed selection filters in accordance with social criteria.

414 - 2 Negative social impacts in the supply chain and actions taken.

EPM - 30 Human Rights Management

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

El Salvador

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Human rights management in projects under construction

Back to content

Human rights management in projects under construction

The commitment to respect and promote human rights is a premise that guides business actions in the development of all infrastructure projects carried out by the Organization. The institutional approach to the issue, whose framework is made up of the institutional due diligence procedure, the human rights policy and the guidelines that complement it, provides a basis for the agencies responsible for the execution of a project to define priorities and lines of action, in accordance with the needs identified in the operating environment.

To this end, each time the construction of an infrastructure project that involves an intervention with significant impacts begins, the Organization carries out an evaluation to define specific strategies to deal with the risks identified in the territories. In those projects whose construction takes considerable time, evaluations are carried out periodically in order to keep the findings updated. In this class of projects, there are also grievance mechanisms attentive to human rights so that the communities inform the Organization of situations of potential or real impact on the matter.

Performance in 2020

As part of the development of the Ituango Hydroelectric Project, significant progress was made in the process of executing the agreements derived from prior consultation with the Nutabe indigenous community of Orobajo.

The agreements reached with the Nutabe community contemplate 26 projects divided into components: ethnic strengthening, productive and economic projects, community infrastructure, environmental projects, training and education, all-encompassing during this process. For the implementation of the agreements, in Colombia, agreements have been established with expert entities for each of the projects and the support of guarantor entities such as the Office of the Ombudsman and the Office of the Attorney General of the Nation. The Ministry of the Interior periodically monitors this process.

Taking into account the dynamics and complexities of the context in which the Ituango Hydroelectric Project is inserted, which is characterized by circumstances such as armed conflict, violation of human rights and institutional weakness and social capital, two strategies were defined in order to contribute to the development of sustainable and peaceful territories. The first of these aims to strengthen trust between communities, local administrations and companies, through dialogue for action and capacity building, to build joint actions that contribute to territorial development. The second is aimed at analyzing and strengthening the promotion and protection of Human Rights, compliance with the SDGs and development of the socio-political environment for municipalities of Bajo Cauca Antioqueño, within the scope of the Project's Strategic Environmental Plan. The development of these strategies is supported by the Ideas para la Paz Foundation -FIP- and the United Nations Development Program -PNUD.

From the strategy of analysis and strengthening in the promotion and protection of Human Rights, the component called intercultural recognition and initial diagnosis of ethnic communities will be implemented from the accompaniment and generation of trust for the creation of joint proposals.

Ethnic communities

During 2020, no situations arising from the operation of the Group's companies that establish negative effects for the community were reported, nor cases related to the impact on the rights of special communities (indigenous peoples and other ethnic communities), which have been reported and processed through formal complaint or complaint channels.

In the affiliated companies in Colombia CHEC, EDEQ, CENS and ESSA the Relationship Guide with communities of ethnic peoples was adopted. This is a tool through which the principles of relationship with these communities are established, on the principle of mutual recognition, understanding and respect in the exercise and guarantee of rights. The guide was prepared by an interdisciplinary group from different areas of the Organization and was accompanied by the Office of the United Nations High Commissioner for Human Rights in Colombia.

Jobs created in the Ituango Hydroelectric Project			
Concept	**2018**	**2019**	**2020**
Jobs created	7,871	6,324	6,801
People hired from the region	1,735	1,816	1,989

Source: Executive VP Projects and Engineering

Grievance on Human Rights - Ituango Hydroelectric Project			
Concept	**2018**	**2019**	**2020**
Complaints and claims received concerning public and private security	0	0	0
Complaints and claims resolved concerning public and private security	0	0	0
Complaints and claims received concerning Human Rights	0	0	0
Complaints and claims resolved concerning Human Rights	0	0	0
Complaints and claims received concerning labor issues and engagement with contractors	0	52	36
Complaints and claims resolved concerning labor issues and engagement with contractors	0	51	36
Communications addressed	718	239	444
Communications resolved	709	209	419
Total received	**718**	**291**	**480**
Total resolved	**709**	**260**	**455**

Source: Executive VP Projects and Engineering

** Of the 444 communications received, 80 correspond to the attention of the contingency (downstream municipalities) and 364 to environmental license (area of influence of the PHI). Of those resolved, 75 are contingency and 344 are license.*

Legal actions filed in the Ituango Hydroelectric Project			
Concept	**2018**	**2019**	**2020**
Rights of petition attended	2,285	3,239	1,308
Rights of petition resolved	2,141	3,054	1,242
Writs of Protection attended	24	33	62
Writs of Protection resolved	13	14	29
Attended Lawsuits	40	35	143
Resolved Lawsuits	30	4	4
Total attended	**2,349**	**3,307**	**1,513**
Total resolved	**2,184**	**3,072**	**1,275**

Source: Executive VP Projects and Engineering

GRI standards contents and own indicators

411 - 1 Cases of violations of the rights of indigenous peoples.

412 - 1 Operations subject to reviews or impact assessments on human rights.

413 - 1 Operations with local community participation, impact evaluations and development programs.

EU22 Number of physically or economically displaced persons and the compensation granted, detailed by type of project.

EPM - 30 Human Rights Management

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

El Salvador

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Institutional management in human rights

Back to content

Institutional management in human rights

Since joining the United Nations Global Compact in 2006, EPM assumed the commitment to incorporate respect for human rights into its practices, which has subsequently been deployed through a specific work scheme on the matter, as a fundamental step for strengthening of relations with all its stakeholders.

For this purpose, the Company formally assumed the cross-sectional management of the issue in all business operations, which was ratified with the promulgation of the institutional human rights policy in 2012. This declaration makes PUBLIC and explicit the commitment to respect human rights from the business endeavors and lays the formal basis for its implementation throughout the Grupo EPM.

Today the companies in Colombia and abroad that are part of the Grupo EPM are progressing gradually in the approach to human rights, with the goal of achieving in 2023 the development of the due diligence procedure as a starting point for their management. With that purpose and based on the United Nations Guiding Principles, the Organization defined the following management milestones for each subsidiary: the identification and prioritization of risks in human rights, design and development of a treatment plan, internal and external training in human rights in companies, adoption of institutional policy, implementation of a grievance mechanism attentive to human rights and a permanent deployment of communication for stakeholders regarding commitment and management in this regard.

Institutional management on the subject includes compliance with each of these milestones, complemented with the development of specific actions to respect human rights in operations, the adoption of instruments and tools to strengthen the management of the Company, promote respect in operations for third parties and account for progress in implementation. Throughout this deployment, the Organization makes a permanent reference to the advances in human rights and companies worldwide and, in particular, welcomes and applies the United Nations Guiding Principles as a guide in the internal approach on the matter.

Performance in 2020

The Presidency of the republic of Colombia recognized EPM as an Equipares company, thanks to the management that the Organization has been developing to close the gaps identified in the diagnosis with a gender perspective that was carried out with the United Nations Development Program and the Colombian Ministry of Labor.

In 2020, EPM carried out a process of review and adjustment of the guidelines that are part of its institutional human rights policy, in order to emphasize the issues of inclusion, diversity and gender. In 2021, the Organization plans to carry out different audits to qualify for the silver seal certification of the Equipares program.

The Company remains firmly committed to consolidating an internal culture of inclusion and diversity. During the second year of the program for the inclusion of people with disabilities, 20 people with physical, sensory, cognitive and psychosocial disabilities joined the Organization, who are permanently accompanied to ensure their future employability in EPM or in other companies. In 2021, the third cohort of this initiative is expected to be incorporated.

As part of the celebration of International Human Rights Day, EPM held the first Human Rights and Business Forum, in which around 600 people from the entire business group participated. The meeting addressed issues such as the United Nations Guiding Principles, the practices carried out by the Group on this issue and its deployment in the management of the supply chain. Given the reception, it was decided to institutionalize this space and carry it out on an annual basis.

In internal training, during 2020, a virtual course on gender equality was designed for EPM employees, attended by 5,356 people. Additionally, 1,063 employees participated in the virtual course on labor inclusion for people with disabilities.

In EPM there is freedom of union association, 95% of the staff are affiliated directly or by extension to one or more of the six existing union organizations. In the companies of the Grupo EPM in Colombia, the membership percentage is 97%, taking into account that some of its subsidiaries such as Aguas de Oriente and Aguas Nacionales do not have union organizations because of their size. The Organization did not register any claim for discrimination in 2020.

Property management

As a general principle, EPM promotes voluntary negotiation and agreements as a management method for the acquisition of properties and the obtaining of rights over the properties required for the development of projects. However, some legal or legal situations may motivate imposition or expropriation processes, cases in which the Company seeks to advance these processes within strict compliance with the requirements for such purposes.

In 2020, a matrix was designed that allows qualifying the level of risk presented by a specific property, according to previously established objective criteria, so that, according to the result, it is subjected to an analysis within an Internal Integration and Coordination Meeting - RIC, space in which the strategy for obtaining the real estate asset is defined according to the analysis and information available for each specific case.

During the year a total of 1,706 properties were analyzed, of these 1,700 correspond to 47 projects in the formulation and execution stages, and 6 correspond to projects in operation.

In order to strengthen due diligence in property matters and with the support of the Ideas para la Paz Foundation, an evaluation of property management practices in EPM was carried out, in light of the recommendations contained in the Guide for Purchasing and the Acquisition of Rights to the Land and the Right of Use of Guias Colombia. Based on the gaps identified, an action plan will be designed to be implemented starting in 2021.

Consistent with its concern to develop business practices that promote respect for human rights in the country, EPM maintained a permanent participation in Guias Colombia, an initiative made up of companies, members of civil society and the National Government for the promotion and orientation of company-environment relations, under minimum criteria of compliance and respect for human rights and international humanitarian law.

As part of the deployment of due diligence actions on human rights, a joint effort was carried out between EPM and the Colombian subsidiaries CHEC, ESSA and EDEQ for the formulation of grievance mechanisms attentive to human rights. As a result, designs were approved to develop different mechanisms and adjust some of the existing ones, work that is planned to be carried out in 2021.

During 2020, the Guide for intercultural relations and dialogue with the communities of ethnic peoples was formally adopted in the subsidiaries CENS, CHEC, ESSA and EDEQ, a tool through which the principles of relations with these communities are established, on the principle of mutual recognition, understanding and respect in the exercise and guarantee of rights. The guide was prepared by an interdisciplinary group from different areas of the Organization and was accompanied by the Office of the United Nations High Commissioner for Human Rights in Colombia.

During the reporting period, no claim was received related to events of possible human rights violations with members of ethnic, Afro or ROM communities located in the Grupo EPM's areas of operation.

In line with the deployment of the HR work scheme in all Grupo EPM companies, during 2020 the approach continued in the ENSA company that operates in Panama, where risks were identified, treatment plans were defined for the prioritized risks and the Group's institutional human rights policy was formally adopted. Additionally, a conceptual approval plan was developed on the subject, with the areas involved in managing these risks in this company.

Human Rights Training - Trained Employees

Companies	2018	2019	2020
EPM	71	349	537
Aguas Regionales	0	0	165
Aguas de Malambo	0	0	18
Emvarias	0	89	39
CHEC	117	71	122
ESSA	0	212	100
CENS	165	101	42
EDEQ	106	145	194
Delsur	0	32	110
Eegsa	568	642	130
Total	**1,027**	**1,641**	**1,457**

Source: Vice Presidency of Human Talent and Organizational Development, Executive Vice Presidency of Business Management.

Human Rights Training - Hours of Training			
Companies	**2018**	**2019**	**2020**
EPM	142	698	1,074
Aguas Regionales	0	0	306
Aguas de Malambo	0	0	18
Emvarias	0	79	78
CHEC	303	355	244
ESSA	0	212	100
CENS	543	155	84
EDEQ	212	580	388
Delsur	0	64	110
Eegsa	568	642	250
Total	**1,768**	**2,785**	**2,652**

Source: Vice Presidency of Human Talent and Organizational Development, Executive Vice Presidency of Business Management.

Human rights training -% of employees trained			
Companies	**2018**	**2019**	**2020**
EPM	1%	5%	7%
Aguas Regionales	0%	0%	66%
Aguas de Malambo	0%	0%	34%
Emvarias	0%	35%	16%
CHEC	12%	7%	12%
ESSA	5%	22%	10%
CENS	30%	18%	7%
EDEQ	26%	33%	38%
Delsur	0%	10%	35%
Eegsa	72%	83%	17%

Source: Vice Presidency of Human Talent and Organizational Development, Executive Vice Presidency of Business Management.

Property management in EPM			
Concept	**2018**	**2019**	**2020**
Property management procedures with special due diligence	0	188	47

Source: Vice Presidency of Human Talent and Organizational Development and Executive Vice Presidency of Business Management

GRI standards contents and own indicators

406 - 1	Cases of discrimination and corrective actions taken.
407 - 1	Operations and suppliers whose right to freedom of association and collective bargaining could be at risk.
411 - 1	Cases of violations of the rights of indigenous peoples.
412 - 1	Operations subject to reviews or impact assessments on human rights.
412 - 2	Employee training in human rights policies or procedures.
EPM - 30	Human Rights Management

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Aguas de Antofagasta - Adasa

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Security and human rights

Back to content

Security and human rights

Grupo EPM is aware of the importance of a preventive approach to human rights as part of the development of its security strategies. For this reason and as a business principle, steps are carefully taken to ensure the protection of operations, employees and assets, both in the actions carried out by private security agencies, as well as those derived from the fulfillment of agreements with the public force (in the cases in which these are established), accepting and applying the regulations of the country in which the operation is carried out.

From its institutional human rights policy, the Organization establishes: "Include in the contracts and agreements of surveillance and security services with private firms and State security organizations, explicit commitments to respect and promote human rights. In NO case will the provision of these services be accepted by social actors that are outside the constitutional and legal framework".

In the development of its security operations, EPM accepts the recommendations contained in the Voluntary Principles, which propose guidelines for action for companies in relation to the PUBLIC force, private security agencies and civil society. Likewise, it incorporates the guidelines of the Security Guide, developed by the Guías Colombia initiative, which provides guidelines for action on human rights and international humanitarian law when security activities are deployed in companies.

In order to continuously monitor operations in its areas of influence, the Organization has provided means to address grievance from the communities. Through these, the management of security contractors is monitored, among other matters.

Performance in 2020

The business rules of the Security process were defined, which constitute binding provisions for EPM personnel in the tactical and operational deployment of security activities. These included respect for human rights and international humanitarian law.

This document will be formalized in 2021 and includes topics such as human rights and IHL training for EPM personnel, as well as for surveillance and private security companies and personnel who are part of the agreements signed with the Public Force. In addition, it formally establishes the operation of the grievance mechanism attentive to human rights to address eventual risk situations that involve personnel working in security.

During 2020, the EPM agreement with the Army and with the Colombian National Police remained in force, which aims to act in a coordinated manner with the state security systems and within the current legal framework, in order to strengthen the conditions of protection and security required in the facilities, infrastructure and activities associated with operations. As a general principle, the obligation to "Be respectful of international treaties on Human Rights and International Humanitarian Law signed by the Colombian State, promoting their preservation and defense, is included in all the agreements that EPM signs with the Public Force."

It is important to note that the nature of these agreements is cooperation and that it is not the power, nor is it within the powers of EPM to give operating instructions to members of the Police or the Army. However, accepting national and international recommendations on the subject, the Organization has placed an explicit emphasis within these agreements on establishing permanent respect for human rights in all operations derived from these agreements. To this end, in addition to including specific recommendations in the agreements, the Organization fosters spaces for permanent monitoring and analysis with security personnel and commanders of the police and battalion districts of the areas where the operation is present. The structure of the agreements also establishes the agreement for the personnel assigned to the Army and the National Police to receive permanent training in human rights in face-to-face training with instructors and specific training to each of the institutions.

During 2020 EPM contractually linked the companies Andiseg and Sevicol for the provision of security and surveillance services. For the formalization of these contracts, these companies are required to guarantee training to their personnel in human rights, international humanitarian law, appropriate use of force and application of Voluntary Principles. A total of 1,505 guards were employed in these contracts, of which 95% received training in these matters.

For the operations of private security companies, EPM requires service providers to strictly comply with the legal provisions in force in Colombia, especially the regulation issued by the Superintendency of Surveillance and Private Security, including the review of the background of the personnel employed by the contracting firms.

A relevant security decision has to do with the disarmament of security contractor personnel. As a policy of the Organization, the optimal scheme is determined based on the threat identified in the physical security and facilities. This analysis defines which facilities should have armed surveillance. Today 80% of the security guards at EPM do not use firearms in their operations.

In territories with the presence of armed conflict, non-armed surveillance is recommended, in order to avoid situations that may have an impact on the human rights of private security personnel and the community, due to the presence of said elements.

In order to continuously monitor operations in its areas of influence, the Company has established grievance mechanisms attentive to human rights. Through these, the management of security contractor employees is monitored. During the reported period, there were no complaints associated with this work.

In the reported period, EPM kept in application the Protocol for Attention to Events of Social Protest with de facto channels, which establishes an internal procedure for institutional response actions against events of social protest that involve de facto channels. In this way, it seeks to provide an action protocol to the subsidiaries of Grupo EPM in Colombia for the comprehensive and timely attention of these situations, articulating the responses from the different levels of the Organization in tune with respect for human rights.

Training in human rights for security personnel - EPM Contractors

Concept / Indicator	2019	2020
Total Security Personnel - Contractors	1,331	1,505
Security Personnel Trained in Human Rights - Contractors	1,289	1,436
Human Rights Training Hours - Security Personnel - Contractors	2,464	2,513
Average Training Duration (Hours)	1.9	1.8
Percentage of security personnel trained	97%	95%

Source: Risk Vice Presidency and Executive Vice Presidency of Business Management

Unarmed EPM security personnel		
Concept / Indicator	**2019**	**2020**
Security personnel working for the company	2,095	1,505
Personnel working for EPM who DO NOT use weapons	1,634	1,205
Percentage of personnel working for EPM that DOES NOT use weapons	78%	80%
Source: Risk Vice Presidency and Executive Vice Presidency of Business Management		

Human Rights Training - Security Personnel Hired by Grupo EPM		
Concept / Indicator	**2019**	**2020**
Total Security Personnel - Contractors	1,911	2,101
Security Personnel Trained in Human Rights - Contractors	1,566	1,887
Human Rights Training Hours - Security Personnel - Contractors	3,294	5,010
Average Training Duration (Hours)	2.1	2.7
Percentage of security personnel trained	82%	90%
Source: Risk Vice Presidency and Executive Vice Presidency of Business Management		

GRI standards contents and own indicators

410 - 1 Security personnel trained in human rights policies or procedures.
412 - 1 Operations subject to reviews or impact assessments on human rights.
412 - 2 Employee training in human rights policies or procedures.
EPM - 30 Human Rights Management

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

El Salvador

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Quality and safety of products and services

Back to content



Quality and safety of products and services

It consists of meeting the expectations of customers and users, as well as the regulatory and control requirements aimed at the quality, continuity and security of the service, as well as other aspects related to the commercial offer.

It refers to the technical and commercial characteristics inherent to the service to meet the expectations of customers and users, and the regulatory and control requirements. Quality, continuity and security of the service are included, as well as aspects related to attention, education and communication, customer satisfaction and corporate reputation.

Importance

The economic value is associated with the objective of optimizing processes, the basis of the competitiveness of the Group's businesses, and of quality to satisfy the requirements of customers and users. Faced with social value, the quality of products impacts the quality of life and human development; for its part, safety favors the protection of the life and health of the people who make up the interest groups.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Quality and continuity of service	Water suitable for human consumption	Obtain a water quality index - ICA <5%	Aguas de Malambo	Water quality index - ICA as of December = 0.35% Compliance 143%	Total
		Obtain a water quality risk index - IRCA <5%	Aguas del Oriente	Water quality index - IRCA as of December = 0.01% Compliance 199.7%	Total
			Aguas Regionales	Water quality risk index - IRCA as of December = 0.0% Compliance 200%	Total
			EPM	Water quality risk index - IRCA as of December = 0.74% Compliance 185%	Total
	Continuity of service	Obtain an aqueduct continuity index - ICTAC = 75.53%	Aguas de Malambo	Aqueduct continuity index - ICTAC as of December = 68.2% Compliance 96.6% The indicator was affected, among others, by obstructions in the intake in the rainy season.	Partial
		Obtain an aqueduct continuity index - ICTAC = 99.7%	Aguas del Oriente	Aqueduct continuity index - ICTAC as of December = 99.9% Compliance 100.2%	Total

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Quality and continuity of service	Continuity of service	Obtain an aqueduct continuity index - ICTAC = 99.7%	**EPM**	Aqueduct continuity index - ICTAC as of December = 99.79% 100% compliance. Due to operational interventions and system failures, interruptions are generated, which occurred mainly in the circuits: Pajarito, San Cristóbal, Abreo, La Cascada, Ajizal y Girardota.	**Total**
		Obtain an aqueduct continuity index - ICTAC = 95.1%	**Aguas Regionales**	Aqueduct continuity index - ICTAC as of December = 92.6% Compliance 97.3%. The system that impacts the result is Turbo with an average continuity of 46%, mainly due to the rainy season that forces the suspension of the pumping at intake due to a high level of the water source and turbidity.	**Partial**
		Achieve 100% continuity of sweeping and cleaning.	**Emvarias**	Continuity of sweeping and cleaning to December = 99.17%. In the first half of 2020, measures were taken to mitigate the impact of the pandemic and protect the lives of employees, therefore, sweeping and cleaning routes were suspended, which impacted compliance with the indicator.	**Partial**
		Achieve 100% continuity in recollection.	**Emvarias**	Continuity in recollection to December = 100%	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Quality and continuity of service	Continuity of service	Achieve a Saidi indicator less than or equal to 22.2	**ESSA**	Saidi as of December = 19.23 Compliance 113%	**Total**
		Achieve a Saifi indicator less than or equal to 14.52		Saifi as of December = 12.8 Compliance 112%	**Total**
		Achieve a Saidi indicator less than or equal to 26.25	**CENS**	Saidi as of December = 22.47 Compliance 192.9%	**Total**
		Achieve a Saifi indicator less than or equal to 8.89		Saidi as of December = 7.65 Compliance 193.4%	**Total**
		Achieve a Saidi indicator less than or equal to 26.63	**CHEC**	Saidi as of December = 17.4 Compliance 135%	**Total**
		Achieve a Saifi indicator less than or equal to 22.01		Saifi as of December = 16.19 Compliance 126%	**Total**
		Achieve a Saidi indicator less than or equal to 7.46	**EDEQ**	Saidi as of December = 7.10 horas Compliance = 105%	**Total**
		Achieve a Saifi indicator less than or equal to 8.0		Saifi as of December = 5.88 Compliance = 127%	**Total**
		Achieve a Saidi indicator less than or equal to 11.6	**EPM**	Saidi - a diciembre = 11.46 Compliance 101%.	**Total**
		Achieve a Saifi indicator less than or equal to 6.87		Saifi as of December = 6.74 Compliance 103%	**Total**
Education and communication to clients, users and the community	Education on production and responsible consumption	To ensure that the families of the Conexiones por la vida aqueduct community supply line have a maximum consumption of 20 m^3 of water per month.	**EPM**	As of December 2020, an average consumption of 15 cubic meters of water was recorded. Compliance 125%	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Education and communication to clients, users and the community	Education on production and responsible consumption	Carry out 37 "We are there for you" events, which allow the development of relationship and education activities.	**EPM**	As of December 26 events were held "We are there for you" Compliance 70% The annual goal was not reached due to COVID-19 restrictions.	**Partial**
		Sensitize students from 75 schools in Antioquia about caring for the environment and responsible use of HOME PUBLIC services through the Cuidamundos program.		As of December, 12 schools were visited - 16% compliance. The restrictions due to COVID-19 impacted the goal of the program mainly in Bajo Cauca where there was the largest commitment to the educational community.	**Not accomplished**
Loss management	Legal and safe use of services	Achieve an indicator of losses per billed user - IPUF less than or equal to 14.26	**Aguas de Malambo**	Loss rate per billed user - IPUF as of December = 20.49 Compliance 56.3% Twelve subnormal sectors have been identified illegally reconnected to the network, a situation that generates a demand close to 70,000 CUBIC meters of water, and negatively impacts the indicator.	**Not accomplished**
		Achieve an indicator of losses per billed user - IPUF less than or equal to 4	**Aguas del Oriente**	Loss rate per billed user - IPUF as of December = 2.6 Compliance 135%	**Total**
		Achieve an indicator of losses per billed user - IPUF less than or equal to 11.85	**Aguas Regionales**	Loss rate per billed user - IPUF as of December = 9.19 Compliance 77.6%	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Loss management	Legal and safe use of services	Lograr un índice de pérdidas por usuario facturado - IPUF menor o igual a 7.08	**Grupo EPM**	Loss rate per billed user - IPUF as of December = 6.38 80% compliance. With this result, the Grupo EPM approaches the efficiency standard for the sector, which was defined by Resolution CRA 688 of 2014 at 6.00 m3 / billed user / month.	**Total**
		Obtain a gas loss rate less than or equal to 4.3%	**EPM**	Loss rate as of December = 4.6% Compliance 93%. The increase occurred mainly in the Barbosa and Guarne distribution systems due to fraud in the non-residential sector and possible billing errors.	**Not accomplished**
		Achieve a network operator loss indicator less than or equal to 8.47%	**CHEC**	Network operator loss ratio - IPORR as of December = 8.30% Compliance 102.5%	**Total**
		Achieve a loss ratio per billed user - IPUF less than or equal to 6.6	**EPM**	Loss rate per billed user - IPUF as of December = 5.92 Compliance: 110%	**Total**
		Achieve a network operator loss indicator - IPORR less than or equal to 11.49%	**CENS**	Network operator loss ratio - IPORR as of December = 12.82 Compliance 88.4%	**Partial**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Loss management	Legal and safe use of services	Achieve a network operator loss indicator - IPORR less than or equal to 8.29%	**EDEQ**	Network operator loss ratio - IPORR as of December = 8.57% Compliance 97% The performance of the indicator below the goal is due to the increase in energy, registered at the entrance through the borders to other network operators, causing a slight increase in technical losses at voltage level four.	**Not accomplished**
		Achieve a network operator loss indicator - IPORR less than or equal to 7.48%	**EPM**	Network operator loss ratio - IPORR as of December = 8.65% Compliance 91%	**Not accomplished**
		Achieve an network operator loss indicator - IPORR less than or equal to 11.81%	**ESSA**	Network operator loss ratio - IPORR as of December = 12.41% Compliance 94%	**Not accomplished**
Customer service	Not applicable	Achieve a complaints indicator less than or equal to 10.85	**Aguas de Malambo**	Complaints as of December = 29.1 Compliance 68.2%	**Not accomplished**
		Achieve a complaints indicator less than or equal to 2.64	**Aguas de Oriente**	Complaints as of December = 1.3 Compliance 151%	**Total**
		Achieve a complaints indicator less than or equal to 3.78	**Aguas Regionales**	Complaints as of December = 0.80 Compliance 178.8%	**Total**
		Achieve a complaints indicator less than or equal to 2.94	**Emvarias**	Complaints as of December = 1.32 Compliance 155%	**Total**
		Achieve a complaints indicator less than or equal to 1.11	**EPM**	Complaints as of December = 0.53 Compliance 153%	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Customer service	Not applicable	Achieve a complaints indicator less than or equal to 3.94	EPM	Complaints as of December = 3.09 Compliance 122%	Total
		Achieve a complaints indicator less than or equal to 3.15 en provisión de aguas.		Complaints as of December = 2.39 Compliance 124%	Total
		Achieve a complaints indicator less than or equal to 0.25 en gestión de aguas residuales		Complaints as of December = 0.11 Compliance 157%	Total
		Achieve a complaints indicator less than or equal to 1.45	CENS	Complaints as of December = 0.56 Compliance 161%	Total
		Achieve a complaints indicator less than or equal to 1.22	CHEC	Complaints as of December = 0.7 Compliance 142%	Total
		Achieve a complaints indicator less than or equal to 0.91	EDEQ	Complaints as of December = 0.35 Compliance 162%	Total
		Achieve a complaints indicator less than or equal to 1.21	EPM	Complaints as of December = 0.98 Compliance 119%	Total
		Achieve a complaints indicator less than or equal to 1.16	ESSA	Complaints as of December = 0.61 Compliance 148%	Total

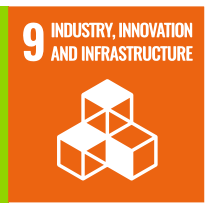
Challenges 2021

Program, project, initiative or action	Management emphasis	Challenges	Company	Business	Geography
Quality and continuity of service	Water suitable for human consumption	Obtain a water quality risk index - IRCA < 5%	Aguas de Malambo	Water and Sanitation	Colombia - Antioquia
			EPM		
			Aguas del Oriente		
			Aguas Regionales		
	Continuity of service	Obtain an aqueduct continuity index - ICTAC = 99.7%	EPM	Water and Sanitation	Colombia - Antioquia
			Aguas del Oriente		
		Achieve 100% continuity of sweeping and cleaning.	Emvarias		
		Achieve 100% continuity of recollection.			
		Accompaniment in the Solid Waste Transfer Station project: legalization of properties, completion of detailed designs and start of construction of this project.	EPM		
		Obtain an aqueduct continuity index - ICTAC = 96.47%	Aguas Regionales		
		Obtain an aqueduct continuity index - ICTAC = 75%	Aguas de Malambo		Colombia - Malambo
		Achieve a Saidi indicator = 24.67	CENS	Energy - T&D	Colombia - Norte de Santander
		Achieve a Saifi indicator = 8.70			
		Achieve a Saidi indicator = 24.51	CHEC		Colombia - Caldas
		Achieve a Saifi indicator = 20.25			

Program, project, initiative or action	Management emphasis	Challenges	Company	Business	Geography
Quality and continuity of service	Continuity of service	Achieve a Saidi indicator = 6.86	EDEQ	Energy - T&D	Colombia - Quindío
		Achieve a Saifi indicator = 8			
		Achieve a Saidi indicator = 10.81	EPM		Colombia - Antioquia
		Achieve a Saidi indicator = 21.50	ESSA		Colombia - Santander
		Achieve a Saifi indicator = 13.50			
Loss management	Legal and safe use of services	Achieve a network operator loss indicator less than or equal to 8.47%.	CHEC	Energy - T&D	Colombia - Caldas
		Achieve a loss ratio per billed user - IPUF less than or equal to 11.05.	Aguas Regionales	Water and Sanitation	Colombia - Antioquia
		Achieve a loss ratio per billed user - IPUF less than or equal to 15.10	Aguas de Malambo		Colombia - Malambo
		Achieve a loss ratio per billed user - IPUF less than or equal to 4	Aguas del Oriente		Colombia - Antioquia
		Achieve a gas loss rate less than or equal to 4.10%	EPM	Energy - Gas	
		Achieve a network operator loss indicator - IPORR less than or equal to = 11.81%	ESSA	Energy - T&D	Colombia - Santander
		Lograr un índice de pérdidas por usuario facturado - IPUF menor o igual a 6.48.	EPM	Water and Sanitation	Colombia - Antioquia
		Achieve a network operator loss indicator - IPORR less than or equal to = 12.73%	CENS	Energy - T&D	Colombia - Norte de Santander
		Achieve a network operator loss indicator - IPORR less than or equal to = 8.46%	EDEQ		Colombia - Quindío
		Achieve a network operator loss indicator - IPORR less than or equal to = 8.34%	EPM		Colombia - Antioquia

Program, project, initiative or action	Management emphasis	Challenges	Company	Business	Geography
Security in the provision of the service	Continuity of service	Advance in the expansion project of the North Desalination Plant 380 l / s	**Aguas de Antogasta**	Water and Sanitation	**Chile**
Customer service	Not applicable	Achieve a complaints indicator less than or equal to 3.78	**Aguas Regionales**	Water and Sanitation	**Colombia - Antioquia**
		Achieve a complaints indicator less than or equal to 1.45	**CENS**	Energy - T&D	**Colombia - Norte de Santander**
		Achieve a complaints indicator less than or equal to 27	**Aguas de Malambo**	Water and Sanitation	**Colombia - Malambo**
		Achieve a complaints indicator less than or equal to 2.38	**Aguas del Oriente**		**Colombia - Antioquia**
		Achieve a complaints indicator less than or equal to 2.22	**Emvarias**		
		Achieve a complaints indicator in Water Provision less than or equal to 2.84	**EPM**		
		Achieve a complaints indicator in Waste Water Management less than or equal to 0.25			
		Achieve a complaints indicator less than or equal to 1.00		Energy - Gas	
		Achieve a complaints indicator less than or equal to 1.09	**CHEC**	Energy - T&D	**Colombia - Caldas**
		Achieve a complaints indicator less than or equal to 0.87	**EDEQ**		**Colombia - Quindío**
		Achieve a complaints indicator less than or equal to 1.04	**ESSA**		**Colombia - Santander**
		Achieve a complaints indicator less than or equal to 3.55	**EPM**	All business	**Colombia - Antioquia**

Sustainable Development Goals





Related stakeholders

- Clients and users
- Community

GRI standards Contents and own indicators

103-1	Explanation of the material topic and its coverage.
103-2	The management approach and its components.
103-3	Evaluation of the management approach.
416-2	Cases of non-compliance related to the impacts on health and safety of the categories of products and services.
417-3	Cases of non-compliance related to marketing communications.
418-1	Substantiated complaints regarding violations of customer privacy and loss of customer data.
419-1	Non-compliance with laws and regulations in the social and economic fields.
EU25	Number of injuries and deaths involving company assets, including legal judgments, settlements, and pending legal cases of illness.
EU28	Average frequency of blackouts.
EU29	Average duration of blackouts.
EPM-03	Loss rate.
EPM-04	Customer service channels.
EPM-05	Complaints.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental -Ticsa

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia - Norte de Santander

Colombia - Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Quality and continuity of service

Back to content

Quality and continuity of service

The quality of the service includes the technical and commercial characteristics that are inherent to the provision. They must meet the expectations of customers and users, in addition to meeting the requirements of regulatory and control entities.

Continuity refers to the amount of time that the user has the service.

Performance in 2020

All the companies of the Grupo EPM maintained high levels of quality and continuity of the aqueduct, sewerage, energy and gas services.

The management of the Colombian subsidiary Aguas de Malambo stands out, presenting notable improvements in both indicators.

The companies of the Grupo EPM that provide the aqueduct and sewerage services maintained very high levels of service continuity. It is worth highlighting the increase in the continuity of the service in Aguas de Malambo, going from 65.41% in 2019 to 75.04% in 2020, as a result of investments in sectorization activities to reduce losses and increasing continuity without representing a significant increase of drinking water production. Emvarias, the subsidiary responsible for solid waste management in Medellín, presented a slight decrease compared to the previous year in the continuity of the collection service due to the restrictions generated by the COVID-19 pandemic, which led to redesigning the sweeping routes and decreasing their frequency, so the indicator was slightly affected.

It is noteworthy for Emvarias that 404 containers were installed during the year, each for a value of COP 739,800, which were located in different areas of the city, benefiting 23,970 people. The total value of the investment was COP 298.87 million.

Regarding the quality indicator, Water Quality Risk Index (IRCA), all the Group companies maintained excellent results, all below 1%, significantly lower than the reference value defined in the standard (5%), thus guaranteeing the supply of water suitable for human consumption throughout the year. It is noteworthy that in Aguas de Malambo activities were managed for the regulatory compliance of water quality, going from 0.56% to 0.35% in 2020.

The Saidi and Saifi indicators showed improvement in the group companies compared to the previous year, which meant a decrease in the total interruption time (in hours) and the number of times that the average user of the system was deprived of supply of electric power in 2020.

The quality, continuity and reliability standards of the gas service have been maintained over time and during 2020 it was no exception, all technical and operational efforts were made to guarantee the distribution and delivery of the service without interruption. 100% compliance with the continuity and quality indicators required by current regulations.

Water and sanitation service continuity (%)

Companies	2018	2019	2020
EPM	99.89%	99.81%	99.79%
Aguas del Oriente	99.94%	99.99%	99.83%
Aguas Regionales	89.10%	92.94%	92.55%
Aguas de Malambo	38.77%	65.41%	75.04%
EP Rio	99.92%	99.88%	N.A.
Emvarias	100.00%	100.00%	99.17%
Ticsa	97.30%	99.87%	98.89%
Adasa	98.99%	98.79%	99.12%

Source: Water and Sanitation Vice Presidency

** The value of Ticsa corresponds to continuity in sanitation.*
The value of EP Rio is included in EPM.

Water quality risk index - EPM (%)

Municipality	2018	2019	2020
Medellín	0.08%	0.75%	0.75%
Copacabana	0.17%	0.52%	0.74%
Girardota	0.15%	0.26%	0.64%
La Estrella	0.11%	0.56%	0.36%
Caldas	0.29%	0.47%	0.25%
Barbosa	0.33%	0.24%	0.44%
Sabaneta	0.27%	0.82%	0.86%
Envigado	0.13%	0.41%	0.82%
Bello	0.10%	0.38%	0.44%
Itagüí	0.10%	0.48%	0.36%

Source: Water and Sanitation Vice Presidency

Water quality risk index - Aguas del Oriente (%)			
Municipality	**2018**	**2019**	**2020**
El Retiro	0.20%	0.48%	0.01%

Source: Water and Sanitation Vice Presidency

Water quality risk index - Aguas Regionales (%)			
Municipality	**2018**	**2019**	**2020**
Sopetrán	0.22%	0.00%	0.00%
San Jerónimo	0.31%	0.00%	0.30%
Santa Fe de Antioquia	0.18%	0.09%	0.35%
Olaya	0.00%	0.00%	0.76%
Apartadó	0.00%	0.02%	0.15%
Turbo	0.08%	0.33%	0.42%
Chigorodó	0.04%	0.00%	0.07%
Carepa	0.05%	0.02%	0.07%
Mutatá	0.00%	0.00%	0.00%
El Reposo	0.00%	0.00%	0.31%
Bajirá	0.32%	0.00%	0.00%

Source: Water and Sanitation Vice Presidency

Water quality risk index - Aguas de Malambo (%)			
Municipality	**2018**	**2019**	**2020**
Malambo	0.50%	0.56%	0.35%

Source: Water and Sanitation Vice Presidency

Average duration of system outages (Saidi) - (hours)			
Companies	**2018**	**2019**	**2020**
EPM	14.72	14.55	11.46
CHEC	29.57	29.49	17.39
ESSA	25.34	23.15	19.22
CENS	26.96	27.33	22.47
EDEQ	8.12	8.07	7.11
Delsur	15.60	17.57	15.66
Eegsa	3.97	4.31	3.88
ENSA	12.70	12.43	9.87

Source: Energy Transmission and Distribution Vice Presidency

** Saidi calculated as the total interruption time (in hours) that the average customer-user of the system was deprived of electricity supply in the evaluated period.*

Average frequency of system outages (Saifi) - (amount)			
Companies	**2018**	**2019**	**2020**
EPM	6.67	7.29	6.67
CHEC	24.61	27.88	16.19
ESSA	16.80	15.13	12.80
CENS	10.53	8.96	7.65
EDEQ	5.73	6.54	5.88
Delsur	7.96	9.16	7.26
Eegsa	2.70	2.70	2.85
ENSA	7.42	6.47	5.65

Source: Energy Transmission and Distribution Vice Presidency

** Saifi is the number of times that an average customer-user of the system suffers an electrical power service interruption in the evaluated period.*

Gas service continuity - EPM			
Concept	**2018**	**2019**	**2020**
Pressure Index in Individual Lines (IPLI)	100.00%	100.00%	100.00%
Odorization Index (IO)	100.00%	100.00%	100.00%
Equivalent Duration of Service Interruption (DES)	0.00	0.00	0.00

Source: Gas Vice Presidency

** Equivalent Duration of Service Interruption (DES) is expressed in hours.*

GRI standards Contents and own indicators

EU28	Average frequency of blackouts.
EU29	Average duration of blackouts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental -Ticsa

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia - Norte de Santander
Colombia - Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Businesses

Water
Sanitation
Electricity
Gas

Education and communication to clients and users

Back to content

Education and communication to clients and users

The relationship with clients and the community is managed from educational communication at levels of awareness, information and training on basic aspects of the provision of home public services. For its part, communication due to scheduled interruptions is aimed at minimizing inconvenience, while commercial communication seeks to position the Grupo EPM brand, its services and the different offers associated with affordability and access, improve the user-company relationship and strengthen the ties of trust.

Performance in 2020

2020 was a challenging year in the relationship with customers, new communication strategies, more presence in mass media and new uses in platforms and digital channels were the allies to maintain interaction with customers and users and the most effective way to provide solutions to their needs, avoiding travel to offices in order to promote self-care at home during the time of the pandemic.

EPM held 250 virtual talks with leaders, clients and users, 190 radio programs in the city, 12 Facebook Lives and participated in 26 television programs whose contents are family-oriented. It carried out more than 460 meetings and trainings for leaders and communities and more than 17,000 home visits, in order to raise awareness in the efficient use of public services; more than 80,000 users benefited from this strategy. In addition, he participated in 26 municipal councils.

Direct contact was achieved with more than 214,000 people where they had the opportunity to teach them the decrees issued by the National Government in the matter of home public services and the application of these in EPM, the strategies to mitigate the impacts generated by the COVID-19 pandemic, the efficient use of services and the interpretation of the invoice, among other topics of interest to the community.

Among the regions that benefited from education programs in 2020 are: municipalities of the Metropolitan Area of Valle de Aburrá, Apartadó, Urabá, Necoclí, Turbo, Carepa, Chigorodó, Caucasia, Nechí, Valdivia, Cáceres, Yolombó, Santa Bárbara, Yondó, Sonsón, among other regions.

Aguas Regionales created the Leaders Network in order to continue cultivating relationships with stakeholders through the development of a work plan with educational and informational topics aimed at building a civic culture and empowering leaders. The implementation of virtual programs such as: Más Agua Más Vida, retos en Familia, Líderes en Línea and the podcast Súmate al Parche, which allowed us to continue educating our users and the community in general about household public services, reinforcing the importance of responsible use of water, timely payment and knowledge of the utility bill.

EPM was focused on strengthening digital channels in order to streamline the needs of customers and users by making use of these channels from the comfort and safety of their homes. Digital transactions showed a growth of 531% compared to the previous year, thanks to the improvements and development of digital solutions.

55 new transactions or interactions were made available to customers on different digital channels, such as a website, Chat Bot virtual advisor, mobile application and self-management modules. Among the new transactions or interactions are: abona a tu factura, water requests, Somos balance inquiry, enrollment in pay to your measure and energy connection feasibility analysis.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Businesses

Water

Sanitation

Electricity

Gas

Geography

Colombia - Antioquia

Loss management

Back to content

Loss management

Loss reduction and control programs in the aqueduct service are aimed at reducing the waste of water resources through the control and prevention of leaks, commercial actions and social interventions to promote responsible use by customers, users and the community in general.

In energy and gas services, the programs integrate education, value offers of access and affordability, and technologies to minimize the vulnerability of the infrastructure to fraudulent actions.

Performance in 2020

The indicators of losses of the aqueduct, energy and gas services were affected in the year, due to the economic, social and health emergency situation generated by the COVID-19 pandemic.

Grupo EPM monitors and manages water losses through the project for the comprehensive management of Unaccounted for Water (ANC), with activities aimed at reducing and controlling technical and commercial losses, through pressure control, modernization and replacement of networks and connections, systematic search for leaks, normalization of fraud, improvement of micro measurement and customer loyalty. In Aguas de Oriente, the execution of 3 construction and investment projects to improve and optimize the aqueduct and sewerage systems stands out.

EPM developed strategies aimed at controlling water losses from the system, with actions aimed at detecting and repairing leaks in networks, fraud control and renewal of micro metering, which, together with the Prepaid Water and Conexiones por la Vida programs, allowed to obtain good results despite the difficulties and operational restrictions generated by COVID-19.

EPM exceeds the efficiency standard defined by the CRA in 6.0 m3 / user / month.

Aguas de Malambo controlled the loss indicator in the sectors with the greatest irregularity problems. In addition, it held workshops with the municipal mayor's office, the Government of Atlántico and community leaders, regarding the problems presented by the sectors of difficult access and management in the municipality of Malambo.

In energy companies in Colombia, there was an increasing trend in the Loss Rate of the Regulated Network Operator (IPORR), due to the regulatory changes derived from the entry into force since January 2020 of CREG Resolution 015 of 2018 and 036 of 2019, for Network Operators (OR) this trend will be maintained for an additional year due to the indicator calculation methodology.

During 2020, there was a deterioration in the Commercial Loss Rate due to the economic situation of the country and the world due to the COVID-19 pandemic, which generated an increase in illegal connections and in the fraud of fluids.

The gas service loss indicator closed the year at 4.6%, three tenths above the goal, mainly due to an increase in losses in the distribution systems of the municipalities of Barbosa and Guarne. This increase in turn is attributed to the probable increase in fraud in the non-residential sector, due to economic difficulties derived from the pandemic and possible errors in billing.

Unaccounted for water index (ANC) - (%)

Companies	2018	2019	2020
EPM	30.51%	30.58%	31.05%
Aguas del Oriente	21.70%	20.30%	19.90%
Aguas Regionales	46.06%	43.79%	42.16%
EP Rio	16.90%	19.86%	N.A.
Aguas de Malambo	55.44%	58.32%	57.06%
Adasa	26.42%	24.64%	28.08%

Source: Water and Sanitation Vice Presidency

Loss rate per billed water supply user (IPUF) - (m^3)

Companies	2018	2019	2020
EPM	6.05	6.05	5.92
Aguas del Oriente	2.87	2.61	2.60
Aguas Regionales	10.89	9.95	9.19
EP Rio	2.58	2.95	N.A.
Aguas de Malambo	17.22	17.98	20.49
Adasa	6.79	6.79	7.23

Source: Water and Sanitation Vice Presidency

Loss rate of the regulated network operator (IPORR) - (%)			
Companies	**2018**	**2019**	**2020**
EPM	7.22%	7.57%	8.65%
CHEC	8.71%	7.35%	8.30%
ESSA	11.65%	11.84%	12.41%
CENS	12.83%	11.86%	12.81%
EDEQ	8.03%	7.77%	8.57%
Delsur	8.86%	9.14%	9.61%
Eegsa	6.40%	4.48%	4.44%
ENSA	11.37%	11.47%	12.65%

Source: Energy Transmission and Distribution Vice Presidency

Commercial loss rate of regulated market (IPERC) - (%)			
Companies	**2018**	**2019**	**2020**
EPM	11.93%	12.12%	12.41%
CHEC	13.30%	11.27%	12.76%
ESSA	14.79%	14.91%	16.11%
CENS	16.55%	15.12%	15.94%
EDEQ	10.86%	10.16%	10.75%
Delsur	8.88%	8.90%	9.69%
Eegsa	5.62%	5.59%	5.56%
ENSA	11.37%	11.47%	12.65%

Source: Energy Transmission and Distribution Vice Presidency

National Transmission System Loss Rate (IPRSTN) - (%)			
Companies	**2018**	**2019**	**2020**
EPM	1.47%	1.31%	1.37%

Source: Energy Transmission and Distribution Vice Presidency

Natural gas loss indicator - (%)			
Companies	**2018**	**2019**	**2020**
EPM	4.70%	4.30%	4.60%

Source: Gas Vice Presidency

GRI standards Contents and own indicators

EPM-03 Loss rate

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental -Ticsa

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia - Norte de Santander
Colombia - Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Businesses

Water
Sanitation
Electricity
Gas

Customer satisfaction

Back to content

Customer satisfaction

In Colombia, the Grupo EPM evaluates the status of the relationship with customers in terms of complaints and based on these results, the management of EPM's business units and the Group's subsidiaries is monitored, seeking to improve the management of each one and the satisfaction of customers and users.

Performance in 2020

The energy and water subsidiaries in Colombia, except Aguas de Oriente, showed improvement in the indicator, reducing the number of attributable complaints.

EPM's complaints indicator showed improvement in relation to the previous year, going from 4.1 to 3.09 complaints for every 10,000 installations.

In 2020, the complaints indicator presented positive results for the Colombian companies of the Grupo EPM.

Aguas Regionales went from 1.2 complaints in 2019 to 0.80 in 2020; Although the Aguas de Malambo subsidiary is the one with the highest indicator, it improved 3.23 points from 32.33 complaints to 29.1 in 2020, the behavior of this subsidiary's complaints was very stable until May, but as a result of the application of the relief measures decreed by the National Government to reconnect the delinquent services, the operational capacity of the contracts that carry out work in the field was exceeded, generating non-compliance in the requests for damage arrangements. The Aguas del Oriente subsidiary ended the year with 9 complaints, representing a slight increase in the indicator from 0.6 to 1.3. These complaints were generated by the temporary suspension of the aqueduct service due to the replacement works of the aqueduct and sewerage networks carried out in the municipality of El Retiro in Antioquia.

Emvarias, the Medellín waste collection and management company, also presented an improvement in the complaints indicator, going from 1.91 to 1.32. The subsidiary redesigned collection routes due to the mobility restrictions generated in the first quarter and later those generated by the COVID-19 pandemic, in the same way it guaranteed a timely service during the year despite the increase in complaints mostly associated with hospital waste.

All the energy subsidiaries in Colombia presented a decrease in complaints, meeting the goals in a satisfactory manner. CHEC ended the year with a result of 0.7 complaints, EDEQ 0.35, CENS 0.57 and ESSA 0.61.

Complaints indicator - Companies in Colombia

Companies	2018	2019	2020
EPM	5.62	4.10	3.09
Aguas del Oriente	3.92	0.60	1.30
Aguas Regionales	1.61	1.2	0.80
Aguas de Malambo	35.45	32.33	29.10
Emvarias	2.55	1.91	1.32
CHEC	1.06	1.01	0.70
ESSA	1.03	0.76	0.61
CENS	1.53	1.60	0.57
EDEQ	0.46	0.44	0.35

Source: Commercial Vice Presidency

** The indicator is expressed as the number of complaints per ten thousand clients or facilities.*

GRI standards Contents and own indicators

EPM-05 Complaints

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia - Norte de Santander
Colombia - Malambo, Atlántico

Businesses

Water
Sanitation
Electricity
Gas

Safety in the service provision

Back to content

Safety in the provision of the service

To increase the efficiency levels of the entire Organization, the strategic focus is: optimization of operations, which applies operational safety and quality standards for the delivery of services to customers and users. Risk prevention, mitigation and control plans are developed, as well as the application of methods and technology with quality standards and educational actions that guarantee the adoption of good practices to take care of the infrastructure and safety of employees, customers and the community.

Performance in 2020

In the Grupo EPM the number of accidents associated with the provision of the service was reduced by 29% and 61% fewer appeals filed by clients.

The optimization of operations constitutes one of the Grupo EPM's greatest commitments, insofar as efficient operations are essential to ensure the optimal and quality provision of home public services.

Grupo EPM ensured access to home public services for all its customers and users, maintaining standards, reliability, quality and continuity of services, and complying with the biosafety protocols that had to be implemented as a result of the COVID-19 pandemic.

In the Grupo EPM there were 63 people burned by electrical accidents, 28 deaths from accidents and 21 people injured for other reasons, for a total of 112 people injured, 29% less than the previous year.

Most of the people burned by electrical accidents are concentrated in Eegsa with 26, CHEC with 13 and EPM with 10 people burned by electrical accidents.

Of the 28 deaths due to accidents, the ESSA subsidiary registered eight deaths, followed by Eegsa with five, the other deaths were registered in EPM, CENS, EDEQ, CHEC, Emvarias, Delsur and ENSA.

As a result of the emergency situation generated by COVID-19, there was an increase in fraud and improper manipulation of meters and infrastructure, which generated risks, accidents and deaths. Simultaneously, given the situation of staying at home and the increase in the use of digital platforms and channels, the Grupo EPM was able to reach more people with campaigns and educational actions through virtual talks, Facebook Live, broadcast in mass

media such as radio and television, to sensitize customers and users about the responsible, efficient and safe use of Public Services and the infrastructure necessary to provide them.

The Operational Safety program, which involves employees and contractors, continues to be implemented with a focus on closing gaps with reference to good practices, under the scheme of fundamental pillars such as Policies and Objectives, Risk Management, Promotion and Culture, Assurance and Control and Human Factors.

The culture of self-care continued to be strengthened, using personal protection elements and developing a management and safety system at work. In conjunction with EPM's Occupational Risks Unit and the agencies in charge of the issue in each of the energy subsidiaries in Colombia and abroad, they have been working on the unification of criteria, technical specifications of equipment, formats and measurement criteria.

Progress was also made in the standardization of procedures, exchange of knowledge and best practices, and establishment of goals for the Group's companies, in order to continue the path towards zero accidents, mitigating risks to employees and contractors.

Regarding incidents or claims for damage to property or equipment, there was a 3% decrease compared to the previous year, for a total of 4,983 received in the year.

2,431 lawsuits or claims for loss of economic activity were received, of these 367 were settled in favor of the Company and 345 in favor of the claimant.

There was a 61% decrease compared to the previous year, in appeals filed by clients related to the provision of services, for a total of 6,201. Of that figure, 5,329 are concentrated in the subsidiaries ESSA and CENS.

Accidents in the service provision - (Quantity or number)

Concept	2018	2019	2020
People burned by electrical accidents	34	64	63
Deaths by Accident	34	29	28
People injured by other concepts	84	65	21
Total people injured	**152**	**158**	**112**

Source: Executive Vice Presidency of Business Management

Incidents, claims and demands due to service provision (Quantity or number)					
Concept			**2018**	**2019**	**2020**
Incidents or claims **for damages or injuries to people**	**Received in the year**		109	47	66
	Settled in the year	**In favor of the company**	47	22	23
		In favor of the claimant	7	4	6
Incidents or claims **for damage to property or equipment**	**Received in the year**		5,818	5,162	4,983
	Settled in the year	**In favor of the company**	2,974	3,235	2,806
		In favor of the claimant	1,575	1,731	1,552
Incidents **due to deaths**	**Received in the year**		0	25	18
	Settled in the year	**In favor of the company**	0	10	5
		In favor of the claimant	9	3	7
Lawsuits or claims for **loss of economic activity**	**Received in the year**		0	0	2,431
	Settled in the year	**In favor of the company**	0	0	367
		In favor of the claimant	0	0	345
Appeals filed by clients related to the provision of the service			12,996	15,762	6,201
Incidents due to non-compliance with advertising and commercial communication regulations			0	0	0
Fines for regulatory breaches	Quantity		82	140	147
	Amount in million COP		2,710	16,878	21,989

Source: General Secretariat, Executive Vice Presidency of Business Management and Business and Investment Management Directorate.

GRI standards Contents and own indicators

417-3	Cases of non-compliance related to marketing communications.
419-1	Non-compliance with laws and regulations in the social and economic fields.
EU25	Number of injuries and deaths involving company assets, including legal judgments, settlements, and pending legal cases of illness.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental -Ticsa

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia - Norte de Santander

Colombia - Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Customer service

Back to content

Customer service

The purpose of Grupo EPM is to deliver a value proposition of PUBLIC services and a portfolio of solutions with a comprehensive focus on the customer-user, with parameters of opportunity, quality, coverage, innovation and continuity of the service, in order to leverage development social with equity, quality of life, competitiveness and sustainability.

Performance in 2020

2020 was a challenging year in customer service due to the situation generated by COVID-19. Virtuality and digital channels were allies to maintain closeness and interaction with customers and users, while being efficient mechanisms to provide solutions to their needs and promote self-care at home during the time of the pandemic.

EPM managed a total of 7,954,792 transactions, of these 17%, that is, 1,341,780 correspond to digital transactions. These presented a growth of 531% compared to 2019.

Due to the emergency situation generated by the COVID-19 pandemic, for almost two months the customer service offices remained closed to the public and from May the gradual reopening began, which promoted the use of digital channels.

EPM made improvements and developments of digital solutions, among which 55 new transactions or interactions were made available in different digital channels, such as a website, Ema virtual advisor, mobile application and self-management modules. Among the new transactions or interactions are: abona a tu factura, water requests, Somos balance inquiry, enrollment in pay to your measure and energy connection feasibility analysis.

Of the digital channels available to customers and users, the virtual advisor Ema had a 58% share of use, followed by the website with 32% and lastly online chat with 9%.

The customer service line presented an increase of 16% in calls received compared to 2019.

"Somos" benefits and relations program of the Grupo EPM, started more than six years ago at EPM, and in 2020 the Colombia level program was launched in the CHEC, EDEQ and ESSA subsidiaries. The Somos service portfolio offers customers the possibility of enjoying experiences through different activities and discounts in commercial establishments through the ViveSomos program and the financing of products and services that are related to the consumption of public services with CrediSomos.

In 2020, more than 960,000 clients were benefited through ViveSomos and around 28,000 clients were enrolled to CrediSomos, improving the quality of life of more than 270,000 families, where 88% belong to SEC 1, 2 and 3.

During 2020 there were no claims for violations of customer privacy and loss of customer data.

GRI standards Contents and own indicators

418-1	Substantiated complaints regarding violations of customer privacy and loss of customer data.
EPM-04	Customer service channels.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Businesses

Water

Sanitation

Electricity

Gas

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Renewable energy

Back to content



Renewable energy

It is the offer of efficient, clean and reliable solutions based on energy obtained from virtually inexhaustible natural sources or that can be regenerated by natural means, which help to ensure a full and timely energy supply, maintain productivity and protection of the environment, and ensure the efficient use of energy, the preservation and conservation of renewable natural resources.

Renewable energies are alternative solutions to traditional energy production with fossil fuels and contribute in the same way to the economic and social development of the region. This type of technology includes solar, wind, hydraulic, geothermal, tidal energy, biomass, biogas, among others.

These clean technologies not only allow energy to be supplied to central areas of Colombia, but also to reach with energization remote populations that do not have access to the service.

In Colombia, with the issuance of Act 1715 of 2014, the implementation of some regulatory decrees and the National Government's commitment to the country's energy transition through renewable energy programs, a greater boost has been given to the implementation of this type of sources. For this reason, its development and use has increased, which will make it possible to expand the coverage of the service, maintain the country's productivity, mitigate the effects of climate change and protect the environment.

Importance

The supply of energy from renewable, efficient and sustainable sources generates important value for Grupo EPM and its stakeholders, because it reduces the cost of energy for the end customer, meets new market needs, minimizes the risk of dependency of water resources and improves the coverage of the population without service. For all this, its social value is high. In addition, the environmental value obtained is significant due to its contribution to reducing greenhouse gas emissions and protecting the environment.

The production and use of renewable energy sources has been declared a matter of PUBLIC utility and social interest, of national convenience, fundamental to ensure full and timely energy supply, competitiveness, efficient use of energy and preservation of renewable natural resources. For this reason, Grupo EPM decidedly ventures into these technologies and at the same time contributes to the achievement of the objectives at the country level.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Biomass	Offer of renewable energies	Take advantage of the biomass from the Ituango reservoir to generate electricity.	**EPM**	This milestone was postponed for a few years, after conducting the Cost-Risk-Performance (CRD) analysis.	**Not accomplished**
Biogas	Offer of renewable energies	Maintain the generation of energy from biogas in EPM's San Fernando and Aguas Claras wastewater treatment plants (WWTP), to self-supply at least 30% of the internal demand of each plant.	**EPM**	The percentage of self-generated energy consumed up to December at the Aguas Claras plant was 48% and at the San Fernando plant it was 29%.	**Partial**
Geothermal energy	Offer of renewable energies	Explore geothermal project leverage options through new execution models and / or strategic allies, and the definition of milestones.	**CHEC**	Attention to the requirements of third parties and environmental authorities. Progress of 60% in the study of the use of energy from the wells programmed in the Ruiz volcanic massif project. Preparation of a document of potential strategic allies and guidelines for relations with interested third parties.	**Total**
Small hydroelectric power stations	Offer of renewable energies	Evaluate competitiveness strategies for small hydroelectric plants (SHP) to be implemented in future projects carried out within Grupo EPM.	**EPM**	Preparation of an optimization proposal for the management of these projects, which will be included in the business case for SHP. Analysis of financial and regulatory viability where the relationship with environmental authorities, the Ministry of Mines and Energy and the UPME stands out as a key success factor. Identification of competitive opportunities for SHP.	**Total**
		Continue with the environmental licensing process for SHP PGU5.	**CHEC**	Attention to Corpocaldas requirements regarding the approval process for the environmental impact study (EIA) and obtaining the project's archaeological license.	**Total**
		Contract the EIA for the technical, economic and environmental feasibility of the SHP PGU6.	**CHEC**	Beginning of the execution of the contract for the preparation of the EIA for a SHP.	**Total**

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Photovoltaic solar energy	Offer of renewable energies	Develop a large-scale solar park connected to the system in Colombia with a strategic partner.	**EPM**	Completion of the EIA and socialization with Corpocaldas, which allows progress in obtaining the project's environmental license.	**Total**
		Launch the new commercial portfolio of the electric energy service with solar panel technology for clients in the regulated market.	**ESSA**	Progress in 80% of the homologation of the offer, the exploration of allies and the structuring of the business case.	**Not accomplished**
Photovoltaic solar energy	Offer of renewable energies	Launch EPM's strategic alliance with Invenergy for the development of solar and wind projects.	**EPM**	Optimization of alliance projects. The development of the prioritized projects (3 solar and 1 wind) and with the elaboration of agreements and annexes for their transfer to Invenergy, where applicable, continued.	**Total**
		Execute the Rural Electrification project with photovoltaic energies.	**CENS**	Project in a preliminary stage due to the signing of the initiation act on December 22, 2020 and due to the COVID-19 contingency.	**Not accomplished**
		Install solar panels for auxiliary services at the San Francisco plant.	**CHEC**	Purchase of materials and equipment necessary to start assembly in the first quarter of 2021.	**Not accomplished**
Wind energy	Offer of renewable energies	Carry out technical, economic and environmental feasibility studies for the development of large-scale wind farms.	**EPM**	Conclusion of the prior consultation process with Wayuu communities in the project area. Socio-economic characterization of the territory and progress in EIA for the environmental license application. Start of prior consultation for connection line.	**Not accomplished**

Challenges

Program, project, initiative or action	Management emphasis	Challenges	Year of compliance	Scope and coverage		
				Company	Business	Geography
Cross-sections	Offer of renewable energies	Prepare a business case to enable the offer of smaller plants.	2021	**EDEQ**	Energy - T&D	**Colombia - Quindío**
Geothermal energy	Offer of renewable energies	Explore geothermal project leverage options through new execution models and / or strategic allies, and the definition of milestones.	2021	**CHEC**	Energy - Generation	**Colombia - Caldas**
Small hydroelectric power stations	Offer of renewable energies	Optimize the competitiveness of small hydroelectric generation plants (SHP) in their operation.	2021	**EPM**	Energy - Generation	**Colombia - Antioquia**
				CHEC		**Colombia - Caldas**
Photovoltaic solar energy	Offer of renewable energies	Develop a large-scale solar park connected to the system in Colombia with a strategic partner.	2025	**EPM**	Energy - Generation	**Colombia - Antioquia**
		Launch EPM's strategic alliance with Invenergy for the development of solar and wind projects.				
		Develop nanostructured solar cells with materials available in Antioquia.	2024			
		Launch the new commercial portfolio of the electric energy service with solar panel technology for clients in the regulated market.	2021	**ESSA**	Energy - T&D	**Colombia - Santander**
		Develop a pilot project for solar panels with floating membranes.	2023	**EPM**	Energy - Generation	**Colombia - Antioquia**
		Execute the Rural Electrification project with photovoltaic energies.	2021	**CENS**	Energy - T&D	**Colombia – Norte de Santander**
		Install solar panels in three sites for self-generation of energy.	2021	**ENSA**		**Panamá**
Wind energy	Offer of renewable energies	Carry out technical, economic and environmental feasibility studies for the development of large-scale wind farms.	2025	**EPM**	Energy - Generation	**Colombia - Antioquia**

Sustainable Development Goals



Related stakeholders

- Clients and users
- State
- Colleagues
- Suppliers and contractors
- Community
- Investors
- Owner
- Partners

GRI standards Contents and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
EPM - 14	Resources allocated to renewable energies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Elektra Noreste - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Santander
Colombia – Norte de Santander
Panamá

Business

Energy
Sanitation

Small hydroelectric power stations

Back to content

Small hydroelectric power stations

The electrical energy produced through small hydroelectric plants (SHP) is considered clean and classified as renewable, in addition, that its development produces few impacts on the environment. The energy expansion in this technology would take advantage of the high potential that Colombia has.

Grupo EPM, which has the largest number of SHPs in the Colombian market, is carrying out an initiative that seeks to improve its competitiveness with the implementation of improvements applied to the planning, construction and operation processes both for plants in operation and for new projects in this technology.

Performance in 2020

Among the initiatives approved for the growth of the Grupo EPM with a vision of 2025, it is necessary to evaluate competitiveness strategies for the SHPs and their implementation both in the mini-plants in operation and in the future projects of this technology that are carried out within the Grupo EPM .

There is a proposal to optimize the planning and construction processes, which will be applied in future SHP developments.

In 2020, the schedule established to carry out the activities formulated and the studies required for the development of future projects of small hydroelectric plants, both in EPM and in the CHEC subsidiary, was fulfilled.

This year, a proposal for optimization of the planning and construction processes was prepared, which will be included in the update of the business case that is formulated for the SHP, and competitive opportunities were identified for projects in this technology. Progress was made in the analysis of financial and regulatory viability for small power plants, highlighting the relationship with environmental authorities, the Ministry of Mines and Energy and UPME, a key success factor for this activity.

On April 28, 2020, the CHEC subsidiary filed an environmental impact study (EIA) with Corpocaldas, a prerequisite for the licensing of a project in this technology that is being carried out in the department of Caldas. During the year, the requirements requested by the environmental authority necessary for their approval and to obtain the archaeological license

was answered. Due to the health emergency caused by COVID-19, it was not possible to achieve the pronouncement of the environmental authority.

Likewise, for another project located in this same region of Colombia, the execution of a contract with a validity of 455 days began on May 11, 2020, the purpose of which is to prepare the EIA and thus proceed with the licensing process of this new SHP.

Budget for SHP project studies (million COP)

Activity	2018	2019	2020
Development of small hydroelectric plants - Studies	0	826	1,103

Source: Energy Generation Vice Presidency

** The budget assigned for each year corresponds to the projected costs and expenses for the execution of the activities associated with the studies.*

GRI standards Contents and own indicators

EPM-14 Resources allocated to renewable energies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Geography

Colombia – Antioquia

Colombia – Caldas

Business

Energy

Wind energy

Back to content

Wind energy

Wind energy energy is one of the most mature, efficient and highly developed renewable sources in the world. Aware of the quality and potential of the wind resource that Colombia has and that there are more and more projects of this type in Latin America, Grupo EPM, which already has a wind project in operation, wants to continue betting on this energy source as a viable alternative to generate electricity, contribute to climate change and mitigate global warming.

Performance in 2020

In order to strengthen and grow the energy generation portfolio with renewable energy solutions, we continue with the consolidation of knowledge, the development of studies and the subsequent construction of solar and wind projects through joint work with the strategic ally, Invenergy, a company with which a framework collaboration agreement was signed at the end of 2019 and the clauses of the knowledge transfer plan were negotiated.

During 2020, a 200 MW wind project in La Guajira was prioritized in the strategic alliance.

With the aim of continuing with the diversification of its energy basket, the Grupo EPM incorporates to the portfolio of projects for the growth of energy generation, large-scale wind farm initiatives to develop in the short, medium and long term.

In 2020, a project was prioritized to advance to the construction stage when the studies are completed and the environmental license is obtained, and the evaluation of other initiatives continued. All future alternatives are located in Colombian territory (especially in La Guajira).

Despite the impact caused by COVID-19, which prevented entry into the areas where the studies are being carried out for much of the year and caused considerable delays in the planned schedule, the prior consultation process with the Wayuu communities located In the project area was completed, the socio-economic characterization of the territory was carried out, the prior consultation of the connection line was started and progress was made in environmental impact studies for the application for the environmental license.

Likewise, we participated in the different work fronts of the "Monthas de La Guajira" created by the National Government to promote the projects located there.

Various alternatives were analyzed to close the life cycle of the Jepirachi wind pilot project located in La Guajira, which due to technical and regulatory reasons and after completing its USEFUL life in 2023, will enter the dismantling phase.

Budget for wind project studies (million COP)

Activity	2018	2019	2020
Large-scale wind farm development - Studies	3,107	2,800	2,859

Source: Energy Generation Vice Presidency

* *As a result of internal validations, the figure reported in 2019 was adjusted. budget assigned for each year corresponds to the projected costs and expenses for the execution of the activities associated with the studies.*

GRI standards Contents and own indicators

EPM-14 Resources allocated to renewable energies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Business

Energy

Geography

Colombia – Guajira

Geothermal energy

Back to content

Geothermal energy

Geothermal energy energy is produced due to the natural heat existing inside the earth. It manifests as hot springs, steam emissions, and mud volcanoes. It is used to generate electrical energy when pressurized water vapor is conducted to the surface to a geothermal power plant.

This energy, in addition to coming from a renewable source, does not require large areas of land, has a low environmental impact, provides firm energy, is friendly to the environment and is low risk for nearby communities because its operation is very safe and clean.

EPM and CHEC are making progress in the studies, licenses and evaluations that allow making the decision to develop a geothermal power plant in the western central zone of Colombia.

Performance in 2020

Various execution and leverage options for the future project were explored and all aspects related to environmental authorities were addressed.

Progress is being made in the agreement with the Ministry of Science, Technology and Innovation related to the postdoctoral program "Study of energy use from wells programmed in the Ruiz volcanic massif geothermal project - CHEC Grupo EPM".

Through the Colombian subsidiary CHEC, all the requirements of third parties and environmental authorities, necessary to advance in technical studies and environmental licenses, were met.

A document of potential strategic allies and guidelines for relations with interested third parties was created. Participated in scientific and commercial events at the national and international level.

In the agreement with Minciencias, 60% progress was made in the work of the summons and the approval of the postdoctoral stay and resources was received by the ministry, for the

development of the project.

With the resources provided by Minciencias, all the technologies used for the generation of electricity from geothermal energy and the conditions under which one or the other is chosen were studied, simulation of multiple generation scenarios and their financial projection were carried out, which allowed to analyze the most viable systems from a technical point of view.

Budget for geothermal project studies (million COP)

Activity	2018	2019	2020
Use of the geothermal resource to generate electrical energy in the Exploration phase - Feasibility - Studies	25	31	48

Source: Energy Generation Vice Presidency

* *The budget assigned for each year corresponds to the projected costs and expenses for the execution of the activities associated with the studies.*

GRI standards Contents and own indicators

EPM-14 Resources allocated to renewable energies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Geography

Colombia – Antioquia

Colombia – Caldas

Business

Energy

Photovoltaic solar energy

Back to content

Photovoltaic solar energy

The installed photovoltaic solar energy generation capacity is increasing in the world and in Colombia, due to the fact that the costs associated with its production are increasingly lower and make it an attractive, competitive technology with a high projection for future supply of energy. The development of large-scale projects, the installation of small-scale photovoltaic systems, and the formulation of initiatives and projects in areas that are not interconnected and difficult to access, is permanent in the different markets.

For the Grupo EPM, photovoltaic solar technology is of great interest and the implementation of projects that make it possible to take advantage of the available solar resource has gained momentum. In the specific case of Colombia, where the Organization has a broad participation in the electricity market, it is desired to decisively complement the energy basket with said technology, which is why different studies have been undertaken and the development of projects that make it possible to take advantage of the solar resource that the country has.

Performance in 2020

In order to strengthen and grow the energy portfolio of generation with renewable energy solutions, continue with the consolidation of knowledge, the development of studies and subsequent construction of solar and wind projects through joint work with the strategic ally, Invenergy, company with which in 2019 an agreement was signed collaboration framework and the clauses of the knowledge transfer plan were negotiated. This year, three solar park projects were prioritized in the Strategic Alliance, 2 from the ally and 1 from EPM, totaling about 330 MW.

On the other hand, the different companies of the Grupo EPM have undertaken photovoltaic solar projects at their facilities and are making progress in the consolidation of various business models for the implementation of self-generation and distributed generation offers in the different markets in which they participate.

With the aim of consolidating photovoltaic solar energy in the portfolio of services, Grupo EPM through its different companies carried out activities related to this technology, such as: Technical and environmental studies for the development of future solar parks, launch

of a new commercial portfolio for clients in the regulated market, installation of solar panels in own offices and those of market clients, attention to connection requests for generation and self-generation projects, contracts for rural electrification in non-interconnected areas, among others.

Among the main steps, EPM continued with a strategic ally in the development of a large-scale solar park in Colombia, connected to the electricity system. In this year the environmental impact study was completed and it was socialized with the respective authority, which allows progress in the process of obtaining the environmental license.

Additionally, the study of floating solar panels in the Guatapé reservoir was completed, concluding that this type of system generates more energy than one on land under the same environmental conditions and solar radiation, in addition, there were no alterations in the quality of the water, nor effects on the surrounding ecosystem.

Solar panels were installed in the EPM building and in different sites of the Panamanian subsidiary ENSA. Likewise, there are the designs, equipment and materials to start the assembly in different dependencies of the CHEC subsidiary in Colombia.

A contract was signed between the subsidiary CENS and the Ministry of Mines and Energy of Colombia for energization with solar solutions in a rural non-interconnected area. This project will benefit 282 homes in 7 municipalities in the department of Norte de Santander. Social management began with the dissemination of the list of beneficiaries of this initiative.

In some of the affiliated companies, the commercial portfolio was complemented with service offers for the different customer segments based on photovoltaic solar technology.

Investments in solar projects (million COP)

Concept / Indicator	2018	2019	2020
Execution of projects in EPM	1,677	1,101	462
Execution of projects in the Group's subsidiaries	621	31	432
Total Investments	**2,298**	**1,132**	**894**

Source: Executive Vice Presidency Business Management

** The values in the table correspond to the annual budget assigned for the execution of the activities associated with the studies and initiatives.*

GRI standards Contents and own indicators

EPM - 14 Resources allocated to renewable energies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Centrales Eléctricas del Norte de Santander - CENS

Elektra Noreste - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Norte de Santander
Panamá

Business

Energy

Biogas

Back to content

Biogas

Biogas is a gas that is produced from the decomposition of organic matter or waste where there is no oxygen. It is common for biogas to be generated in wastewater treatment plants (WWTPs) and in landfills.

For the Grupo EPM it is an energy source of interest, therefore analyzes have been carried out to define the best use of the biogas generated in the La Pradera landfill, located in the north of the department of Antioquia and in the wastewater treatment plants (WWTP) San Fernando, in Itagüí, and Aguas Claras, in Bello, either to enter the markets for emission reduction certificates, electricity generation and heat, or their purification and injection into the grid. This is possible in Colombia from Resolution 240 of 2016, which regulates that the biogas that today is produced and used for self-generation in these plants can be converted into biomethane through chemical processes and be injected into the natural gas network.

Performance in 2020

The operation of the biogas flaring plant at the La Pradera landfill continued. With the production of this gas, it is intended to enter the market for the sale of emission reduction certificates.

The self-generation of energy from biogas that meets the internal demand of the San Fernando and Aguas Claras wastewater treatment plants, remained within the expected percentage.

With an investment of COP 88 million, the Emvarias subsidiary carried out the maintenance and operation of the biogas flaring plant in the La Pradera landfill in 2020.

At EPM, the initiative for self-generation of energy from biogas exceeded the expected goal at the Aguas Claras plant, meeting 48% of the energy demand of this plant as of December. For the San Fernando plant the percentage, in this same month, was 29%, the expected value for the year.

Biogas production (m^3) San Fernando wastewater treatment plant			
Month	**2018**	**2019**	**2020**
January	502,173	401,950	470,078
February	470,163	341,307	391,488
March	502,646	366,057	401,464
April	490,025	376,771	404,892
May	458,703	393,363	421,850
June	496,059	396,830	414,189
July	532,679	408,165	433,785
August	460,363	408,928	553,471
September	463,837	415,602	535,992
October	488,164	468,060	545,428
November	429,344	544,129	474,069
December	500,149	465,997	506,702
Total	**5,794,305**	**4,987,159**	**5,553,408**

Source: Water and Sanitation Vice Presidency

Biogas production (m^3) Aguas Claras wastewater treatment plant		
Month	**2019**	**2020**
January	0	749,124
February	0	911,543
March	152,972	956,903
April	871,196	880,591
May	236,384	863,112
June	284,383	956,360
July	152,664	894,972
August	426,754	941,904
September	427,737	817,200
October	617,036	775,620
November	705,173	775,603
December	827,435	986,544
Total	**4,701,735**	**10,509,476**

Source: Water and Sanitation Vice Presidency

GRI standards Contents and own indicators

EPM-14 Resources allocated to renewable energies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Empresas Varias de Medellín - Emvarias

Geography

Colombia – Antioquia

Business

Sanitation

Energy

Climate strategy

Back to content



Climate strategy

Achieve resilient and carbon efficient businesses for the Grupo EPM, by integrating the climate variable in the different analyzes and business decision-making, in order to contribute to its sustainability and competitiveness, minimizing vulnerability to climate risks and developing low-emission operations of GHG (greenhouse effect gases) in each of the regions where it offers services, under the principles of integrality, competitiveness, flexibility and innovation, is the purpose of the Grupo EPM's Climate Strategy, which also seeks to respond to the "Precautionary Principle" , enshrined in National and International Law, as a guiding and protectionist principle of the environment, which aims to guide the conduct of all agents to prevent or avoid serious and irreversible damage to the environment; EVEN when said damages are not in the consummation or threat stage but in a stage, prior to the LATTER and different, considered as a risk or danger of damage, and there is no absolute scientific certainty about their occurrence.

Importance

The bidirectional relationship between climatic events and the Grupo EPM's businesses makes it necessary to maintain a business development that considers the analysis of climatic variables in decision-making.

Climate variability and change and their influence on ecosystems, territories and the availability of natural resources make it necessary for Grupo EPM to have strategies for providing its services, restructuring its products, as well as the use of their competitive advantages and the establishment of risk management schemes that enable both their adaptation and that of the environments, thus favoring more solid economies in harmony with society and the environment.

Main achievements

Program, project, initiative or action	Management Emphasis	Challenges	Company	Achievements in 2020	Compliance
Climate strategy management	Mitigation and adaptation	Establish mitigation and adaptation indicators for Grupo EPM, based on prioritized actions.	Grupo EPM	Progress was made in the proposal for the quantification of the impact, product of the energy efficiency actions in CHEC, public lighting, EPM Building, own vehicle fleet.	Partial
	Adaptation	Establish mitigation and adaptation indicators for Grupo EPM, based on prioritized actions. Incorporation of the climate risk model in business risk management (EPM and Colombian Energy subsidiaries).	Grupo EPM	The methodological guide and the control template were prepared and shared for the identification - evaluation and monitoring of climatic risks in the Grupo EPM. Follow-up will begin with all companies and businesses from 2021.	Total
	Adaptation	Implementation of the WRF (*Weather Research and Forecasting*) Climate Model to monitor climate variables in businesses.	EPM	Climate scenarios were updated for areas of interest to the Water and Energy businesses for the periods 2030 - 2040. The storage capacity of corporate servers that support climate models was expanded. The proposal was structured for the formation of a work team specialized in climatic analysis at the service of EPM.	Total
	Mitigation	Verification of emission reduction by operation of Jepírachi in 2019.	EPM	This activity was rescheduled for 2021 due to the uncertainty to issue Emission Reduction Certificates after December 31, 2020 in the CDM standard.	Not accomplished

Program, project, initiative or action	Management Emphasis	Challenges	Company	Achievements in 2020	Compliance
Strategy management	Mitigation	Identification of new emission reduction projects to be registered in Colombian carbon standards.	**Grupo EPM**	New projects were identified in the Group related to all businesses. Monitoring reports and a description document of the La Pradera landfill project were reviewed to understand considerations and calculation methodology. The renewal of this project, in a second period of accreditation in the CDM standard, was achieved in October. Monitoring parameters were analyzed and existing gaps were identified for their measurement.	**Total**
		Estimation of reduced emissions from internal mitigation initiatives.	**Grupo EPM**	The emissions to be reduced through the implementation of the AMI project in EPM, CHEC and CENS were estimated. The third follow-up was carried out on the prioritized actions of the Grupo EPM 2020 climate strategy. From the reported results, the reduction in GHG emissions achieved by the most significant actions can be calculated in March / 2021.	**Total**
		Carry out the second auction of reduced tCO_2 of EPM (carbon tax).	**EPM**	The corresponding contractual process was carried out for the certification of the emission of Porce III carbon credits, which enables EPM for their use. The auction was published, only one proposal was received with a price lower than the reserve price, so it was not awarded. It was rescheduled again for 2021.	**Not accomplished**

Challenges 2021

Program, project, initiative or action	Management Emphasis	Challenge	Scope and coverage		
			Company	Business	Geography
Climate management strategy	Adaptation	Update climate scenarios for areas of interest of the Water and Energy businesses for EPM period 2030 - 2060.	**EPM**	Energy - T&D Water and sanitation	**Colombia - Antioquia**
	Adaptation	Estimate GHG emissions inventory (scopes 1 and 2) Grupo EPM 2020 and prepare the corresponding Grupo EPM reports	**Grupo EPM**	All businesses	**All geographies**
	Mitigation	Estimate GHG scope 3 emissions for EPM 2020.	**EPM**	All businesses	**Colombia - Antioquia**
	Mitigation	Carry out 2 auctions of emission reduction certificates	**EPM**	Energy - Generation	**Colombia - Antioquia**
	Mitigation	Prepare the project design document for the Aguas Claras wastewater treatment plant	**EPM**	Water and sanitation	**Colombia - Antioquia**

			Scope and coverage		
Program, project, initiative or action	Management Emphasis	Challenge	Company	Business	Geography
Climate management strategy	Mitigation/ Adaptation	Establish the costs of the project to install solar panels for the supply of 100 kW lights (El Tesoro Plant).	**Aguas de Malambo**	Water and sanitation	**Colombia - Malambo**
	Mitigation/ Adaptation	Define plan of photovoltaic solar solutions for ZNI.	**EDEQ**	Energy - T&D	**Colombia - Quindío**
	Mitigation	Obtain a gas loss rate less than or equal to 4.3%, (in 2020 the losses were 4.6%).	**EPM**	Energy - Gas	**Colombia - Antoquia**
	Mitigation	Install an electric station in the city of CÚCUTA.	**CENS**	Energy - T&D	**Colombia - Norte de Santander**
	Adaptation	Carry out a vulnerability and climate change study in an area of interest to the Company.	**Delsur**	Energy - T&D	**El Salvador**
	Adaptation	Renewal of the policy that covers climate risk, for 85 substations.	**EPM Guatemala**	Energy - T&D	**Guatemala**

Program, project, initiative or action	Management Emphasis	Challenge	Scope and coverage		
			Company	Business	Geography
Climate management strategy	Mitigation	Reduce by 0.5% SF6 leaks from the T&D system in the Aburrá Valley, (in 2020 they were 0.4%),	**EPM**	Energy - Gas	**Colombia - Antoquia**
	Mitigation	Adaptation or remodeling of facilities, under sustainable construction criteria.	**CHEC**	Energy - T&D	**Colombia - Caldas**
	Mitigation	Have 53 facilities monitored on the energy management platform.	**EPM**	Water and sanitation	**Colombia - Antoquia**
	Mitigation	Calculate methane emissions from wastewater treatment plants.	**Aguas Regionales**	Water and sanitation	**Colombia - Antoquia**

Sustainability Report 2020

Sustainable Development Goals



Associated stakeholders

- Colleagues
- Community
- State

Contents GRI standards and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
201 - 2	Financial implications and other risks and opportunities derived from climate change.
305 - 1	Direct GHG emissions (scope 1).
305 - 2	Indirect GHG emissions when generating energy (scope 2).
305 - 3	Other indirect GHG emissions (scope 3).
305 - 4	Intensity of GHG emissions.
305 - 5	Reduction of GHG emissions.
305 - 6	Emissions of substances that deplete the ozone layer (ODS).
305 - 7	Nitrogen oxides (NOX), sulfur oxides (SOX) and other significant air emissions.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
El Salvador
Guatemala
México
Chile
Panamá

Businesses

Water
Sanitation
Electricity
Gas

Climate management strategy

Back to content

Climate management strategy

Climate change creates significant challenges for humanity and for the world economy. It is considered one of the main challenges in sustainable human development, so it becomes a key aspect of study and comprehensive analysis, from environmental, social, political, economic, technological, regulatory and cultural perspectives to define business positions.

Setting strategies under the aforementioned approaches allows companies to face the challenge of business growth and development considering the climate impact.

Management in 2020

With the pursuit of the carbon neutral operation as of 2025, the Grupo EPM contributes to Colombia's commitment in the 2015 Paris Agreement, updated in 2020: to reduce 51% of its Greenhouse Gas emissions by 2030 (base year 2010).

With actions such as photovoltaic solar solutions for homes, SMEs and large clients; sustainable mobility, thermal districts, use of biogas and development of emission reduction projects, EPM committed itself to contribute to Colombia's commitment.

418 clients of the MNR - EPM's Unregulated Energy Market (59%) have a supply of energy generated with 100% renewable sources and 40% of the energy destined for the MNR is green.

In 2020, EPM sold 1.7 million Green Energy Certificates (I-REC), which are equivalent to 280,000 tCO_2 and avoided. The income from this initiative will be reinvested in the development of new projects.

Worldwide, Colombia is the third country in commercialization of I-REC, an international standard for renewable energy certificates, where the main marketer is EPM.

Main advances

Greenhouse Gas Emissions Inventory

In the pursuit of a carbon neutral operation as of 2025, the Company annually estimates its carbon footprint. Includes businesses and subsidiaries in Colombia and abroad. For 2020, the calculation was 2,846,932.47 tCO_2e, which showed a significant increase compared to 2019 (912,020.43 tCO_2e), where the EPM inventory was 398,596 tCO_2e and that of the Group was 912,020 tCO_2e. The main variations were in thermal generation, since the La Sierra thermoelectric plant operated throughout the year using natural gas.

In 2020, the inclusion of emissions from the La Pradera landfill to the Group's inventory (994,370 tons of CO_2e emissions) is highlighted, and the projection of said emissions to 2033. These emissions represent a 3% increase in the Group's inventory.

To see more details, see: Climate change mitigation

Emission factor

EPM committed since 2012 to keep its emission factor below the factor of the National Interconnected System -SIN-, a commitment that it has fulfilled since then. For 2020 the EPM emission factor was 0.0797 tCO_2e / MWh, while that of the national electricity factor was 0.2034 tCO_2e / MWh; This indicates that EPM's emissions remain below the SIN. The highest energy consumption of the Grupo EPM was in thermal generation (89.28%), other activities (0.13%) due to consumption of Liquefied Petroleum Gas - LPG and its own vehicle fleet (0.91%) respectively.

Source of information:
http://www.xm.com.co/Paginas/detalle-noticias.aspx?identificador=3310, fecha de consulta, marzo 4 de 2021

Emission Offset and Low Carbon Products

The technical table was maintained for the analysis of compensation alternatives and low-carbon products of the Group and monitoring was carried out on emission reduction projects, possible compensation initiatives and opportunities derived from emissions management, with the aim of to have carbon credits available to offset the carbon footprint of the business group or for commercialization in the national or international market.

In 2020, the issuance of 3,613,918 Porce III carbon credits corresponding to the 2016-2018 period was certified, which enables EPM for their use.

The verification of the emission reduction of the 2019-2020 projects was postponed to 2021. A reduction of 36,139 tCO_2e (2019) and 5,776 tCO_2e (2020) is estimated for the Jepirachi Wind farm ; 1,191,082 tCO_2e (2019) and 1,126,656 tCO_2e (2020) from Porce III and; 74,233 tCO_2e (2019) and 76,580 tCO_2e (2020) from the La Vuelta and La Herradura mini-plants. These projects were registered in the National Emission Reduction Registry - RENARE.

Aimed at learning about new sources of emission reduction in the Group, a portfolio of new initiatives was developed in 2020, among which actions to repower energy generation plants, small plants, Aguas Claras wastewater treatment, sustainable mobility and energy efficiency stand out.

During this period, EPM put up to auction approximately 3,700,000 carbon credits, only one proposal was received with a price lower than the reserve price, which caused said auction to be rescheduled for 2021.

Risk analysis and climate risk scenarios

- Progress was made in the exercises to update the climate model, periods 2030 - 2040 for the main areas of interest for the Water and Energy businesses.
- The methodological guide for the identification, monitoring, management and improvement of climate risks in Grupo EPM was prepared.

See: Adaptation to climate change and variability.

Interinstitutional Management

The Grupo EPM participated in the technical tables led in Colombia by the Ministries of Environment, and of Mines and Energy and in the regional tables on climate change, whose objective was the definition and update of climate action plans by 2050, identification of indicators and articulation of the main business initiatives to contribute to the Paris 2015 goals (NDC).

Participation in the Thematic Committee on Climate Change of the Municipality of Medellín, the Regional Nodes and in the national workshops to update the Determined National Contribution is highlighted. Likewise, in the analyzes and contributions to the sectoral plans for energy, water and sanitation and in the progress made for linking EPM with the scope of the Group, to the Carbon Neutral Electricity Sector Alliance by 2050, promoted by the Ministry of Mines and Energy of Colombia.

Emission factor EPM and Colombia 2020

Emission factor EPM / Emission factor SIN					
Indicator tCO_2e / MWh year	2016	2017	2018	2019	2020
EPM emission factor	0.0513	0.0097	0.0096	0.0278	0.0797
SIN emission factor	0.2100	0.1100	0.0096	0.1643	0.2034

Source: EPM.

EPM's emission factor is kept below the national emission factor. The variations were due to a significant increase of 592.23% in natural gas for continuous generation of 1,580 GWh at the La Sierra thermoelectric plant in 2020, compared to the 159.25 GWh generated in 2019.

The values for the national emission factor correspond to the calculation made by XM, as an official source in Colombia. http://www.xm.com.co/Paginas/detalle-noticias.aspx?identificador=3310, query date, March 4 2021.

Emission Reduction Projects by 2020								
Project	Standard	Credit period	Estimated reduced tCO_2e	Reduced verified tCO_2e			tCO_2e estimated	
				2016	2017	2018	2019	2020
Jepírachi wind park	Clean Development Mechanism -MDL-	2004-2025	25,631	22,590	1,358	24,604	36,139	5,776
Mini hydroelectric plants La Vuelta and La Herradura		2005-2025	77,149	72,908	85,559	73,285	74,233	76,580
REDD + EPM project	Climate Community and Biodiversity -CCB-	2014-2033	5,462	63,636 between 2014 - 2017		ND	ND	ND
Hydroelectric Project Porce III	Cercarbon	2011-2020	1,139,242	1,038,409	1,246,901	1,328,608	1,191,082	1,126,656
Ituango Hydroelectric Project	Verified Carbon Standard -VCS-	2018-2027	4,383,088	NA	NA	NA	NA	NA

Source: Sustainable Development Management

The estimated reduced tCO_2e correspond to those recorded in the project design document. The tCO_2e of 2019 and 2020 will be verified between the years 2021 - 2022.

The verification of the reduction of emissions is carried out year overdue.

Balance of green energy certificates 2020

Balance of accumulated and redeemed certificates (1 REC equals 1 MWh produced)

Generating Power Plant	Redeemed 2017	Redeemed 2018	Redeemed 2019	Redeemed 2020	Total redeemed to 2020
Jepírachi		23,164	56,667	38,514	118,345
La Vuelta		6,733	1,541	40,728	49,002
La Herradura	1,191		24,775		25,966
Porce III	461	1,132,362	1,558,973	1,653,412	4,345,208
Total	**1,652**	**1,162,259**	**1,641,956**	**1,732,654**	**4,538,521**

Source: Markets Directorate

** 2019 data was updated. Redemptions are according to the month of consumption.*

Contents GRI standards and own indicators

201 - 2	Financial implications and other risks and opportunities derived from climate change.
305 - 1	Direct GHG emissions (scope 1).
305 - 2	Indirect GHG emissions when generating energy (scope 2).
305 - 3	Other indirect GHG emissions (scope 3).
305 - 4	Intensity of GHG emissions.
305 - 5	Reduction of GHG emissions.
305 - 6	Emissions of substances that deplete the ozone layer (ODS).
305 - 7	Nitrogen oxides (NOX), sulfur oxides (SOX) and other significant air emissions.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Empresas Públicas de Rionegro - EPRio

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Climate change mitigation

Back to content

Climate change mitigation

Set of actions, initiatives, projects and programs developed by the Company to avoid and reduce the emission of greenhouse gases in its processes and operations.

All Grupo EPM companies made progress in the plans defined for 2020, especially in efforts to reduce emissions from practices and technologies for energy efficiency, use of alternative energy and sustainable mobility.

The Energy Transmission and Distribution affiliate companies implemented initiatives aimed at reducing energy losses and SF 6 (sulfur hexafluoride) leaks, meeting their annual goals.

EPM made progress in the studies for the construction of a sulfur hexafluoride-free electrical power distribution substation.

CHEC exceeded the proposed goal of linking customers to the web invoice by 42%. Achieving a total of 11,415 registered customers at the end of the year.

EPM's Gas business connected a new client to the Thermal District in Medellín, a project recognized as a sustainable energy efficiency solution, uses residual heat and reduces thermal island effects while reducing CO2 emissions by 30% and Ozone Depleting Substances -SAO 100%.

29% of the energy required for the operation of the San Fernando plant and 49% for the Aguas Claras plant was produced from the biogas generated in these wastewater treatment facilities.

Performance in 2020

There were important advances in the thematic axes of the climate strategy related to: energy efficiency, renewable energies, sustainable mobility and emissions management.

Energy efficiency

CHEC, Delsur and T&D EPM continued with the technology change program of fluorescent lighting with LED technology, both in internal installations and in projects the city. In Medellín, a cumulative 2,689 light points were achieved and energy savings of 74.15 MWh per year.

CHEC installed timers for some of the main circuits at its headquarters, implemented perimeter lighting, performed preventive and corrective maintenance on electrical installations and optimization of transformer loads. A saving of 3% is expected for 2021, from the improvements in the Uribe station and the Peralonso and La Rosa substations.

DELSUR achieved savings of 70% in lighting energy consumption, due to the accumulated replacement of 183 lamps (June to November); 50% for the replacement of 16 bulbs (September) and 94% for the change of 12 Dichroics. It made progress in the replacement of inefficient air conditioners with "inverter" air conditioners, which operate with ecological refrigerants.

Aguas Regionales implemented the televised system in networks of the Sucre (Olaya) district in Antioquia, which allows remote operation for 12 hours a day, avoiding transfers and travel of its employees.

EPM continued with the sustainable adaptation of its facilities, seeking significant savings in electricity consumption from changes in sensors, lighting and air conditioners in the administrative and operational areas. Energetic adjustments were made in 18 operating aqueduct and sewerage facilities, which represent a saving of COP 456 million pesos, 30 pumping efficiency tests were carried out and 41 licenses were acquired for online monitoring; Progress was made in reconfiguring meters and changing current transformers, measuring cells, meters and terminals in 5 facilities.

For more detail see: Energy consumption in Sustainable production and consumption.

Loss management and SF_6

Delsur developed a plan for monitoring and control of SF_6 gas leaks while EPM Guatemala made progress in the preparation of a manual for the management of equipment with SF_6 in the same way CHEC and T&D EPM continued with their plans to prevent emissions of SF_6 on its equipment.

EPM submitted, for internal approval, the initiative to build a sulfur hexafluoride (SF_6) -free electrical power distribution substation. It is in the feasibility stage and intends to restructure the emission risk management plan of SF_6 in operations.

Renewable energy

During 2020 EPM Guatemala installed 144 solar panels in 12 substations, with installed power of 3.0 kWp and panel power of 250 Wp, and expanded the Company's energy matrix from 56% to 80% with non-conventional renewable energy sources.

CHEC installed solar panels at its headquarters and carried out environmental studies for the Guacaica 5 and Guacaica 6 projects. Together with EPM, it continued the studies for the Valle de Nereidas Geothermal project.

ENSA registered a generation of 176,000 KWh of self-supplied energy from the solar panel system, ceasing to emit 123.5 tons of CO_2.

Aguas de Malambo held talks with other institutions for the technical-economic analysis of the use of renewable energy at the El Tesoro water treatment plant. While Aguas Regionales implemented the project of self-supply of electricity through solar panels in the wastewater treatment plants of the Santa Fe de Antioquia and Olaya municipalities. Currently, the lighting system is self-sufficient in the first and the entire installation in the second; and analyzes cost reduction and emission reduction from energy savings.

As part of the implementation of the collaboration framework agreement with the Invenergy Partner, EPM carried out environmental procedures for the prioritized wind and solar energy projects. An increase in installed power generation capacity is expected from the integration of unconventional sources.

The Gas business continued studies for the use of biomethane in the San Fernando wastewater treatment plant, which self-generates about 40% of the plant's energy requirements. Progress was made in the process for the award of the construction, with the purpose of injecting it into the natural gas network.

In commercial management, contracts were made for the sale of photovoltaic solar energy for large EPM clients (administrative headquarters, shopping centers and universities, among others). A total generation of 750 MWh per year was obtained with photovoltaic solar solutions, an installed capacity of 0.58 MWp and additional businesses for 3.5 MWp. In comprehensive solutions for Homes and SMEs, the installation was reached for a total of 33 clients, equivalent to 304 KWp.

In photovoltaic solutions for Non-Interconnected Zones (ZNI), the progress with the Government of Antioquia in the inter-administrative agreement to expand coverage in the department is highlighted, including the subsidy of 70% of the connection to new customers.

For its part, the CENS Board of Directors approved the contracting process for the Financial Support Fund for the energization of the ZNIs in Catatumbo.

EDEQ took up the initiative for the development of solar solutions in Non-Interconnected Zones, with progress in the market study with potential suppliers.

Carbon footprint

EPM Guatemala advanced the management with the Ministry of Energy and Mines of Guatemala, for the annual calculation of the emission factor of the electrical network, while ENSA, in Panama, updated its information on recharging air conditioners, fire extinguishers and fuel consumption by part of its contractors.

Aguas Regionales carried out the monthly measurement of gas emissions in the Santa Fe de Antioquia wastewater treatment plant, the evaluation of the conditions of the equipment installed for the capture and the analysis of the burning efficiency, in order to study Possibilities for structuring an emissions reduction project.

CHEC prepared the manual for "reducing greenhouse gas emissions and increasing removals for the energy efficiency initiative at the Uribe Station and Substations headquarters." In the year, it projected a reduction of 466.85 tCO_2e by the year 2025 at said headquarters.

Sustainable Mobility

Electric Mobility

EPM Guatemala continued with its financing plan for motorcycles and electric bicycles among its employees. It maintained the use of 4 own electric vehicles for the development of transport activities.

CENS made progress in the agreements for the signing of the memorandum of understanding with the Metropolitan Area of Cúcuta, in order to join forces to improve air quality and the establishment of an electric mobility model.

ESSA, EDEQ and CHEC maintained the operation of the pilot test of fast and slow public charging stations for users of this technology. CHEC succeeded in opening the first semi fast charging station for electric vehicles in the city of Manizales and installed the second charging station. It also made progress in the public policy proposal of sustainable mobility.

EPM continued as a promoter of sustainable mobility (electric and natural gas) in the Aburrá Valley. It closed 2020 with 1,810 electric vehicles circulating throughout the region. We highlight activities such as:

- Adaptation and commissioning of a public charging eco station (Sao Paulo) for a total of 20.
- More than 870 users linked to public charge.
- Entry into operation of 64 electric buses of the Medellín Mass Transportation System, METROPLÚS, for a total of 66 running throughout the city and the commissioning of the charging stations for these buses.
- Operation of the electric taxi project continued, of which seven are in operation; the offer to finance electric bicycles and motorcycles for users of the "Somos" card (EPM's customer loyalty program) and the agreement to finance electric vehicles for employees.
- Adaptation of 23 facilities for internal charging of electric vehicles, for a total of 104.

Natural gas mobility

- EPM financed more than COP 1,400 million to facilitate the access of its clients to NGV-Natural Vehicular Gas.
- Together with other actors in the commercial chain, it delivered bonds of up to COP 1,254 million per vehicle for the installation of NGV kits and up to COP 55,000,000 for the acquisition of vehicles dedicated to natural gas.
- It carried out 2,537 conversions, for a total of 24,000 NGV vehicles.
- It achieved an increase of close to 20% in the fleet of dedicated vehicles, going from 506 units in 2019 to 606 units in 2020.
- It kept 17 EPM brand NGV stations in operation.

In the own fleet, as of December 31, 2020, three tank trucks with the capacity to transport 10 m^3 of drinking water were reported, a dump truck for the transport of waste in the San Fernando wastewater treatment plant, a repowered vactor with a new dedicated engine to natural gas and a bus for the transport of civil servants.

EPM estimates that the use of gas in the city's automotive fleet has contributed to the reduction of 91.8% of particulate matter, 45.54% of volatile organic compounds and 21.14% of carbon dioxide. These data are estimated from the comparison of the reduction in emissions when substituting diesel with Euro IV technology for natural gas, it should be noted that the contribution in reducing emissions achieved from electrical technology is 100% in these pollutants.

For more detail see: Smart city services

Inventory of GHG emissions (scope 1 and 2), Group and EPM.

GHG emissions inventory (tCO_2e)					
Grupo EPM	**2016**	**2017**	**2018**	**2019**	**2020**
Scope 1	590,694	60,471	93,397	267,862	2,093,724.27
Scope 2	306,841	516,580	525,720	644,157	753,208.20
Total	**897,535**	**577,051**	**619,117**	**912,020**	**2,846,932.47**

EPM	2016	2017	2018	2019	2020
Scope 1	514,664	45,480	84,572	236,298	933,787.30
Scope 2	131,972	92,179	97,492	162,298	220,896.48
Total	**646,636**	**137,659**	**182,064**	**398,596**	**1,154,683.78**

Source: Idsos application.

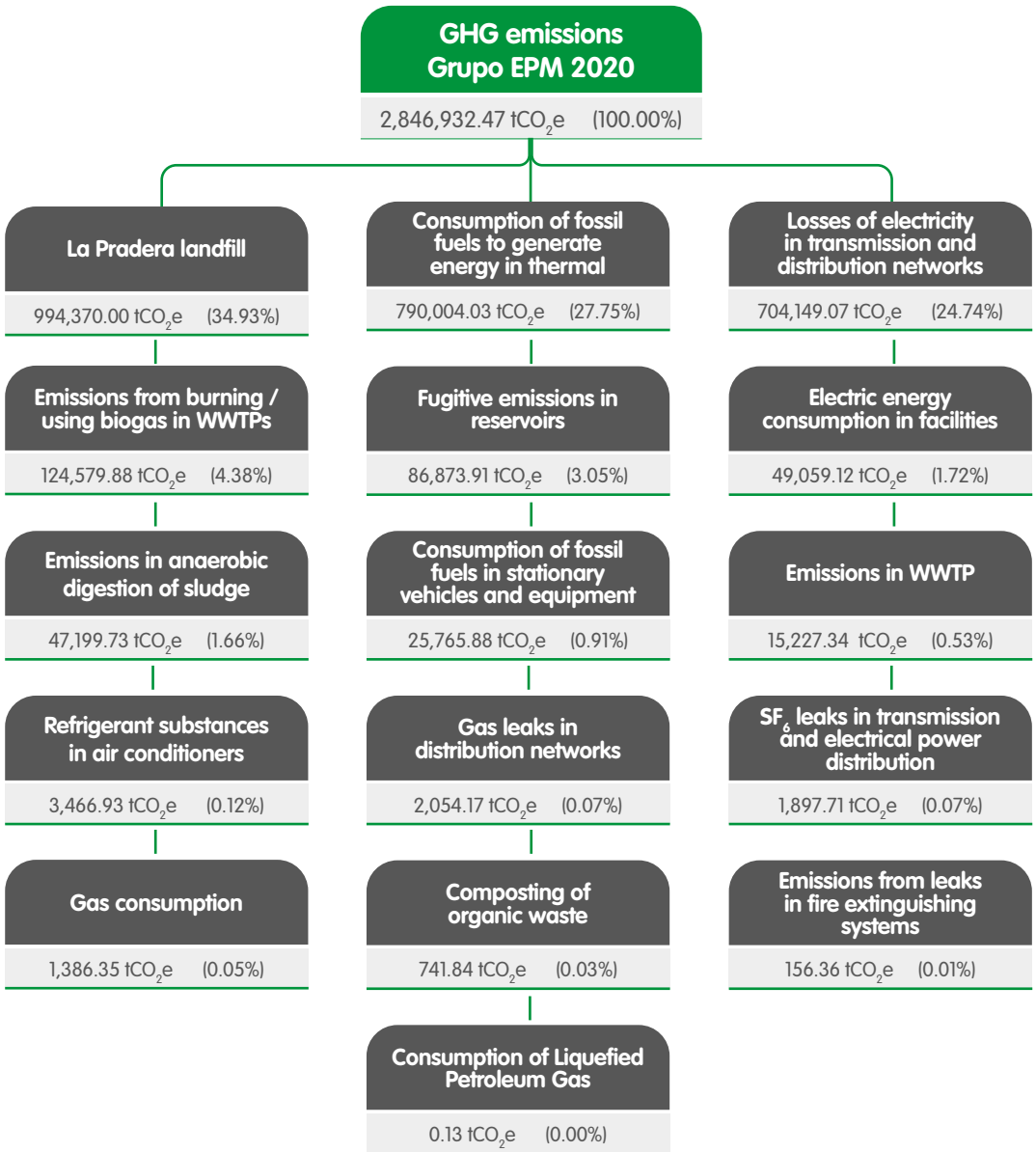
Source: *Sustainable Development Management*

The Group's 2020 inventory includes GHG emissions from: EPM, ESSA, CHEC, EDEQ, CENS, ENSA, Delsur, EPM Guatemala, HET, Aguas de Malambo, Aguas Regionales EPM, Aguas Nacionales, Aguas de Oriente, Emvarias and Adasa. The GHG Protocol methodology is followed and CO_2, CH_4, N_2O, SF_6 and HFC gases are taken into account.

The variations were due to a significant increase of 592.23% in natural gas for continuous generation of 1,580 GWh at the La Sierra thermoelectric plant in 2020, compared to the 159.25 GWh generated in 2019.

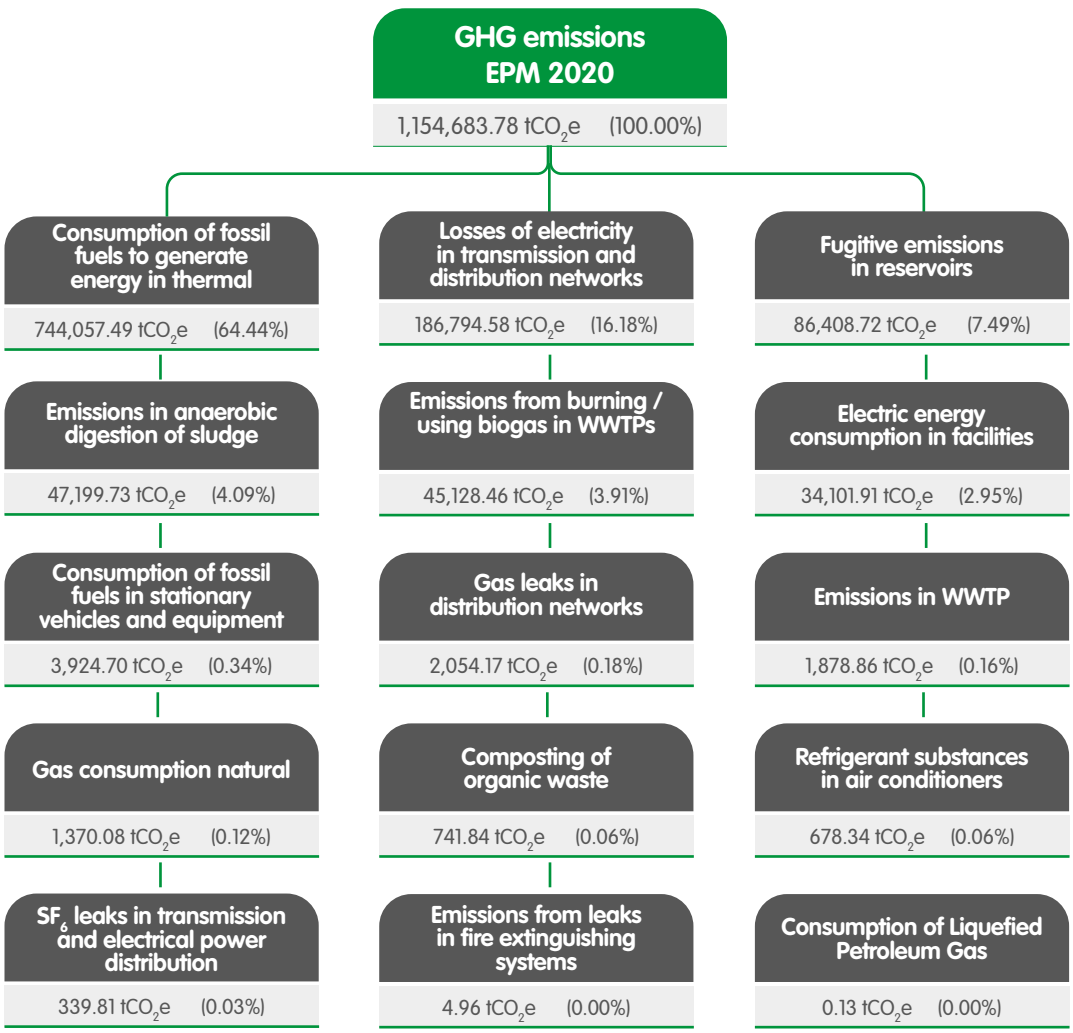
* *The annual inventory is calculated year overdue.*
* *Emissions Scope 1 (direct emissions). Includes emissions from own sources owned or controlled by the Company. As well as the emissions of vehicles of the own fleet, the emissions by steam or boilers, and the fugitive emissions by air conditioners, pipelines or own systems.*
* *Emissions Scope 2 (indirect emissions). It includes the emissions derived from electricity consumption and those from the consumption of heat, steam and cooling that are acquired externally, as well as those associated with the losses of electrical energy in the transmission and distribution networks.*

Detail of emissions scope 1 and 2 Grupo EPM, according to activity



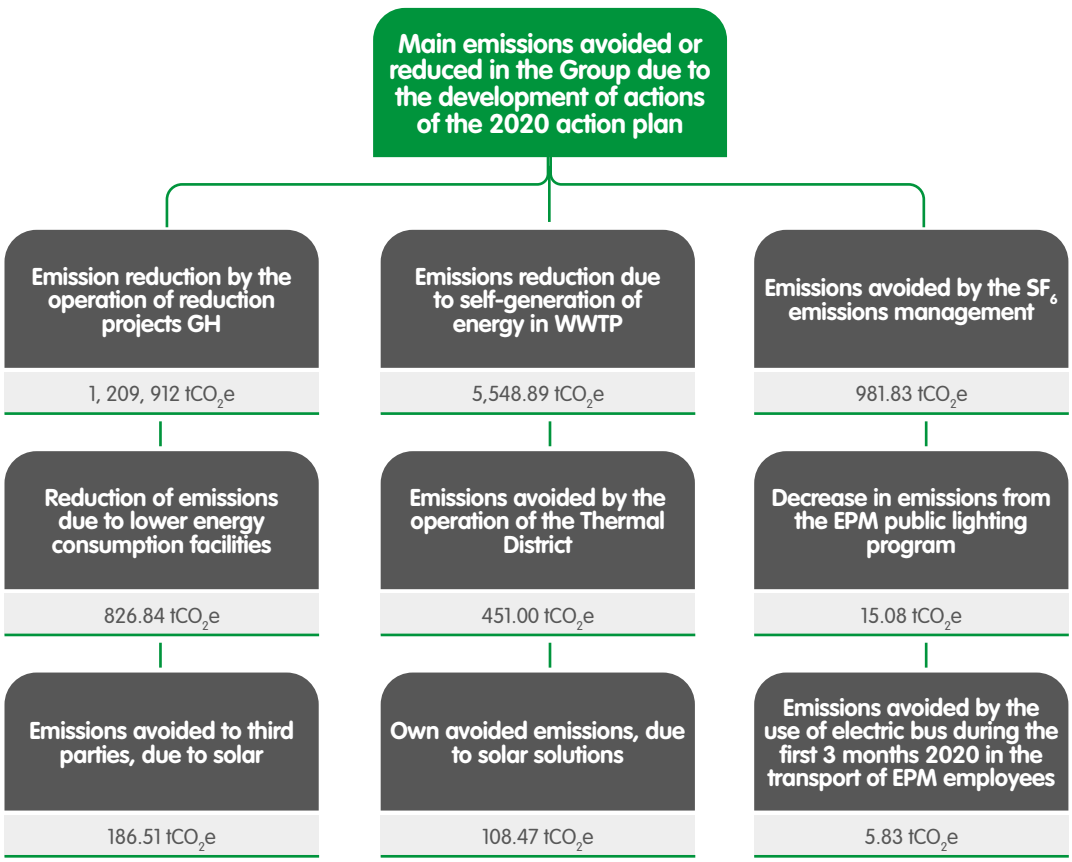
***Sources:** Idsos application*

Detail of emissions scope 1 and 2 EPM, according to activity



Sources: *Idsos application*

Detail of the impact of the implementation of the 2020 action plan



Sources: *Idsos application*

Scope 3 EPM emissions inventory								
Concept	2017		2018		2019		2020	
	Ton CO_2e	%	Ton CO_2e	%	Ton CO_2e	%	Ton CO_2e	%
Goods and services	* 16,118	0.58%	* 16,118	0.70%	* 16,118	0.64%	* 16,118	0.49%
Capital goods	* 525	0.02%	* 525	0.02%	* 525	0.02%	* 525	0.02%
Fuels	2,049	0.07%	2,218	0.10%	10,369	0.41%	64,510	1.97%
Waste	51,767	1.85%	59,224	2.58%	*** 68,051	18.07%	17.447	0.53%
Land transport + Air transport	2,363	0.08%	2,631	0.11%	3,685	0.15%	4,228	0.13%
Employee posting	** 3,260	0.12%	3,124	0.14%	3,938	0.16%	**** 3,938	0.12%
Use of sold products	2,718,413	97.28%	2,208,003	96.34%	2,023,557	80.55%	3,163,785	96.74%
Total	**2,794,494**	**100%**	**2,291,843**	**100%**	**2,512,087**	**100%**	**3,270,552**	**100%**

Source: Sustainable Development Management

*** 2012 values are used*
*** 2015 values are used*
**** The 157,002 tons of wood generated due to the filling of the Ituango project reservoir are excluded. It is estimated that these wastes would generate around 385,841 tons of CO_2e.*
***** 2019 values are used*

- *For scope 3 emissions, the 2012 calculation base was used. The GHG Protocol and Corporate value chain (Scope 3) accounting and reporting standard methodology, published by WRI and WBCSD, is followed.*
- *In the categories of goods and services and capital goods, the same 2012 values are preserved.*
- *The higher emissions continue to be associated with the consumption of the products sold by the Company.*
- *In 2020, the increase in the "fuels" category is mainly due to the use of natural gas for the operation of the La Sierra thermoelectric plant throughout the year.*
- *In the category "Displacement of employees", the contribution has always been less than 1% of the total emissions reached 3. For the 2020 calculation, the 2019 value is used due to the difficulties in data capture, however, this value could have decreased considerably due to the conditions of the COVID-19 pandemic.*
- *The variations in emissions from 2017 to 2019 due to employee displacement were due to the gradual increase in employees, since while in 2017 there were 6,500 employees, in 2018 they went to 7,153 and in 2019, to 7,917.*

***NOTE**: Scope 3 (other indirect emissions). Includes the rest of the indirect emissions as a consequence of the activities of the Company and that do not come from its own sources or controlled by the same (production of purchased materials, business trips, transportation of raw materials, fuels and products and derived emissions consumption of products or services offered by the Company).*

SOx and NOx emissions, Grupo EPM

SOx and NOx emissions - Grupo EPM						
Concept / Indicator (Ton / year)	**2018 (1)**		**2019 (2)**		**2020 (3)**	
NOx and SOx emissions	**NOx**	**SOx**	**NOx**	**SOx**	**NOx**	**SOx**
La Sierra Thermoelectric Plant (isokinetic sampling).	2.53	0.00	21.74	0.11	0.00	194.87
Transportation of personnel, supplies and products in the Group's own vehicles. *	* 44.31	0.43	149.27	1.00	* 85.44	0.51
Adasa	60.45	3.21	28.32	1.50	4.11	0.22
Total	**107.29**	**3.63**	**199.34**	**2.61**	**89.55**	**195.60**

Source: EPM calculations. (Emission factors taken from EPA AP-42)

(1) Includes EPM, Aguas de Malambo, Aguas del Oriente, Aguas Regionales, CENS, CHEC, Delsur, ENSA, ESSA, Eegsa, HET and Ticsa

(2) Includes EPM, Adasa, Aguas de Malambo, Aguas del Oriente, Aguas Regionales, CENS, CHEC, Delsur, ENSA, ESSA. Adasa reports for the first time in 2018.

(3) (Includes EPM, Adasa, Aguas de Malambo, Aguas del Oriente, Aguas Regionales, CENS, CHEC, Delsur, Emvarias, EMSA and ESSA.

** Corrections are presented in the 2019 values in the category of personnel transport due to adjustments in the input data, mainly from Emvarias, which registered information for the first time as of that year.*

The main variations in SOx were due to the generation of the La Sierra thermoelectric plant that operated continuously throughout the year from natural gas, given the commitment assumed by the Company to support the generation of the Ituango Hydroelectric Project.

** SOx: sulfur oxides*

** NOx: nitrogen oxides*

"The calculations are made from the consumption of compounds and emission factors obtained from the United States Environmental Protection Agency (EPA). The different emissions considered are: VOC (g / km), CO (g / km), CO_2 (g / km), NOx (g / km), SO_2 (g / km), MP (g / km) and benzene (g / km) . These are calculated according to the type of vehicle, equipment andfuel used in the Company. "

SOx and NOx emissions, EPM

SOx and NOx emissions - EPM

Concept / Indicator (Ton/year)	2018 (1)		2019 (2)		2020 (3)	
NOx and SOx emissions	NOx	SOx	NOx	SOx	NOx	SOx
La Sierra Thermoelectric Plant (isokinetic sampling).	2.53	0.00	21.74	0.11	0.00	194.87
Transportation of personnel, supplies and products in the Group's own vehicles.	16.53	0.13	14.70	0.17	0.41	0.01
Total	**19.07**	**0.13**	**36.44**	**0.28**	**0.41**	**194.88**

Source: EPM.

(1) 302 cars and trucks, 281 motorcycles, 103 trucks and buses
(2) 266 cars and trucks, 278 motorcycles, 76 trucks and buses.
(3) 243 cars and trucks, 280 motorcycles, 62 trucks and buses.
The main variations in SOx are due to the generation of the La Sierra thermoelectric plant that operated continuously throughout the year from natural gas, given the commitment assumed by the Company to support the generation of energy from the Ituango Hydroelectric Project.

Other emissions, Grupo EPM.

Other emissions - Grupo EPM

Year	Benzene	Particulate matter	CO	COV
2018 (1)	0.10	1.61	71.31	8.44
2019 (2)	0.24	5.70	169.51	27.14
2020 (3)	0.14	4.52	75.34	14.32

Source: EPM.

(1) Includes EPM, Aguas de Malambo, Aguas del Oriente, Aguas Regionales, CENS, CHEC, Delsur, ENSA, ESSA, Eegsa, HET and Ticsa.
(601 cars and vans, 307 motorcycles, 395 trucks and buses).
(2) Includes EPM, Adasa, Aguas de Malambo, Aguas del Oriente, Aguas Regionales, CENS, CHEC, Delsur, Emvarias and ESSA.
*(596 cars and trucks, 302 motorcycles, * 378 trucks and buses.)*
(3) Includes EPM, Adasa, Aguas de Malambo, Aguas del Oriente, Aguas Regionales, CENS, CHEC, Delsur, Emvarias and ESSA.
(541 cars and vans, 309 motorcycles, 365 trucks and buses)
** Corrections are presented in the 2019 values due to adjustments in the information reported mainly by Emvarias, which registered information on its fleet for the first time in that year.*
** The 2020 decreases in all emissions were mainly due to the lower operation of the own fleet due to the health emergency due to COVID-19.*

Other emissions, EPM

Other emissions - EPM				
Year	Benzene	Particulate matter	CO	COV
2018 (1)	0.05	0.76	38.31	3.96
2019 (2)	0.06	0.56	32.76	4.17
2020 (3)	0.00	0.04	1.87	0.42

Source: EPM.

(1) 302 cars and trucks, 281 motorcycles, 103 trucks and buses
(2) 266 cars and trucks, 278 motorcycles, 76 trucks and buses.
(3) 243 cars and trucks, 280 motorcycles, 62 trucks and buses.
Due to the conditions derived from the COVID-19 pandemic, during 2020 there was less operation in EPM's vehicle fleet, which is reflected in significant decreases in all emissions, mainly in particulate matter and carbon monoxide.

Contents GRI standards and own indicators

305 - 1 Direct GHG emissions (scope 1).
305 - 2 Indirect GHG emissions when generating energy (scope 2).
305 - 3 Other indirect GHG emissions (scope 3).
305 - 4 Intensity of GHG emissions.
305 - 5 Reduction of GHG emissions.
305 - 6 Emissions of substances that deplete the ozone layer (ODS).
305 - 7 Nitrogen oxides (NOX), sulfur oxides (SOX) and other significant air emissions.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Hidroecológica del Teribe - HET

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Adaptation to natural variability and climate change

Back to content

Adaptation to natural variability and climate change

Set of strategies, measures and projects duly identified, evaluated and prioritized over time, according to the scale of risks associated with climatic events, to strengthen the response capacity of businesses, services, environments and communities, and contribute to the permanence of the Company in the face of changing weather conditions.

EPM prepared the Grupo EPM's climate risk management guide.
The companies of the Grupo EPM maintained participation at the national, sectoral, union and territorial levels, in matters of climate interest, adaptation measures, development of regulatory projects, territorial and municipal planning plans.

Performance in 2020

In the implementation of the Grupo EPM Adaptation Plan, actions related to strengthening climate knowledge, risk analysis, updating of contingency plans and inter-institutional management were carried out.

In knowledge and infrastructure

- **CHEC** conducted several training workshops with its employees on issues related to climate change and then led to the analysis of climate risks and the identification of adaptation measures. Progress was made in the analysis by company, processes and projects. Participation in the Caldas Environmental Monitoring System (SIMAC), to contribute to the monitoring and construction of climatic indicators based on the hydro-climatic variables of its monitoring stations located in the Chinchiná river basin, and in the - Misión de Sabios por Caldas - Table of Water and Climate Change, in order to agree on strategies and alternatives for regional solutions.

- **Delsur** defined the training plan on climate variability and change, prepared the training program for management levels and approved the budget to start vulnerability studies in 2021.

- **CENS** processed the inter-institutional agreement to support and include the network of meteorological stations in Norte de Santander, which seeks to access climate information of interest for planning the operation and expansion of businesses. It intends to include 5 new meteorological stations to the hydro-climatological early alert system from Norte

de Santander and Sur del Cesar in the basins of the Zulia, Pamplonita, Táchira, Chitagá, Algodonal and Tibú rivers.

- **EPM** Guatemala presented its expansion studies to PETNAC (National Transportation Expansion Plan) that includes climatic variables. It prepared studies and environmental and social management plans for the new projects, also considering these variables, and acquired all-risk insurance for 85 substations. Progress was made in the analysis of climatic risks associated with the activities of planning, operation, maintenance and construction of the distribution networks, transmission lines and substations.

- **Aguas Regionales** continued with rainfall measurements of flows, made tours of supply sources to observe risk conditions, and activated contingency plans for the supply of the community due to the drought that occurred in the Urabá subregion. It advanced analysis of alternative water sources for the supply with options such as the use of deep wells; as well as the execution and construction of sewer networks, collectors and replacements to guarantee service coverage. It also carried out the analysis of different sources of financing for the implementation of the new regional supply source in Urabá.

- **Energy Transmission and Distribution EPM** carried out vulnerability analysis in the system's substations, updated the emergency plans of 63 facilities, carried out the management plan for the Bello-Guayabal-Ancón- BGA- and Nueva Esperanza 230 kW line, trained 292 people in emergency plans and carried out 80 drills.

- **Energy Generation EPM** continued the studies of climate variability and change scenarios in areas of interest, at different spatial and temporal scales, and carried out simulations for future periods.

- **Water and Sanitation EPM** carried out studies to have complementary water sources of supply (Valles de Aburrá and San Nicolás and the New Barbosa Catchment project). It carried out the identification of strategies to strengthen monitoring in the main supply basins and the contract to update the map of vegetation cover for the Hydrosed model (model of flow regulation scenarios, sediments and water quality in the sources).

In knowledge and infrastructure

- **ESSA** carried out the urban forestry pilot plan for the landscape management of the company's distribution networks and the reuse of water from air conditioners in substation sanitary systems. It formulated the strategy of planting isolated trees in network circuits to improve energy service and reduce electrical risk for the community and workers. In addition, it prepared the market study, the participation certificate with the contractor firm and the draft agreement with the municipal mayors.

- **CENS** once again signed the BanCO$_2$ agreement, for the benefit of peasant families that inhabit the buffer zone of the Santurbán páramo, through the payment scheme for environmental services. It increased to 10 families, 53 beneficiaries and 2,083 hectares conserved.

- **Aguas Regionales** carried out mitigation programs in the Abibe mountain range, by planting trees on the banks of the water sources.

- **Transmission and Distribution EPM** monitored the erosion and soil degradation processes in the areas of influence of the projects, established the revegetation and mass movement files, and involved personnel from the environmental area in the analysis of risks associated with climate variability in infrastructure and operation.

To see the detailed progress of these actions, we invite you to consult the content Conservation of water and biodiversity.

Contents GRI standards and own indicators

201 - 2 Financial implications and other risks and opportunities derived from climate change.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

EPM Chile

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Financial strength

Back to content



Financial strength

Management of the financial health of the Grupo EPM, with a vision of competitiveness and long-term permanence of the Organization, considering growth limits and corporate governance practices, to generate economic value and contribute to sustainable human development and increased value for stakeholders.

Financial strength is essential for the competitiveness and permanence of the Organization.

The definition of financial and growth goals must consider organizational, natural and market conditions, since the achievement of results depends on them.

An adequate administration of financial resources requires a forward-looking vision for the business group, a focus on the prevention of risks associated with undue political interference, and the application of controls that prevent the diversion of resources towards initiatives not aligned with its corporate purpose or decisions contrary to long-term permanence.

Financial strength is the basis for responding to the commitment to generate economic value, with which there is a direct impact on the contribution to sustainable human development and the increase in value to stakeholders, including the return on the investment of the owners.

The relationship with the Municipality of Medellín in its capacity as owner is regulated by Law, in the autonomy granted by administrative decentralization and in internal regulations; furthermore, the Relations Framework Agreement was signed in 2007 between the Medellín Mayor's Office and EPM, a document that establishes the owner-company relationship. The detailed report on EPM's Ownership Structure, which includes monitoring of the framework agreement and transfers, can be found in the Corporate Governance Report.

Importance

It allows meeting the requirements of working capital, investment needs, obligations with the owner and muscle to grow. It is essential to contribute to the sustainability of its environment through the generation of shared value and the distribution of the value generated, considering the social, natural and market limits.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Liquidity strategies	Financial health	Save COP 300,000 million in costs and effective expenses not including the commercial operation.	Grupo EPM	Savings of COP 94 billion were achieved in Grupo EPM.	Not accomplished
		Obtain sources of financing for COP 1.8 billion that allow maintaining adequate levels of liquidity in the companies of the Grupo EPM.		EPM carried out, in July 2020, an international bond issue in the capital market for USD $ 750 million. Thus fulfilling the challenge for this term.	Total
		Manage disbursements for USD 100 million for the insurance claim for the Ituango hydroelectric project incident.		The Mapfre company made the second payment for USD 100 million.	Total
		Obtain a liquidity indicator greater than or equal to 1.	EPM	Real indicator 1.18	Total
		Obtain a return indicator on operating capital employed - RSCEO = 19.7%		Real indicator 17.7%	Not accomplished
Financial results	Financial health	Obtain an EBITDA margin = 57%	Adasa	Real indicator 56%	Not accomplished
		Obtain a net margin = 31%		Real indicator 30%	Not accomplished
		Obtain an EBITDA margin = 2%	Aguas de Malambo	Real indicator -5%	Not accomplished
		Obtain a net margin = -7%		Real indicator -17%	Not accomplished
		Obtain an EBITDA margin = 39%	Aguas del Oriente	Real indicator 55%	Total
		Obtain a net margin = 27%		Real indicator 38%	Total
		Obtain an EBITDA margin = 70%	Aguas Nacionales	Real indicator 73%	Total
		Obtain a net margin = 52%		Real indicator 58%	Total

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Financial results	Financial health	Obtain an EBITDA margin = 31%	Aguas Regionales	Real indicator 40%	Total
		Obtain a net margin = 12%		Real indicator 15%	Total
		Obtain an EBITDA margin = 24%	Emvarias	Real indicator 25%	Total
		Obtain a net margin = 2%		Real indicator 8%	Total
		Obtain an EBITDA margin = 22%	Ticsa	Real indicator 26 %	Total
		Obtain a net margin = 5%		Real indicator 4 %	Not accomplished
		Obtain an EBITDA margin = 21%	CENS	Real indicator 22%	Total
		Obtain a net margin = 8%		Real indicator 8%	Total
		Obtain a net margin = 8%	ESSA	Real indicator 11%	Total
		Obtain an EBITDA margin = 26%		Real indicator 25%	Not accomplished
		Obtain an EBITDA margin = 28%	CHEC	Real indicator 29%	Total
		Obtain a net margin = 14%		Real indicator 9%	Not accomplished
		Obtain an EBITDA margin = 10%	Delsur	Real indicator 10%	Total
		Obtain a net margin = 3%		Real indicator 4%	Total
		Obtain an EBITDA margin = 23%	EDEQ	Real indicator 24%	Total
		Obtain a net margin = 11%		Real indicator 11%	Total

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Financial results	Financial health	Obtain an EBITDA margin = 14%	Eegsa	Real indicator 15%	Total
		Obtain a net margin = 4%		Real indicator 5%	Total
		Obtain a net margin = 4%	ENSA	Real indicator 3%	Not accomplished
		Obtain an EBITDA margin = 15%		Real indicator 15%	Not accomplished
		Obtain an EBITDA margin = 63%	HET	Real indicator 66%	Total
		Obtain a net margin = 13%		Real indicator -94%	Not accomplished
		Obtain an EBITDA margin = 38%	EPM	Real indicator 37%	Not accomplished
		Obtain a net margin = 29%		Real indicator 26%	Not accomplished

Challenges 2021

Program, project, initiative or action	Management emphasis	Challenges	Scope and coverage		
			Company	Business	Geography
Liquidity strategies	Financial health	Save COP 300,000 million in costs and effective expenses not including the commercial operation.	Grupo EPM	All businesses	All geographies
		Obtain a liquidity indicator greater than or equal to 1.	EPM		Colombia - Antioquia
		Obtain sources of financing that allow maintaining adequate levels of liquidity in the companies of the Grupo EPM	Grupo EPM		All geographies
		Manage disbursements for COP 441 billion and an additional USD 80 million for the insurance claim for the Ituango hydroelectric project incident.	Grupo EPM		All geographies
Financial results	Financial health	Obtain a return indicator on operating capital employed - RSCEO = 19.1%	EPM	All businesses	Colombia - Antioquia
		Obtain an EBITDA margin = 57%	Adasa	Water and sanitation	Chile
		Obtain a net margin = 32%			
		Obtain an EBITDA margin = 2%	Aguas de Malambo		Colombia - Malambo
		Obtain a net margin = -7%			
		Obtain an EBITDA margin = 39%	Aguas del Oriente		Colombia - Antioquia
		Obtain a net margin = 23%			
		Obtain an EBITDA margin = 70%	Aguas Nacionales		
		Obtain a net margin = 48%			
		Obtain an EBITDA margin = 33%	Aguas Regionales		
		Obtain a net margin = 11%			

Program, project, initiative or action	Management emphasis	Challenges	Scope and coverage: Company	Business	Geography
Financial results	Financial health	Obtain an EBITDA margin = 24%	Emvarias	Water and sanitation	Colombia - Antioquia
		Obtain a net margin = 3%			
		Obtain an EBITDA margin = 24%	Ticsa		México
		Obtain a net margin = 7%			
		Obtain an EBITDA margin = 21%	CENS	Energy - T&D	Colombia - Norte de Santander
		Obtain a net margin = 8%			
		Obtain a net margin = 10%	ESSA		Colombia - Santander
		Obtain an EBITDA margin = 26%			
		Obtain an EBITDA margin = 28%	CHEC		Colombia - Caldas
		Obtain a net margin = 14%			
		Obtain an EBITDA margin = 10%	Delsur		El Salvador
		Obtain a net margin = 3%			
		Obtain an EBITDA margin = 23%	EDEQ		Colombia - Quindío
		Obtain a net margin = 11%			
		Obtain an EBITDA margin = 14%	Eegsa		Guatemala
		Obtain a net margin = 4%			

Program, project, initiative or action	Management emphasis	Challenges	Scope and coverage		
			Company	Business	Geography
Financial results	Financial health	Obtain a net margin = 4%	**ENSA**	Energy - T&D	**Panamá**
		Obtain an EBITDA margin = 18%			
		Obtain an EBITDA margin = 63%	**HET**		
		Obtain a net margin = 11%			
		Obtain an EBITDA margin = 38%	**EPM**	All businesses	**Colombia - Antioquia**
		Obtain a net margin = 29%			

** Commercial operation: Resources necessary for the provision of home public services.*

Sustainable Development Goals







Associated stakeholders

- Clients and users
- State
- Partners
- Community
- Investors
- Owner
- Suppliers and contractors

GRI standards Contents and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
EPM - 21	Resources generated by liquidity strategies
EPM - 22	Ebitda EPM.
EPM - 23	Ebitda Grupo EPM.
EPM - 24	EPM Ebitda Margin.
EPM - 25	Grupo EPM Ebitda Margin.
EPM - 26	EPM Net Margin.
EPM - 27	Grupo EPM Net Margin.
EPM - 32	Grupo EPM Covenant (Debt / Ebitda)

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Business

Water

Sanitation

Electricity

Gas

Macroeconomic behavior

Back to content

Macroeconomic behavior

Grupo EPM continued to provide public services in the midst of a challenging economic environment due to the COVID-19 pandemic, volatility in financial markets and the drop in oil prices.

The atypical conditions of the year 2020 generated negative effects on demand, employment, consumption, investment, exports and sectors such as trade in services, mining, construction and entertainment activities; in addition, a high level of PUBLIC debt was reached as a reaction to the crisis. Regarding inflation, a decreasing trend was observed in Colombia, Panama and El Salvador, caused largely by the weak demand and large excesses of productive capacity that the pandemic generated, as well as by the temporary price relief granted by the governments and the lower price of fuel, mainly in Central America. In exchange, currencies registered a strong depreciation against the dollar in the first quarter of the year as a result of the fall in the price of commodities, risk aversion and volatility caused by the pandemic in international financial markets, a trend that it was reversed as of the second semester.

Performance in 2020

In the first semester, EPM had a relevant foreign currency rate exposure that presented an accounting impact. As of June, once the respective authorizations were obtained, and after an average stabilization of the financial markets, conditions were generated that allowed EPM to close 16 hedging operations for an amount of USD 1.45 billion, which they made it possible to significantly mitigate the market risks associated with financial liabilities in foreign currency, which made it possible to reduce the foreign currency rate exposure from USD 1.66 billion in January to USD 414 million in December.

Concept	Colombia	México	Panamá	Chile	El Salvador	Guatemala
IPC (annual variation)	1.61%	3.15%	-1.60%	2.97%	-0.08%	4.82%
PPI / MPI (annual variation)	1.65%	4.14%	N.A.	10.21%	0.52%	N.A.
Exchange rate (end of year)	3,432.50	19.91	N.A.	711.24	N.A.	7.79
Devaluation / Revaluation(annual)	4.74%	5.54%	N.A.	-4.48%	N.A.	1.23%

Source: Executive Vice President Finance and Investments

Scope and coverage

Companies

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa Eléctrica de Guatemala - Eegsa

EPM Chile

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Business

Water
Sanitation
Elecrticity
Gas

Liquidity strategies

Back to content

Liquidity strategies

The liquidity strategy of EPM and in general of the business group is aimed at guaranteeing the sources of resources that allow meeting the needs derived from the normal operation of the businesses and guaranteeing the execution of the infrastructure investment plan, to continue providing public services in conditions of coverage, reliability and quality.

The establishment of an optimal source structure is a principle that guarantees not only the necessary resources in the short and medium term, but also the financial stability of the Group's companies in the long term.

Performance in 2020

Grupo EPM's liquidity strategy focused on managing the claim for the Ituango Hydroelectric Project policy, optimizing costs and expenses, managing to obtain financing resources to meet the needs of the second half of 2020 and pre-funding of much of 2021, in order to guarantee the sources of resources that allow the Company to cover the needs derived from the normal operation of the businesses and guarantee the execution of the infrastructure investment plan, to continue providing quality PUBLIC SERVICES AND comply with the guidelines derived from the health emergency due to COVID-19.

Actions aimed at obtaining additional sources of liquidity for the Grupo EPM:

Issuing Bonds

It was successfully carried out with a new foray into the international capital market, through the placement of bonds equivalent to USD 750 million, represented in a bond issue in dollars for USD 525 million maturing in 2031 and a second reopening of the Global peso bond maturing in 2027, for USD 175 million equivalent, additionally, credits were obtained with commercial banks and development banks for COP 181 billion.

Policy claim

Regarding the compensation received during 2020 for claims in the policies of the corporate insurance program for the Grupo EPM, also including the compliance insurance that guarantees the execution of the contracts, close to COP 25,200 million were received in compensation for subsidiaries in Colombia including EPM.

As part of the Ituango Hydroelectric Project contingency, three advance payments were received for the claims of affected third parties in the Extra-contractual Civil Liability policy for a value of COP 8,666 million. Regarding the Construction and Assembly All Risk policy, on September 15, 2020 Mapfre made a second advance payment of USD 100 million corresponding to emergent damage in civil works and equipment.

Cost and expense optimization

The Grupo EPM continued with the goal of saving costs and expenses excluding the commercial operation component, thus guaranteeing continuity in the provision of services in a timely manner and with the quality that characterizes EPM.

In 2020 the Grupo EPM obtained an Internal Generation of Funds (GIF) of COP 6.1 billion and EPM of COP 3.7 billion, resources from the dynamics of its operation and from other sources that have allowed financing the investment plan and other obligations of the Group.

GRI standards Contents and own indicators

EPM – 21 Resources generated by liquidity strategies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM
Aguas Regionales EPM
Aguas Nacionales EPM
Empresa de Aguas del Oriente Antioqueño
Aguas de Malambo
Empresas Varias de Medellín - Emvarias
Central Hidroeléctrica de Caldas - CHEC
Electrificadora de Santander - ESSA
Empresa de Energía del Quindío - EDEQ
Centrales Eléctricas del Norte de Santander - CENS
Distribuidora de Electricidad del Sur - Delsur
Empresa Eléctrica de Guatemala - Eegsa
EPM Chile
Tecnología Intercontinental - Ticsa
Hidroecológica del Teribe - HET
Elektra Noreste - ENSA
Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Business

Water
Sanitation
Electricity
Gas

Financial results

Back to content

Financial results

EPM, as a decentralized entity of the Municipality of Medellín, has the obligation to periodically report its financial results. In turn, being international bond issuers, it is committed to its investors to keep them informed about the results and different situations that may positively or negatively impact the results of EPM and the Group.

In order to guarantee the transparency of the financial information, an external entity is reviewing it that validates the quality and veracity of the information.

Performance in 2020

The companies of the Grupo EPM allocated the necessary resources to comply with the guidelines issued by national governments to face the health crisis caused by COVID-19. The provision of the energy service began in part of the Atlantic coast of Colombia through the new AFINIA subsidiary and EPM continued with the advancement of the Ituango Hydroelectric Project. In this way, the Grupo EPM has taken on significant challenges and has continued with the strategy aimed at guaranteeing financial soundness in the midst of an economic environment characterized by the uncertainty derived from the pandemic and a devaluation that presented its historical maximum of 24% in the first quarter year.

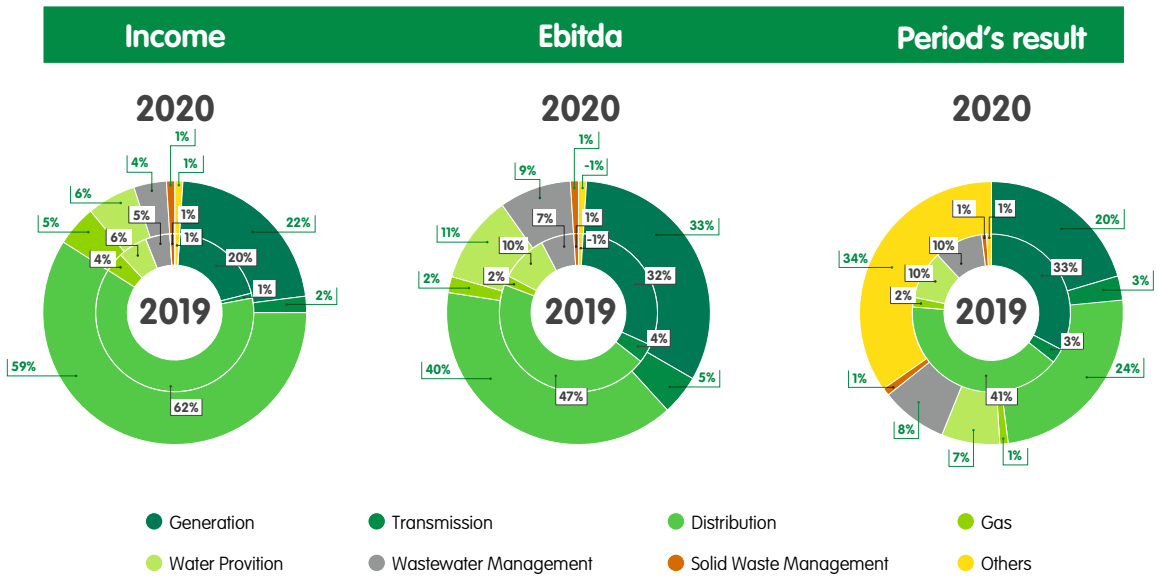
Indicator	2020		2019		Variations %	
	Grupo	EPM	Grupo	EPM	Grupo	EPM
Income	19,799	9,898	18,360	8,850	8%	12%
Total costs and expenses	15,669	7,044	13,390	5,608	17%	26%
Ebitda	5,761	3,607	6,011	3,832	-4%	-6%
Net profit	3,741	2,540	3,156	2,706	19%	-6%

Source: Executive Vice President Finance and Investments

* *Figures in billions*

In terms of Ebitda, there was a 4% decrease in relation to the previous year, for a value of COP 5.8 billion, explained by a combined effect of a lower income growth than expected by the fall in the industry demand for the times of confinement and the higher costs generated in the commercial operation (energy purchases), portfolio deterioration, biosafety supplies, among others. 45% was contributed by the distribution and transmission businesses, followed by generation with 33%, provision of water, wastewater and solid waste management with 21% and the gas business with 2%.

Grupo EPM's net income was COP 3.7 billion with a growth of 19%, equivalent to COP 584,942 million, mainly explained by the net effect of a positive variation in income of COP 1.4 billion, higher costs and expenses of COP 2.3 billion, accumulated devaluation of 4.74%.



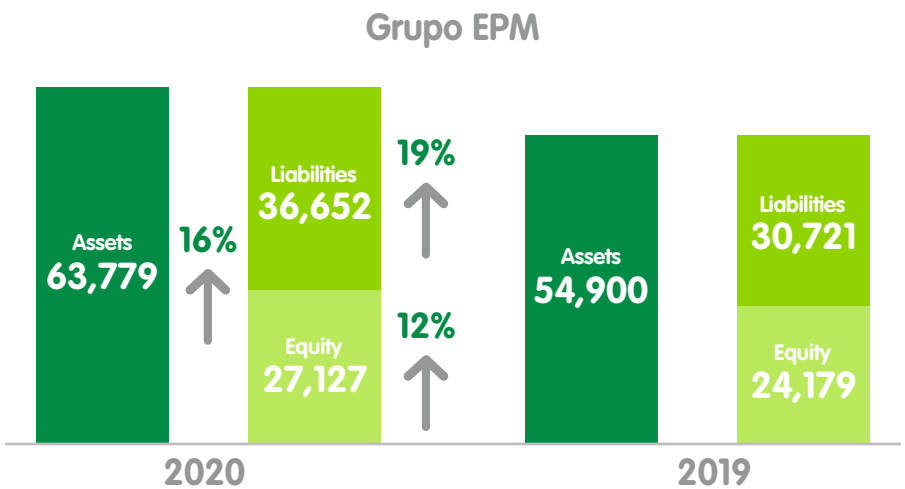
Source: *Executive Vice President Finance and Investments*

The Ebitda margin and equity profitability reached results of 29% from 15% respectively.

The Debt / Ebitda indicator of the Business Group as of December 2020 amounted to 4.37, being above the established limit of 3.5, it deteriorated with respect to the value obtained in 2019 (3.49) due to the fact that the debt increased by 20% compared to the previous year, reaching COP 25 billion. Said increase was mainly due to the international issuance of bonds and loan disbursement with HSBC, for the allocation of resources for general corporate uses and an investment plan.

The growth of the Group's assets was 16%, going from COP 54.9 to COP 63.7 billion; liabilities grew 19%, going from COP 30.7 billion to COP 36.6 billion, and equity a growth of 12%, going from COP 24.2 billion to COP 27.1 billion.

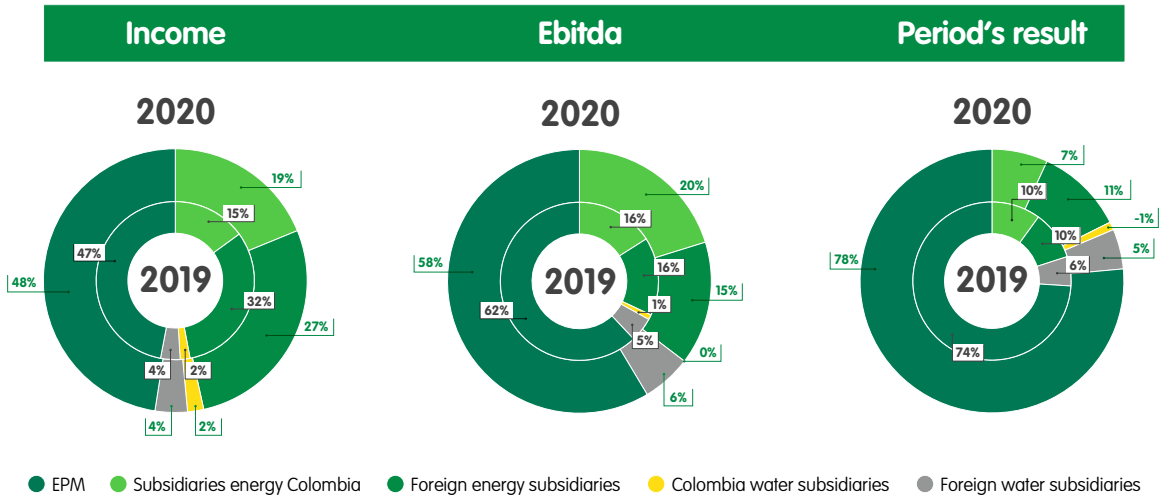
Grupo EPM made investments in infrastructure for COP 3.1 billion of which COP 2.1 billion were in EPM Parent Company, the national subsidiaries COP 506,896 and the international ones COP 507,969 million.



Source: *Executive Vice President Finance and Investments*

The affiliates contribute to the Ebitda of the COP2.6 billion group, of which the international affiliates participate with 50% as well as the national ones. The structure by business presents a contribution of 84% from energy companies and 16% from water companies.

EPM received in 2020 dividends for COP 465,074 million, of which 84.3% came from affiliated companies and the rest to non-controlled companies.



Source: *Executive Vice President Finance and Investments*

In turn, EPM at the end of 2020 reached revenues of COP 9.9 billion, an Ebitda of COP 3.6 billion and a result of the exercise of COP 2.5 billion. Regarding total assets, they amounted to COP 53.4 billion, equity in COP 26.4 billion and liabilities COP 26.9 billion, figures that compared to December of the previous year presented growth of 13% for total assets, as well as for liabilities + equity. The Ebitda margin and equity profitability reached results of 37% from 10% respectively.

Transfers to the Municipality in 2020 amounted to COP 1.5 billion, of which COP 811,810 million correspond to ordinary transfers and COP 676,509 million to extraordinary ones. The variation with respect to the previous year in terms of ordinary and extraordinary transfers is 15%.

GRI standards Contents and own indicators

EPM - 21	Covenant Grupo EPM (Debt / Ebitda).
EPM - 22	Ebitda EPM.
EPM - 23	Ebitda Grupo EPM.
EPM - 24	EPM Ebitda Margin.
EPM - 25	Grupo EPM Ebitda Margin.
EPM - 26	EPM Net Margin.
EPM - 27	Grupo EPM Net Margin.
EPM - 32	Covenant Grupo EPM (Deuda / Ebitda)

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Empresas Públicas de Rionegro - EPRio

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

EPM Chile

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Business

Water

Sanitation

Electricity

Gas

Rates and prices

Back to content



Rates and prices

Management before the Colombian National Government and regulatory entities for the application of rate methodologies that are fair and efficient for customers, accompanied by education and communication activities for customers and users to facilitate understanding of the UTILITY bill and the factors that affect the rate.

The rates for publicservices provided by Grupo EPM are regulated. For this reason, the Colombian Government and the regulatory entities are permanently proceeding with the management so that the rate methodologies that are applied are fair and efficient for the clients. The competitive rate is a purpose of Grupo EPM, and it is for this reason that, additionally, it works on a business efficiency scheme in its costs and in its processes.

In the case of large consumers of electricity and natural gas, the Grupo EPM offers rates to be negotiated with its customers in the components of the marketing margin and the value of the supply. In this case, the other components are regulated (transport, distribution and others).

Importance

It allows the recovery of costs and the achievement of the strategic objectives of the company. It impacts the trust of stakeholders in the organization by influencing their perception of the fairness of rates, by contrasting the Company's surpluses with people's income and with the proportion in which both increase over time.

Main achievements

The achievements are cut to December 31, 2020.

Program, project, initiative or action	Challenges	Company	Follow-up closure	Compliance
Aqueduct and sewerage rates	Modify Resolution CRA 688 of 2014 regarding the calculation of the investment provision.	EPM	Work was carried out before the CRA, with the accompaniment of Andesco, where arguments were presented that from the point of view of the Company and the sector merited modifying the norm. The CRA analyzed the issue and published Resolution CRA 938 of 2020 where the manner of calculation of the investment provision is modified.	Total
	Request the rate modification (components: POIR and demand) of the aqueduct and sewerage services.	Aguas de Malambo	On December 11, 2020, a request for a particular modification of the Aguas de Malambo rate formula was filed with the CRA in order to adjust the following variables and parameters: i) the projection of users, consumption and losses, ii) the Index of Losses per Standard Billed Subscriber (IPUF *) replace it by the Economic Level of Losses -NEP- calculated for the Company's own system and iii) the Regulated Work and Investment Plan -POIR-	Total
	Request a rate modification from the CRA (components: POIR and demand) of the aqueduct and sewerage services.	Aguas Regionales	It was possible to define that the development of the tariff modification is by service provision area, this will be presented to the Board of Directors in 2021.	Partial
	Obtain the declaration of regional market by the CRA, for the regional tariff of the aqueduct and sewerage services in the municipalities of the interconnected system, Caldas and Rionegro.	EPM	The declaration of the regional market for EPM was obtained by the CRA for a period of up to 20 years, supported by Resolution CRA 934 of 2020.	Total
	Make the request for a rate modification of the cost of final disposal of the Cleaning service.	Emvarias	Approval was obtained from the Company's Board of Directors to proceed with the application before the CRA in 2021.	Partial

Program, project, initiative or action	Challenges	Company	Follow-up closure	Compliance
Electricity rates	Manage the approval of income for the Grupo EPM's electricity distribution business and actively participate in the process of defining the new transmission remuneration methodology.	EPM	Admission approval was obtained. Regarding the remuneration methodology of the distribution business, it was raised by the regulation commission for 2021.	Partial
	At EPM Implement and lead the technical, regulatory, financial and administrative implementation of the standards issued by CREG related to CREG Resolution 015 of 2018, and monitor and standardize procedures in the Colombian subsidiaries of the business group.	EPM	23 deliverables out of 52 were completed, with a project progress of 86% over the planned 88% goal. The main milestones achieved were: • Incentive and compensation quality scheme certification. • Internal audit for asset management certification. • Satisfactory external audit for AOMs. • Computer developments required for implementation. • Employee training on the CREG Resolution • 015.	Partial
	Manage the approval of income for the electricity distribution business.	EDEQ	It was approved in April 2020.	Total
Gas rates	Manage the approval of natural gas retail distribution and marketing charges.	EPM	The request for approval of distribution charges was formalized before the CREG. Approval is expected in the first half of 2021. The CREG did not advance in the definition of the methodology for remuneration of marketing positions that it had proposed on its agenda.	Partial

Challenges

Program, project, initiative or action	Challenges	Scope and coverage		
		Company	Business	Geography
Electricity rates	Implement and lead the technical, regulatory, financial and administrative implementation of the standards issued by the CREG related to CREG Resolution 015 of 2018, in EPM and carry out monitoring and approval of procedures in Colombian energy subsidiaries.	**EPM**	Energy - T&D	**Colombia - Antioquia**
Aqueduct and sewerage rates	Respond in a timely manner to the requests made by the CRA regarding the process of issuing the next rate framework for large water supply, sewerage and Cleaning providers.	**EPM**	Water and Cleaning	**Colombia**
	Request before the CRA the rate modification (components: POIR, demand and / or losses) of the aqueduct and sewerage services.	**Grupo EPM**		**Colombia**
	Implement the regional rate for the aqueduct and sewerage services in the municipalities of the Interconnected System, Caldas and Rionegro.	**EPM**		**Colombia - Antioquia**
Cleaning fees	Request before the CRA the rate modification of the cost of final disposal of the Cleaning service.	**Emvarias**	Water and Cleaning	**Colombia - Antioquia**
Business outreach events	Communicate the rate increases for the year 2021, with a pedagogical approach that facilitates understanding by the business community about the relevance of publicservices as a fundamental input in the production chain and in the economic reactivation of commercial and industrial sectors under the current panorama of the region.	**EPM**	All businesses	**Colombia - Antioquia**

Sustainability Report 2020

Sustainable Development Goals







Associated stakeholders

- Clients and users
- State
- Colleagues
- Investors
- Owner
- Partners

GRI standards Contents and own indicators

103 - 1	Explanation of the material topics and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
EPM - 13	Rates by type of service.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Company de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Business

Water
Sanitation
Electricity power
Gas

Invoice

Back to content

Invoice

The EPM invoice is the Company's means to charge for the publicservices it provides and to communicate with customers and users through a modern, personalized, close and easy-to-interpret format, which also seeks to facilitate their understanding of the invoiced values and at the same time keep them updated with information of interest for them.

Performance in 2020

The year 2020 was one of great challenges due to the pandemic generated by COVID-19.

Faced with this situation, the Company implemented the following actions that were reflected in the billing:

- Reinstallation and reconnection of energy and gas services.
- No suspensions or cuts for non-payment in energy and gas to residential and non-residential customers.
- Suspension in the collection of credits and financing.
- No charge of interest on arrears.
- Payment facilities for debts prior to the COVID-19 health emergency, with special rates and terms.
- Payment agreements for clients of the unregulated energy market, in force from March 23 to July 31, 2020.
- Deferred payment option for non-residential customers. For energy and gas consumption billed in April, May and June 2020. In aqueduct and sewerage, it was applied for consumptions invoiced between March 17 and July 31, 2020.
- For Prepaid Water customers, no charge of 10% of the debt in each recharge, from March 23, 2020 to July 22, 2020.

A special installment payment program for public services was also activated, through this, the client could divide the value of the EPM invoice into up to three payments during the month. In addition, the ongoing programs continued: Prepaid Energy, Prepaid Water, partial payment of the bill and financing plans.

When interpreting the invoice, it is important to be clear about the concepts that influence the values to be paid by customers. The main elements to be considered are the consumption units and the rates for each of the billed services. In addition, concepts such as credits, days of consumption and work performed, among others, must be taken into account.

The consumption of each one of the services depends mainly on the habits of use that the client has; Variables such as the NUMBER of people who live in the property, the technical conditions of the installations and the characteristics of consumer appliances and household equipment influence. The days of consumption that are taken into account for billing also influence consumption, since they may vary in some months of the year due to factors such as the NUMBER of days of the month and holidays, among others.

In Colombia, the rates for each of the services are defined by the respective regulatory commissions through rate formulas that, depending on their application and the different variables defined for each of the services, may define increases or decreases in rates.

In addition, there are other concepts that must be taken into account when reviewing the invoice values: delinquency interest for accounts pending or paid after the date, financing of consumption, work carried out, new services or purchases made with the Somos credit, charges for suspensions or reconnections of the service. Additionally, in some Antioquia municipalities, EPM has agreements to bill the services provided by other entities, including the Cleaning fee and publiclighting, and other products such as vital insurance and home network.

In 2020, education and communication activities were carried out to facilitate the understanding of the invoice:

Reading to your measure aimed at promoting understanding of the meter reading process and the bill. Through home visits and virtual conversations, about 85,500 people were approached.

26 "We are there for you" events, 12 Cuidamundos activities and 941 sensitized community leaders, meetings that allowed closeness, pedagogy and the strengthening of relationships of trust with clients, users and the community.

Pedagogical communication campaigns were also carried out to promote the efficient use of publicservices during confinement due to COVID-19.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Geography

Colombia – Antioquia

Business

Water
Sanitation
Electric power
Gas

Aqueduct and sewerage rates

Back to content

Aqueduct and sewerage rates

The household public services of aqueduct and sewerage are regulated, which is why the Grupo EPM makes permanent work before the National Government and the decentralized entities of regulation and control, to contribute to the well-being of the population, through market conditions that allow provide these services with quality, continuity and coverage at competitive and efficient rates, which also guarantee the financial sufficiency of the Company.

Performance in 2020

In 2020, the Colombian companies of the Grupo EPM participated in regulatory spaces established by the Commission for the Regulation of Drinking Water and Basic Cleaning - CRA, by the Superintendency of residential publicServices - SSPD and by the Ministry of Housing, City and Territory - MVCT. The predominant theme was all the regulatory development associated with the health emergency due to COVID-19.

In Colombia the National Government, through the Ministry of Housing, City and Territory and the Regulatory Commission of Water and Basic Cleaning, implemented a series of measures on publicservices residential water and sewerage: reinstallation and immediate reconnection of the aqueduct service, temporary suspensions of rate increases, deferred payment of homepublicservices, direct transfer of resources from the General Participation System -SGP-, increase in the subsidy limit, among others.

Important sectoral definitions were presented, such as the provision of resources due to differences between planned and executed investments and the foundations of the next tariff framework.

Regulatory work in 2020 consisted of monitoring, participation and work in the general regulations for the sector due to the measures implemented by the National Government to respond to the economic and social effects of the pandemic. This produced a normative compendium constituted by the resolutions of the Commission for the Regulation of Drinking Water and Basic Cleaning (CRA) 911, 915, 916, 918, 919, 920, 921, 922, 923, 932 and 936 of 2020, which created an environment where it was sought to protect customers and users and companies so that they can continue with the provision of quality services.

During this year, the Grupo EPM implemented the Management and Results Plan (PGR) referred to in Resolution CRA 906 of 2016, which was modified and clarified by Resolution CRA 926 of 2020. This resulted in the structuring of a calculation and reporting scheme for the 54 management indicators requested in the PGR, which will be consigned in the Single Information System (SUI) of the Superintendency of residential publicServices (SSPD). Annually, the surveillance and control entity will carry out an analysis of the risk level of each provider through the Single Sector Indicator (IUS).

Finally, among the most important regulatory steps are the issuance of Resolution CRA 938 of 2020, which modified the provision of resources due to differences between the planned and executed investments of the Regulated Works and Investments Plan - POIR. This was achieved thanks to the sectoral work articulated through Andesco.

EPM Aqueduct - Full rate (SEC 4)

Fixed charge (COP / User)	2018	2019	2020
Metropolitan area	6,173	6,359	6,551

Variable charge (COP /m³)	2018	2019	2020
Interconnected	2,357	2,596	2,843
Caldas	1,779	1,925	2,091
Barbosa	1,735	1,996	2,305

Source: Water and Sanitation Commercial Directorate.

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

EPM Sewerage - Full rate (SEC 4)

Fixed charge (COP / User)	2018	2019	2020
Metropolitan area	3,543	3,650	3,760

Variable charge (COP /m³)	2018	2019	2020
Interconectado	1,876	2,289	2,407
Caldas	930	1,084	1,236
Barbosa	1,191	1,318	1,445

Source: Water and Sanitation Commercial Directorate.

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

Aguas regionales

Aguas Regionales Aqueduct - Full rate (SEC 4)			
Fixed charge (COP / User)	**2018**	**2019**	**2020**
Region: Occidente	8,133	8,407	8,661
Region: Urabá	7,001	7,224	7,443

Variable charge (COP /m³)	**2018**	**2019**	**2020**
Region: Occidente			
Santa Fe de Antioquia	1,569	1,868	1,885
San Jerónimo	1,689	1,799	1,919
Sopetrán	1,280	1,491	1,717
Olaya	884	1,058	1,240
Region: Urabá			
Apartadó	1,442	1,544	1,559
Carepa	825	1,006	1,197
Chigorodó	1,552	1,670	1,613
Mutatá	1,847	1,903	1,943
Turbo	1,903	2,026	2,087
Bajirá	1,847	1,903	1,943
El Reposo	1,442	1,544	1,559

Source: Water and Sanitation Commercial Directorate.

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. The variations correspond mainly to the indexation of the value of the rates with respect to the CPI, thus allowing the recovery of costs and the provision of a quality service. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

Aguas Regionales Sewerage- Full rate (SEC 4)			
Fixed charge (COP / User)	**2018**	**2019**	**2020**
Region: Occidente	4,722	4,864	5,011
Region: Urabá	4,040	4,172	4,298

Variable charge (COP /m³)	2018	2019	2020
Region: Occidente			
Santa Fe de Antioquia	1,209	1,365	1,042
San Jerónimo	2,104	2,455	2,805
Sopetrán	799	1,170	1,565
Olaya	469	613	775
Region: Urabá			
Apartadó	1,900	2,161	2,224
Carepa	1,237	1,402	1,577
Chigorodó	1,701	1,919	1,963
Mutatá	1,117	1,318	1,516
Turbo	1,205	1,337	1,427

Source: Water and Sanitation Commercial Directorate.

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. The variations correspond mainly to the indexation of the value of the rates with respect to the CPI, thus allowing the recovery of costs and the provision of a quality service. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

Aguas de Malambo

Aguas de Malambo Acueducto - Tarifa plena (estrato 4)			
Concept	**2018**	**2019**	**2020**
Fixed charge (COP / User)	6,910	7,118	7,118
Variable charge (COP /m³)	1,646	1,696	1,618

Source: Water and Sanitation Commercial Directorate.

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. The variations correspond to the indexation of the value of the rates with respect to the CPI, thus allowing the recovery of costs and the provision of a quality service. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

Aguas de Malambo Sewerage- Full rate (SEC 4)			
Concept	**2018**	**2019**	**2020**
Fixed charge (COP / User)	3,530	3,636	3,636
Variable charge (COP /m³)	821	852	850
Source: Water and Sanitation Commercial Directorate.			

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. The variations correspond to the indexation of the value of the rates with respect to the CPI, thus allowing the recovery of costs and the provision of a quality service. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

Aguas del Oriente

Aguas del Oriente - El Retiro - Aqueduct - Full rate (SEC 4)			
Concept	**2018**	**2019**	**2020**
Fixed charge (COP / User)	6,786	8,468	8,468
Variable charge (COP /m³)	1,792	2,779	2,779
Source: Water and Sanitation Commercial Directorate.			

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. The significant variation in the rate from 2018 to 2019 corresponds to the application of the CRA 844 rate methodology of 2018. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

Aguas del Oriente - El Retiro - Sewerage- Full rate (SEC 4)			
Concept	**2018**	**2019**	**2020**
Fixed charge (COP / User)	4,127	4,811	4,811
Variable charge (COP /m³)	679	1,182	1,182
Source: Water and Sanitation Commercial Directorate.			

** Values as of December of each year in current prices, where the evolution of the charges charged to customers can be appreciated. The variations correspond to the indexation of the value of the rates with respect to the CPI, thus allowing the recovery of costs and the provision of a quality service. These values correspond to the full rate, that is, without including the subsidies or contributions that each municipality determines.*

GRI standards Contents and own indicators

EPM-13 Rates by type of service.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Geography

Colombia – Antioquia

Colombia – Malambo, Atlántico

Business

Water

Sanitation

Cleaning fees

Back to content

Cleaning fees

The public cleaning service is regulated, which is why the Grupo EPM carries out permanent work before the National Government and the decentralized entities of regulation and control, to contribute to the well-being of the population, through market conditions that allow the service to be provided with quality, continuity and coverage at competitive and efficient rates, which also guarantee the financial adequacy of the Company.

Performance in 2020

In 2020, the Colombian companies of the Grupo EPM participated in regulatory spaces established by the Commission for the Regulation of Drinking Water and Basic Cleaning - CRA, by the Superintendency of residential publicServices - SSPD and by the Ministry of Housing, City and Territory - MVCT. The predominant theme was all the regulatory development associated with the health emergency due to COVID-19.

In Colombia the National Government, through the Ministry of Housing, City and Territory and the Regulatory Commission of Water and Basic Cleaning, implemented a series of measures on Cleaning public services: increase in the frequencies of washing and disinfection of publicareas, deferred payment of services, among others. Additionally, for the Cleaning service, sectoral definitions were also presented, such as the productivity factor that companies must incorporate in their rates, clearer rules were defined for the implementation of incentives for use, and the bases for the next rate framework were presented.

Regulatory work in 2020 consisted of monitoring, participation and work in the general regulations for the sector due to the measures implemented by the National Government to respond to the economic and social effects of the pandemic. This produced a normative compendium constituted by the resolutions of the Commission for the Regulation of Drinking Water and Basic Cleaning (CRA) 911, 915, 916, 918, 919, 920, 921, 922, 923, 932 and 936 of 2020, which created an environment where it was sought to protect customers and users and companies so that they can continue with the provision of quality services.

For its part, Resolution CRA 912 of 2020 defined the productivity factor of the Cleaning service at 1.18%. This value had been estimated to display a lower value in the invoice as of April 2020, however, this term was modified by Resolution CRA 916 of 2020, which defined that

such a factor must be incorporated into the billing of the month following in which the health emergency ends.

In April 2020, the Ministry of Housing, City and Territory, published Resolution 0172, which regulates and defines the eligibility criteria that the projects that intend to access the resources of the incentive for the use and treatment of solid waste must have. This has led to the analysis of the possible alternatives provided by the standard for its implementation and the viability of waste recovery projects for the city of Medellín.

Rates per user of the ordinary Cleaning service in Medellín

Concept	2018	2019	2020
Socio Economic Level 1	8,113	8,064	8,315
Socio Economic Level 2	11,233	11,173	11,482
Socio Economic Level 3	16,251	16,170	16,587
Socio Economic Level 4	20,109	20,027	20,456
Socio Economic Level 5	41,233	41,134	41,678
Socio Economic Level 6	50,123	50,088	50,332
Small Commercial Generators	51,558	51,713	51,033
Variable Charge m^3 Large Generators	51,809	55,634	58,612

Source: Emvarias

** Values as of December of each year in current prices, where the evolution of the rates charged to customers can be appreciated. The variations correspond to the indexation of the value of the rates, with respect to indicators such as the IPC, the SMMLV, the Fuel Oil Fuel Oil and Diesel Oil ACPM (ICFO), and the earthworks index (IOExp), thus allowing the cost recovery and the provision of a quality service. The decrease in the rate charged to residential users in 2019 compared to 2018, corresponds to the decrease in tons presented by each subscriber.*

GRI standards Contents and own indicators

EPM-13 Rates by type of service.

Scope and coverage

Companies

Empresas Varias de Medellín - Emvarias

Business

Sanitation

Geography

Colombia – Antioquia

Electricity rates

Back to content

Electricity rates

By their nature, home public services are price-regulated. This means that the rates that EPM charges its clients are not freely chosen, but are subject to the provisions determined by the regulatory entity and supported by Law; in this case it is the CREG –Commission for the Regulation of Energy and Gas-. This entity dictates norms that establish the methodologies for calculating the rates and they are based on efficiency criteria so that efficient costs are transferred to the consumer. In all the regions where it provides its services, Grupo EPM seeks that rates are competitive so that they allow cost recovery and the sustainability of companies. In 2020, EPM continued its proactive work with the CREG and the National Government so that the rules issued for the next rate period reflect fair and efficient rates.

The costs covered with the rate are the assets required to provide the service through the production chain (Generation, transmission, distribution and commercialization), as well as the costs of managing, operating and maintaining them, in order to deliver electrical energy from energy sources to the end user's home; additionally, the rate also covers the costs associated with the customer service support process.

Performance in 2020

During 2020, EPM continued to offer its clients competitive rates at all voltage levels, especially level 1: its price was always among the 4 cheapest in Colombia; The national companies of the Grupo EPM were on this same track.

The Company continued with the correct implementation of CREG Resolution 015 of 2018, which determined the new methodology for calculating the distribution charge. Said regulations have impacted the rate, given that this component has an important share in the unit cost, as it recognizes new projects that promote uninterrupted service with compliance with high international quality standards.

In attention to the provisions issued by the National Government in Colombia to face the health emergency caused by COVID-19, EPM accepted, as of March 2020, CREG Resolutions 012, 058 and 152 of 2020, which enable the rate option mechanism for the regulated market, in such a way that the energy tariff published from March to November, did not show variations; the December rate increased 0.5% compared to the previous month.

Resolution CREG 104 of 2020 was also applied in June, which defined the monthly calculation of the rate for subsistence consumption of SEC 1 and 2, while the state of emergency declared by the Ministry of Health lasts, as the lowest variation between inflation and the cost of providing the service, giving priority to the benefit of the client.

In 2020, the management of the energy purchase strategy continued, which represented not only savings for users, but also efficiencies for the Company, by positioning itself as one of the most prominent buyers in the market, ranking among the top three places.

The coverage in long-term energy contracts was not less than 88%, which minimized exposure to the stock market, providing customers with fair prices and lower than the average market price, protecting them from fluctuations in the energy market.

Evolution of energy rates - EPM (COP / kWh)

Concept	2018	2019	2020
Socio Economic Level 1	214	223	228
Socio Economic Level 2	268	278	285
Socio Economic Level 3	424	441	485
Socio Economic Level 4	498	519	570
Socio Economic Level 5	598	623	684
Socio Economic Level 6			
Commercial			
Industrial			

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

Evolution of energy rates - EDEQ (COP / kWh)			
Concept	**2018**	**2019**	**2020**
Socio Economic Level 1	228	234	240
Socio Economic Level 2	285	296	300
Socio Economic Level 3	450	453	501
Socio Economic Level 4	530	533	589
Socio Economic Level 5	636	640	707
Socio Economic Level 6			
Commercial			
Industrial			

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

Evolution of energy rates - ESSA (COP / kWh)			
Concept	**2018**	**2019**	**2020**
Socio Economic Level 1	215	223	235
Socio Economic Level 2	269	279	293
Socio Economic Level 3	419	450	499
Socio Economic Level 4	493	530	587
Socio Economic Level 5	592	636	704
Socio Economic Level 6			
Commercial			
Industrial			

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

Evolution of energy rates - CENS (COP / kWh)			
Concept	**2018**	**2019**	**2020**
Socio Economic Level 1	216	225	240
Socio Economic Level 2	270	282	300
Socio Economic Level 3	451	453	508
Socio Economic Level 4	531	533	597
Socio Economic Level 5	637	640	716
Socio Economic Level 6			
Commercial			
Industrial			

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

Evolution of energy rates - CHEC (COP / kWh)			
Concept	**2018**	**2019**	**2020**
Socio Economic Level 1	234	243	245
Socio Economic Level 2	285	296	303
Socio Economic Level 3	466	472	515
Socio Economic Level 4	548	556	606
Socio Economic Level 5	658	667	727
Socio Economic Level 6			
Commercial			
Industrial			

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

Evolution of energy rates - Afinia (COP / kWh)	
Concept	**2020**
Socio Economic Level 1	234
Socio Economic Level 2	285
Socio Economic Level 3	466
Socio Economic Level 4	548
Socio Economic Level 5	654
Socio Economic Level 6	
Commercial	
Industrial	

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** Afinia began operations in October 2020. The values correspond to the rate in December 2020.*

Evolution of energy rates - ENSA (USD / kWh)			
Concept	**2018**	**2019**	**2020**
Residencial	0.17	0.2	0.17
Commercial	0.21	0.24	0.22
Industrial	0.18	0.21	0.19

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

The reduction was due to lower energy costs, given the reduction in fuel costs.

Evolution of energy rates - Delsur (USD / kWh)			
Concept	**2018**	**2019**	**2020**
Residencial	0.21	0.228	0.192
Commercial	0.19	0.206	0.171
Industrial	0.16	0.169	0.136

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

The variations are mainly due to the decrease of around 24% (Delsur data in December 2020 figures) in the price of energy between December 2019 and December 2020, these variations are due to the decrease in the price of oil.

Evolution of energy rates - Eegsa (USD / kWh)			
Concept	**2018**	**2019**	**2020**
Baja tensión simple	0.14	0.17	0.16

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The values correspond to the rate in December 2020.*

The variations are mainly due to the decrease of around 24% (Delsur data in December 2020 figures) in the price of energy between December 2019 and December 2020, these variations are due to the decrease in the price of oil.

GRI standards Contents and own indicators

EPM-13 Rates by type of service.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Company de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Afinia

Distribuidora de Electricidad del Sur - Delsur

Company Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Colombia – Bolívar
Colombia – Cesar
Colombia – Córdoba
Colombia – Sucre
Colombia – Sur de Magdalena
El Salvador
Guatemala
Panamá

Business

Electric power

Gas rates

Back to content

Gas rates

The domestic public service of natural gas through pipeline networks is regulated in prices by the Energy and Gas Regulation Commission - CREG. Under the definition of specific remuneration methodologies for each activity in the natural gas value chain (Production, transportation, distribution and marketing), this regulatory entity seeks to guarantee the transfer of efficient investment and administration, operation and maintenance costs to the customers.

It is understood that every rate is comprehensive in that it involves coverage and a level of quality of service. EPM seeks, in all the towns where it provides this service, that the rates are competitive and allow the recovery of costs and the sustainability of the Company.

The marketing cost, which is charged today through a fixed fee, pays for the entire customer service support process.

Performance in 2020

Evolution of gas rates - Integrated EPM (COP / m^3)

Concept	2018	2019	2020
Socio Economic Level 1	876	928	1,004
Socio Economic Level 2	946	1,026	1,144
Socio Economic Level 3	1,694	1,884	2,168
Socio Economic Level 4	1,686	1,884	2,168
Socio Economic Level 5	1,961	2,201	2,552
Socio Economic Level 6	1,867	2,099	2,456
Non-residential sector (Commercial + Industrial)	1,489	1,491	1,780
Commercial	1.497	1,500	1,793
Industrial	1.481	1,482	1,767
Vehicular Gas	964	1,024	1,025

Source: Gas Vice Presidency, Commercial Management

** Average rate (including the fixed charge) based on the average consumption by stratum, of the municipalities of Medellín, Barbosa, Girardota, Copacabana, Bello, Envigado, ITAGÜÍ, Sabaneta, La Estrella, Caldas, La Ceja, La Unión, El Retiro, Sonsón, Apartadó, Turbo, Chigorodó, Carepa, Necoclí, Arboletes, Frontino, Cañasgordas, Fredonia, Santa Bárbara, Jardín, Jericó, San Juan de Urabá, Abejorral, Angelópolis, Belmira, Betania, Betulia, Caramanta, Carolina del Príncipe, Cocorná, Concordia, Gómez Plata, Granada, Guadalupe, Hispania, Montebello, Mutatá, Pueblorico, Puerto Nare, Salgar, San Carlos, San Luis, San Pedro de Urabá, San Rafael, Támesis, Tarso, Titiribí, Urrao, Valparaíso, Venice, Maceo, Amalfi, Santo Domingo, Caracolí, Yolombó, San Vicente, Ituango, Liborina, Olaya, Sabanalarga, San Andrés de Cuerquia, Valdivia, Concepción, Dabeiba, Remedios, San José de la Montaña, San Roque (urban), Toledo, Vegachí and Yalí.*

Evolution of gas rates - EPM Markets with investment resources (COP / m³)			
Concept	**2018**	**2019**	**2020**
Socio Economic Level 1	704	727	749
Socio Economic Level 2	923	952	975
Socio Economic Level 3	2,996	3,141	3,367
Socio Economic Level 4	2,945	3,156	3,378
Socio Economic Level 5	4,321	4,679	5,293
Socio Economic Level 6	3,805	3,955	4,175
Commercial	3,297	3,318	3,591
Industrial	2,995	3,032	3,355

Source: Gas Vice Presidency, Commercial Management

** Average rate (including the fixed charge) based on the average consumption by stratum, of the municipalities of Guatapé, El Peñol, Yarumal, San Pedro de Los Milagros, Santa Rosa de Osos, Entrerríos, Donmatías, Santa Fe de Antioquia, San Jerónimo and Sopetrán, Amagá, Puerto Berrío, San Jose del Nus and Cisneros.*

Evolución de las tarifas de gas – EPM Integrado (COP / m3)			
Concept	**2018**	**2019**	**2020**
Socio Economic Level 1	1,488	1,387	1,301
Socio Economic Level 2	854	953	921
Socio Economic Level 3	3,751	3,531	3,666
Socio Economic Level 4			
Socio Economic Level 5	4,501	4,238	4,399
Socio Economic Level 6			
Commercial	4,085	4,129	3,992
Industrial			
Vehicular gas	1,250	1,195	1,196

Source: Gas Vice Presidency, Commercial Management

** Average rate (including the fixed charge) based on the average consumption by stratum, of the municipalities of Guarne, Marinilla, Rionegro and Santuario.*

As of the March / 2018 billing, CREG approved new markets and temporary distribution charges for the municipalities served by EPM. It defined an integrated market and 8 submarkets that correspond to the municipalities to which investment resources from the Nation were approved. The new regulatory framework defined in CREG Resolution 202/2013 also began to be applied.

For the municipalities of the Southeast, the previous regulatory framework (CREG 011/2003) and its approved charges continued to be applied. As of the May / 2020 billing, tariff paths defined in CREG 048/2020 are applied.

The variation of the rate in SEC 1 and 2 corresponds to the first 20 m3. The variation is not comparable since the calculation depends on the behavior of the CPI and the maximum percentages of allowable subsidies.

The average rates are obtained from the average consumption of each market. The rate increases for 2020 were due to increases in the TRM of 15% and updating of supply contracts at the beginning of the year. The increase was also due to the recovery of the rate path of distribution charges as of March / 2020.

Subsidies and contributions - Gas EPM (COP millions)

Concept	2019	2020
Subsidy	51,902	82,202
Contribution	12,400	17,494
Deficit	-39,502	64,708

Source: Transmission and Distribution Vice Presidency / Energy Commercialization Transactions Unit.

** The increase in the surplus in 2020 is due to the application of the rate path of CREG resolution 048/2020, and the additional 10% of subsidy granted.*

GRI standards Contents and own indicators

EPM-13 Rates by type of service.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Business

Gas

Geography

Colombia – Antioquia

Transparency

Back to content



Transparency

The companies of the Grupo EPM develop communication, education and relationship strategies, supported by truthful, sufficient, pertinent, timely and clear information, which is delivered on business management, with the purpose of contributing to generate and maintain the trust of stakeholders in the actions of the Organization.

Importance

Minimize corruption, extra costs and reputational risks. It enables the trust of stakeholders to be strengthened, giving them the possibility of exercising social control and making decisions for their social, environmental and economic benefit.

Main achievements

Program, project, initiative or action	Challenges	Company	Achievements in 2020	Compliance
Information for stakeholders	Carry out the EPM accountability exercise with stakeholders in accordance with what is defined in the Integrated Planning and Management Model (MIPG).	**EPM**	The public rendering of accounts was held on May 7, this time in televised format, with live broadcasts on Telemedellín, Teleantioquia and EPM social networks. Due to the contingency of COVID-19, it could not be done in person.	**Total**
Transparency practices	Ensure compliance with Law 1712 and Decree 103 of 2014, by publishing on the website www.epm.com.co of the required information related to transparency and access to public information..	**EPM**	In compliance with the provisions of Law 1712, the completeness review was carried out, the improvement plan was registered in Avanza and the respective advances were generated.	**Total**
	Implement the Declaration of Transparency and Declaration of Conflict of Interest.	**Adasa**	The health emergency generated by COVID-19 made its implementation difficult in 2020. For the year 2021, compliance will depend on the favorable evolution of the pandemic.	**Not accomplished**
		Aguas de Malambo	In November 2020, the training on the declarations was given, but the health emergency generated by COVID-19 prevented its implementation. For the year 2021, compliance will depend on the favorable evolution of the pandemic.	**Not accomplished**
		Delsur	In November 2020 Delsur presented its Comprehensive Ethics Management Model, which consists of five components within them are: Ethical Management and Conflict of Interest manuals, through the latter the Declaration of Transparency and Declaration of Conflict of Interest is adopted. However, its employees have not filled out these statements.	**Not accomplished**

Program, project, initiative or action	Challenges	Company	Achievements in 2020	Compliance
Transparency practices	Implement the Declaration of Transparency and Declaration of Conflict of Interest.	Eegsa	The health emergency generated by COVID-19 made its implementation difficult in 2020. For the year 2021, compliance will depend on the favorable evolution of the pandemic.	Not accomplished
		ENSA	Due to the level of development of ethical management in ENSA, the subsidiary considers that, for the moment, the implementation of these statements is not necessary.	Not accomplished
	Train 3,793 servers through the Ethical Management virtual course on the EPM University platform.	EPM	6,498 people completed the course at EPM, meeting the challenge by 164%. The virtual course is still available on the platform to be done.	Total
	Encourage energy and water subsidiaries in Colombia to carry out their ethical climate measurement in 2020 based on the mechanisms that EPM has.	Grupo EPM	EPM accompanied the ten subsidiaries in Colombia that completed their measurements: ESSA, CENS, EDEQ, CHEC, Emvarias, Aguas Nacionales, Aguas de Malambo, Aguas Regionales, Aguas del Oriente and Fundación EPM.	Total
	Measure the ethical climate in EPM	EPM	The survey was enabled between April 21 and May 15, 2020. Of a TARGET AUDIENCE of 7,305 EPM servers, 5,028 completed the survey, which indicates a response rate of 68.83%.	Total

Challenges 2021

Program, project, initiative or action	Management emphasis	Challenges	Year of compliance	Company
Transparency practices	Openness of Information	Ensure compliance with Law 1712 and Decree 103 of 2014, by publishing the required information on the website regarding transparency and access to public information.	2021	**EPM**
		Implement the Declaration of Transparency and Declaration of Conflict of Interest.	2021	**Adasa**
				Aguas de Malambo
				Delsur
				Eegsa
		Measure the Ethical perception of EPM in at least two stakeholders other than EPM People.	2021	**EPM**
		Make available to operating international subsidiaries the mechanisms that parent EPM has so that they can measure the Ethical Climate.	2021	**Grupo EPM**
		Activate the Network of Promoters of Ethical Practices.	2021	**EPM**

Sustainable Development Goals



Related stakeholders

- Clients and users
- State
- Investors
- Community
- Colleagues
- Suppliers and contractors
- Owner
- Grupo EPM people
- Partners

GRI standards Contents and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
205 - 2	Communication and training on anti-corruption policies and procedures.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Electrificadora de Santander - ESSA

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Hidroecológica del Teribe - HET

Tecnología Intercontinental - Ticsa

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

México

Businesses

Water

Sanitation

Electricity

Gas

Information for stakeholders

Back to content

Information for stakeholders

Grupo EPM shares its business management, directly and through the media, with stakeholders, as one of the mechanisms to strengthen and transcend the information function and strengthen relationships with them.

The main mechanisms to achieve this are:

- **Press management:** informative work and relationship with mass media of social communication, based on respect, equity, transparency, timeliness, truthfulness, openness and a vocation of service, in accordance with EPM's Communication Policy and the Manual of EPM's relationship with opinion leaders.
- **External media:** own management of media aimed at external audiences and interest groups in the areas of influence of each of the Grupo EPM companies, with relevant information on interaction with the territory, matters related to public services and how participation mechanism for communities, clients and users.
- **Social networks:** permanent attention to virtual communities and facilitation of conversations with interest groups, which aim to strengthen relationships and transparency, as well as the construction of sustainability and the protection of reputation.
- **Sustainability Report:** balanced report on the economic, social and environmental management of the last year, and its positive or negative impact on society. It becomes a business sustainability management tool, which allows identifying gaps, risks and opportunities, as well as prioritizing actions and having the traceability of reported initiatives.
- **Public accountability:** held annually to publicize the main achievements and challenges of business management and its articulation with stakeholders.

Performance in 2020

During the year, the informative work on the management events and main actions of the companies of the Grupo EPM was permanent. As thematic axes that guided the content agenda for the press, it is worth highlighting the measures and actions implemented as a result of the COVID-19 contingency, in the same way the progress in the works of the Ituango Hydroelectric Project, and in projects of infrastructure that seek to increase coverage, reliability and quality in the provision of public services. Despite the restrictions on account of the confinement, pedagogical activities were carried out with the media and opinion leaders, mainly aimed at consolidating knowledge in the regulatory framework of public services. The virtual meetings set the tone to promote closeness and opportunity with journalists, employees and other stakeholders.

Socialization of initiatives, projects, programs and current themes of EPM before different audiences

The Organization maintained its dynamic of informing, on the various facets of its business work, to unions, State entities and different levels of society.

During the year, activities, meetings and work tables were held with the State stakeholder. It is also worth mentioning the interventions before investors, territorial entities, ministries, multilateral banks, Medellín Council, Bolívar Government, Sucre Government, Cartagena Mayor's Office, Bolívar unions, Medellín Metro, transport companies, corporations and environmental authorities, among others. At these meetings, EPM provided information on the progress of the Ituango Hydroelectric Project, other infrastructure projects and operational improvement, as well as initiatives and programs led by the Organization.

There was relevant participation in theaters of debate and political control, with the Medellín Council, Antioquia municipal councils, the Antioquia Departmental Assembly and the Congress of the Republic. In total, 34 invitations of this type were attended, in which topics associated with infrastructure projects with a territorial approach, measures by COVID-19 and commercial offer were exposed. Likewise, it was possible to participate in 18 accidental commissions of the Medellín Council.

In 2020, 78 petition rights were duly addressed, coming from different instances of the State stakeholder.

Press management

Virtuality marked the path of press management during 2020, with a local, regional, national and international scope. Based on the guidelines of the Communication Policy and thanks to the informative dynamics, the relationship with the mass and alternative media was strengthened. Access to the Company's information was given through different channels and spaces, in an environment of respect, equity and trust.

During the year, press bulletins, press releases and multimedia content were published; Daily requirements of journalists were met and press conferences, talks, interviews and virtual tours were held.

On a permanent basis, there was monitoring of information published in the media. The analysis of these reports allowed a proactive management in the production of content to respond to the signals of the environment and the information needs of the stakeholders.

The initiatives in 2020 are highlighted: "Seminar on drinking water and basic sanitation", which was possible in partnership with the Press Club. 86 journalists were able to join this virtual meeting, which was held weekly. Capture, purification, distribution, care of water, new technologies, management and treatment of wastewater, solid waste management, purification of seawater, challenges and challenges of the availability of the service, were the topics that occupied the agenda of this formative space. And with the media and community leaders of Bajo Cauca Antioqueño and the municipalities in the area of influence of the Ituango Hydroelectric Project, the discussion and virtual tour How is electricity produced? Was held, a strategic activity that allowed 64 journalists to get closer to EPM's management, understand how a power generation plant operates and learn about the environmental and social management carried out by the Organization in the power plants' areas of influence.

Actions carried out by the companies of the Group

Company	Action	Description
CHEC	CHEC, in alliance with the University of Manizales, generated communication skills in 64% of the population participating in the "Communication for development" project, in which human rights issues with a gender and intercultural approach were promoted, in relation to the Sustainable Development Goals (ODS).	In 2020, communication capacities were generated through virtual training, in order to strengthen the relationship and contribution to transparency and information openness, with the indigenous reservations: Unified of Bajo San Juan and Gitó DOKABÚ in the municipality of Pueblo Rico (Department of Risaralda); Escopetera and Pirza, Cañamomo and Lomaprieta in Riosucio, and with the Association of Afro Peasants of Magdalena Medio, in La Dorada (Department of Caldas). The process also benefited the Caldas Regional Indigenous Council.
Adasa	COVID-19 support and benefits for clients in delinquency.	In order to make the benefits to the community, both state and company transparent, Adasa decided to carry out a strong communication campaign to make them known and thus help the community with different options. This initiative, disseminated through the company's official channels, website, social networks and traditional media, was aimed at all clients in arrears in the region or who had financial problems due to the pandemic. In addition, the Company's measures in the face of the emergency and how to help the community in the face of this situation.
Emvarias	Environmental Classroom | Educational Connection and Experience Center	In 2020, Emvarias opened its Environmental Classroom, located in the La Pradera landfill. It is an educational and awareness center on proper waste management, where through experiential methodologies the community is sensitized. The Environmental Classroom is a space that, based on social awareness, pedagogy on the problem of solid waste, among others, strengthens the Citizen Culture of Cleaning program, and the relationship with the communities in the area of influence of the sanitary landfill La Pradera (municipalities of Barbosa, Donmatías and Santo Domingo) and with other stakeholders.

Company	Action	Description
Ticsa	Creation of the "Crisis Committee" in the face of the health pandemic to provide solutions and provide new tools to the Company's employees.	Faced with the challenges derived from the contingency due to COVID-19, the Ticsa subsidiary designed a strategy to reinforce communication between work centers (especially between operational centers and administrative centers) and favor that operational and field collaborator could have information updated on protocols and biosafety measures, received support, and messages of tranquility and security. 3 pillars were developed within the strategy: physical and psychological well-being, balance and socialization; that were socialized through the internal communication platform "GoIntegro". This work earned them the distinction "Best Employee Communications Initiative" in Latin America, in the Employee Experience Awards 2020 of GoIntegro, which recognizes the strategic use of internal communication to enhance experiences through digital tools.
Eegsa	Launch of a new "Sunny" chat bot customer service channel on the WhatsApp, Facebook and website digital platforms through the "Whatsappea" advertising campaign with Eegsa.	Due to the COVID-19 pandemic, the need arose to speed up the implementation of the chat bot "Sunny" so that Eegsa's clients could carry out various procedures via digital in order to avoid crowds at service points and saturation on the line telephone service. The chat bot was implemented on WhatsApp, Facebook and Eegsa's website.
Aguas de Malambo	Generate communication and relationship spaces with GI Estado for a better understanding of the work carried out by the Company.	In February 2020, a tour was made with 12 councilors of Malambo through the infrastructure of the company: intake, treatment plants and wastewater plant (at that time under construction), in order to publicize the projects the company has, the investments made to improve the continuity of the drinking water service in the municipality, as well as clearing up doubts about the work being done.
Aguas Nacionales	Tour of local and alternative media through the Aguas Claras plant.	In October, an attention session was held for local and alternative media in Medellín and Bello at the Aguas Claras wastewater treatment plant, this space allowed the validation by the press of the compliance and effectiveness of the plan of 36 actions that were structured to control and mitigate plant odors.

Company	Action	Description
Fundación EPM	"Smiles from Home" Strategy - Transformation of the EPM Water Museum website	The "Smiles from Home" strategy was implemented, which allowed us to continue offering, digitally, all the activities that were carried out in person. Thanks to the good acceptance of the public, the EPM Water Museum site was transformed, turning it into a website with high-quality educational content and a satisfactory user experience. https://www.grupo-epm.com/site/museodelagua/
EDEQ	Internal communication: ConéctatEDEQ	ConéctatEDEQ is the result of the contingency generated by COVID-19 and seeks to maintain the proximity of workers and promote a balance of personal life and work. It is media with two channels: a WhatsApp contact (voluntary) with a microsite, in which the themes are promoted: 1. **EDEQ in 60 seconds:** video reporting the most important EDEQ activities for the week. 2. **Meetings :** interviews with teams, groups or projects to learn about their work and contribution to management. 3. **We Do It Together:** present the achievements of teams and projects. 4. **EDEQ Challenges:** space to promote wellness activities. 5. **Manager Message:** message with relevant information that recognizes positive events for the organization. The ConectatEDEQ microsite was seen by 489 workers who made more than 17,000 visits since April, the month it was created.
ESSA	Generate communication and relationship spaces with GI State for a better understanding of the work carried out by the Company.	Through sessions of the Assembly, municipal councils and other spaces of relationship with authorities of the region, the main achievements and challenges of ESSA were made known, and from the declaration of the sanitary emergency in the country, the measures implemented in Santander.

External media

- **EPM Radio:** a collaborative radio model between EPM and the community, which generates citizen interaction, participation and pedagogy around issues such as benefits of public services, programs, projects and products of Grupo EPM, responsible use and consumption of public services and natural resources, as well as community initiatives associated with these issues. In 2020, the radio program was broadcast on the daily frequency, with amplification for the entire department of Antioquia. Radio production was also carried out with a territorial focus in Bajo Cauca and Urabá and in the Ituango Hydroelectric Project.
- **EPM Magazine:** digital publication, which circulates every semester, with a focus on the management of public services. It is aimed at the different interest groups of Grupo EPM, with greater emphasis on the academic community. The magazine, which in 2020 had two editions, numbers 15 and 16, reaches approximately 120 institutions in Colombia, including university libraries, city halls, companies in the same sector and Group companies. You can consult it at https://www.epm.com.co/site/publicaciones#undefined

Social Networks

During 2020 a dynamic and constant agenda was maintained in the different digital platforms of the Company. The topics developed in multimedia, interactive and conversational formats were concentrated on the progress of the works of the Ituango Hydroelectric Project, compliance with the odor mitigation plan of the Aguas Claras EPM treatment plant, infrastructure projects with a territorial approach, programs and initiatives in favor of caring for the environment, the responsible use of public services during confinement due to COVID-19, as well as the initiatives associated with the Innóvate program and the Company's management focuses.

With daily monitoring, the Company constantly monitored social networks and mentions related to the management of EPM. These reports derived from monitoring are input for the definition of the thematic agenda that materializes in news, stories and content for the different digital media that the Organization has.

Sustainability Report

Most of the companies in the Grupo EPM prepare their sustainability reports using the GRI methodology, which facilitates the preparation of sustainability reports by organizations, regardless of their size, sector or location. In the case of EPM, the GRI Standards are used to

prepare the report, which is also aligned with the Framework of the International Integrated Reporting Council, IIRC.

The preparation of the Grupo EPM Report is a process of continuous organizational learning, which is constantly evolving. The Grupo EPM reports are presented to shareholders, workers and the community assemblies through different spaces for dialogue, such as meetings with community action boards and municipal councils, among others.

Global Reporting Initiative (GRI) is an organization that promotes the use of sustainability reports so that organizations are more sustainable and contribute to sustainable development.

See: https://www.globalreporting.org/about-gri/

To learn more about the Sustainability Report, see Report Profile.

The management and sustainability reports of the Grupo EPM subsidiaries can be consulted on the website of each company.

Public accountability

EPM carries out its public Accountability every year, to present the main achievements and challenges of its business management. This exercise of transparency corroborates the Company's commitment to a close, timely and clear relationship with its stakeholders, and enables compliance with the Anti-Corruption and Citizen Service Plan, as well as the Digital Government policy.

This strategy is designed under the guidelines of the Single Manual of Accountability of the Administrative Department of public Function, and responds to the 3 basic elements referred to in this document: information actions, dialogue actions and incentive actions. It seeks to go beyond a one-way event for the delivery of information on business management, to be a space for conversation that allows to listen to and respond to the concerns of citizens.

The central event of public Accountability was held on Thursday, May 7, 2020. As a result of the contingency for COVID-19, it was not carried out in person, but was broadcast through the regional television channels Telemedellín and Teleantioquia, and the EPM social networks. In this version of the event, the General Manager, Álvaro Guillermo Rendón López, presented the main results of the management of the year 2019, as well as the focuses of action carried out during the first 100 days of 2020. As a complement to this public exercise, the Company developed a dissemination strategy through its own means, both internal and external, and through the mass and alternative communication media to amplify the management facts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

México

Guatemala

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Transparency practices

Back to content

Transparency practices

Transparency is one of the values of Grupo EPM; it is a voluntary act and goes beyond mere compliance with the law. Fundamental for good governance and its serious, orderly and committed practice that has allowed the Company to increase trust among those who have a relationship with it, therefore the Organization applies clear rules in its management processes and documents each of its actions, in order to allow the exercise of the right of all people to access public documents, except in cases expressly established by law; likewise, accounts are rendered on the results of the management to all stakeholders and in general to all those with whom a commercial or contractual relationship is established directly or indirectly.

This practice facilitates the fulfillment of the strategic objectives of Grupo EPM and is based on a culture based on values and ethical principles.

Current practices are:

- **Ethics and transparency mechanisms:** these are the practices and tools that are implemented to minimize the materialization of risk situations related to fraud, corruption, bribery, money laundering and terrorist financing.
- **Transparency measurement:** Grupo EPM companies in Colombia participate voluntarily in measuring the transparency practices of companies that provide public services, in order to identify their degree of development and encourage the implementation of plans and actions to improve its management, to highlight companies committed to ethical and transparent relationships with their stakeholders, and to stimulate compliance with international standards.
- **Digital government:** strategy that seeks to improve efficiency, contribute to increased transparency, promote collaboration and participation among citizens. This strategy is based on the strengthening of work with stakeholders and the conditions for increasing the competitiveness of institutions linked to the State, leveraged on the use of information and communication technologies.

Performance in 2020

In terms of Digital Government, aligned with the Integrated Planning and Management Model (MIPG), the Company received recognition through new seals of excellence in the categories: territories and smart cities and open data and became the first public entity recognized with a seal of excellence in all categories defined by the Ministry of Information and Communication Technologies.

Through different mechanisms, channels and strategies, the Grupo EPM continued to strengthen its transparency practices, with greater awareness of its collaborators, opening spaces for training, dialogue and exchange of experiences, which made it easier for the subject to be present in all the Company's actions.

In 2020, 7 integration meetings were held that made it possible to strengthen the LAFT Integration Mechanism in EPM and its subsidiaries in Colombia.

Ethics and transparency mechanisms

For EPM and the companies of the Group, ethical and transparent behaviors are standards that constitute a fundamental element for the creation of value in the actions of its collaborators and in the way in which it generates trust between the different interest groups with which it interacts.

The mechanisms and instruments for the prevention of fraud, corruption and bribery (FCS) in the Grupo EPM strengthen the capacities for participation, monitoring, advocacy and dialogue with all public and private actors, therefore, the business group has initiatives and self-regulation instruments that allow it to maintain the operation in an environment of security, transparency and trust. Likewise, these best practices are a way to facilitate the fulfillment of the business purpose, strategy, objectives and purposes, both statutory and legal, and as the foundation of a culture based on values and ethical principles.

For the prevention of fraud, corruption and bribery, EPM has the following mechanisms: Zero Tolerance Policy against Fraud, Corruption and Bribery; Grupo EPM Code of Ethics; Grupo EPM Business Conduct Manual, Conflicts of Interest Manual and Treatment of Decisions in the Group Interest; a complaints channel -Ethical Line "Transparent Contact-; Code of Conduct for Suppliers and Contractors of Grupo EPM; Declaration of Transparency by officials; Declaration of Conflict of Interest and annually the Anticorruption and Citizen Service Plan is

built and developed, whose components are: Corruption risk management - Corruption risk map, Anti-paperwork strategy, Accountability, Mechanisms to improve citizen service and Transparency and access to information. This information is public and can be consulted at www.epm.com.co During the year 2020, there were no acts of corruption in EPM committed by its directors or executive personnel.

Other additional initiatives:

- Annual Ethical Climate Survey - USAID Methodology
- Manual for the Risk Management System for Money Laundering and Terrorism Financing (SARLAFT)
- Collective Agreement of the Electricity Sector
- Compliance Committee of the Real Sector in Antioquia

The following actions stand out in the management of 2020:

- **Ethical line:** "Transparent Contact": Grupo EPM mechanism enabled to report anonymously or not the possible improper acts that have been committed by the Company's servers or any person from the interest groups: Clients and Users; Colleagues; Community; Owner; Condition; Suppliers and Contractors; Partners and Investors, who directly or indirectly affect the management of EPM and the Group companies, as well as the fulfillment of the strategic objectives. See https://www.epm.com.co/site/home/transparencia/contacto-transparente

  Available reporting channels:

  - Website www.epm.com.co EPM and the websites of each subsidiary in Colombia or abroad.
  - Email: **contactotransparente@epm.com.co**
  - Free telephone line in Colombia: 01 8000 522 955
  - Mobile App: EPM we are there (Android - IOs)

  This mechanism, in addition to serving for the reception and reporting of incidents, has an interactive-infographic- development that trains and teaches the user. The most relevant cases, the lessons learned and the annual operating statistics for the LAST three years are also published. https://www.epm.com.co/site/portals/contacto_transparente/ie.html

- Declaration of Transparency: It is a voluntary initiative that was implemented in 2015; By 2020 it is accepted by 95.85% of employees and those who have a potential conflict of interest. The statements strengthen trust in the company-employee and company-citizen relationship and transparency in the work of Grupo EPM.

- The Zero Tolerance Policy against Fraud, Corruption and Bribery has been adopted in all the Group's companies since 2015. https://www.epm.com.co/site/home/nuestra-empresa/politicas#Pol-tica-de-Cero-Tolerancia-al-Fraude-la-Corrupci-n-y-el-Soborno-1240.

- Grupo EPM Business Conduct Manual: was approved by EPM as parent company in April 2018; and during the same year it was approved through the boards of directors in each of the energy and water subsidiaries in Colombia. In 2019 it was adopted in all international subsidiaries. In accordance with Resolution 080 of 2019 of the Energy and Gas Regulation Commission -CREG-, the Manual is in the process of being updated to include new behaviors that allow evidence of the implementation of said Resolution. See manual in: https://www.epm.com.co/site/Portals/0/centro_de_documentos/Manual-conducta-empresarial-de-Grupo.pdf

- Advances in the consolidation of the Ethical Management Model and the promotion of ethical practices. Actions aimed at dissemination and awareness are highlighted, which included the activation of more than 200 promoters of ethical practices; also, the dissemination of ethical dilemmas with a reflective approach, the dissemination of the organizational structure that the Company has and training to promote principles and values.

- The composition of the Ethics Committee was adjusted, which has the participation of different top-level managers and agencies that work together to strengthen Ethical Management in the Organization, accompanied by a member of the Board of Directors, designated by the General Manager.

- Ethical Climate Survey: it was carried out for the fourth year with the purpose of continuing and maintaining the diagnosis and review of the ethical management process at EPM and its impact on the evolution of its organizational culture. The perceptions of the servers were compiled based on the ethical scope of the EPM culture. The measurement instrument used was the one proposed by the "Ethical management model for USAID State entities".

  The survey was directed to 7,305 employees with a response of 68.83%. Twelve categories were measured, and a scale of excellence was reached in 10 of them; 2 in a stage of development, application and strengthening. The results were also shared in the Ethics, Management, Audit and Board of Directors committees. Similarly, they were presented in the primary groups of some areas of the Organization and the results were communicated through the Company's own media platform.

All the energy and water subsidiaries in Colombia carried out the Ethical Climate measurement in 2020, and adopted the mechanisms offered by EPM Matrix for such measurement. By 2021 the practice will be extended to international subsidiaries.

- Celebration of the International Day against corruption: EPM, in line with its commitment to transparency, hosted the third meeting to commemorate this day, which was held on December 3, 2020 virtually; More than 180 people participated in this space, including academics, employees and compliance officers; as well as professionals from the areas of ethics, auditing and internal control, and people responsible for the matter.

- Collective Agreement of the Electricity Sector: EPM and all its energy subsidiaries in Colombia continue to actively participate in this agreement on the fight against corruption and the promotion of free competition, promoted by the National Operation Council (CNO) and XM SAESP with the oversight of the Ministry of Transparency of the Presidency of the republic of Colombia, Transparencia por Colombia and UNODC. During 2020, the best practice manuals were prepared for: Competition, Anticorruption and LAFT for the Colombian electricity sector.

- The Compliance Unit accompanied the Accounts Payable and Portfolio Management processes in the implementation of prior and subsequent controls to minimize the materialization of risk scenarios associated with Fraud, Corruption and Bribery.

- EPM participated in the process of obtaining the certification as Authorized Economic Operator - AEO- as a member of the working group that attended the DIAN visit in the review of requirements and in the preparation and fulfillment of the action plan to make the proposed adjustments by DIAN. Likewise, the content of the virtual course "Security Measures and LAFT Threats and Risks" was redesigned.

- The LAFT Integration Mechanism of EPM and subsidiaries in Colombia was strengthened through periodic meetings in which issues related to LAFT risk management and prevention were discussed, experiences were exchanged and procedural decisions were made. In total there were 7 moments of integration.

- EPM joined the celebration of the International Day for the Prevention of Money Laundering and Terrorism Financing, led by UNODC and which was held in virtual format on October 29 and 30, 2020.

- Participation in the project "Design and Implementation of the new Management Model comprehensive Risks in the Grupo EPM" specifically in aspects related to the definition and scope of Compliance in EPM and the participation of the VP of Risks in said Compliance system.

- The contract with Konfirma was managed and formalized for the provision of the information and verification service of risks associated with the Grupo EPM's interest groups, in the form of group purchase for CHEC, EDEQ, CENS, ESSA, EPM and which is also will link the subsidiary Emvarias. The purpose of this contract is to advance the Expanded Due Diligences for the knowledge of third parties.

- The subscription was arranged with Stradata for the search service with which Simple Due Diligence is performed; Additionally, the EXDOM service was subscribed together with the Real Estate Negotiation and Administration Unit for the study of traditional property titles, which will begin to operate in January 2021.

- EPM continues to participate in the Compliance Committee of the Real de Antioquia sector. Union-type initiative consolidated at the national level. Likewise, Grupo EPM was recognized within the real sector for the progress made in the implementation of the LAFT risk management system for its good practices.

- The authorization formats were reviewed from the Personal Data Protection work front; privacy notices; contractual clauses; among others and accompanied to different areas, especially to the commercial area dependencies, and to the subsidiaries in Colombia. In 2020, we actively participated in the Privacy and Information Security component of the El Centinela project, which made it possible to review and adjust the instructions regarding: "Privacy by design and by default" and "Security incidents that compromise personal data."

- The Comprehensive Personal Data Management Program was issued, a document that compiles all the activities carried out by the Organization regarding the protection of personal data, in an official, published and disclosed document; as indicated by the Superintendency of Industry and Commerce - SIC. Likewise, following its guidelines, we proceeded to update the registration in the National Database Registry of all EPM's personal databases.

- As an awareness and training strategy, we participated in the annual meeting of Suppliers and Contractors organized by EPM.

- Celebration of the International Day for the protection of personal data: EPM held a forum for the second time to ratify its commitment to data protection, an event that was held in person on February 3, with about 220 attendees.

If you want more information, you can visit the website https://www.epm.com.co/site/home/transparencia/transparencia-de-nuestra-gestion.

Ethical management with Suppliers and contractors

In 2020, the following actions are highlighted in relation to the suppliers and contractors interest group:

- The attention of 10 cases was managed to validate compliance with the Code of Conduct by suppliers and contractors.
- The procedure for managing breaches of the Code of Conduct was unified with the procedure associated with the mechanism for dealing with human rights complaints, which was also reviewed and analyzed to incorporate improvements.
- Information on human rights management and the Code of Conduct was shared through newsletters.
- With respect to the Anti-Corruption Plan and the corporate guideline on end-of-year gifts, several notices were issued, addressed to suppliers and contractors.

Measurement of Business Transparency

EPM participates in the Business Transparency Measurement, public Services chapter, promoted by the Transparency for Colombia Corporation. The general objective of the measurement is to improve transparency and anti-corruption standards, through the identification of corruption risks to strengthen business management. This is a tool that identifies institutional designs and practices that generate corruption risks and promotes the formulation and execution of improvement actions. The Business Transparency Measurement consists of four components: Clear Rules, Openness, Dialogue and Control. The results obtained in the measurements carried out at EPM and the Grupo EPM's water and energy subsidiaries in Colombia, reflect the business group's commitment to this important practice and become a stimulus for continuous improvement and strengthening of the corporate integrity system.

Digital Government

The Grupo EPM is committed to the Digital Government Policy, which is why it promotes the use and exploitation of information and communication technologies to consolidate a State and a competitive, proactive and innovative citizenship, which generate public value in an environment of digital trust.

In this sense, the 5 purposes of the Organization are:

- Enable and improve the provision of reliable and quality digital services.
- Achieve internal, safe and efficient processes.
- Make data-driven decisions.
- Empower citizens.
- Promote the development of smart cities and territories

This mobilization was achieved through:

- Adequate internal management leveraged on technological architectures and business management.
- Provision of quality digital services.
- Use of technologies to help solve real problems.
- Promotion so that the State reaches where the market does not reach, enabling the creation of new markets.
- Generation of digital trust between the State, citizens and the other actors of the digital ecosystem.
- Permanent dialogue in a simple, co-responsible, predictable and safe environment.

In 2020 the challenges leveraged the management focus "Services of the future, smart cities and 4RI", which materialized in maintaining the seals of excellence obtained in the categories of IT Management Capabilities, Government with open data and citizen participation exercises, Online services with web invoice and was complemented with the seal of excellence in Territories and Smart Cities, the latter made EPM the first entity in the country to obtain this seal. The Organization is the first public entity in Colombia to obtain seals of excellence in all the categories defined by the Ministry of Information and Communication Technologies.



The main achievements to highlight in this management of the year 2020 are _____

- Recognition with a seal of excellence in territories and smart cities, complementing those that already exist.
- Progress in defining the Group's Digital Government Policy.
- The quantity and quality of open data was expanded.
- Progress was made in the organizational structuring for compliance with Decree 620 of May 2020, of digital citizen services.
- Advances in the implementation of the Information Security Management System (SSGI) to increase trust and digital security.
- Position 4 in Antioquia, and 32 in Colombia, among 743 entities registered, in the Maximum Digital Speed contest, of the Ministry of Information and Communication Technologies, which seeks to accelerate the implementation of the policy in State entities.
- Development of several contextualization exercises with MinTic to advance the integration of procedures to the Single Portal of the Colombian State Gov.co
- The adoption of the smart cities and territories model was advanced.
- Carrying out 6 citizen participation exercises to promote participation and democracy in digital media.
- The necessary actions were carried out to strengthen compliance with Law 1712, with a compliance rating of 98% of the Active Transparency Index (ITA) of the Office of the Attorney General of the Nation, which contributed to the strengthening of corporate transparency actions.

GRI standards Contents and own indicators

205 - 2 Communication and training on anti-corruption policies and procedures.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Complementary topics

Grupo·epm

Corporate citizenship

Back to content



Corporate citizenship

The Grupo EPM's social responsibility model promotes actions directly related to its role as a provider of public services. Likewise, directly or through the EPM Foundation, it carries out actions that respond to the needs of the communities that inhabit the areas in which it is immersed: social investment, programs and contributions to public policies aimed at strengthening corporate citizenship. In this way, the Organization promotes sustainable development, inclusion and participation in the communities, as well as economic activities, access to information and cultural, educational, social, labor and economic opportunities.

Associated stakeholders

- Community
- State
- Owner
- Partners

GRI standards Contents and own indicators

203 - 1 Investments in infrastructure and supported services.

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Empresas Varias de Medellín - Emvarias

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Aguas de Antofagasta - Adasa

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia - Norte de Santander

Colombia - Malambo, Atlántico

Chile

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Christmas Lighting

Back to content

Christmas Lighting

Lighting up the holiday season is a commitment that Grupo EPM reaffirms every year to contribute to the construction of civic culture, family gathering, the promotion of values, the preservation of community traditions, as well as the appropriation and enjoyment of the PUBLIC SPACE. The Christmas Lighting project, which in 2020 was called *La magia de Colombia ilumina la Navidad*, was a recognition of the cultural and environmental diversity of the country, made possible thanks to the work of 270 people, including artisans, welders, engineers, architects and designers; of them there were 135 artisans: 100 mothers head of the family and 35 welders and helpers.

A tour of the main Colombian tourist destinations, through their regions, took its visitors to live a journey of fantasy and color through the cultural diversity, celebrations, traditions, fauna, flora and the towns that are national cultural and architectural heritage. In different emblematic points of the city of Medellín, such as Parque Norte, Parques del Río, main avenues, streets and neighborhood parks, people were able to enjoy and interact with the Christmas Lighting, with all the biosecurity measures defined for times of pandemic.

To recreate *La magia de Colombia ilumina la Navidad*, 30,500 hand-woven figures were installed, by mothers head of the family, with seven tons of metallic paper. In addition to 28 million LED bulbs, 830 kilometers of LED light hose, 7,000 meters of neon light hose, 169 1,000-watt light projectors, 250 RGB LED projectors, 450 LED tubes and 250 meters of RGB LED tapes.

And for the rest of the municipalities of Antioquia, the *Encendamos la Alegría* contest was developed for the eighth time, with 13 municipalities and a township that were the winners of the design, construction, assembly, maintenance and removal of the Christmas Lighting: Alexandria, Angelópolis, Arboletes, Betulia, Caramanta, Cocorná, Copacabana, Dabeiba, Liborina, Puerto Berrío, Sabanalarga, Santo Domingo, Valdivia and the village of Puerto Valdivia.

Performance in 2020

The Grupo EPM made an effort in the midst of the pandemic and the confinement conditions, to enable the Christmas Lighting in Colombia, as a motivation for hope, joy, family unity and solidarity, to keep December traditions alive.

For the first time, and on a voluntary basis, the *Encendamos la Alegría* contest rewarded a village: Puerto Valdivia, which, added to the 13 winning municipalities, were the protagonists in Antioquia Christmas with lights that paid tribute to its cultural riches and traditions; and in turn, they boosted the economy, employment and tourism in these populations.

In the companies of the Grupo EPM in Colombia:

- **CENS:** lit the Christmas Lighting in 5 municipalities of Norte de Santander: Cúcuta, Pamplona, Ocaña, Tibú and Aguachica, places where the largest number of users in their area of influence are concentrated. The lighting, which was characterized by characters and objects that marked the course of 2020 in the world, such as policemen, nurses, priests, and also sports and traditional Christmas figures, was installed in places that allowed the free movement of people. The subsidiary, in coordination with the municipal administrations, carried out communication and educational campaigns to promote citizens' enjoyment of the Christmas holidays with self-care and compliance with biosecurity measures.

- **CHEC:** was linked to the Christmas Lighting initiative led by the Mayor's Office of Manizales, with the lighting of two points in the Caldas capital: San Rafael roundabout and Torre de El Cable. 262 figures allusive to traditional Christmas were installed, which were positively valued by visitors. For the design, production and installation of these figures, 40 direct jobs were generated, with an investment of COP 388 million. In addition to the lighting, CHEC carried out the caravans of color for the first time, an initiative that traveled through 26 neighborhoods and 6 communes of Manizales, as well as the municipalities of Dosquebradas and Chinchiná, to bring cultural and artistic samples to homes, and thus avoid displacements and crowds in the streets. The caravans were made up of various floats that included musical groups, Christmas choirs and circus art, in charge of groups from the region such as Tambor Hembra, Fundación Circo Manizales and El Coro de Dean.

- **EDEQ:** the Christmas Lighting managed to illuminate 9 of the 12 municipalities of the department of Quindío with a total investment of COP 1,307 million thanks to a joint effort with the municipal administrations that contributed 48% of the resources. 55 formal jobs were generated for more than 2 months, of these 35 were for mothers who are heads of households and 2 for people with special abilities. To make this possible, about 130,820 meters of mini-led extensions, 8,000 meters of led hose, 160 RGB projectors and 480 Christmas figures both volumetric and flat were installed. Additionally, the subsidiary awarded the Christmas decoration of the facades of their houses to 10 families from the urban sector, who were winners of the "Light up your home" contest.

- **ESSA:** in 2020, it carried out the contest "Encendamos la Alegría", in which the municipalities of Santander and the neighborhoods of Bucaramanga and Barrancabermeja participated. The winning municipalities, among 64 that participated, were 5; and out of 35 competing neighborhoods, 13 won. As a prize, each one received a kit of figures, in addition to the assembly of the figures, their maintenance, removal, transportation and the energy consumed during the time that the decoration lasted. In addition to this, the company awarded a Christmas Bonus that consisted of the delivery of 25 tablets to each winning locality to facilitate the learning process of the same NUMBER of minors benefited, in total it delivered 450 tablets.

EPM Christmas Lighting			
Indicator	**2018**	**2019**	**2020**
Direct jobs	219	220	270
Indirect jobs (street innkeepers)	350	430	796
People benefited	2,427,129	2,483,545	2,533,424
Investment (million COP)	10,000	10,000	12,000
Source: Energy Transmission and Distribution Vice Presidency			

Christmas Lighting - Energy subsidiaries of Grupo EPM			
Indicator	**2018**	**2019**	**2020**
Direct jobs	317	189	165
Indirect jobs (street innkeepers)	454	454	192
People benefited	1,942,143	2,296,994	1,535,981
Investment (million COP)	4,598	3,281	2,214
Source: Energy Transmission and Distribution Vice Presidency			

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia - Norte de Santander

Colombia – Santander

Business

Electric power

Events and sponsorships

Back to content

Events and sponsorships

Grupo EPM develops and supports events and open advertising relationships that strategically aim to generate, sustain and strengthen relationships with stakeholders, to promote the development of the regions where it OPERATES and increase its business reputation.

With a sense of social responsibility, Grupo EPM supports local and regional initiatives that positively impact the community, by addressing issues such as caring for natural resources, technical issues that favor a culture of sustainability, efficient use and insurance of PUBLIC services and the use of recyclable materials, among others, while contributing to the processes of human, economic, cultural, social and environmental development in the territories where the companies of the business group are present.

Performance in 2020

In 2020, an atypical year due to the PUBLIC health contingency, the Grupo EPM managed to strengthen the relationship with its different stakeholders, in the territories where it has a presence, through the management of events and advertising that on this occasion had the particularity of being carried out in virtual format.

In the case of EPM, the local and national advertising stand out, such as the World Business Forum 2020 - WOBI, Andesco Congress, ANDI, the Book and Culture Festival and participation in city spaces that contribute to culture, such as the connection with the Antioquia and Modern Art museums, the Las Flores Fair, the Antioquia Philharmonic Orchestra and the Explora Park.

In terms of events, the organization carried out, during the COVID-19 pandemic, important activities aimed at fostering trust and closeness with its stakeholders.

EPM held children's workshops with Parque Explora and cultural and recreational activities with Prolírica and the MAMM. In addition, spaces were created for relationships with the State interest group, such as involvement with the National Congress of Municipalities; and participation as an ally in the city event: Medellín Book and Culture Festival.

It is worth highlighting events with a pedagogical purpose such as: environmental forums Navigating the Cauca River, Cuidamundos EPM door-to-door strategy for water care, the first Human Rights forum, the environmental week at the Ituango Hydroelectric Project, twelfth version of the meeting on Corporate Social Responsibility, the fifth version of the program Innóvate that promotes innovation, development, science and research; likewise, more than 40 activities with companies, large clients and the government to promote the efficient use of PUBLIC services and the understanding and interpretation of the invoice. Similarly, promotion, dissemination and awareness activities were carried out to accompany infrastructure interventions, such as the Sowing Plan for tree compensation in sectors of Medellín and activations as a complement to the aqueduct and sewerage interventions in the municipality of Bello.

EPM sponsorships

Number of sponsorships	2018	2019	2020
Local (Medellín only)	18	34	17
National	20	18	24
International	0	1	0

Source: Vice Presidency of Communication and Corporate Relations

EPM investment in sponsorships

Contributions (million COP)	2018	2019	2020
Local (Medellín only)	2,371	3,804	1,982
National	4,835	4,340	6,169
International	0	89	0
Total contributions (million COP)	**7,206**	**8,233**	**8,151**

Source: Vice Presidency of Communication and Corporate Relations

Consolidated of sponsorships and contributions - Grupo EPM subsidiaries			
Concept	**2018**	**2019**	**2020**
Number of sponsorships	22	171	251
Contributions (million COP)	409	1,456	734
Source: Executive Vice Presidency Business management			

EPM Events			
Concept	**2018**	**2019**	**2020**
Commercial events	27	48	27
Non-commercial events	120	77	300
Contributions - Commercial events	147	819	194
Contributions - Non-commercial events	1,080	1,659	785
Source: Vice Presidency of Communication and Corporate Relations			

**Contributions are expressed in million COP*

The subsidiaries of Grupo EPM adapted to the new normal, generated by the contingency of COVID-19, for that reason in 2020 the use of new technologies was privileged to favor relationships, communication, closeness and pedagogy with stakeholders. Thanks to digital formats, it was possible to carry out awareness-raising activities, workshops, events and campaigns through the screens and without putting communities at risk. The balance is positive because it opened up new possibilities for interaction and also made it possible to be connected from a distance, which favored greater citizen participation in the offer of activities.

These initiatives are highlighted in some of the subsidiaries of the business group:

- Emvarias sealed the alliance with Postobón, to promote responsible consumption among the citizens of Medellín and the proper disposal of usable waste at the Orange Points that the company has located in various areas of the city. With educational campaigns and workshops, it sensitizes the communities to achieve the collection of paper, cardboard, plastic, glass and tetrapack. The goal as of December 2021 is to collect 650 tons of these reusable materials.

- Aguas de Antofagasta, in association with FCAB - Ferrocarril Antofagasta - Bolivia, CONAF - Corporación Nacional Forestal and Hospital Regional Antofagasta, developed the environmental initiative "One child, one tree", which promoted the planting of a tree for each child graduated from the pediatric critical patient unit. To this was added planting a flower for each patient discharged from the ICU who had overcome COVID-19. With

this project, it was possible to plant, with the participation of the community, more than 200 tree species.

- Aguas Nacionales, through the water supply and dumping management program in rural areas, and with resources from the loan with the Inter-American Development Bank (IDB), delivered 300 bicycles to the Wayúu indigenous community, settled in La Guajira, to facilitate its displacement to the drinking water supply batteries. These bicycles have a special design to transport two 20-liter vessels of drinking water each, and contribute to access to strategic points for this community, which due to the complexity of the territory is dispersed, which generates difficulties in the supply process.

- In Quindío, the EDEQ subsidiary supported the arts and culture sector through the "Festival artístico de la buena energía". With this initiative, which included activities transmitted by social networks, the responsible use of energy was promoted under conditions of confinement due to the COVID-19 pandemic.

- In Central America, EPM Guatemala inaugurated the Ciudad Vieja, Tinco, Monserrat and Minerva substations and participated in the Third Electric Power Transportation Forum, which was held from September 23 to 25 in virtual format under the slogan "Resilience of the transportation industry energy: evolving towards a new reality", with the participation of more than 650 people. Additionally, it supported the December activities held in the Municipality of Guatemala, among them the Festival Navideño de la Sexta, which included concerts, workshops and virtual activities, as well as caravans of luminous floats that toured the city.

- For its part, Delsur allocated resources to be involved in 4 activities during 2020: National Energy Congress, Sustainability Week, Mobility Congress and the Emblematic Woman event.

GRI standards Contents and own indicators

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Empresa de Energía del Quindío - EDEQ

Aguas Nacionales EPM

Empresas Varias de Medellín - Emvarias

EPM Guatemala

Distribuidora de Electricidad del Sur - Delsur

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Quindío
El Salvador
Chile
Guatemala

Business

Water
Sanitation
Electricity
Gas

EPM Foundation

Back to content

EPM Foundation

The EPM Foundation, created in 2000, seeks to contribute to the development of sustainable and competitive territories in the Grupo EPM's areas of influence, through social and environmental management programs and projects that promote the care of natural resources and the responsible use of public services.

In this sense, and in line with the corporate strategy of the business group, in 2020 the Foundation carried out actions to strengthen closeness with communities, improve coverage in home public services and promote care for the environment.

Its management was oriented to the execution of programs and projects such as: Agua para la educación, educación para el agua, the Articulated Life Units - UVA, the EPM Water Museum, the EPM Library, the Parque de Los Deseos and the House of Music, Ambiente para la Vida, Alianza por el agua, Educating Clients and EPM Community, and supporting the Environmental Management Plan and the Monitoring and Follow-up Plan for the Nueva Esperanza and La Sierra - Cocorná projects.

Performance in 2020

About 1.2 million people, in the departments of Antioquia and Cundinamarca, benefited in 2020 from the development of social and environmental initiatives. The EPM Foundation invested COP 25,487 million to strengthen relationships, pedagogy and closeness with the communities in the Grupo EPM's area of influence.

The year 2020 was a year full of challenges to maintain communication ties and relationships with the communities with which the Organization works. Faced with this, some strategies were adapted and others were designed with the purpose of continuing with the educational and cultural offer, in the same way, actions were adapted to virtual environments to preserve the health of users, collaborators and other populace of interest.

Approximately 1.2 million people were covered with the virtual and face-to-face strategies that were implemented from the programs and projects. With "Agua para la educación, educación para el agua", 44 drinking water solutions were installed in 17 municipalities of

Antioquia, which allowed 2,240 people to access drinking water in rural areas. With these, there are already 766 water treatment solutions installed in 6 departments of Colombia.

The "Alianza por el agua" project was also started in coordination with the Antioquia Ministry of Education and the Ambiente para la Vida, Client Education and EPM Community projects were continued and the Environmental Management Plan and the Monitoring and follow up Plan of the Nueva Esperanza and La Sierra-Cocorná projects continued; as well as the Antioquia Higher Education Scholarship Fund, which is administered by the Gilberto Echeverri Mejía Corporation.

With the aim of contributing to the care of the health emergency caused by COVID-19, the Mayor's Office of Medellín and EPM, created the "Hugging with Love Fund", an initiative to add resources and meet different needs generated by the contingency, in addition, the "Donatón por Medellín" was held, with which financial resources were collected. As part of this initiative, COP 7,554 million were executed, destined to the three strategic lines: humanitarian aid, health and education, for the LATTER through the project "Educando con Amor" that will be executed during 2021.

Fundación EPM / Beneficiaries of programs and projects

Program o project	2018	2019	2020
Agua para la educación, educación para el agua	5,520	4,988	2,240
EPM Library	402,026	395,139	290,690
EPM Community and Customer Education	86,060	157,773	50,051
EPM Water Museum	104,236	97,517	44,682
Parque de los Deseos and Casa de la Música	1,720,568	1,800,195	280,698
14 Units of Articulated Life (UVA)	1,882,993	1,774,118	407,605
Ambiente para la Vida	N.A.	42,840	18,889
Antioquia Higher Education Fund*	270	542	641
Alianza por el agua	N.A.	N.A.	270
Fondo Abrazando con Amor	N.A.	N.A.	186,647

** The figures from the Antioquia Higher Education Scholarship Fund correspond to 2020 scholarship recipients. The total number of students is 12,257 throughout the department, in partnership with the Government of Antioquia and the Institute for the Development of Antioquia IDEA. Of these 2,313 are supported with the resources provided by the EPM Foundation to the Gilberto Echeverri Mejía Corporation.*

GRI standards Contents and own indicators

203 - 1 Investments in infrastructure and supported services.

203 - 2 Significant indirect economic impacts.

Alcance y cobertura

Companies

Empresas Públicas de Medellín - EPM

Aguas Nacionales EPM

Geography

Colombia – Antioquia

Colombia - Cundinamarca

Business

Water

Electric power

City projects

Back to content

City projects

Aware of its role in building a fair, educated and sustainable society, Grupo EPM defines projects with a visible impact on the quality of life of the inhabitants in the territories where it operates.

Performance in 2020

EPM continued with its activities to sustain public spaces that are important to the inhabitants of Medellín. For their part, the Grupo EPM's water and energy subsidiaries carried out some actions in those locations where they have a presence, especially in Quindío and Norte de Santander in Colombia, El Salvador and Chile.

In 2020, the participation of EPM and its companies in city projects decreased due to the restrictions derived from the COVID-19 contingency.

EDEQ, in the department of Quindío, ended the Youth Leadership Network program, which was active for 3 years and in which 14 educational institutions from the 12 municipalities of Quindío participated, 119 students were certified, and there was the participation of 14 teachers, 14 headmasters and 16 tutors, for a total of 163 people benefited. This process had a positive impact, since the young people of the Network were able to amplify their experience and knowledge to another 3,500 students. The total investment for the three periods of the program was COP 300 million.

The subsidiary CENS, advanced in the Norte de Santander region projects focused on minimizing the impacts derived from COVID-19, among them the following stand out: inter-institutional agreements with departmental and municipal government entities, as well as with the Colombian Red Cross and Pastoral Social to provide food aid and hospital supplies. It also carried out the beautification around several urban and rural roads and the purchase of school kits for the 2021 term.

Adasa - Aguas de Antofagasta, built a meeting space on El Arenal beach, a work that benefited the Bodyboard Club and the families living in the Tres Marías sector in Tocopilla, a community neighboring the new Tocopilla desalination plant in Chile.

Delsur, in El Salvador, developed the "Buen Vecino" project in partnership with the Mayor's Office of Antiguo Cuscatlán and two client companies of the subsidiary. This allowed the construction of a basketball court in the area of influence of the three companies, a space designed to promote coexistence and healthy recreation from sports practice.

For its part, EPM continued with the work of maintenance and support of the electrical system, water sources, green areas, civil works and cleaning of the Parque de Los Pies Descalzos and Puerta Urbana spaces, located in Medellín. These spaces, which are freely accessible and are arranged for citizen gatherings, presented a significant reduction in visitors compared to 2019, due to the restrictions on the free movement of people that were decreed in Colombia as a preventive measure to avoid the spread of COVID-19.

Management of urban spaces owned by EPM

Concept	2018	2019	2020
Visitors to the Pies Descalzos Park and Puerta Urbana	311,297	219,088	44,967
Maintenance of Parque Pies Descalzos and Puerta Urbana	276	344	324
Orientation service (guides) in urban spaces	402	309	274
Sanitary units in urban spaces	307	410	330

Source: Shared Services and Supplies Vice Presidency - Real Estate Management

** The values of maintenance, orientation service and sanitary units are expressed in million COP*

Plots delivered in free lease by EPM to the community

Concept	2018	2019	2020
Contracts signed for the transfer of land in bailment	61	61	61
Benefit for the community (million COP)	3,702	3,785	3,928

Source: Shared Services and Supplies Vice Presidency - Real Estate Management

** The reported value corresponds to the estimated percentage of profitability of assets in free lease, which is equivalent to the cost of leasing that commodataries did not pay, since this type of contracts are legally free of charge.*

GRI standards Contents and own indicators

203 - 1 Investments in infrastructure and supported services.

203 - 2 Significant indirect economic impacts.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Quindío

Colombia - Norte de Santander

Chile

El Salvador

Business

Water

Electric power

Innovation Management

Back to content



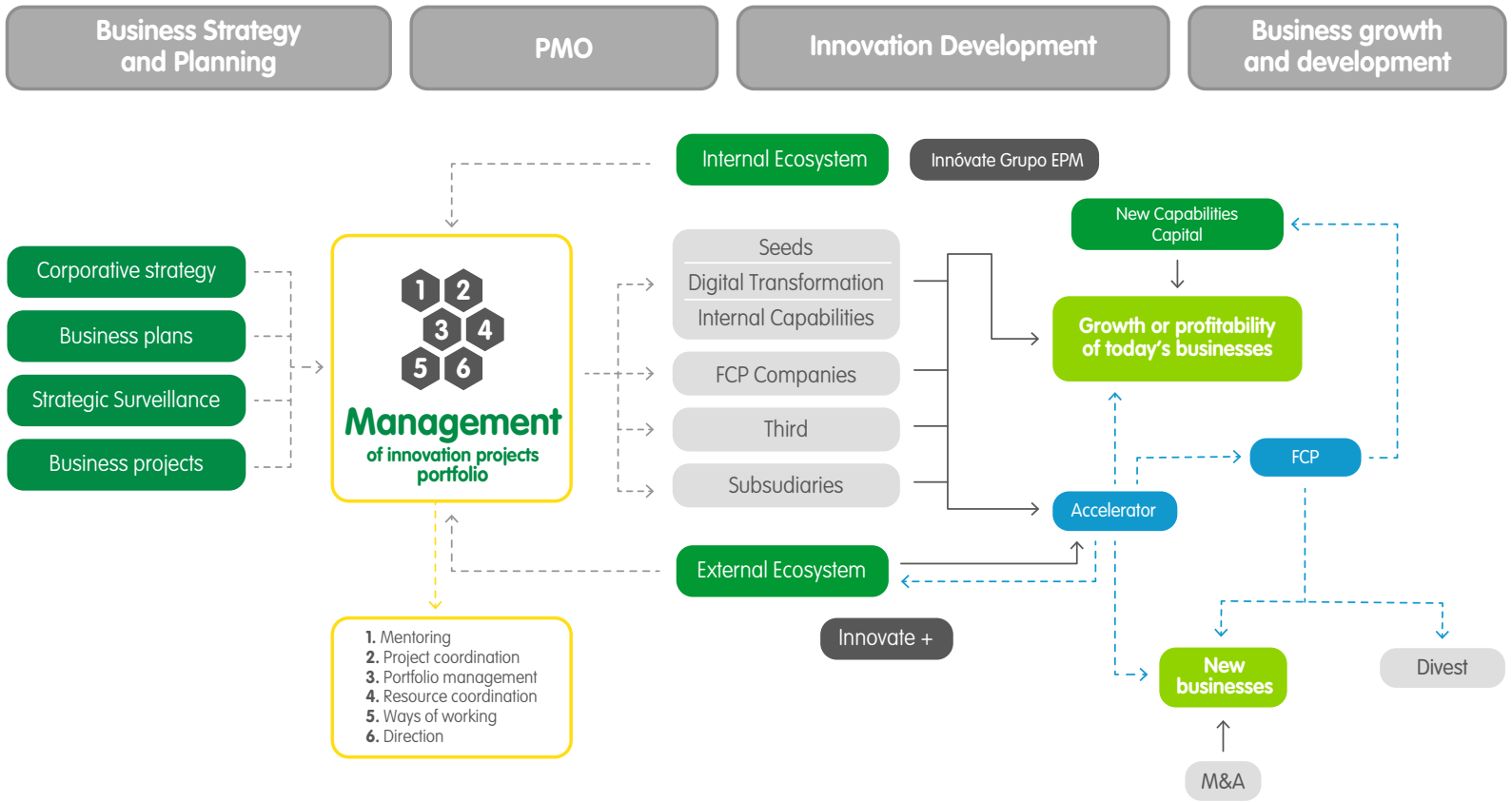
Innovation Management

EPM continues to innovate and seek to be more efficient in its different processes to contribute to the harmony of life for a better world. This is how, starting from the corporate strategy, the business plan and strategic surveillance, it executes an innovation model that starts from sowing, undertaking, accelerating, growing and finally scaling options for new lines of business, new or improved products and transfer of technologies that allow business optimization.

The Grupo EPM has matured in innovation management, incorporating the culture to innovate in its employees. It recognizes the importance of maintaining continuous learning and having a network of allies to make agreements or collaborative alliances, in an open innovation scheme that has allowed it, for example, to create the Center for Innovation, Entrepreneurship and Digital Transformation of Medellín- CIET, through an agreement between EPM and Ruta N for COP 12,000 million for the next three years.

Likewise, it continues to promote entrepreneurship through the Capital Fund and the business accelerator by establishing a win-win relationship with 11 companies in which it has a stake, with whom it builds the required solutions with the quality and efficiency that the environment demands.

Additionally, with work on innovation it contributes to the following SDGs: 7 - Ensure access to affordable, reliable, sustainable and modern energy for all, 9 - Develop resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation and 11 - Make cities and human settlements inclusive, safe, resilient and sustainable.


Business Strategy and Planning
PMO
Innovation Development
Business growth and development
Internal Ecosystem
Innóvate Grupo EPM
Corporative strategy
Business plans
Strategic Surveillance
Business projects
Management
of innovation projects portfolio
Seeds
Digital Transformation
Internal Capabilities
FCP Companies
Third
Subsudiaries
New Capabilities Capital
Growth or profitability of today's businesses
FCP
Accelerator
External Ecosystem
Innovate +
1. Mentoring
2. Project coordination
3. Portfolio management
4. Resource coordination
5. Ways of working
6. Direction
New businesses
Divest
M&A

Main achievements

Program, project, initiative or action	Challenges	Company	Achievements in 2020	Compliance
Distributed resources	Implement pilot project of power generation in EPM's aqueduct network through technological developments (PAT systems - pumps such as turbines).	**EPM**	Due to the health emergency due to COVID-19, this project was suspended in April 2020 with a scheduled restart in February 2021. For this reason, the connection to the network was not achieved.	**Not accomplished**
Distributed resources	Carry out studies to determine the viability of the water sales business in service stations (supply of high VOLUMES of water to fill tank cars).		The business model to implement this service (supply of high VOLUMES of water to fill tank cars) was proposed and results were delivered to the Water business.	**Total**
Technological development	Initiate the remodeling of the industrial workshop and application of thermal barrier coatings for power generating equipment using locally developed materials.		The design stage was concluded, the budget was approved and the construction phase began, preparing pre-contractual documents for civil works and the procedures for obtaining the construction license. The work will finish in 2022.	**Total**
Distributed resources	Carry out studies and a pilot to determine the feasibility of offering comprehensive management services for dielectric oils.		The feasibility study was executed, whose deliverables were: benchmarking and market study; regulation and macro environment; analysis of attractiveness and competitiveness, and scenarios and recommendations for business models. As a pilot for hypothesis testing, a commercial test was carried out with some potential clients.	**Total**

Program, project, initiative or action	Challenges	Company	Achievements in 2020	Compliance
Smart city services and sustainable mobility	Encourage the conversion of 3,500 vehicles to Natural Gas Vehicles.	EPM	2,537 conversions were carried out, for a total of 24,000 vehicles with installed and active NGV.	**Partial**
Highly innovative company	Manage the investments of the Private Capital Fund - FCP I and II (EPM Ventures Program) and work jointly with the companies in which it has a stake.		FCP II operations began in the second half. The monitoring of FCP I investments continued.	**Total**
Highly innovative company	To develop and execute, in conjunction with the EPM Foundation, the "Technological Challenges" and "Innóvate EPM" programs to develop innovation capacities in new generations.		It was not possible to carry out the Solar Circuit. A special training process of 52 hours of mentoring and spaces for prototyping of business ideas with external people and intrapreneurs, until reaching the selection of the best six ventures that CONTINUE with a new phase of acceleration in 2021.	**Partial**

Challenges 2021

Program, project, initiative or action	Challenge	Year of compliance	Scope and coverage: Company	Scope and coverage: Business	Scope and coverage: Geography	Management progress in 2020
Distributed resources	Define the business model for smart aqueducts	2021	**EPM**	Water	**Colombia – Antioquia**	Its implementation has not started.
	Run community solar energy pilot, based on distributed energy resources, smart metering and digital platform for energy transactions	2021		Electric power	**Colombia – Antioquia**	This pilot began in October 2020, with the participation of ERCO and the Universidad Escuela de Ingeniería de Antioquia and with the support of *University College London*. The first deliverable has already been received and it is expected to advance during the year 2021 with the other defined deliverables.
Smart city services and sustainable mobility	Implement the provision of smart city services as a strategic ally of Medellín and other territories in Colombia	2022		All businesses	**Colombia – Antioquia**	Qualitative research was carried out that allowed exploring the concept of smart cities in: citizens, authorities, EPM, and companies in Medellín and other municipalities of the metropolitan area. The contractual process was started for the consulting phase, the purpose of which is to develop capacities in EPM, to be the strategic ally of the cities in the definition of the city strategy, design of Smart services and support in the implementation.

Program, project, initiative or action	Challenge	Year of compliance	Scope and coverage			Management progress in 2020
			Company	Business	Geography	
Smart city services and sustainable mobility	Propose the EAS (*energy as a service*) service in electric buses.	2021	**EPM**	Electric power	**Colombia – Antioquia**	Conversations were activated with some companies that offer electric buses to start with the signing of confidentiality agreements.
Highly innovative company	Start the execution of activities and projects at the Center for Innovation, Entrepreneurship and Digital Transformation	2021		All businesses	**Colombia – Antioquia**	The collaboration agreement and contributions were signed with Ruta N, who will be EPM's ally for the operation of the Center for Innovation, Entrepreneurship and Digital Transformation.

Associated stakeholders

- Clients and users
- State
- Partners
- Community
- EPM Group People
- Investors
- Owner
- Suppliers and contractors

GRI standards Contents and own indicators

EPM - 11	Innovation efficiencies
EPM - 19	New lines of business in innovation

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Aguas Regionales EPM

Aguas de Malambo

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Geography

Colombia – Antioquia
Colombia - Malambo, Atlántico
Colombia – Caldas
Colombia – Quindío
Colombia – Santander
Colombia - Norte de Santander
El Salvador
Guatemala
Panamá

Business

Water
Sanitation
Electric power
Gas

Highly innovative company

Back to content

Highly innovative company

In its day to day, the Organization seeks to foster the capacity for innovation in its employees and promote digital transformation in each of the companies, from the motivation, knowledge and creativity of the people, who are the ones who finally develop these new solutions that deliver value to stakeholders.

Some mechanisms and actions to promote innovation, entrepreneurship and digital transformation are:

- Management of the business accelerator and the Private Capital Innovation Fund.
- Training events in innovation and agile methodologies.
- Launch of challenges in the innovation ecosystem.
- Seed and project management with application of agile methodologies and agile digital operating model (MOAD).

Performance in 2020

The recognition of the EPM innovation team as an R + D + I Unit was once again obtained by the Ministry of Science, in Colombia, According To the Policy of Actors of the National System of Science, Technology and Innovation. In addition, the Innóvate EPM 2020 program was implemented, aimed at external entrepreneurs (university students). In this version, which had the participation of EPM officials, the training, prioritization and selection phases of the six best projects were developed, which will be part of a later phase for acceleration.

The Grupo EPM promotes an open and collaborative innovation strategy that allows its companies to develop alliances with technological parks, centers and universities, in addition to carrying out R & D & I projects that seek profitability and the development of new business alternatives. Through Ventures EPM, a program that materializes investment in ventures, the business accelerator and Private Equity Funds, strategic and financial support is provided to companies related to EPM's sectors of interest for the development of new products or necessary services. in the group. Capital Fund I continued with the portfolio management and the constitution of Capital Fund II was managed, as well as its approval before the Financial Superintendence and the beginning of its operations.

The digital transformation in EPM continues to grow with more seeds (teams focused on solving business challenges), which have generated minimum viable products (MPV) and transversal digital components. An agile and digital operating model (MOAD) was implemented, which includes teams called Virtual Centers of Excellence, who will mark the evolutionary path of different disciplines for the future: intelligent process automation, agile and innovation practices, customer experience and data science.

The CHEC subsidiary consolidated its innovation management system and executed the CHEC 3D strategy, by identifying core capabilities, training in design thinking, scrum master and the creation of the innovation committee and studies associated with this culture.

Innóvate CHEC was expanded and the program was extended to the department of Risaralda. Several designs and some prototypes were developed: a web application to manage payments for consumption made in the electric stations and the application of nanotechnology principles for the decomposition of organic pollutants in CHEC's water bodies. In addition, with the event called "The great CHEC challenge", prioritized initiatives were started until four challenges were presented in the summons. A preliminary mapping of possible partners for a solution was also carried out and the communication strategy and launch of the program were defined in March 2021.

CHEC and ESSA obtained the approval by Minciencias of several projects presented in the summons for tax benefits.

CENS worked on the development of organizational capacities with innovation as a means to implement and advance new solutions.

Investments and expenses - Highly Innovative Company Action (million COP)

Concept / Indicator	2018	2019	2020
EPM Headquarters	15,416	7,259	19,220
Subsidiaries Grupo EPM	3,677	255	2,563
Total investments	**19,093**	**7,514**	**21,783**

Source: New Business, Innovation and Technology Vice Presidency / Development and Innovation Management

The values include the investments and expenses of EPM and its subsidiaries executed in previous years, which had been considered in the actions previously called "Transformational Innovation" and "Entrepreneurship", since many of these pilots and projects have to do with the new action. detailed here, the most significant items correspond to investments made in the Private Equity Fund for Entrepreneurship.

GRI standards Contents and own indicators

EPM - 11 Innovation efficiencies

EPM - 19 New lines of business in innovation

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Businesses

Water

Sanitation

Electric power

Gas

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Santander

Colombia – Norte de Santander

Distributed resources

Back to content

Distributed resources

EPM seeks to offer solutions for places and territories difficult to reach with large centralized systems designed for cities. This focus requires the integration of technology and business models in small-scale solutions that allow cost efficiency in the provision of PUBLIC drinking water, sanitation, energy and solid waste management services.

For the Water and Sanitation business, they are solutions for the provision of drinking water and sanitation in a sustainable, clean and adaptable way to populations, sectors or communities that are not connected in any way with the main networks.

For the Energy business, they are small and modular energy generation and storage technologies that provide electrical capacity, energy and flexibility when needed.

For the Solid Waste Management business, they are solutions that involve the construction, operation and maintenance of systems that respond to the needs of small populations.

Performance in 2020

With the pilot carried out in the rural area of the municipality of Olaya, EPM advanced in the knowledge about the installation of efficient aqueduct solutions in areas of difficult access for new users, using remote measurement technologies for remote management of these systems. This pilot could be replicated in many regions where Grupo EPM has a presence.

The Energy business, for its part, strengthened its foray into solar self-generation, in which it invested COP 2,068 million in four solar systems for large clients, with a total installed capacity of 859 kWp and carried out the operation and maintenance of two solar systems.

An ultrafiltration plant was installed to integrate it into the telemetry and remote-control network that is part of the smart aqueduct project in the town of Sucre, municipality of Olaya-Antioquia.

The scope and design of a pilot plan for the initiative to flatten the demand curve for drinking water was advanced. The best technology was identified and components were developed to transmit the information to an analytics center for processing and control.

A market investigation was carried out with the company Ernst & Young, as an input for the structuring of the business model for the sale of water in service stations.

The floating solar panel project in the Guatapé reservoir was completed and the photovoltaic solar system was delivered to the operating areas of the Guatapé plant.

On the subject of transactive energy, in an agreement with the Universidad Escuela de Ingeniería de Antioquia and the ERCO company, progress was made in the execution of two pilots: one with the community of Comuna 13 of Medellín in order to analyze the transactional characteristics of this population segment, and another in which the data of the energy transactions of 14 participating users were collected.

A proposal was delivered for the structuring of the dielectric oil renewal business -RAD-, to offer renewed oil and services associated with the management and treatment of these oils to third parties.

Aguas Regionales installed two hypochlorite generation systems on site, one in the municipality of Apartadó and the other in Chigorodó.

CHEC designed the technology evaluation prototype for swimming pool water heating.

ESSA completed the third year of monitoring the performance of the El Parnaso solar self-generation system, and recorded a generation of 145 kWh-day.

CENS structured the energy efficiency proposal to start in 2021.

ENSA installed a recycled water reserve tank in the Cerro Viento offices, which can wash 25 to 30 vehicles, representing a saving of 500 liters of drinking water.

Investment and expenses in distributed resources (million COP)

Concept / Indicator	2018	2019	2020
EPM Headquarters	7,091	3,611	3,631
Subsidiaries Grupo EPM	11,527	73	2,340
Total investments	**18,618**	**3,684**	**5,971**

Source: New Business, Innovation and Technology Vice Presidency / Development and Innovation Management

The values include the investments and expenses of EPM and the subsidiaries, executed in previous years, which had been considered in the action previously called "Technological developments", since many of these pilots and projects have to do with the new action detailed here.

GRI standards Contents and own indicators

EPM - 11 Innovation efficiencies

EPM - 19 New lines of business in innovation

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia - Norte de Santander

Colombia – Santander

Panamá

Businesses

Water

Electric power

Smart city services and sustainable mobility

Back to content

Smart city services and sustainable mobility

Smart city is a concept and a way of organizing a territory making use of technology and other elements, to satisfy the needs and offer relevant services to citizens, businesses and visitors, which facilitates governance, increases transparency, strengthens democracy and citizen participation and builds a more equitable, inclusive and competitive city.

In this sense, the Grupo EPM has projects to improve the intelligence of the services it provides, in smart electrical grids, in analytics to detect losses and fraud in energy, gas and water, as well as in automation and remote management of PUBLIC LIGHTING. It also develops sustainable mobility initiatives that aim at the harmony of life for a better world, fitting in with the sustainable mobility strategy of providing energy "for transport" from clean or renewable sources and natural gas.

Performance in 2020

In most of its energy subsidiaries in Colombia and abroad, the Grupo EPM has fostered the ecosystem of sustainable mobility in its territories with the acquisition of electric vehicles and the installation of infrastructure consisting of PUBLIC and private electric chargers. Regarding smart city services, the subsidiary Eegsa made progress in the Red AMI project, in which it invested 10,333,881 quetzals equivalent to COP 4,551 million in its operation and maintenance.

EPM carried out a market investigation to modernize PUBLIC lighting, which includes the change from sodium and conventional luminaires to more efficient LED luminaires and the foray into pilot projects for remote management systems for PUBLIC LIGHTING. These results will serve as input for a consulting phase in smart cities.

In electric mobility, the offer to finance bicycles and electric scooters for Somos cardholders continued (EPM's loyalty program aimed at customers and users). Conversations were started with foreign suppliers of electric buses to sign confidentiality agreements and explore alternatives for renting batteries or associated models to promote the use of these vehicles.

CHEC closed the year with the launch of the first electric charging eco-station, the installation of the second charging station and the presentation to the Manizales city hall of the proposal for a sustainable mobility public policy.

EDEQ installed the first fast charging station in the department of Quindío and began steps to deploy the charging infrastructure for two wheels. Additionally, it continued to promote the purchase of motorcycles and electric bicycles through the Somos card.

Eegsa made the purchase of an electric vehicle and continued with the initiatives of: automation of the electricity grid, installation of recharging points, Asociación de Movilidad Eléctrica de Guatemala -Amegua-, negotiation and pilot tests of LED luminaires and carried out the designs of the financing platform called "Consíguelo".

Delsur worked on the installation of thermal imaging cameras, battery bank monitors and isolating protectors in the network sections in the substations, in order to carry out monitoring, data analysis and reduction of faults. Also, in the implementation of the cable and phase identification system in distribution networks that provide more precise data in the geographic information system, reducing technical losses.

Investment and expenses in smart city services (million COP)

Concept / Indicator	2018	2019	2020
EPM Headquarters	0	0	173
Subsidiaries Grupo EPM	8,774	33,120	5,745
Total investments	**8,774**	**33,120**	**5,917**

Source: New Business, Innovation and Technology Vice Presidency / Development and Innovation Management

The values include the investments and expenses of EPM and the subsidiaries, executed in previous years, which had been considered in the action previously called "Technological developments", since many of these pilots and projects have to do with the new action detailed here, the most significant items correspond to investments made by the subsidiary Eegsa on smart metering -AMI- and with the Integrated Computer System for User Service -SIIAU- Eegsa,

Investments and expenses for sustainable mobility are detailed in the Mitigation of climate change action.

GRI standards Contents and own indicators

EPM - 11 Innovation efficiencies

EPM - 19 New lines of business in innovation

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Centrales Eléctricas del Norte de Santander - CENS

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia - Norte de Santander

Colombia – Quindío

El Salvador

Guatemala

Businesses

Electric power

Business platforms and services of the future

Back to content

Business platforms and services of the future

A business and services platform is a business model that creates value by facilitating exchanges between two or more interdependent groups, generally consumers and producers. For these exchanges to happen, platforms leverage and create large, scalable networks of users and resources that can be accessed.

The Grupo EPM seeks to redesign business to commerce (B2C), business to business (B2B) and business to government (B2G) services, including point-to-point (P2P) services for regulated and unregulated markets, as well as to develop new service offers through virtual platforms, with an objective of growing through innovation. With this guideline, EPM has made progress in structuring possible new businesses or in optimizing current ones, achieving efficiencies that also translate into lower costs for the company and consequently in a more efficient and innovative company for its users.

Performance in 2020

Both EPM and the subsidiaries CHEC, CENS, Delsur and Eegsa made significant progress implementing applications based on technologies such as IoT, Artificial Intelligence, Blockchain and Cloud and enabled new digital assistants that provide remote access to our clients, guaranteeing security, agility and improvement in the attention. Likewise, in EPM several platforms were implemented to support some regulations and for the management, use and exploitation of information.

EPM reviewed and adjusted the business plan to offer B2C-B2B services, incorporating lessons learned from iterations carried out with clients. At the same time, CENS designed a similar service that is awaiting approval by the Board of Directors.

EPM made progress in the Prosumidores platform, in the development of web applications that allow to unify the customer experience, in the platform for robotization of manual tasks of current processes, put into operation the first IPA solution (Robotic Process Automation + Artificial Intelligence) with the invoice quality process - histograms, the platform and data quality tools were enabled for monitoring, for the monitoring of IT applications and components (information technologies) and establishment of the Data Science Community.

The company implemented EMA chatbot for employees and clients in the process of integrating with WhatsApp. Likewise, the Delsur subsidiary advanced with a chatbot pilot that it hopes to massify during 2021. For its part, Eegsa implemented the bot called Sunny with artificial intelligence and machine learning that integrates with messaging channels and with other tools such as the CRM-EPESI system and Comegsa APP and with digital services to facilitate communication with customers, including the package of technical services called MantPlus offered by Comegsa.

CHEC inaugurated the Vive CHEC experience center, a modern and innovative relationship point, where clients find commercial, experiential and co-creation spaces. A concept that combines digital and experiential moments in an experience that generates positive emotions, for remembrance and recommendation. It also made progress in optimizing the administration, operation and maintenance of electrical installations by implementing high-tech equipment that monitors different variables through energy management software.

Delsur made progress in the VAcBI Plan (active sales with business intelligence) that promotes the acquisition of complementary services through the analysis of personalized information to generate tailored value offers, through contracts with staggered coverage and with payment flexibilities in the invoice (initially aimed at high demand customers).

Eegsa for its part made progress with the C4C (Cloud for customer) platform that integrates with Outlook and creates an automatic ticket for customer service; tools were implemented for the SIIAU system (Integrated User Service Computer System), progress was made in generating online electronic invoices, as well as payment and credit agreements.

Investments in business platforms and services of the future (million COP)

Concept / Indicator	2018	2019	2020
Investments and expenses made by EPM	0	0	5,416
Investments and expenses made by national and international subsidiaries	1,552	148	10,847
Total investments	**1,552**	**148**	**16,263**

Source: New Business, Innovation and Technology Vice Presidency / Development and Innovation Management

The values in the table include the investments and expenses of the subsidiaries, executed in previous years, in the action called "Technological developments", since many of these pilots and projects have to do with the new action detailed here.

The significant increase in investments in 2020 in the subsidiaries corresponds mainly to the implementation of scada and materials management at Eegsa.

GRI standards Contents and own indicators

EPM - 11 Innovation efficiencies

EPM - 19 New lines of business in innovation

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Santander

Colombia - Norte de Santander

El Salvador

Guatemala

Businesses

Water

Sanitation

Electric power

Gas

Work environment

Back to content



Work environment

Grupo EPM assumes the work environment based on the objective and subjective conditions that form the environment for work performance, seeking that human beings obtain a satisfactory experience in the development of their activities in the company. 2020 was a defying and challenging year.

New ways of work, relationships and collaborative co-creation, added to the digital transformation, were installed in EPM to stay. Although they were issues that had been working at the organizational level, 2020 accelerated their arrival. Cultural evolution, as a transversal dimension, accompanied the process of learning, change and training from the different mobilizers of culture and that is how it was possible to overcome a challenging year and turn it into an inspiring year, where EPM People were the most cared for and valued asset.

In order to guarantee the provision of the service and the continuity of the business, nearly 5,000 employees worked in person or alternately in the different EPM headquarters and their return to the headquarters was postponed. Consequently, in EPM an interdisciplinary team was formed during the contingency that enabled the EPM Contigo Program, with the aim of making the confinement experience a possibility of personal and family encounter, with three lines of action: mental and physical health , new ways of working and connecting with life.

- The EPM Contigo microsite was created, an informative space that grouped notes of interest and activities for EPM People, which became the third most visited page on the corporate intranet with more than 23,638 visits in the year.
- A recognition was received for commitment to gender equality (October 2020).
- The pilot program for the inclusion of people with disabilities was continued.

Today the companies of the Grupo EPM focus their strategies and efforts towards improving the quality of life of their employees and healthy environments, generating motivation, satisfaction and a sense of belonging to the Organization. A suitable work environment will facilitate the development of their work in optimal conditions, a situation that makes them more productive with a balance between personal and professional development.

EPM is committed to the labor practices and standards defined in the ILO agreements and complies with the labor regulations of each country where the Grupo EPM operates.

In EPM, responsibilities are assigned to specific agencies to build, implement and consolidate a management model for the management of labor and union relations of the Grupo EPM, within the framework of Colombian labor legislation and jurisprudence.

Main achievements

- In the Grupo EPM there were collective bargaining processes in the subsidiaries: Aguas Nacionales, Emvarias, Malambo, Adasa, Eegsa and Enérgica.
- As of December 31, 2020, EPM had 7,791 employees.
- During 2020, 433 people joined EPM, while 139 employees within the Organization obtained promotions and 115 changed positions due to selection processes.
- The measurement of Quality of Life- Psychosocial Risk within the framework of the Occupational Health and Safety Management System, becomes a management tool that guides and focuses efforts to improve organizational results and the well-being of employees and their families.
- Resolution 0312 of 2019 was implemented, which defines minimum standards of the Occupational Health and Safety Management System. As a result, 97.5% compliance with what is required in the standard was obtained.
- In total, 38,749 benefits were delivered for a value of COP 28,164 million. 87.2% of EPM's employee population made use of at least one of the benefits granted by the Company.
- In the program for pensioners and retirees, no face-to-face activities were carried out in 2020 due to the situation of isolation. However, a program with 14 virtual courses was structured.
- 2020 invited the Company to adapt its organizational contexts to a new reality. The conversation was undoubtedly a mobilizer of questions about the meaning that unites it as a Business Group and about the application of skills to act in transitory and continually reviewable scenarios.

- In 2020, leaders' ability to talk about how to give feedback to their collaborators, the importance of managing relationships and taking charge of themselves, was strengthened.
- At a general level, there was a decrease in training events in the Group, given the impacts of the pandemic generated by COVID-19; however, this same situation created a great opportunity for the development of virtual and telepresence courses.

Goals	Achievements	Compliance
Advance the collective bargaining processes in EPM with Sinpro and Sintraelecol.	Compliance with the negotiation strategy.	**Total**
Population at low / non-existent risk in the total risk indicator = 60.50%	Total risk indicator = 68.39	**Total**
Disabling Injury Index - ILI = 0.25	ILI indicator = 0.14	**Total**

Sustainable Development Goals



Related stakeholders

Clients and users | Community | Grupo EPM people | Suppliers and contractors

GRI standards Contents and own indicators

102 - 8	Information on employees and other workers.
102 - 41	Collective bargaining agreements.
103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
EU14	Programs and processes to guarantee the availability of qualified labor.
EU15	Percentage of employees entitled to retire in the next 5 and 10 years, broken down by category and region.
EU16	Policies and requirements regarding health and safety of workers, contractors and subcontractors.
EU17	Work days of employees of contractors and subcontractors involved in construction, operation and maintenance activities.
EU18	Percentage of contractors and subcontractors that have undergone relevant training on health and safety issues.
401 - 1	New employee hires and staff turnover.
401 - 2	Full-time employee benefits that are not provided to part-time or temporary employees.
403 - 2	Types of accidents and accident frequency rates, occupational diseases, days lost, absenteeism and number of deaths due to occupational accident or occupational disease.
403 - 3	Workers with high incidence or high risk of diseases related to their activity.
403 - 4	Health and safety topics covered in formal agreements with unions.
404 - 1	Average hours of training per year per employee.
404 - 2	Employee Skills Enhancement Programs and Transition Assistance Programs.
404 - 3	Percentage of employees receiving periodic performance and career development reviews.
405 - 1	Diversity in governing bodies and employees.
EPM - 16	Percentage of employees surveyed regarding quality of life.

Scope and coverage

Companies

Empresas Públicas de Medellín E.S.P. - EPM
Central Hidroeléctrica de Caldas S.A. E.S.P. - CHEC
Empresa de Energía del Quindío S.A. E.S.P. - EDEQ
Electrificadora de Santander S.A. E.S.P. - ESSA
Centrales Eléctricas del Norte de Santander S.A. E.S.P. - CENS
Distribuidora de Electricidad del Sur S.A. de C.V. - Delsur
Empresa Eléctrica de Guatemala S.A. - Eegsa
EPM Chile S.A.
Hidroecológica del Teribe S.A. - HET
Elektra Noreste S.A. - ENSA
Regional de Occidente S.A. E.S.P.
Aguas de Urabá S.A. E.S.P.
Aguas Nacionales EPM S.A. E.S.P.
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.
Aguas de Malambo S.A. E.S.P.
Empresas Varias de Medellín S.A.- Emvarias
Tecnología intercontinental S.A.P.I. de C.V. - Ticsa
Aguas de Antofagasta S.A.

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
México
Panamá

Businesses

Water
Sanitation
Electricity
Gas

Work well-being and benefits

Back to content

Work well-being and benefits

Grupo EPM promotes the quality of life of its employees and their family group, based on the timely delivery of monetary benefits and the implementation of programs and activities that harmonize their personal, family and work life. In this way, the Company promotes spaces for accompaniment, recreation, sports and social and cultural projection, in a dynamic that consolidates the sense of belonging and strengthens the business culture for the fulfillment of organizational objectives.

Performance in 2020

87.2% of EPM's employee population made use of at least one of the benefits granted by the Company. In total, 38,749 benefits were delivered for a value of COP 28.164 million.

In 2020, as a result of the health emergency caused by COVID-19, the ways of work were adapted and a large percentage of the servers migrated to work at home, which led to the programs of the labor welfare plan being redesigned and will be provided virtually through new service channels. Additionally, new services were designed and coverage was expanded, benefiting the server and his family group.

During 2020, as a result of the health emergency caused by COVID-19, EPM implemented the work-at-home modality for 3,342 servers and apprentices, corresponding to 69% of the population.

At EPM, the teleworking strategy was encouraged, to which 283 servers have been integrated as follows: 107 managers authorized to carry out mobile teleworking, 91 servers with supplementary teleworking modality and 85 teleworkers in autonomous modality.

EPM has five established flexible working hours that start in a stepwise manner every half hour between 6:00 a.m. and 8:00 a.m. To serve the servers in virtuality, a total of 340 training videos for the different muscle groups were hosted on the EPM Contigo site, 460 virtual group classes were given through the Facebook platform and an average of 280 people were in virtual training every month.

EPM created the special calamity loan to meet the urgent and unforeseen needs of official workers and their primary family group (spouse or permanent partner), children and stepchildren, parents and siblings.

Corporate events also migrated to virtuality, with a participation of 75.7% of the people honored in Years of service (619 servers), 10,538 registered on Family Day and 1,401 connections in Christmas "novenas".

Within the EPM Contigo Program, 1,300 servers participated in the activities: "Being a mom and dad today", "Snack for the soul" and "I share my recipe".

Due to the situation of isolation and quarantine experienced, in 2020 there were no face-to-face activities with the group of retirees and pensioners of the Organization; however, a program was structured with virtual courses developed by the EPM Foundation and the Museum of Modern Art (MAMM), and functional training classes were held for this population every day at 8:00 am.

In 2020 EPM designed the Time for your Wellbeing program, which will be presented at the beginning of 2021. This program includes measures to harmonize and balance the work, personal and family life of the servers, with which it is expected to contribute to the improvement of their performance, the commitment to the Company and the retention of human talent.

People benefited from occupational wellness programs - EPM
(Quantity or number)

Concept	2018	2019	2020
Social projection	2,252	3,015	3,151
Cultural events	6,950	12,270	15,065
Sport and recreation	10,884	11,786	3,322
Total	**20,086**	**27,071**	**21,538**

Source: Human Talent and Organizational Development Vice Presidency.

Value of workplace wellness programs - EPM
(Quantity or number)

Concept	2018	2019	2020
Social projection	396	394	610
Cultural events	97	227	338
Sport and recreation	2,105	2,497	1,863
Total	**2,598**	**3,118**	**2,811**

Source: Human Talent and Organizational Development Vice Presidency.

In 2020, participation in workplace wellness programs decreased by 20%, due to the emergency caused by COVID-19.

In sports and recreation, there were no massive events and activities, which caused a 72% decrease in attendees at events such as sports conferences and tournaments, representative group competitions, games in the electricity sector, recreational outings and festivals. Additionally, as of March 14, no face-to-face service was provided in EPM gyms.

In cultural events there was an increase of 23%, originated by Family Day, Christmas novenas, and years of service events.

To accompany the servers and their family group, programs such as Being Daddy and Mommy Today, Snacks for the Soul and Sharing My Recipe were developed. Also reported in this item are those attending the Financial Well-Being Program, Recognition Program and Safe and Sustainable Mobility Week.

Value of workplace wellness programs - EPM
(Quantity or number)

Concept	2018	2019	2020
Home loans	260	161	133
Loans for other concepts	1,878	1,186	1,267
Loan value (million COP)	33,019	21,667	19,999

Source: Human Talent and Organizational Development Vice Presidency.

In 2020, EPM injected capital worth COP 7,000 million to the Sintraemsdes housing fund and COP 2,942 million to the Sinpro housing fund, according to an extra conventional act.

133 housing loans were disbursed for COP 18,824 million and 1,267 loans for other concepts for COP 1,175 million, for a total of COP 19,999 million, with a decrease of 8% compared to the previous term.

As a result of the contingency, the collection of housing loans was suspended for Sintraemsdes affiliates from April to June and for Sinpro affiliates from April to October, in order to ease the family economy during this time. Among the loans for other concepts, one was included for special calamity with a total of 173 disbursed for an amount of COP 321 million.

Benefits - Grupo EPM			
Concept	**2018**	**2019**	**2020**
Benefits delivered	53,430	52,099	38,749
Value of benefits (million COP)	50,482	51,720	50,399

Source: Human Talent and Organizational Development Vice Presidency.

The 26% decrease in 2020 compared to 2019 is due to the effects caused by the pandemic, related to restrictions on the use of benefits in person. Of 2,581 registered entities, only 358 requested authorization to dictate their programs virtually.

Value of workplace wellness programs - Grupo EPM *(Quantity or number)*			
Concept	**2018**	**2019**	**2020**
EPM	20,086	27,071	21,538
Aguas del Oriente	14	15	0
Aguas Regionales	277	253	250
Aguas Nacionales	21	91	176
EPRio	130	108	N.A.
Aguas de Malambo	92	74	77
Emvarias	565	236	755
EPM Chile	0	0	0
CHEC	34,340	34,200	34,529
ESSA	10,621	10,750	22,508
CENS	556	571	596
EDEQ	928	1,019	1,368
HET	0	0	0
ENSA	564	541	573
Delsur	0	320	315
Eegsa	790	658	800
Adasa	0	74	489
Ticsa	502	597	563
Total	**69,486**	**76,578**	**84,537**

Source: Human Talent and Organizational Development Vice Presidency.

Value of workplace wellness programs - Grupo EPM *(million COP)*			
Concept	**2018**	**2019**	**2020**
EPM	30,621	31,028	28,164
Aguas del Oriente	6	8	0
Aguas Regionales	125	415	461
Aguas Nacionales	8	50	86
EPRio	14	13	0
Aguas de Malambo	26	48	46
Emvarias	1,457	1,696	1,754
EPM Chile	0	0	0
CHEC	1,064	1,108	879
ESSA	1,142	973	536
CENS	480	3,111	2,548
EDEQ	890	1,038	811
HET	0	0	0
ENSA	1,090	4,110	3,908
Delsur	0	0	3,963
Eegsa	13,268	3,537	3,635
Adasa	0	3,959	2,955
Ticsa	291	626	652
Total	**50,482**	**51,720**	**50,399**

Source: Human Talent and Organizational Development Vice Presidency.

The value of the monetary benefits delivered by EPM in 2020 amounted to COP 28,164 million, with a 9% decrease compared to the previous year due to restrictions on its use in person due to the effects of the pandemic.

In Grupo EPM, the decrease in the use of benefits was 3%.

Permits and leaves in EPM				
Concept		**2018**	**2019**	**2020**
Extra-legal leave for birth or abortion	**Women**	34	58	34
	Men	92	137	113
Leaves by law	**Women**	447	350	421
	Men	473	321	266
Incorporated women on maternity leave		227	133	107
Incorporated men on paternity leave		464	206	193

Source: Human Talent and Organizational Development Vice Presidency.

For 2020, an adjustment was defined in the extralegal leave for birth applicable only to men, therefore, the extralegal leave for birth or abortion - Women shows a decrease of 41%.

The Company continues to strengthen the granting of leaves and permits for servers who have this right, disclosing it in training spaces.

GRI standards Contents and own indicators

401 - 2 Full-time employee benefits that are not provided to part-time or temporary employees.

401 - 3 Parental leave.

401 - 4 Employee Skills Enhancement Programs and Transition Assistance Programs.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Elektra Noreste - ENSA

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

El Salvador

México

Guatemala

Businesses

Electricity

Water

Sanitation

Gas

Quality of life

Back to content

Quality of life

The measurement of Quality of Life - Psychosocial Risk within the framework of the Occupational Health and Safety Management System - SGSST, becomes a management tool that guides and focuses efforts to improve organizational results, well-being of the officials and their families.

For EPM and its national subsidiaries, Resolution 2646 of 2008 of the Ministry of Labor is taken as a reference, which establishes provisions and defines responsibilities for the identification, evaluation, prevention, intervention and permanent monitoring of exposure to psychosocial risk factors at work and for determining the origin of pathologies caused by occupational stress; and Resolution 2404 of 2019, also of the Ministry of Labor, by which the Battery of instruments for the evaluation of psychosocial risk factors is adopted, as well as the General Technical Guide for the promotion, prevention and intervention of psychosocial factors and their effects on the working population, with its specific protocols.

Performance in 2020

The results of the measurement of Quality of Life - Psychosocial Risk 2020 show a stabilization of the indicators as a result of all the actions carried out, as evidenced by 85.78% of the surveyed population. according to these results, EPM is in a total risk, low or no risk, which classifies it as a healthy company.

Employees surveyed - Quality of Life - Grupo EPM in Colombia

Concept	2018	2019	2020
Employees surveyed	9,049	9,253	8,844

Source: Human Talent and Organizational Development Vice Presidency.

** Applies only to companies in Colombia.*

6,320 employees participated in EPM, equivalent to 83.95% of the Company's total population.

In order to improve the measurement of the work environment in the quality of life component, three dimensions were taken as bases, the compared results of which were:

Results of the Quality of Life survey - EPM (%)

Concept	2018	2019	2020
Role clarity	50.86%	49.53%	53.15%
Social relationships at work	55.16%	54.93%	60.03%
Leadership	48.43%	46.09%	51.34%

Source: Human Talent and Organizational Development Vice Presidency.

Results of the Grupo EPM Quality of Life survey - In Colombia

Concept	2018	2019	2020
EPM	64.22	64.09	68.39
Aguas del Oriente	42.86	60.00	0.00
Aguas Regionales	38.89	56.32	0.00
Aguas Nacionales	35.34	42.61	0.00
Aguas de Malambo	50.00	37.25	0.00
Emvarias	21.55	31.90	0.00
CHEC	53.60	61.17	76.40
ESSA	62.76	60.96	70.02
CENS	58.39	59.68	70.59
EDEQ	56.87	67.71	62.60

Source: Human Talent and Organizational Development Vice Presidency.

** Applies only to companies in Colombia.*

The results obtained in the measurement of Quality of Life in the Grupo EPM in 2020 were the product of the actions led by each company with the purpose of reducing the psychosocial risk scenarios for the collaborators.

The conditions caused by the contingency and the call to work at home for officials forced a large part of the 2020 planning to be modified. Even the subsidiaries of the water business: Aguas del Oriente, Aguas Regionales, Aguas Nacionales, Aguas de Malambo and Emvarias

did not carry out this measure because they accepted Memo 0064 of 2020 from the Ministry of Labor, which defines the minimum actions for evaluation and intervention of psychosocial risk factors, the promotion of mental health and the prevention of problems and mental disorders in workers in the context of the current health emergency due to COVID-19 in Colombia.

GRI standards Contents and own indicators

EPM - 16 Percentage of employees surveyed regarding quality of life and psychosocial risk.

Scope and coverage

Companies

Empresas Públicas de Medellín E.S.P. - EPM

Central Hidroeléctrica de Caldas S.A. E.S.P. - CHEC

Electrificadora de Santander S.A. E.S.P. - ESSA

Empresa de Energía del Quindío S.A. E.S.P. - EDEQ

Centrales Eléctricas del Norte de Santander S.A. E.S.P. - CENS

Aguas Regionales

Aguas de Malambo S.A. E.S.P.

Aguas Nacionales EPM S.A. E.S.P.

Empresas Varias de Medellín S.A.- Emvarias

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Colombia – Risaralda

Businesses

Electricity
Gas
Water
Sanitation

Job performance

Back to content

Job performance

Performance management in Grupo EPM leverages the achievement of strategic direction, organizational purpose and the system of organizational capabilities based on the definition of the contributions and expected behaviors, promoting joint responsibility for the comprehensive development of people.Through conversations, the leaders facilitate that the servants understand the issues in which they must perform, the ways of work and the results to be achieved individually and collaboratively.

Performance in 2020

In order to strengthen performance management and people development, the leaders' ability to talk about how to give feedback to their collaborators, the importance of managing relationships and taking charge of themselves, was reinforced.

Performance management is evolving and during 2020 a work team was consolidated that developed a proposal to update the process to apply, as a pilot, in the performance cycle of 2021.

Most of the subsidiaries have implemented the performance management process defined in EPM, but some have their own performance and development model.

In general, companies focused their efforts on maintaining the application of the performance management process during the COVID-19 Pandemic, developed capacities to accompany teams in virtuality and made adjustments to carry out business operation activities. Working sessions were held with the Aguas Regionales and Eegsa subsidiaries on the implementation of the performance process.

Employees with performance evaluation in Grupo EPM

Concept	2018	2019	2020
Employees with performance evaluation	8,054	11,461	11,660

Source: Human Talent and Organizational Development Vice Presidency.

Employees with performance evaluation (%)			
Concept	**2018**	**2019**	**2020**
EPM	99%	0%	94%
Aguas Regionales	100%	0%	19%
Aguas Nacionales	100%	100%	100%
Ticsa	100%	100%	100%
Adasa	100%	100%	100%
Aguas Regionales	100%	0%	19%
Emvarias	50%	0%	92%
EPM Chile	100%	0%	0%
CHEC	91%	99%	92%
ESSA	93%	96%	93%
CENS	93%	98%	96%
EDEQ	0%	99%	99%
Delsur	100%	100%	0%
Eegsa	0%	20%	13%
ENSA	100%	100%	100%

Source: Human Talent and Organizational Development Vice Presidency.

- Adasa, Aguas Nacionales, Ticsa and Ensa assigned targets to 100% of the population.
- CHEC: it is expected to carry out an assessment of 92% of the population that has 2020 performance commitments in the information system.
- CENS: it is expected to carry out an assessment of 96% of the population that has 2020 performance commitments in the information system.
- EDEQ: 2020 performance commitments were defined for 99% of workers.
- Eegsa: an assessment was carried out only to the management personnel associated with the compensation goals. Planning was carried out to start the application of performance management at other levels of positions.
- ENSA: the objectives for the performance evaluation were defined for all the personnel.
- Delsur: defined suspending the performance evaluation given the conditions of the COVID-19 pandemic.

GRI standards Contents and own indicators

404 - 3 Percentage of employees receiving periodic performance and career development reviews

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Aguas de Antofagasta - Adasa

Elektra Noreste - ENSA

EPM Chile

Empresa Eléctrica de Guatemala - Eegsa

Distribuidora de Electricidad del Sur - Delsur

Hidroecológica del Teribe - HET

Tecnología Intercontinental - Ticsa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Guatemala

Chile

México

El Salvador

Panamá

Businesses

Electricity

Gas

Water

Sanitation

Training and development

Back to content

Training and development

In Grupo EPM, development management refers to a series of practices and scenarios of exposure, support and guided training, aimed at preparing people to meet the present and future needs of the Organization, within the framework of planning EPM talent.

At EPM, development strategies are implemented to enhance the skills of each of the collaborators and align the knowledge, behaviors and skills of human talent with the Organization's strategic plan. For this, the 70/20/10 approach is used, in which 70 is defined by the possibility of exposing servers to new work scenarios that allow capacity building; 20 refers to the possibility of learning from the hand of others and the training of managers so that they accompany and promote the development of their work teams; and 10 is made up of all the guided training strategies: certifications, courses, seminars, congresses, diplomas; these strategies are used by the EPM University to strengthen the knowledge and ability to manage and operate its processes and to develop what the Company requires in the future.

Performance in 2020

The organizational knowledge map was drawn up, identifying the key, critical and general knowledge in processes and initiatives, and the execution of the training events began for the identified knowledge that is in insufficient status.

Critical positions were identified in the missionary processes of the Water and Sanitation, Transmission and Distribution and Gas businesses, and those of Generation are still in the validation process. Additionally, positions were evaluated in all processes of the Human Talent and Organizational Development Vice Presidency. Presidency and progress was made in the Commercial Vice Presidency.

The structuring of new curricular networks of processes and capacities continued, with 12 structured networks. Conscious leadership, as a mobilizer of cultural evolution, was this year one of the greatest dynamizers to achieve the integration of the lessons that the new forms of work brought with them.

It was the leaders, through the Leadership School and its different lines of action, who were trained and arranged their agendas to participate in the different training mechanisms: collaborative networks, advanced training for leaders, ABC Program for administrative management, Leaders 4.0 as an approach to the digital environment, among others, to continue to build and establish itself in the leadership model of the Organization.

Training and development - EPM

Concept		2018	2019	2020
Training hours	**Directors**	75	34	42
	Professionals	13	32	44
	Assistants, technicians and technologists	14	31	28
	Maintenance	20	40	24
Training Hours - Average Employee		17	32	34
Learning events held		512	561	353
Approved Training trips abroad		46	41	10

Source: Human Talent and Organizational Development Vice Presidency.

In 2020, 500 leaders among executives, managers, operation leaders and project leaders attended the different spaces programmed by the EPM University Leadership School.

The commitment was put to the test regarding the remote leadership subject, as the pandemic demanded, in record time, maintaining productivity and leading from a distance, dodging all kinds of technical, practical and emotional situations.

The leaders were the strategic allies to accompany the teams and favor the evolution of the processes and their integration into the emerging reality.

Within the closeness strategy, the leaders received an emotional gift in their homes, in which they were thanked for their commitment during the year and invited to remain united to the organizational purpose.

Training Hours - Average Employee Grupo EPM			
Companies	**2018**	**2019**	**2020**
EPM	17	32	34
Aguas del Oriente	5	48	54
Aguas Regionales	50	53	75
Aguas Nacionales	19	0	2
Ticsa	20	18	13
Adasa	24	40	12
Aguas Regionales	50	53	75
Emvarias	38	92	16
HET	0	38	38
CHEC	47	63	48
ESSA	55	96	82
CENS	28	34	34
EDEQ	65	44	34
Delsur	48	47	30
Eegsa	134	114	81
ENSA	34	6	2

Source: Human Talent and Organizational Development Vice Presidency.

Training and development - Grupo EPM			
Concept	**2018**	**2019**	**2020**
Learning events held	2,314	2,590	3,431
Approved postgraduates	39	47	44
Scholarships awarded	599	697	362
Approved Training trips abroad	58	65	13
Value of the Organizational Learning Plan (million COP)	6,131	6,253	5,030

Source: Human Talent and Organizational Development Vice Presidency.

Budget execution Grupo EPM (%)			
Companies	**2018**	**2019**	**2020**
EPM	93%	95%	67%
Aguas del Oriente	100%	100%	49%
Aguas Regionales	100%	100%	0%
Aguas Nacionales	57%	47%	22%
Aguas de Malambo	90%	20%	0%
Ticsa	90%	80%	25%
Adasa	99%	99%	73%
Aguas Regionales	100%	100%	0%
Emvarias	100%	84%	98%
CHEC	70%	74%	63%
ESSA	90%	93%	99%
CENS	100%	100%	100%
EDEQ	82%	118%	91%
Delsur	98%	116%	89%
Eegsa	40%	58%	63%
ENSA	95%	100%	55%

Source: Human Talent and Organizational Development Vice Presidency.

At a general level, in the Grupo EPM there was a decrease in training events given the impacts of the COVID-19 pandemic; however, this same situation created a great opportunity for the development of virtual and telepresence courses.

GRI standards Contents and own indicators

404 - 1 Average hours of training per year per employee.

404 - 2 Employee Skills Enhancement Programs and Transition Assistance Programs.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Empresa Eléctrica de Guatemala - Eegsa

EPM Chile

Elektra Noreste - ENSA

Tecnología Intercontinental - Ticsa

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Panamá

México

Guatemala

Businesses

Electricity

Gas

Water

Sanitation

Retirees and pensioners

Back to content

Retirees and pensioners

In order to maintain the relationship with its retirees and pensioners, Grupo EPM develops different strategies that facilitate rapprochement with this interest subgroup, including social projection activities that include psychological and spiritual counseling, as well as full adulthood (program for retirees and pensioners and pre-pensioners).

Performance in 2020

The bond with retirees and pensioners is permanently strengthened with the implementation of varied, innovative and inclusive activities that are approached from different dimensions: personal, social, recreational and cultural.

The commitment and contact with this population group is warm and close, which is reflected in their participation and attendance at all scheduled activities.

EPM has a pension preparation program that has coverage for people with less than two years to retire.

In 2020, as a result of the pandemic, only two talks were held, the first in June on change management with 48 attendees and the second in December with topics on the Company, pension process, portfolio, risks, insurance, housing and benefits, with 34 attendees.

In the pensioners and retirees program, in 2020 no face-to-face activities were carried out due to the situation of isolation and quarantine. However, a program was structured with 14 virtual courses developed by the EPM Foundation and the Museum of Modern Art of Medellín (MAMM), in which 245 people participated. Additionally, functional physical training classes were held for this population, every day from Monday to Friday at 8 a.m.

In general, the subsidiaries have programs to improve the skills of workers who are beginning their transition to retirement (pre-pensioned), with the objective of assuming this stage as an opportunity for personal, social and work development and that can generate a change of attitude towards their withdrawal from the respective organizations.

Retirees and pensioners Grupo EPM			
Concept	**2018**	**2019**	**2020**
Pensioners in the year	912	925	1,056
Direct retirees - Accumulated	3,604	3,547	3,967

Source: Human Talent and Organizational Development Vice Presidency.

Projection of personnel to retire in the next 10 years - Grupo EPM	
Concept	**2021**
Directors	149
Professional	1,063
Technologist, technician and assistant	1,106
Maintenance	620
Total	**2,938**

Source: Human Talent and Organizational Development Vice Presidency.

The retirees in charge were the responsibility of EPM until June 30, 1995; The number of people who would meet age requirements for the recognition of the pension is reported.

GRI standards Contents and own indicators

EU15 Percentage of employees entitled to retire in the next 5 and 10 years, broken down by category and region.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Empresa de Energía del Quindío - EDEQ

Central Hidroeléctrica de Caldas - CHEC

Centrales Eléctricas del Norte de Santander - CENS

Electrificadora de Santander - ESSA

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Elektra Noreste - ENSA

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Santander
Colombia – Norte de Santander
El Salvador
Guatemala

Businesses

Electricity
Gas
Water
Sanitation

Trade union organizations

Back to content

Trade union organizations

At present, EPM has Guideline 42, which implements and consolidates the management model for the management of labor and union relations that emerge from the right of union association and collective bargaining, within Colombian labor legislation. This guideline includes guidelines such as:

1. Consistent treatment with union organizations
2. Observance of the law on collective bargaining
3. Criteria during the collective bargaining process
4. Normative harmonization
5. Participation of the negotiating team and the directors of the Company
6. Relationship with trade union organizations
7. Monitoring and evaluation of conventional agreements, in which the basic guidelines for the management of collective labor matters are defined, in a clear and coherent manner.

In the Grupo EPM there are 32 trade union organizations, 25 of them national, with whom 16 collective agreements have been signed and four arbitration awards have been adopted; and the remaining seven of an international nature. In Colombia, the percentage of union affiliation in the Group is equivalent to 97%.

The Company declares its compliance with the legal provisions indicated in Colombian law and in the countries where it has companies, governed by the principles established in such regulations and based on respect for the right of union association, collective bargaining and freedom of association.

Performance in 2020

The Collective Agreement was signed with the Union of Workers and Employees of PUBLIC Services, Autonomous Corporations, Decentralized and Territorial Institutes of Colombia, Sintraemsdes, valid for 2020-2022, during the direct settlement stage, an event that had not happened for more than 15 years. Similarly, on June 10, 2020, an extraconventional act was signed with the Union of Professional Workers of residential, complementary and related public Services Companies, Sinpro, to extend the benefits achieved by Sintraemsdes.

The benefits agreed in the aforementioned agreements had as a fundamental premise the well-being and improvement of the quality of life of the workers, the care of the environment and the sustainability of the Company. Important achievements are highlighted in the recognition of the needs of the different interest groups and the expansion of their coverage.

EPM provided legal support to subsidiaries in Colombia in the management of collective labor relations and advice regarding the preparation for the negotiation processes of collective labor agreements in Aguas Nacionales, Emvarias, Adasa and Aguas de Malambo; this affiliate signed its Collective Bargaining Agreement with the Sintraguas union organization on December 11, 2020, within the direct settlement stage.

EPM has accompanied the new Afinia subsidiary and provided legal advice on matters of collective labor law, sharing with it good practices regarding relations with trade union organizations and defining a strategy for the administration of collective labor agreements.

The administrative complaints of the trade union organizations in the EDEQ and ESSA companies before the territorial offices of the Ministry of Labor were reduced.

Union leave is ordinary paid time for the exercise of union and collective association of unionized workers.

Affiliation to trade union organizations - EPM

Concept	2018	2019	2020
Trade unions	5	6	6
Employees covered by collective bargaining agreements	7,145	7,505	7,778
Not Affiliated	8	9	13

Source: Human Talent and Organizational Development Vice Presidency.

Affiliation to trade union organizations - Grupo EPM			
Concept	**2018**	**2019**	**2020**
Trade unions	7	28	27
Employees covered by collective bargaining agreements	8,503	12,829	13,249
Not Affiliated	53	354	714

Source: Human Talent and Organizational Development Vice Presidency.

** The union information does not include the subsidiary Afinia.*

Other indicators on trade union organizations at the national level			
Concept	**2018**	**2019**	**2020**
Conventional agreements and arbitration awards	4	17	20
Complaints	3	12	13
Hours of union leave of the leaders	35,894	54,491	66,003

GRI standards Contents and own indicators

102 - 41 Collective bargaining agreements.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Panamá

México

Guatemala

Businesses

Electricity

Gas

Water

Sanitation

Staff

Back to content

Staff

In Grupo EPM, the staff is defined by structured occupational groups: managers, professionals, technologists, technicians and assistants and the maintenance curve. The report of assigned employees includes the levels, categories, classes of positions and salaries existing in each one of the subsidiaries.

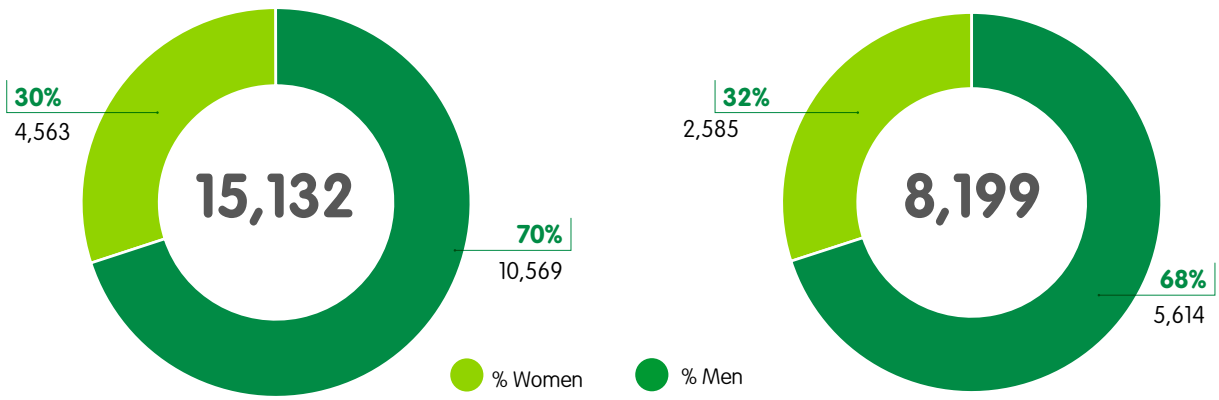
Regarding salary, some of the subsidiaries in Colombia have a fixed compensation and benefits, mostly of a conventional type. In others, a full salary is offered for people who meet the requirements to have it.

Performance in 2020

EPM was ranked fifth among the 100 companies in the 2020 Merco Talent Ranking, which means that it rose two places compared to the 2019 measurement and ranked as one of the best companies to attract and retain talent.

In compliance with Act 789 of 2002, the companies of the Grupo EPM in Colombia have the Apprenticeship Program, which in the case of EPM in 2020 gave 764 students of technical, technological and university programs the opportunity to carry out an internship required by educational institutions.

Grupo EPM Staff 2020 EPM Staff



* *Includes Apprentices and Interns.*

Staff by gender - Grupo EPM

Concept	2018	2019	2020
Men	9,420	10,344	10,569
Women	4,190	4,476	4,563
Total	**13,610**	**14,820**	**15,132**

Source: Human Talent and Organizational Development Vice Presidency.

Staff by gender - EPM

Concept	2018	2019	2020
Men	5,157	5,452	5,614
Women	2,400	2,456	2,585
Total	**7,557**	**7,908**	**8,199**

Source: Human Talent and Organizational Development Vice Presidency.

Top-level managers by gender - Grupo EPM			
Concept	2018	2019	2020
Men	41	51	133
Women	28	34	69
Total	**69**	**85**	**202**

Source: Human Talent and Organizational Development Vice Presidency.

Top-level managers by gender - EPM			
Concept	2018	2019	2020
Men	6	6	9
Women	1	3	3
Total	**7**	**9**	**12**

Source: Human Talent and Organizational Development Vice Presidency.

At EPM there were 139 promotions, 115 changes due to selection processes and 136 transfers that strengthened mobility in the Organization and contributed to renewing and generating new opportunities for professional growth for the Company's staff, encouraging a sense of belonging and commitment.

In compliance with the Human Rights policy, we are working on the development of actions that strengthen diversity in terms of inclusion of people with disabilities and gender equality, to support the fulfillment of SDGs such as: End of poverty, Gender equality and Reduction of inequalities.

Currently, the Company has 19 employees in the program for the Inclusion of people with disabilities, made up of 3 technicians, 5 technologists and 11 professionals with physical, sensory and cognitive disabilities.

Likewise, actions are being carried out to obtain the certification in gender equality of the Equipares seal, a program led by the Ministry of Labor and the Presidential Council for Equity for Women, with technical support from the United Nations Development Program - UNDP.

In 2020, the action plan was diagnosed and designed to identify and advance in closing the gender gaps in the Organization. Periodic follow-ups were carried out on the execution of the actions proposed there, framed in the eight dimensions that support the certification: recruitment and selection, promotion and professional development, training, remuneration, conciliation, work environment and health, workplace and sexual harassment and communications.

For 2021 it is planned to carry out the evaluation of the progress in the dimensions by means of an external audit, to opt for the Silver Seal of Equipares certification.

In 2020, three new vice presidencies were created: VPE New Businesses, Innovation and Technology, VP Risks and VP General Secretariat. As of December 31, 2020, the position of Secretary General is vacant.

Staff by position and by gender - Grupo EPM

Concept		2018	2019	2020
Directors	**Men**	354	384	412
	Women	134	128	150
Directors		**488**	**512**	**562**
Professionals	**Men**	2,917	3,019	3,327
	Women	1,913	1,998	2,168
Professionals		**4,830**	**5,017**	**5,495**
Technologist, technician and assistants	**Men**	3,850	4,569	4,489
	Women	1,576	1,695	1,680
Technologist, technician and assistants		**5,426**	**6,264**	**6,169**
Maintenance	**Men**	1,990	1,957	2,033
	Women	184	210	186
Maintenance		**2,174**	**2,167**	**2,219**
Apprentices	**Men**	218	251	208
	Women	292	291	294
Apprentices		**510**	**542**	**502**
Interns	**Men**	91	164	100
	Women	91	154	85
Interns		**182**	**318**	**185**
Total		**13,610**	**14,820**	**15,132**

Source: Human Talent and Organizational Development Vice Presidency.

Staff by position and by gender - EPM				
Concept		**2018**	**2019**	**2020**
Directors	**Men**	157	167	169
	Women	55	59	55
Directors		**212**	**226**	**224**
Professionals	**Men**	1,609	1,687	1.825
	Women	1,208	1,255	1.332
Professionals		**2.817**	**2,942**	**3,157**
Technologist, technician and assistants	**Men**	1,882	1,993	1.952
	Women	903	927	940
Technologist, technician and assistants		**2.785**	**2,920**	**2,892**
Maintenance	**Men**	1,322	1,412	1.493
	Women	10	14	25
Maintenance		**1.332**	**1,426**	**1,518**
Apprentices	**Men**	151	164	148
	Women	188	178	208
Apprentices		**339**	**342**	**356**
Interns	**Men**	36	29	27
	Women	36	23	25
Interns		**72**	**52**	**52**
Total		**7,557**	**7,908**	**8,199**

Source: Human Talent and Organizational Development Vice Presidency.

The recommendations related to the certification of the Equipares seal and the "Guide to achieve diverse public employment" Are followed to strengthen diversity, gender equity and inclusion in EPM through the recognition, respect and integration of the differences in the daily life of the Organization, with an emphasis on historically excluded groups.

This guide seeks to implement a differential approach in human management practices that seek real and effective access to employment and eliminate any type of discrimination at work due to gender, ethnic-racial, disability, sexual orientation or other similar factors; likewise, the Equipares seal certification will make it possible to reduce gender gaps in the Organization and adjust the processes of human talent and communications in contexts of inclusion and diversity.

Staff by levels - Grupo EPM			
Concept	**2018**	**2019**	**2020**
Directors	488	512	562
Professionals	4,830	5,017	5,495
Technologists - technicians - assistants	5,426	6,264	6,169
Maintenance	2,174	2,167	2,219
Total, employee plant	**12,918**	**13,960**	**14,445**
Apprentices	510	542	502
Interns	182	318	185
Total	**13,610**	**14,820**	**15,132**

Source: Human Talent and Organizational Development Vice Presidency.

Staff by levels - EPM			
Concept	**2018**	**2019**	**2020**
Directors	212	226	224
Professionals	2,817	2,942	3,157
Technologists - technicians - assistants	2,785	2,920	2,892
Maintenance	1,332	1,426	1,518
Total, employee plant	**7,146**	**7,514**	**7,791**
Apprentices	339	342	356
Interns	72	52	52
Total	**7,557**	**7,908**	**8,199**

Source: Human Talent and Organizational Development Vice Presidency.

The staff shows a growth of 4% due to the coverage of places authorized by the Board of Directors to guarantee operational safety, the execution of infrastructure and business projects and to ensure the correct operation of the businesses.

Distribution of employees by age - Grupo EPM			
Concept	**2018**	**2019**	**2020**
Under 30 years old	3,327	1,239	1,493
Between 30 and 50 years	6,105	6,968	8,577
Over 50 years	3,918	3,870	4,375
Total	**13,350**	**12,077**	**14,445**

Source: Human Talent and Organizational Development Vice Presidency.

** Does not include Apprenticeships or interns.*

Distribution of employees by age - EPM			
Concept	**2018**	**2019**	**2020**
Under 30 years old	2,807	505	475
Between 30 and 50 years	3,857	4,283	4,479
Over 50 years	2,807	2,726	2,837
Total	**9,471**	**7,514**	**7,791**

Source: Human Talent and Organizational Development Vice Presidency.

** Does not include Apprenticeships or interns.*

In the Organization, within diversity and inclusion, there is no discrimination by age, since experience and specialized knowledge of age ranges are valued.

Grupo EPM staff by country			
Concept	**2018**	**2019**	**2020**
Colombia	10,786	11,273	11,683
Panamá	592	531	596
El Salvador	252	320	315
Guatemala	554	774	799
México	266	597	563
Chile	468	465	489
Total	**12,918**	**13,960**	**14,445**

Source: Human Talent and Organizational Development Vice Presidency.

** Does not include Apprenticeships or interns.*

GRI standards Contents and own indicators

102 - 8	Information on employees and other workers.
401 - 1	New employee hires and staff turnover.
405 - 1	Diversity in governing bodies and employees.

Scope and coverage

Companies

Empresas Públicas de Medellín E.S.P. - EPM

Central Hidroeléctrica de Caldas S.A. E.S.P. - CHEC

Empresa de Energía del Quindío S.A E.S.P. - EDEQ

Electrificadora de Santander S.A. E.S.P. - ESSA

Centrales Eléctricas del Norte de Santander S.A E.S.P. - CENS

Distribuidora de Electricidad del Sur S.A. de C.V. - Delsur

Empresa Eléctrica de Guatemala S.A. - Eegsa

EPM Chile S.A.

Hidroecológica del Teribe S.A. - HET

Elektra Noreste S.A. - ENSA

Regional de Occidente S.A. E.S.P.

Aguas de Urabá S.A. E.S.P.

Aguas Nacionales EPM S.A. E.S.P.

Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.

Aguas de Malambo S.A. E.S.P.

Empresas Varias de Medellín S.A. E.S.P. - Emvarias

Tecnología Intercontinental S.A.P.I. de C.V.-Ticsa

Aguas de Antofagasta S.A.

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia - Norte de Santander

Colombia - Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Businesses

Water

Sanitation

Electricity

Gas

Safety and health at work

Back to content

Safety and health at work

EPM, in compliance with Decree 1072 of 2015 and Resolution 0312 of 2019 of the Ministry of Labor, which specifies the requirements for the implementation of the Occupational Health and Safety Management System, adopts these standards as systematic and transparent management instruments to address the prevention of accidents and occupational diseases and also the protection and promotion of the health of employees in the provision of home public services.

Performance in 2020

Resolution 0312 of 2019 was implemented, which defines the minimum standards of the Occupational Health and Safety Management System, with strict compliance with standards, requirements and procedures, applying them to the EPM Process Model and to the dependencies of the administrative structure that support the provision of home public services, in which the fulfillment of basic conditions of technological, scientific capacity, equity and financial sufficiency, and technical-administrative capacity for the operation, exercise and development of activities of EPM and its contractors is established, registered, verified and controlled. As a result, 97.5% of compliance with what is required in the standard was obtained.

Disabling Injury Index(ILI)- Result			
Concept	2018	2019	2020
EPM	0.71	0.28	0.14
Aguas Regionales	0.72	0.00	1.65
Aguas Nacionales	0.16	0.13	0.35
Aguas de Malambo	1.14	0.79	0.70
Emvarias	0.12	39.31	0.16
CHEC	0.45	0.31	0.06
ESSA	0.09	0.20	0.65
CENS	0.33	0.18	0.03
EDEQ	0.05	0.59	0.11

Source: Human Talent and Organizational Development Vice Presidency.

Variation of ILI: in Aguas Nacionales, as of October 2019 the operation of the Aguas Claras WWTP began, for which it required the expansion of the company's staff by 143 new employees.

During 2020, the entire staff of approved positions was occupied and the processes of said operation have been stabilizing.

This index decreased during 2020 in most of the Grupo EPM's subsidiaries, since with the established controls, the sources that generated incidents, accidents at work and occupational disease were intervened, in an effective and efficient manner, in accordance with the prioritization obtained in working and health conditions, in order to contribute to the improvement of the health and well-being of workers and the sustainability of the processes.

In Aguas Regionales and ESSA there was an increase due to accidents that occurred in 2020, in which the frequency or severity generated a direct impact on the ILI.

During 2020, EPM's Occupational Health and Safety Management System was adequate in its structure in accordance with the requirements of Decree 1072/2015 in its Book 2, Part 2, Title 4, Chapter 6 and Resolution 0312 of 2019. Although minor deviations were evidenced in the fulfillment of requirements, the commitment and the level of maturity achieved by the Group regarding the planning and implementation of its SGSST, it was successful.

In the different departments and processes of EPM, the SGSST has been carried out in accordance with the provisions of the current legal regulations on health and safety at work, taking into account the opportunity to optimize resources. EPM's management proved effective in achieving its objectives in accordance with the strategies contemplated by senior management regarding compliance with the SGSST.

In each of its established perspectives, the progress of the SGSST with respect to the self-evaluation carried out in the 2020 audit exercise, resulted in a 97.5% rating, denoting an acceptable level of compliance according to the criteria of Resolution 0312 of 2019. For national subsidiaries, the system was implemented under the guidelines of the Ministry of Labor in its Resolution 0312 of 2019, generating a suitable environment for the quality of work life for employees by monitoring and controlling the risk scenarios in each of the Grupo EPM companies.

Within the self-care program, in 2020 68,750 hours of training were conducted at EPM with emphasis on topics such as values-based safety, motivation and self-care, healthy lifestyles and work, complementing with nutrition and eating habits, occupational stress, psychological aspects of workplace bullying, drug dependence and alcoholism, interpersonal relationships and stress management, and biosafety protocols for prevention and mitigation of COVID-19.

In order to contribute to the mental health of the EPM People, in the psychological counseling program in March 2020 it was migrated to the teleconsultation service and there were 3,621 follow-up appointments for the servers and their family group.

In 2020, elections were held for the Coexistence and Joint Committees of Safety and Health at Work - COPASST of EPM, with a participation of 1,846 and 1,107 officials respectively.

In the Grupo EPM's contractor performance evaluation methodology, quantitative criteria were included to qualify occupational health and safety management in each contract, 530 managers were trained in the new methodology, and tools were also provided for regulatory attention.

Training in occupational health and safety - Own personnel - Grupo EPM

Concept	2018	2019	2020
Hours	15,520	117,376	68,750
Own personnel	16,938	16,860	14,456

Source: Human Talent and Organizational Development Vice Presidency.

In the operating units, work plans were established based on the prioritization of the risk matrix, incorporating update minutes with the participation of those responsible for the dependencies and process leaders. During the period, more than 2,500 inspections were carried out that allowed the development of process improvement actions, reported accidents and incidents were investigated, epidemiological surveillance systems (EVS) were used that responded to the needs and health conditions of the Organization, including EVS COVID-19 to address the health emergency and the exposure of employees to biological risk.

For EPM and its subsidiaries, in 2020 there was a decrease in training hours due to the restrictions derived from compliance with current provisions on prevention and mitigation of biological risk due to COVID-19; In this way, the training activities reduced the face-to-face training sessions (source of risk due to crowds), as happened in the fulfillment of the measures for the work at heights training course, where a validity of more than one year was enabled in order not to train the staff and minimize exposure to COVID-19.

GRI standards Contents and own indicators

EU16	Policies and requirements regarding health and safety of workers, contractors and subcontractors.
EU17	Work days of employees of contractors and subcontractors involved in construction, operation and maintenance activities.
EU18	Percentage of contractors and subcontractors that have undergone relevant training on health and safety issues.
403 - 2	Types of accidents and accident frequency rates, occupational diseases, days lost, absenteeism and number of deaths due to occupational accident or occupational disease.
403 - 3	Workers with high incidence or high risk of diseases related to their activity.
403 - 4	Health and safety topics covered in formal agreements with unions.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Electrificadora de Santander - ESSA

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Centrales Eléctricas del Norte de Santander - CENS

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Tecnología Intercontinental -Ticsa

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia - Norte de Santander

Colombia - Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Businesses

Electricity

Gas

Water

Sanitation

Selection of Personnel

Back to content

Selection of Personnel

The Grupo EPM carries out the necessary activities for the selection of personnel who meet the requirements of the positions and the cultural characteristics of its different subsidiaries. The selection process is approved among energy companies and operational support is given to water companies. Among the services provided are: management of apprentices and intern students, review and analysis of candidate requirements, pre-selection and assessment centers; with the purpose of filling vacancies and ensuring successful performance in the position.

Performance in 2020

The Oracle HCM (Human Capital Management) tool has been used to support the different phases of the human talent entry process and support the selection processes in the different Group subsidiaries through the work carried out by the Human Talent Services Department (EPM Shared Services Center).

At EPM, the management of the process "Entry of human talent" to fill vacancies enables the selection of suitable people through the mechanisms of promotion, selection and transfer of people; establishes procedures and standards and uses tools that facilitate the management of the selection process, maintaining their traceability and transparency. In 2020 the following vacancies were filled:

- Promotion processes: 139
- Changes by selection process: 115
- Transfers: 136

Selection of Personnel - Grupo EPM

Concept	2018	2019	2020
Selection processes	882	1,606	1,587
Contract modifications	661	670	557
Enrolled persons	832	1,395	1,358

Source: Human Talent and Organizational Development Vice Presidency.

The business rules that had been defined at the time were adjusted to address the contingency of the Ituango Hydroelectric Project in 2018. They were expanded so that officials from national and international subsidiaries could participate in selection processes, and a provision order was established, among other changes.

Selection of Personnel - EPM

Concept	2018	2019	2020
Selection processes	376	790	536
Contract modifications	224	311	139
Enrolled persons	135	570	433

Source: Human Talent and Organizational Development Vice Presidency.

The filling of vacancies is due to positions authorized by the Board of Directors to guarantee operational safety, the execution of infrastructure and business projects and to ensure the correct operation of the businesses.

GRI standards Contents and own indicators

EU14 Programs and processes to guarantee the availability of qualified labor.

Scope and coverage

Companies

Empresas Públicas de Medellín E.S.P. - EPM

Central Hidroeléctrica de Caldas S.A. E.S.P. - CHEC

Empresa de Energía del Quindío S.A E.S.P. - EDEQ

Electrificadora de Santander S.A. E.S.P. - ESSA

Centrales Eléctricas del Norte de Santander S.A E.S.P. - CENS

Empresa Eléctrica de Guatemala S.A. - Eegsa

Elektra Noreste S.A. - ENSA

Regional de Occidente S.A. E.S.P.

Aguas de Urabá S.A. E.S.P.

Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.

Aguas de Malambo S.A. E.S.P.

Empresas Varias de Medellín S.A. E.S.P. - Emvarias

Aguas de Antofagasta

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia - Norte de Santander

Guatemala

Panamá

Colombia - Malambo, Atlántico

Chile

Businesses

Electricity

Gas

Water

Sanitation

Social and environmental management in projects

Back to content

Social and environmental management in projects

It is the set of environmental and social activities carried out by Grupo EPM as a developer of projects that transform the regions in which it is present. The purpose is to manage negative impacts and enhance positive ones, as well as to avoid the materialization of risks in the construction and operation stage. This largely depends on the capacities to manage the socio-political dimension, knowledge of social and environmental forces, and the building of trust in the territories, among others.

Today infrastructure projects are being built for the expansion and energy growth of the country such as the Ituango Hydroelectric Project in the department of Antioquia, with an installed capacity of 2,400 MW, which will meet 17% of the power demand in Colombia, for which All environmental and social obligations derived from the environmental license and other administrative acts issued by the National Environmental Licensing Authority (ANLA) are met. Likewise, substations and lines of the Regional Transmission System are built and repowered to guarantee service of the energy demand in Antioquia, Caldas, Santander and Norte de Santander, for which the related environmental licenses or permits were managed in a timely manner and the obligations derived from them were fulfilled on time, including the implementation of the environmental management plans and measures established for the development of these projects.

In 2020, the commissioning of the Aguas Claras wastewater treatment plant project was formalized, which has a treatment capacity of 5.0 m3 / s and a Biochemical Oxygen Demand (BOD5) of 123 t / day. This plant receives the residential, industrial and commercial wastewater from Medellín and Bello and is part of the purification plan for the Aburrá Medellín river and its tributaries. The environmental management associated with its operation will be in charge of the Aguas Nacionales subsidiary.

Likewise, environmental and social studies and designs were carried out for the Transfer Station project for the management of urban solid waste in Medellín.

Finally, there is the sustainable construction program -Aldeas, which contributes to making projects and territories feasible through sustainable wood construction. Includes housing, tourism infrastructure, social and community facilities in the department of Antioquia.

Main achievements

During 2020, EPM met the project formulation baseline by 153%, with the formulation of 9 additional projects to the 17 established as a goal. Likewise, support was provided to the subsidiaries ESSA, CHEC and CENS for the formulation of 12 projects.

Among other actions to highlight in 2020 are: progress in the environmental studies of the Río Piedras Reservoir Water and Sanitation project, the internal audit process of the Yulimar project formulation, which did not present requirements in the environmental component and the obtaining of benefits environmental taxes for COP 11,685 million, exceeding the goal by 43% (COP 8,200 million).

For projects in execution and closure status, of the 175 environmental and social milestones, 110 were met, corresponding to 63%. The milestones not met are related to designs, property issues, COVID-19 and expansion of the work contracts. 19% (33 milestones) were met in advance and 7 environmental permits were obtained that were not scheduled, for 6 projects.

Achievements and Challenges

Challenges EPM 2020		Achievements
Completion of 66 environmental studies		57 environmental studies were carried out, with 86% compliance. Studies not carried out are associated with delays in designs due to the pandemic, project suspension or changes in schedules.
Preparation of 28 environmental management measures -MMA		The challenge was met in its entirety. 19 MMA were prepared with own resources for Water projects and 9 for Energy projects.
Realization of 641 socializations in the projects		The challenge was met in its entirety. During the project, socializations are carried out before the start of the works, during and at the closing. The information processes covered 5,103 people.
Reuse of construction and demolition waste (RCD) in projects	Abiotic environment	13% of the total RCD was reused on site. Of the 426,722 m3 of waste generated, 56,404 m3 were reused on site.
Recycling of construction and demolition waste (RCD) in projects		51% of the waste generated was recycled. Of the 173,608 kg of waste generated, 89,355 kg were recycled.
Forest use	Biotic environment	1,090 trees authorized in forest use permits from 19 projects. 848 trees felled, 3,357 planted, 171 transplanted and rescued, and 12.99 hectares compensated.
Forest use (ha)		55.57 has been authorized in forest use permits (Nueva Colonia, Calizas and others projects). 1,001 m3 of authorized wood, 513 m3 of harvested wood, 1,264 trees that received maintenance.

Challenges EPM 2020		Achievements
Forest offsets	Biotic environment	Forestry compensation associated with 20 projects in the execution stage and 2 in operation for an estimated value of COP 2,401 million. During the term, agreements and contracts were implemented with entities such as: Cuenca Verde, Hogares Claret, Conserprados and Guanacas.
Wildlife management		243 removals of fauna, 78 relocations, 68 rescues and an injured individual.
Training on environmental and social issues	Socioeconomic environment	In the development of 44 projects (25 for Water and 19 for Energy) 2,912 people were trained, of these 2,018 correspond to contractor personnel and 894 are people from the communities in the area of influence of the projects.
Employment generation		2,154 jobs generated in the municipalities where the projects are carried out.
PQR management in projects		818 PQR entered and 675 PQR closed (82%). Most of the PQRs are associated with the closing of complementary works.
Archeology and heritage assets		A rescue carried out with their own resources, a find and 22 archeology trainings.

** The achievements associated with the execution and management of the Ituango Hydroelectric Project can be consulted in the chapter* Ituango Hydroelectric Project.

Challenges

- Carry out the environmental and social management of 146 projects.
- Respond to 2,068 commitments and obligations of environmental authorities, especially forestry uses: characterization of protected species, connectivity with own resources and biotic compensation.
- Carry out the resettlement of the population of approximately 100 families in 5 projects, mostly urban, applying the PUBLIC Policy for the Protection of Residents and Economic and Productive Activities, issued by the municipality of Medellín.
- Strengthen the tables and lines of work of different dependencies of the Organization associated with environmental and social management in projects, for the approval and documentation of this management throughout the life cycle of the project.
- Implementation of project guidelines for the Improvement of Infrastructure Project Management Capacity (Vision 2025) in environmental and social management throughout the project cycle.
- Review the governance model with subsidiaries for their interaction in the formulation and execution stages.

** The challenges associated with the execution and management of the Ituango Hydroelectric Project can be consulted in the chapter* Ituango Hydroelectric Project.

Investment, cost and environmental expenditure

Grupo EPM 2020 environmental investments (million COP)

Company	Contingency	Studies and management of environmental and social impacts	Physical environment	Biotic environment	Social management	COVID-19	Environmental management	Forest offsets	Archeology program	Others [1]	Total 2020
EPM	144,714	24,891	6,504	12,398	11,802	10,253	1,174	279	1,908	904	214,828
Aguas Nacionales EPM	0	0	0	0	0	0	51	0	0	0	51
Aguas Regionales EPM	0	184	58	107	83	0	149	0	6	0	588
Adasa	0	426	0	0	0	0	2,621	0	0	0	3,047
Emvarias	0	1,949	16,371	1,117	0	0	234	91	0	0	19,761
CENS	0	0	0	0	0	0	0	1,587	0	0	1,587
ESSA	0	398	0	0	666	0	458	134	0	0	1,656
CHEC	0	252	0	0	0	0	0	0	0	0	252
Delsur	0	324	0	0	0	0	0	0	0	0	324
EPM Guatemala	0	2,495	0	0	0	0	416	0	0	0	2,911
ENSA	0	0	0	0	0	0	59	0	0	0	59
Total environmental investment Grupo EPM	**144,714**	**30,919**	**22,934**	**13,623**	**12,551**	**10,253**	**5,161**	**2,092**	**1,913**	**904**	**245,064**

Source: Vice Presidency of Corporate Finance and Investment Management.

[1] *Others, includes: Management for relations and communication, Provision of Forest Compensations, Provision of forced investment of 1%.*

Environmental costs and expenses EPM 2020 (million COP)								
Businesses	**Management of environmental impacts**	**Hydrological and meteorological management**	**Management for protection and improvement of the environment**	**Comprehensive environmental management of equipment and waste**	**Environmental studies**	**Technical management of environmental procedures**	**Other environmental activities [2]**	**Total**
Energy generation	16,630	11,526	7,676	0	3,482	1,728	1,934	42,976
Power transmission	1,357	0	3	0	82	490	0	1,932
Energy Distribution	4,100	0	415	3,641	304	149	0	8,608
Gas	8	0	0	0	0	2	0	10
Water Provision	6,860	654	288	1	158	0	1	7,961
Wastewater Management	73,129	0	0	0	0	0	0	73,129
Equity investments	0	0	0	0	0	0	0	0
Total costs and environmental expenses EPM	**102,084**	**12,180**	**8,381**	**3,642**	**4,026**	**2,369**	**1,935**	**134,617**

Source: Vice Presidency of Corporate Finance and Investment Management - Accounting and Costs Department.

[2] *Other environmental activities include: environmental management monitoring, environmental process plan and design.*

Grupo EPM 2020 environmental costs and expenses (million COP)

Company	Management of environmental impacts	Hydrological and meteorological management	Management for protection and improvement of the environment	Comprehensive environmental management of equipment and waste	Environmental studies	Technical management of environmental procedures	Other environmental activities [2]	Total
Adasa	8	0	0	2,742	0	722	314	3,786
Aguas Nacionales	299	39	858	4,148	817	0	3	6,164
Aguas Regionales	0	0	0	0	114	4	0	118
CENS	2,350	0	21	73	14	56	0	2,513
CHEC	385	75	1,023	167	538	54	886	3,128
Delsur	5	0	0	22	0	8	0	35
EDEQ	387	0	23	22	0	6	0	439
Eegsa	0	0	306	0	159	0	28	494
Emvarias	257	0	212	0	212	933	40	1,653
ENSA	10	0	48	0	0	10	1	70
EPM [1]	102,084	12,180	8,381	3,642	4,026	2,369	1,935	134,617
ESSA	568	0	41	0	49	0	0	658
Ticsa	90	0	0	0	0	0	0	90
Total costs and environmental expenses Grupo EPM	**106,445**	**12,294**	**10,914**	**10,816**	**5,928**	**4,162**	**3,207**	**153,766**

Source: Vice Presidency of Corporate Finance and Investment Management - Accounting and Costs Department.

[1] *Includes equity investments*

[2] *Other environmental activities include: environmental management monitoring, environmental process plan and design.*

Associated stakeholders

- Clients and users
- Community
- Owner
- State
- Investors

GRI standards Contents and own indicators

203 - 1	Investments in infrastructure and supported services.
203 - 2	Significant indirect economic impacts.
413 - 1	Operations with local community participation, impact evaluations and development programs.
413 - 2	Operations with significant negative impacts –real and potential– on local communities.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Centrales Eléctricas del Norte de Santander - CENS

Aguas Regionales EPM

Aguas Nacionales EPM

Empresas Varias de Medellín - Emvarias

Empresa de Energía del Quindío - EDEQ

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia - Norte de Santander
Colombia – Santander
Colombia – Quindío
Colombia – Risaralda
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
Panamá
México

Businesses

Water
Sanitation
Electricity
Gas

Aldeas Program

Back to content

Aldeas Program

Aldeas is an innovative initiative through which the wood that reaches its maturity period is used in the more than 4,000 hectares of forest plantations around the reservoirs for the generation of energy and the supply of drinking water, the purpose of which is to add value through the offer of a portfolio of constructive solutions for communities and territories with a high degree of socioeconomic vulnerability, in regions where EPM is present.

Aldeas contributes to:

- The strengthening of public-private alliances for the promotion of social and environmental development of the communities.
- The construction of safe habitats in rural areas where families can continue promoting the country's agricultural development.
- The promotion of forest governance through the sustainable use of the wood that completes its maturation cycle in the forests owned by EPM.
- The feasibility of the projects and the validation of the presence of EPM in the territories.
- The linking of the forestry sector, the wood industry and construction, which has allowed the generation of a high number of direct and indirect jobs, contributing to the revitalization of the local and regional economy.

Performance in 2020

Aldeas is today much more than housing, it is a program that contributes to making projects and territories viable through sustainable wood construction, which includes tourist infrastructure, social and community facilities (environmental classrooms, community booths, schools, playgrounds), as well as stations for the enclosure of the protection or compensation zones of the same EPM reservoirs.

Achievements:

- In agreement with the Government of Antioquia and the municipal administrations, seven rural indigenous schools were built in the municipalities of El Bagre, Chigorodó, Uramita, San Pedro de Urabá and Caucasia. Additionally, two playgrounds were installed in the municipalities of Ciudad Bolívar and Pueblorrico.
- Investment of COP 1,832 million for the term 2020.

Difficulties:

- During the year 2020, the workforce was hired again for the installation of indigenous schools in the municipality of Murindó; However, due to the difficulties of access to indigenous communities due to public order conditions, the execution of these infrastructures was not achieved.

GRI standards Contents and own indicators

203 - 1	Investments in infrastructure and supported services.
203 - 2	Significant indirect economic impacts.
413 - 1	Operations with local community participation, impact evaluations and development programs.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Businesses

Electricity

Geography

Colombia – Antioquia

Intermediate Projects

Back to content

Intermediate Projects

These are the expansion, modernization and growth projects in the energy, gas, water and solid waste sectors currently being developed by Grupo EPM and leverage the sustainable growth of the Organization and the territories where it OPERATES. All the environmental and social procedures that make their execution possible and viable are carried out on them, such as the formulation and implementation of environmental management plans or measures and the processing of environmental licenses or permits before the competent environmental authorities.

In power generation: environmental and social efforts were carried out for the rehabilitation of the Playas plant, modernization of the La Ayurá mini-plant, modernization of the connection to the transmission system of the Tasajera plant, modernization of Guatapé Stage III: auxiliary equipment and other annexes; modernization of Porce II, modernization and replacement of equipment at the Niquía hydroelectric plant, rehabilitation of the Miraflores reservoir dam, modernization of the connection to the transmission system of the Tasajera plant and replacement of auxiliary services equipment in the valve chamber and reception towers of the Guatapé plant.

In energy transmission and distribution: environmental and social arrangements were made for the expansion and replacement works of the system such as: expansion of the Rodeo substation, expansion and normalization of the Andes substation, connection of the Urabá-Nueva Colonia-Apartadó substations, modernization of the Ancón Sur, Chigorodó, Guadalupe and Miraflores substations, expansion of the San Jerónimo and Santa Fe de Antioquia substations and the new Calizas substation, among others.

In water and basic sanitation: environmental and social steps were taken for the drinking water supply projects in the Aburrá Valley and Oriente described in the Water Supply Intervention Program - PIPA, and the San Nicolás Valley projects, while in In the Sanitation and Waste Management Program, there are projects such as: maintenance of sewerage networks and infrastructure, Rodas-Piedras Blancas-El Salado and Other Basins, whose works were completed in 2020. Regarding solid waste, environmental and social studies and designs were carried out for the Transfer Station project. With the subsidiaries Aguas de Malambo and Aguas Regionales, projects related to basic sanitation are being carried out.

Performance in 2020

It contributed to the improvement of the quality of life of the communities where GRUPO EPM OPERATES through the construction of infrastructure works to improve the coverage, continuity and quality of PUBLIC services of electricity, gas, aqueduct, sewerage and solid waste management, in addition to modernizing and replacing the networks and, in general, the infrastructure associated with the provision of these services to customers.

Achievements:

- Compliance with environmental and social management plans for public service infrastructure projects.
- Management of the procedures and environmental permits required for the construction of the works: application or modification of environmental licenses, forest use permits, channel occupation, discharge permits, among others; as well as compliance with the obligations and management measures associated with said licenses or permits:
  - 21 environmental procedures were filed out of the 26 scheduled, for a compliance of 80%.
  - 43 environmental permits were obtained out of the 82 programmed, for a fulfillment of 52%.
- The environmental studies required for the feasibility and execution of the projects were reviewed and prepared:
  - 57 environmental and social studies were completed out of the 66 scheduled for the term, for a fulfillment of 88%.

- PQR attentions, petition rights, information request and others:
    - 675 PQR of the 818 received were served and closed, for an attention indicator of 82%
- Carrying out information and community participation programs with different interest groups at the regional and local level:
    - 641 informative meetings were held with a total attendance of 5,103 attendees.
    - 2,018 contractors and 894 people were trained. Implementation of communication and relationship strategies with the different interest groups at the local, regional and national levels that allowed establishing and strengthening relationships of trust for the feasibility and sustainability of the projects.
- Implementation of strategies with authorities, PUBLIC and private entities and communities, in order to influence the prioritization and obtaining of licenses and the feasibility of each of the projects.
- Social support for the constitution of easements and property management.

GRI standards Contents and own indicators

203 - 1	Investments in infrastructure and supported services
203 - 2	Significant indirect economic impacts.
413 - 1	Operations with local community participation, impact evaluations and development programs.
413 - 2	Operations with significant negative impacts –real and potential– on local communities.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas de Malambo

Aguas Regionales

Geography

Colombia – Antioquia

Colombia - Malambo, Atlántico

Businesses

Water

Sanitation

Electricity

Gas

Sustainable production and consumption

Back to content

Sustainable production and consumption

It is an axis of the Grupo EPM's environmental management that establishes, implements and monitors initiatives aimed at efficiency in the use of materials, water (see Water and biodiversity) and energy (see Climate Strategy), waste management and sustainable purchasing.

These improvement actions are aligned with the National Circular Economy Strategy, based on the logic of "producing while conserving and conserving by producing". They seek to facilitate the transition from a linear development model to a circular one, by preventing the generation of waste, by-products and leaks, the continuous valorization of resources, the reincorporation to other production processes, the closing of cycles of materials, water and energy, and innovative business models to increase efficiency in production and consumption, as well as reduce impacts throughout the life cycle.

Sustainable production and consumption constitute a decisive opportunity to optimize the use of resources in the activities necessary for the provision of PUBLIC services by Grupo EPM, influence the practices of production of goods and services of suppliers and contractors and guide changes of habits in customers and users, so that they contribute to the construction of sustainable and intelligent territories, business competitiveness and the promotion of the responsible use of resources.

The installation of photovoltaic solar panels, energy efficiency programs, the implementation of electronic invoicing, the regeneration of dielectric oil and its use in maintenance activities; the replacement of transformers with mineral oil for vegetable oil, the replacement of the diesel or gasoline vehicle fleet with electric vehicles, the participation in city actions for electric mobility, the precise dosage of chemicals in water purification, among others, are a sign of the actions undertaken by Grupo EPM to achieve sustainable production and consumption.

Main achievements

Program, project, initiative or action	Management emphasis	Challenges	Company	Achievements in 2020	Compliance
Energy consumption		Maintain the electrical energy consumption of the EPM Building below or equal to 99.23 kWh/m^2 -year.	**EPM**	The electrical energy consumption of the EPM Building in the 2014-2020 period (in units of kWh/m^2 -year) was: 116.17 (2014), 113.87 (2015), 100.69 (2016), 97.89 (2017), 97.21 (2018), 97.54 (2019) & 73.46 (2020). The reduction in consumption is a consequence of the replacement of fluorescent lamps to LED technology, the change in schedules of technological systems and the modernization of substations. The significant decrease in the reporting year is due to the implementation of work at home due to the COVID-19 pandemic.	**Total**
Energy consumption	Offer of renewable energies	Install solar panels for auxiliary services 220/110 V, in the San Francisco plant.	**CHEC**	All the necessary materials and equipment were purchased (photovoltaic modules, inverter, electrical wiring system, metallic structure, connectors, among others). Assembly will begin in the first quarter of 2021.	**Not accomplished**
Energy consumption	Offer of renewable energies	Maintain the generation of energy from biogas in the San Fernando and Aguas Claras wastewater treatment plants, to self-supply at least 30% of the internal demand of each plant.	**EPM** **Aguas Nacionales**	Self-generation of 28.67% of the electrical energy required in the San Fernando wastewater treatment plant. When the challenge was set, the new operating conditions were not considered after the expansion of the biological system and the increase in treated water, which implies an increase in energy expenditure. Self-generation of 48.68% of the electrical energy demanded in the Aguas Claras wastewater treatment plant.	**Partial**
Energy consumption		Maintain the increase in electricity consumption in CHEC equal to or less than 2% with respect to the previous term.	**CHEC**	Electricity consumption in 2019 was 4,127,663 kWh, in 2020 it was 3,644,544 kWh. The 11.7% decrease is mainly due to work at home due to the COVID-19 pandemic.	**Total**
Waste management	Prevention of contamination	Take advantage of 10% of the ordinary waste that is generated, for the elaboration of ecological bricks.	**EPM**	Due to the health emergency due to COVID-19, this goal was omitted because the staff in the facilities was scarce.	**Not accomplished**
Other efficient consumptions and practices		Replace gaseous chlorine with sodium hypochlorite generated in situ at the Villahermosa purification plant.	**EPM**	The challenge is postponed to the years 2021 and 2022 because there were difficulties in the hiring process. During the LAST quarter of 2020, the new market study was carried out.	**Not accomplished**

Challenges 2021

Program, project, initiative or action	Management emphasis	Challenges	Year of Compliance	Scope and coverage			Management progress in 2020
				Company	Business	Geography	
Energy consumption	Offer of renewable energies	Install solar panels at two sites for self-generation of energy.	2021	**ENSA**	Energy - T&D	**Panamá**	None.
		Reduce per capita electricity consumption at each site, without affecting operations and staff comfort.		**Distribuidora de Electricidad del Sur - Delsur**		**El Salvador**	Replacement of 183 lamps, 16 bulbs and 12 fluorescent dichroics with LEDs. Replacement of 33 inefficient air conditioners. Seven out of eleven locations met the indicator. Project quote for the installation of motion sensors for lighting in places with little traffic and intermittent use.
		Reduce the consumption of electrical energy in the water treatment plant and pumping by 10%.		**Empresa de Aguas del Oriente Antioqueño**	Water and Sanitation	**Colombia - Antioquia**	Optimization of the internal electrical network in the drinking water treatment plant.
Waste management	Citizen culture of cleanliness and integral management of solid waste	Carry out a feasibility study for the solid waste recovery project.	2021	**EPM**	Water and Sanitation	**Colombia - Antioquia**	Carrying out of the pre-feasibility study on the recovery of solid waste in 2019 and 2020.
		Start up a construction and demolition waste utilization plant (RCD) in partnership with a third party.					Signing of a memorandum of understanding and procurement of the site to install the RCD plant.

				Scope and coverage			
Program, project, initiative or action	Management emphasis	Challenges	Year of Compliance	Company	Business	Geography	Management progress in 2020
Waste management	Prevention of contamination	Eliminate equipment stocks and waste contaminated with polychlorinated biphenyls (PCBs).	2021	**Centrales Eléctricas del Norte de Santander – CENS**	Energy – T&D	**Colombia - Norte de Santander**	Three contaminated computers were removed.
		Evaluate alternatives to reduce non-hazardous recyclable waste and waste electrical materials.		**EPM Guatemala**	Energy – T&D	**Guatemala**	A diagnosis of the waste that is managed in EPM Guatemala was carried out.
		Deliver usable hazardous waste that enters the warehouse to authorized disposers, in order to reduce the amount of waste disposed of in security cells and treated by incineration.		**Central Hidroeléctrica de Caldas – CHEC**	Energy – T&D	**Colombia – Caldas**	None.
		Eliminate stocks of polychlorinated biphenyls (PCBs).	2022	**EPM**	Energy – T&D	**Colombia - Antioquia**	74% of the equipment in the inventory was identified and marked. The goal established (60%) in Resolution 0222 of 2011 was exceeded During 2020, 3,482 kg of porous waste from transformers were generated

				Scope and coverage			
Program, project, initiative or action	Management emphasis	Challenges	Year of Compliance	Company	Business	Geography	Management progress in 2020
Waste management	Prevention of contamination	Develop a plan for PCB removal.	2022	**EPM Guatemala**	Energy – T&D	**Guatemala**	87.95% of the transformer inventory was delivered to the Ministry of Environment and Natural Resources. The established goal of 25% was exceeded. The contract for chromatography was awarded and is in progress. Compliance with the 2020 business plan and delivery of the report to the regulatory entity.
		Produce in the EPM nursery the organic fertilizer required for the maintenance of gardens and green areas of the EPM headquarters.		**EPM**	All business	**Colombia - Antioquia**	The use of organic waste was 20.06%, which is equivalent to 24.16 t of organic waste that was used for composting in the EPM nursery, instead of being taken to final disposal. An electric mixer was purchased and the food waste generated in the food concessionaires of the Pies Descalzos park was incorporated into the process.

Sustainable Development Goals



Associated stakeholders

- Clients and users
- Grupo EPM people
- Community
- Investors
- State
- Suppliers and contractors

GRI standards Contents and own indicators

103 - 1	Explanation of the material topic and its coverage.
103 - 2	The management approach and its components.
103 - 3	Evaluation of the management approach.
301 - 1	Materials used by weight or volume.
301 - 2	Recycled supplies.
302 - 1	Energy consumption within the Organization.
302 - 2	Energy consumption outside the Organization.
302 - 3	Energy intensity.
302 - 4	Reduction of energy consumption.
302 - 5	Reduction of energy requirements for products and services.
306 - 2	Waste by type and disposal method.
306 - 4	Transportation of hazardous waste.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Empresas Varias de Medellín - Emvarias

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Risaralda

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

Panamá

Business

Water

Sanitation

Electricity

Gas

Energy consumption

Back to content

Energy consumption

It seeks to optimize the use of energy (electricity, gas, diesel, and others) from initiatives to reduce or stabilize consumption, supported by comparative analysis with historical figures.

The Grupo EPM advances in the implementation of savings and efficient use programs with actions such as replacement of fluorescent lighting with LED lighting –light emitting diode-, lighting control, programming of air conditioning systems, installation and operation of solar panels for self-consumption energy in its own infrastructure, replacement of the gasoline or diesel vehicle fleet with electric vehicles or natural gas, installation of meters, monitoring of the consumption of electric energy in headquarters and of fuels in own and third-party vehicles, and the execution of campaigns awareness-raising aimed at Grupo EPM People and external stakeholders.

The energy distribution and water supply companies of the Grupo EPM develop programs to reduce and monitor losses in the networks.

Performance in 2020

EPM advanced the change in lighting technology in strategic projects in Medellín, by replacing 2,689 sodium HID (high intensity discharge) luminaires with LEDs (light-emitting diodes) with a saving of 74.15 MWh-year of electrical energy.

The Aguas Claras wastewater treatment plant, included for the first time in this report, increased biogas production by 215.74% and self-supplied electricity by 20.62% compared to 2019.

CHEC initiated the formulation of the Energy Management project together with the Ministry of Science and Technology.

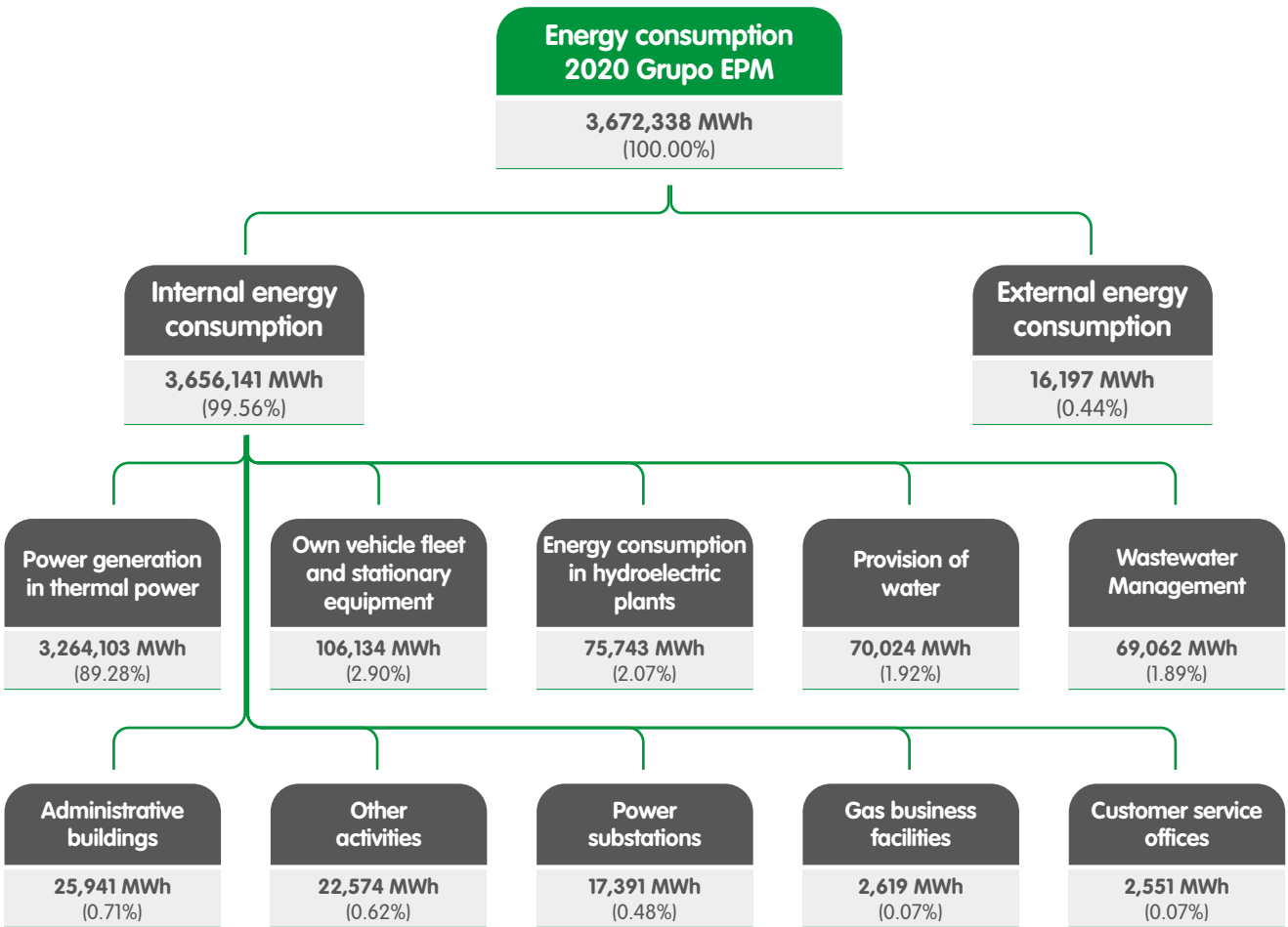
Energy is essential for the provision of services of the Grupo EPM.

The Group's total energy consumption increased 344.22% compared to 2019 due to the continuous generation of the La Sierra thermal power plant from natural gas. This plant must generate energy until the end of 2022, so energy consumption and greenhouse gas emissions are expected from Grupo EPM similar to those of 2020.

Fuels such as natural gas, diesel, liquefied petroleum gas, fuel oil, regular and premium gasoline come from non-renewable sources. Biogas and self-supplied electrical energy come from renewable sources (water, sun). The electrical energy consumed from the grid has a renewable and a non-renewable component that depends on the participation of thermals in the electrical system of each country.

The companies of the Grupo EPM carry out initiatives to optimize energy consumption in their facilities, according to their dynamics, need and reality: from the modernization of the electrical system in the water treatment plant and pumping, Aguas del Oriente reduced its energy consumption by 2.02%; CHEC installed led and telemetry perimeter lighting in two substations; CENS made progress in the consolidation and updating of the baseline of the energy consumption of the facilities with the highest electricity demand and acquired two network analyzers that facilitate the comparison of consumption; Delsur installed 33 more efficient air conditioners with ecological refrigerants, replaced fluorescent lamps with 183 luminaires and 28 LED bulbs and carried out electrical energy audits, and EPM Guatemala established corrective measures to reduce energy consumption in work areas, registered the monthly consumption indicator and updated the energy saving and efficient use program.

Energy consumption 2020 - Grupo EPM

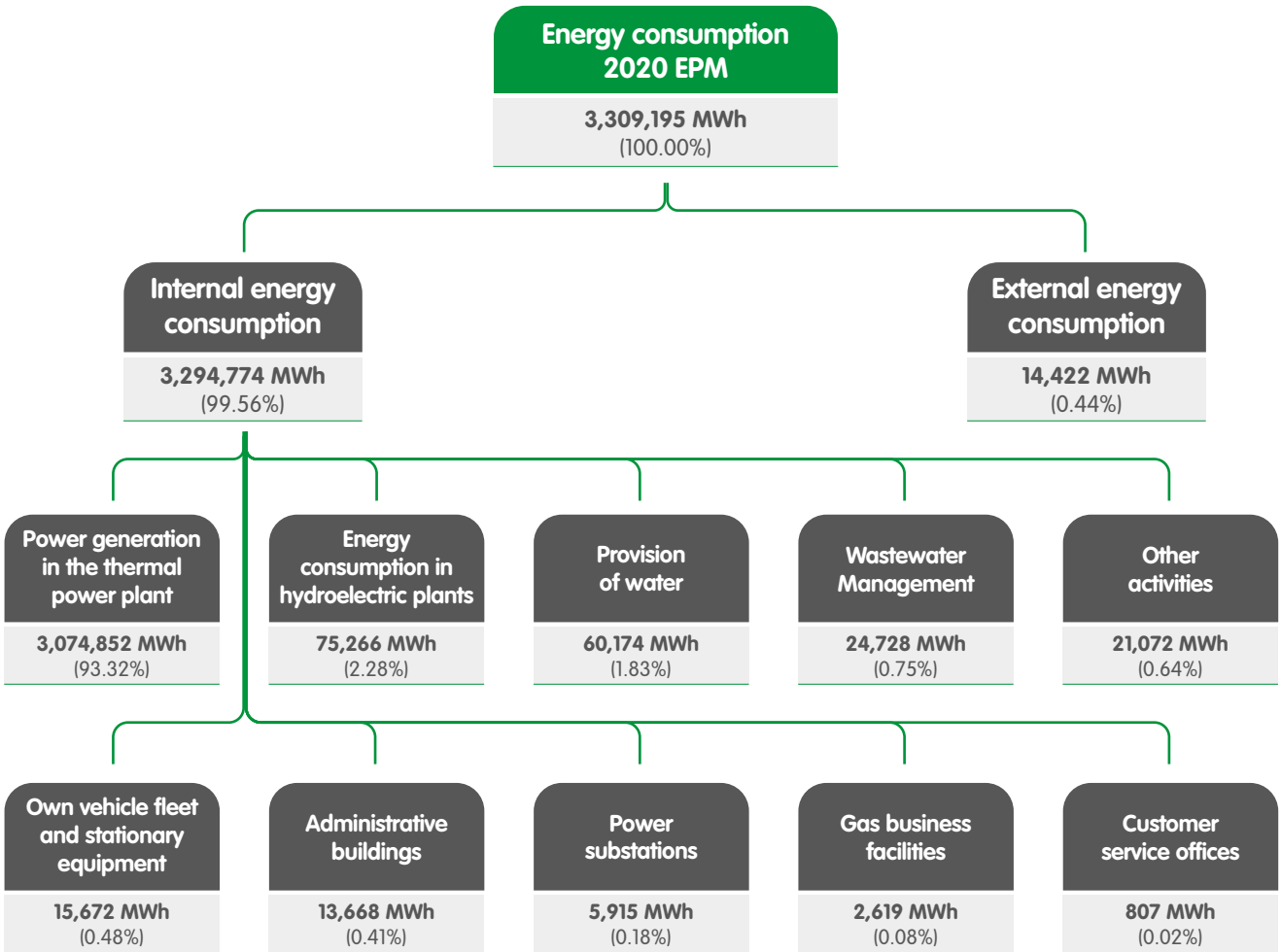


Source: Idsos application.

Other activities include warehouses, camps of power generation plants and technical centers.

The consumption of fossil fuels in thermal power plants required 89.28% of the Grupo EPM's energy in 2020.

Energy consumption 2020 - EPM



Source: Idsos application.

Other activities include warehouses, camps of power generation plants and technical centers.

93.32% of EPM's internal energy demand in 2020 corresponded to the consumption of natural gas for the generation of energy in the La Sierra

Internal energy consumption - Grupo EPM (MWh)			
Power source	**2018**	**2019**	**2020**
Natural gas	56,942	453,197	3,266,869
Electric power	178,720	207,983	229,239
Biogas	35,410	31,224	98,586
Diesel	54,421	59,957	65,546
Self-supplied electrical energy	40,070	44,222	53,342
Vehicular natural gas	34,792	31,944	35,051
Gasoline	5,612	5,688	5,538
Liquefied petroleum gas	1,266	1,320	552
Fuel oil	0	7,155	4
Total	**371,823**	**811,466**	**3,656,141**

Source: Idsos application.

Internal energy consumption increased 350.56%. The most used sources were natural gas (89.35%), electrical energy (6.27%) and biogas (2.70%).

94.12% of natural gas was used in Termosierra and 5.79% in Termodorada. Both are backup plants whose power generation responds to the demand of the system. Hence the 620.85% increase in this fuel.

For the first time, the Aguas Claras wastewater treatment plant is included, which increased biogas and self-supplied electricity. Biogas is excluded from the total because it is included in the self-supplied energy.

Self-supplied energy from biogas, energy use in power plants and photovoltaic solar panels covered 1.46% of the demand.

65.58% of the biogas and 38.01% of the self-supplied energy were generated at the Aguas Claras plant.

The solar panels of three administrative headquarters and a substation of EPM Guatemala supplied 271.48 MWh-year of clean energy (29.09% more than in 2019) that correspond to 11.32% of its total demand for electricity.

Internal energy consumption - EPM (MWh)			
Power source	**2018**	**2019**	**2020**
Natural gas	53,408	448,941	3,078,063
Electricity	139,178	171,236	167,698
Biogas	35,410	31,225	33,938
Self-supplied electrical energy	39,258	43,988	32,785
Diesel	20,182	10,929	10,643
Gasoline	4,408	3,817	4,145
Vehicular natural gas	1,117	451	884
Liquefied petroleum gas	1,266	1,321	552
Fuel oil	0	7,155	4
Total	**258,817**	**687,838**	**3,294,774**

Source: Idsos application.

EPM consumed 90.11% of the Group's energy. Internal energy demand increased 379%. The highest consumptions were natural gas (93.42%) and electricity (5.09%).

The 585.63% increase in natural gas is explained by the generation of 1,576.39 GWh-year in the La Sierra thermal plant in 2020, compared to the 159.25 GWh generated in 2019. The continuous operation of this plant responds to the need to improve the historical unavailability index that affects the reliability charge.

The 25.47% reduction in self-supplied energy is due to the fact that some of the mini and micro power plants of the water supply system were out of service due to modernization construction processes and preventive maintenance. The fuel oil had been used by EPM to generate energy at the La Sierra thermal plant; the drop in its use is due to the change and use of natural gas. The reported fuel oil was used in maintenance activities.

The 96.01% increase in the consumption of natural gas for vehicles is due to a general guideline of the Company to motivate the use of these vehicles by internal personnel and thus contribute to the massification of this technology in the region.

Annual goals EPM 2020-2022

Goal 1

- Non-renewable energy consumption ≤ 3,000 GWh

Goal 2

- Self-supplied electrical energy ≥ 5% of the total energy consumed

The consumption of non-renewable energy EPM 2020 was 3,094.29 GWh. Self-supplied electrical energy in 2020 was 1%.

Goals were not met.

These goals will be reviewed when the Grupo EPM's circular economy strategy is defined.

Energy consumption in water provision - Grupo EPM

Power source	Energy consumption (GWh)			Purified water (Mm^3)			MWh consumed/ MMm^3 of purified water		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
EPM	67.16	85.45	60.17	281.50	303.56	223.05	238.58	281.48	269.79
Aguas Regionales	4.51	4.45	4.47	27.48	25.87	25.93	163.93	171.94	172.50
Aguas de Malambo	4.93	5.00	5.19	8.59	8.49	4.28	573.88	588.49	1,211.39
Aguas del Oriente	0.17	0.19	0.19	0.80	0.85	0.90	207.36	228.55	212.55
EPRio	1.46	N.A.	N.A.	7.92	N.A.	N.A.	183.97	N.A.	N.A.
Adasa	N.D.	N.D.	N.D.	10.93	4.59	13.95	N.D.	N.D.	N.D.
Total	**78.22**	**95.09**	**70.02**	**337.22**	**343.36**	**268.10**	**231.95**	**276.93**	**261.19**

Source: Idsos application.

Includes electrical energy in water treatment plants, tanks, pumps, wells and collection stations.

The Grupo EPM consumed 70,024 MWh-year for the supply of water (1.92% of the internal demand); EPM demanded 60,174 MWh-year. The 29.58% decrease in EPM's energy consumption responds to operational improvements in processes: corrective maintenance measures of meter and filter, leakage correction, efficiency tests, changes of current transformers and meters, among others.

The reductions of 26.52% in EPM and 49.58% in Aguas de Malambo are probably due to the lack of completeness of the information. The 203.92% increase in the water purified by Adasa responds to the start of operation of the Tocopilla desalination plant.

Includes energy use in wastewater treatment plants and pumping stations.

Energy consumption in wastewater management Grupo EPM (MWh)

Power source	2018	2019	2020
Aguas Nacionales	N.A.	N.A.	41,647
EPM	16,503	19,355	24,728
Emvarias	N.A.	1,724	2,223
Aguas Regionales	301	285	347
Aguas de Malambo	56	65	118
EPRio	931	N.A.	N.A.
Total	**17,791**	**21,429**	**69,062**

Source: Idsos application.

Energy consumption for wastewater management in Grupo EPM was 69,062 MWh-year (1.89% of internal demand). The 222.28% increase compared to 2019 is mainly due to the start-up of the Aguas Claras plant, which required 60.30% of the energy consumption in the Group's wastewater management.

The growth of 28.94% in the energy consumption of Emvarias responds to the installation of an energy meter with greater precision in the leachate plant. The 21.75% increase in energy demand in Aguas Regionales is due to the fact that the pandemic increased water consumption and therefore it was necessary to increase the operating hours of the impelling machines to pump the effluents.

The Aguas Claras plant, operated by Aguas Nacionales, treated 69.53% of the wastewater managed in 2020 by Grupo EPM, with an energy intensity of 342.33 MWh consumed for every thousand CUBIC meters of water treated. With the methane produced in the anaerobic digestion of sludge, 48.68% of the electrical energy required in this facility was self-sufficient. 10.58 Mm^3 of biogas were used.

Energy consumption in wastewater management - EPM

Aspecto	2018	2019	2020
Energy consumption (MWh)	16,503	19,355	24,728
Volume of wastewater treated (thousands of m^3)	43,440	50,534	52,984
Renewable energy generated (MWh)	7,619	6,636	7,006
Proportion of renewable energy with respect to energy consumed	46%	34%	28%
kWh consumed/thousands of m^3 of treated wastewater	**380**	**383**	**467**

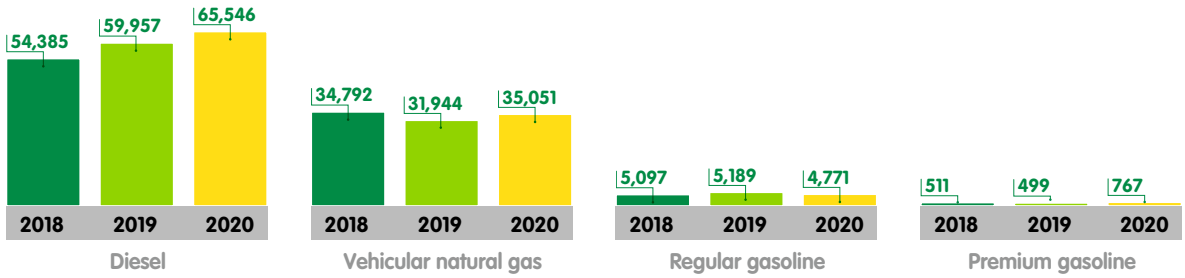
Source: Idsos application.

Energy consumption and treated wastewater correspond to three wastewater treatment plants and a pumping station; energy generation occurs in one of the plants from the capture of biogas.

Energy consumption in wastewater management was 24,728 MWh (0.75% of internal demand). The 27.76% increase is explained by expansions of the San Fernando and El Retiro plants.

With the methane produced in the anaerobic digestion of sludge, 28.67% of the electrical energy required in the San Fernando treatment plant was self-sufficient, where the heat from the motor generators is used to supply the thermal energy necessary to heat the sludge in the biodigesters. 5.55 Mm^3 of biogas were used.

Energy consumption in Grupo EPM's own fleet and stationary equipment (MWh)

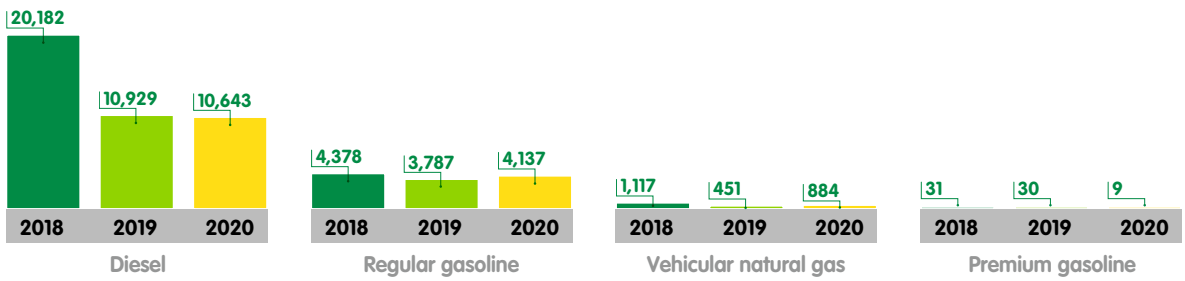


Source: Idsos application.

The energy consumption of its own vehicle fleet was 106,134 MWh-year (2.90% of internal demand). Diesel represents 61.76% of consumption, followed by vehicular natural gas (33.02%).

The natural gas used by Emvarias in its collection trucks was 97.43% of the consumption of this fuel for the Group, while diesel represented 55.94%. Aguas de Malambo is the second most demanding diesel company, consuming 9.73%, followed by ENSA, which used 6.33%.

Energy consumption in own fleet and EPM stationary equipment (MWh)



Source: Idsos application.

The energy consumption of EPM's own vehicle fleet increased 3.12% compared to the previous year. Total consumption was 15,672 MWh-year (0.48% of internal energy demand). Diesel represents 67.91%, followed by regular gasoline (26.40%).

Natural gas increased 96.01% compared to 2019.

External energy consumption

Energy consumption in the contracted fleet - Grupo EPM (MWh)

Combustible	2018	2019	2020
Diesel	9,437	13,968	14,577
Regular gasoline	961	977	546
Vehicular natural gas	79	285	1,074
Premium gasoline	0	0	0
Total	**10,477**	**15,230**	**16,197**

Source: Idsos application.

External energy demand is determined from the fuels used by the Grupo EPM's contracted vehicle fleet. In 2020 this consumption was 16,197 MWh-year, which is equivalent to 0.44% of the total energy demand. Diesel represents 96.01%.

Energy consumption in the contracted fleet - EPM (MWh)

Combustible	2018	2019	2020
Diesel	7,181	11,038	12,902
Regular gasoline	951	958	446
Vehicular natural gas	22	248	1,074
Total	**8,154**	**12,244**	**14,422**

Source: Idsos application.

The energy consumption of the vehicle fleet contracted by EPM increased 17.79%. The most significant increases occurred in vehicular natural gas and diesel. The LATTER represents 89.46% of consumption.

In the specifications for contracts for the transport of personnel to projects in construction, vehicles are required to run on diesel.

GRI standards Contents and own indicators

302 - 1 Energy consumption within the Organization.
302 - 2 Energy consumption outside the Organization.
302 - 3 Energy intensity.
302 - 4 Reduction of energy consumption.
302 - 5 Reduction of energy requirements for products and services.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM
Aguas Regionales EPM
Aguas Nacionales EPM
Empresa de Aguas del Oriente Antioqueño
Aguas de Malambo
Empresas Varias de Medellín - Emvarias
Central Hidroeléctrica de Caldas - CHEC
Electrificadora de Santander - ESSA
Empresa de Energía del Quindío - EDEQ
Centrales Eléctricas del Norte de Santander - CENS
Distribuidora de Electricidad del Sur - Delsur
Empresa Eléctrica de Guatemala - Eegsa
Hidroecológica del Teribe - HET
Elektra Noreste - ENSA
Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia
Colombia – Caldas
Colombia – Quindío
Colombia – Risaralda
Colombia – Santander
Colombia – Norte de Santander
Colombia – Malambo, Atlántico
Chile
El Salvador
Guatemala
Panamá

Business

Water
Sanitation
Electricity
Gas

Waste management

Back to content

Waste management

The comprehensive management of waste includes actions for the prevention in its generation, minimization, recovery, use, treatment and final disposal. Grupo EPM classifies waste into: recyclable, biodegradable, ordinary and inert, special and Hazardous.

The companies of the Grupo EPM implement and update comprehensive waste management plans that include the application of strategies such as reducing generation, increasing the use and holding training and formation events to contribute to the proper management of waste in its facilities. In turn, they participate in workshops led by other institutions in each country or locality for the collection of certain waste such as plastic caps, electrical and electronic devices, pesticides, batteries, among others, generated by Grupo EPM People, customers and users and other stakeholders.

Performance in 2020

EPM Guatemala prepared and delivered the report on the PCB Management Plan to the National Electric Power Commission in order to obtain the Economic Value-Added Distribution (VAD) recognition to which the project is subject, which amounts to USD 266,449.09 in the period from November 2019 to December 2020. In addition, it exceeded the goal in PCB management by delivering the transformer inventory to the Ministry of Environment and Natural Resources (MARN), by delivering 87.95% when the goal agreed for the first year was 25%.

With an achievement of 74%, EPM exceeded the goal established for PCB management in Resolution 0222 of 2011, of identifying and labelling, as of December 31, 2020, 60% of the Company's inventory equipment.

In 2020, the generation of waste in the Grupo EPM was 61,941 t (quantity that excludes the 400 t that were stored in 2019). Biodegradable correspond to 42.13% of the total generated, followed by special waste, with 37.33%.

The water and sanitation companies made progress in the diagnosis, characterization and separation of waste; carried out the work for the use of some special waste generated and gave virtual training during the health emergency due to COVID-19.

CENS consolidated reports of biodegradable pruning and felling waste generated in the maintenance activities of the transmission and distribution system. Also, it updated the official document of the Comprehensive Waste Management Plan (PGIR), adding the component for the management of waste generated in the prevention of the contagion of COVID-19 and the update of the color code, procedures and pertinent adjustments for its application in all venues.

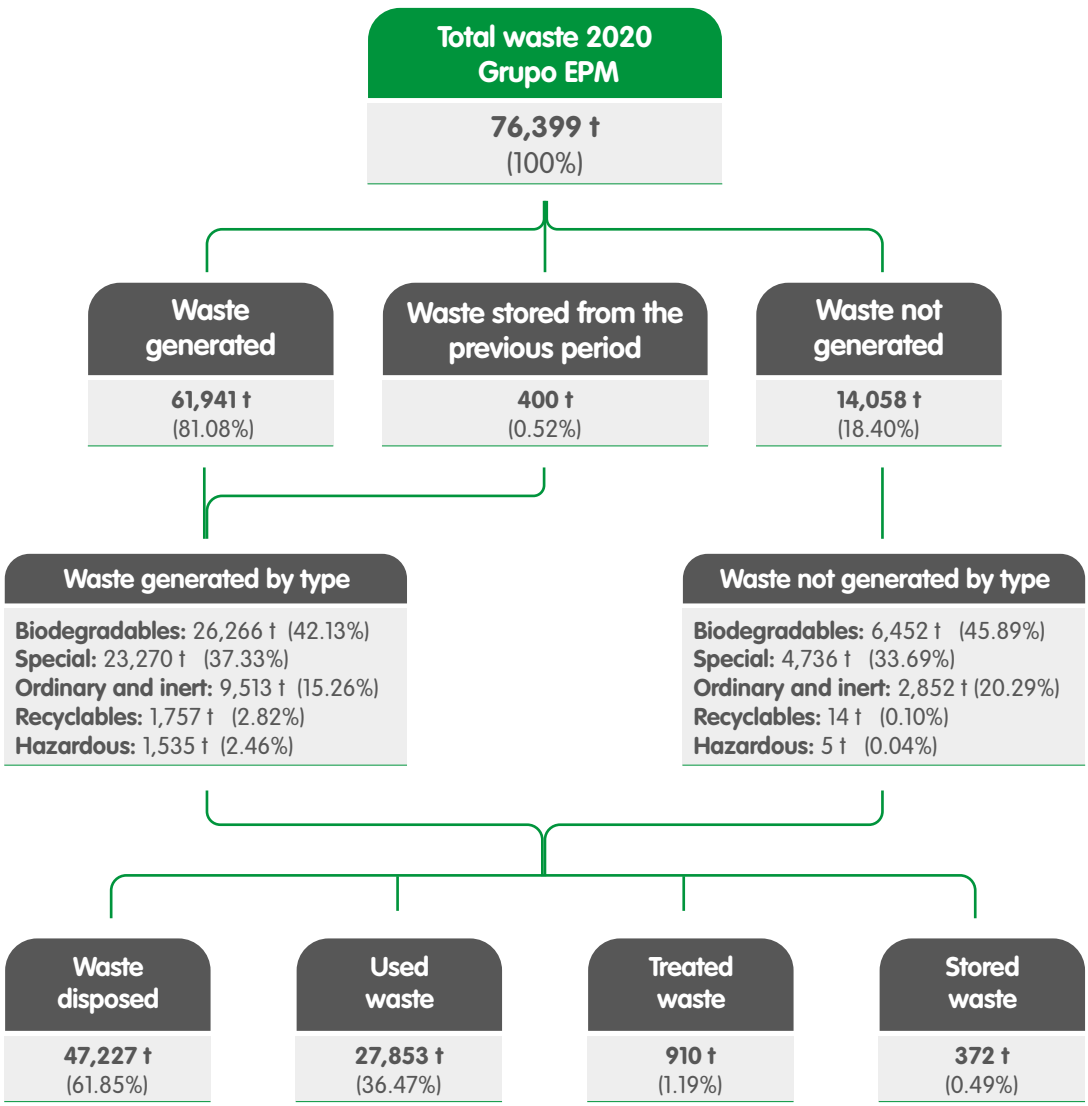
The waste generated by the construction of infrastructure projects is excluded from the total because this stage of the projects produces waste in a different quantity and type than the daily production; therefore, they would alter the trend in the generation of waste from the activities associated with the provision of services and there would be no place for establishing

In addition to the waste that the Grupo EPM generates, the Organization also decided to manage the waste that reaches its reservoirs and inlet grids of the purification and wastewater treatment plants, which amount to 18.40% of the managed waste.

The Ituango Hydroelectric Project began in 2018 the registration and management of waste not generated by the Company from the formation of the reservoir. Most of this waste are pieces of wood that the Cauca River carries along its 850 km route through 80 municipalities in Colombia to the dam. Some populations use the river for the discharge of their liquid effluents and the disposal of their solid waste; this makes the material to be extracted from the reservoir considerable and varied.

The waste generated and managed by the Ituango Hydroelectric Project is analyzed individually.

Waste managed in 2020 by Grupo EPM



Source: Idsos application.

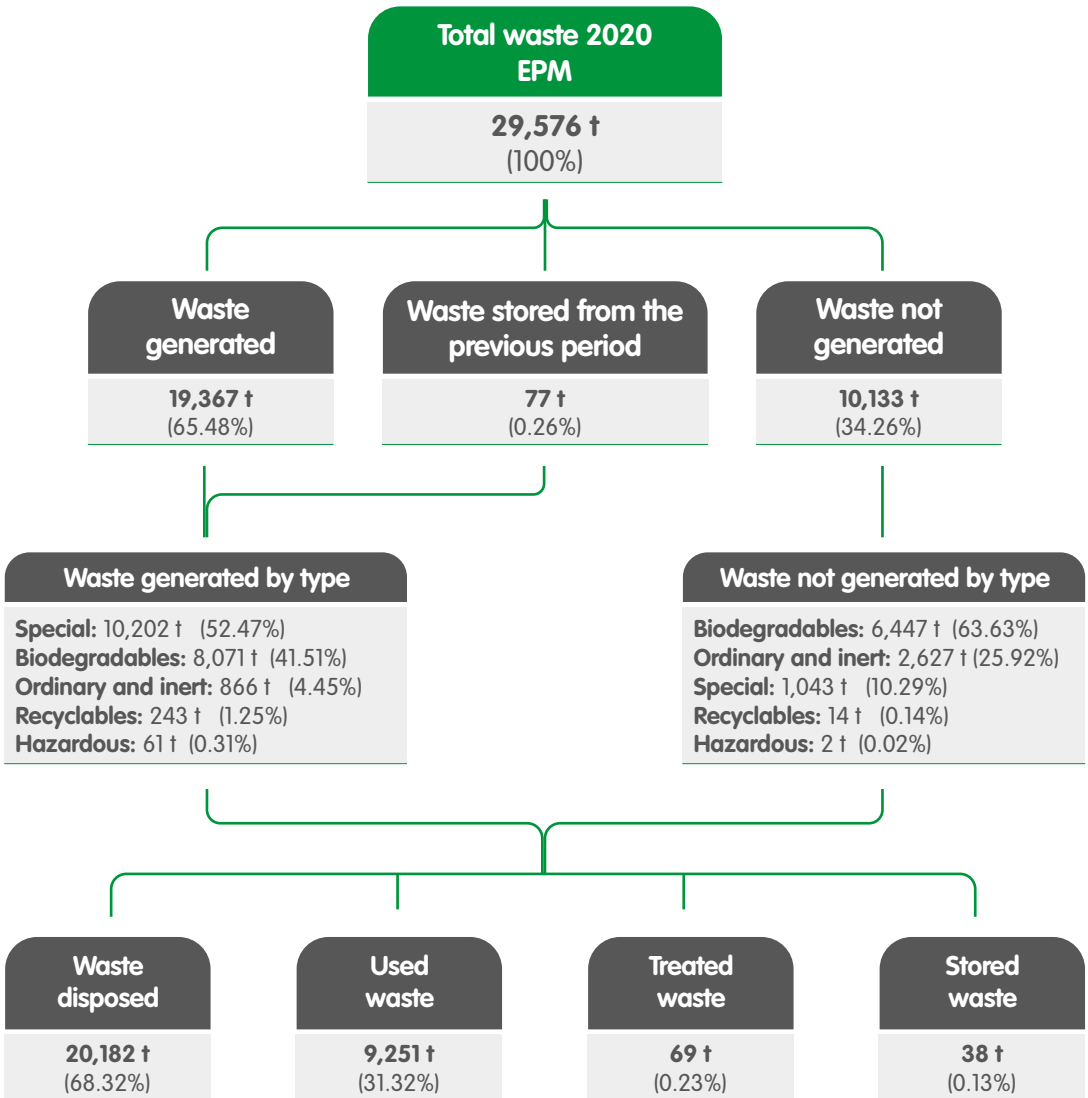
Non-generated waste refers to waste that, despite being managed by the Organization, was not generated directly by it. For example, floating solid waste that reaches reservoirs, invasive aquatic plants or waste that is collected in the intake grids of water treatment plants.

Biodegradable waste constitutes 42.13% of the waste generated by Grupo EPM. They are mostly plant residues.

61.85% of the waste was taken to final disposal due to the prioritization of activities in the COVID-19 pandemic and the waste associated with it.

The Grupo EPM handled 14,058 t of waste that reached reservoirs or inlet grids in its purification and wastewater treatment plants.

Waste managed in 2020 by EPM



Source: Idsos application.

Non-generated waste refers to waste that, despite being managed by the Organization, was not generated directly by it. For example, floating solid waste that reaches reservoirs, invasive aquatic plants or waste that is collected in the intake grids of water treatment plants.

52.47% of the waste generated by EPM is special, while hazardous waste represents 0.31%.

The non-generated waste (which reached the reservoirs or inlet grids of the purification and wastewater treatment plants) represents 34.26% of the waste that EPM managed in 2020. Many of these wastes had to be taken to final disposal due to the difficulty in separating them and due to the considerable amounts collected.

Waste generated - Grupo EPM (t)

Waste type	2018	2019	2020
Biodegradables	18,429	30,226	26,266
Special	5,634	4,827	23,270
Ordinary and inert	779	1,156	9,513
Recyclables	3,087	2,697	1,757
Hazardous	4,141	15,696	1,535
Total	**32,070**	**54,603**	**62,340**

Source: Idsos application.

** The waste generated includes the waste stored from the previous period.*

Waste generation (includes stored waste from the previous period) increased 14.17%.

The 722.77% increase in ordinary and inert waste is mainly explained because the Aguas Nacionales subsidiary reports this waste for the first time with 8,498 t from the Aguas Claras wastewater treatment plant (WWTP). ENSA, for its part, generated 273 t, an amount that increased 62.55% compared to that reported by this company in 2019.

The 382.05% increase in the special group is mainly due to the contribution of non-hazardous sludge (20,666 t). In EPM these LAST residues increased 476.99% with 9,248 t and in Adasa the increase was 2,608.13% with 6,111 t. These increases are due to new water treatment plant sludge treatment systems (PTAP), some of which came into operation during the second half of 2019 and early 2020. Ticsa reported these residues for the first time (5,306 t).

The 90.22% decrease in hazardous is originated because in 2019 the company Adasa registered arsenic sludge from the cleaning of the ponds that were disposed of as a result of the highland winter.

The 34.86% reduction in recyclables in the subsidiaries during 2020 was due to the fact that no newsprint, office and glass waste was generated in some facilities due to the work-at-home modality due to COVID-19.

2019 figures are adjusted for errors and adjustments.

Delsur exhibited good practices with the use of 88% of the waste generated and a final disposal in sanitary landfills of only 10%.

At CHEC, 5.48 t of hazardous waste were generated, with 5.22 t delivered to management companies that achieved a 22.80% (1.19 t) use in post-consumer programs.

Waste generated EPM (t)

Waste type	2018	2019	2020
Special	3,040	1,893	10,202
Biodegradables	8,354	11,675	8,071
Recyclables	1,198	1,206	866
Ordinary and inert	359	408	243
Hazardous	186	257	61
Total	**13,137**	**15,439**	**19,443**

Source: Idsos application.

** The waste generated includes the waste stored from the previous period.*

EPM generated 19,443 t of waste, which is equivalent to 31.19% of the Group's generation.

The 438.97% increase in specials waste is mainly due to non-hazardous sludge residues from the new water treatment plant sludge treatment systems (PTAP).

The decrease of 40.33% of the ordinary and inert is due in general to a lower occupancy and reduction of hours for operational safety associated with the COVID-19 pandemic.

The 30.87% decrease in biodegradable products corresponds mainly to a reduction in logging and pruning waste records in EPM due to the decrease in occupancy at sites and change in consumption patterns due to the measures of the COVID-19 pandemic.

The 28.20% decrease in recyclables occurred mainly in office-type facilities due to the work-at-home modality due to COVID-19.

2019 figures are adjusted for errors and adjustments.

Waste management in Grupo EPM (t)

Management	2018	2019	2020
Utilization	20,944	32,982	27,853
Final disposition	17,398	18,371	47,227
Storage	249	400	372
Treatment	3,326	12,335	910
Total	**41,917**	**64,088**	**76,361**

Source: Idsos application.

* *Utilization includes: reuse, recycling and composting. Treatment comprises incineration. Final provision refers to landfill.*
* *This handling may present differences with the total waste of Grupo EPM, due to the handling and recording of the waste stored during the year.*

The Grupo EPM handled 76,361 t of waste, which includes the 61,941 t generated by the Organization's activities, the 14,058 t that it did not produce and the remainder that it had stored from the previous period.

61.85% of the waste was taken to final disposal, 36.47% was used and 1.19% was treated.

Waste taken to final disposal increased by 157.07%, which is explained because Aguas Nacionales EPM and Ticsa reported waste management for the first time and EPM, CENS and CHEC presented high amounts of special and biodegradable waste.

The treated waste was reduced by 92.62%, due to 11,987 t of arsenic sludge reported by Adasa in 2019 due to the highland winter.

The waste used decreased by 15.55%, among other reasons because EPM, EDEQ, Delsur and EPM Guatemala presented less amount of biodegradable waste.

2019 figures are adjusted for errors and adjustments.

Waste management por EPM (t)			
Gestión	**2018**	**2019**	**2020**
Utilization	6,036	8,600	6,081
Final disposition	7,027	6,718	13,267
Storage	36	48	45
Treatment	37	64	25
Total	**13,136**	**15,430**	**19,419**

Source: Idsos application.

** Utilization includes: reuse, recycling and composting. Treatment comprises incineration. Final provision refers to landfill.*
** This handling is only for the waste generated by EPM, which is why differences may appear with the total amount of waste managed.*

Of the 29,539 t of waste managed by EPM, 19,419 t were generated directly by the Company's activities.

Disposal waste increased 97.49%. 75.46% of the disposed waste corresponds to special and 26.19% to biodegradable. What was taken advantage of decreased 29.29%.

The ideal management for biodegradable products is reuse, while for special ones it can be reuse or treatment. In both cases, the optimal environmental alternative is not final disposal, and therefore constitutes an improvement to be implemented.

Figures for 2018 and 2019 are adjusted for errors and adjustments.

Annual goal EPM (period 2020-2022)

- Waste to be disposed ≤ 55% of managed waste
- Used waste ≥ 45% of managed waste

Results 2020

- Waste disposed of by EPM = 13,267 t, which is equivalent to 68.32% of the waste generated
- Waste used by EPM = 6,081 t, which is equivalent to 31.32% of the waste generated
- These goals were not met in 2020

Waste management in the Ituango Hydroelectric Project (t)			
Waste types	**2018**	**2019**	**2020**
Waste stored from the previous term	3	133,690	93,307
Waste generated by the Project	332	53,468	275
Waste not generated but managed by the Project	133,688	89,974	154,237
Total	**134,022**	**277,132**	**247,820**

Source: Idsos application.

The Ituango Hydroelectric Project managed 247,820 t of waste in 2020, of which 62.24% was not generated in its activities. 99.98% of the waste not generated, but handled, corresponds to biodegradable material (wood and macrophytes). 96.39% of what is stored corresponds to the non-generated biodegradable of 2019.

The decrease in the material generated is explained by the recovery works of the powerhouse carried out in 2019.

155,798 t of these wastes were used, 7 t were treated, 142 t were taken to final disposal and the rest was stored for proper handling during 2021.

Management of hazardous waste generated by Grupo EPM (t)			
Handling type	**2018**	**2019**	**2020**
Utilization	643	3,196	190
Final disposition	23	61	154
Storage	184	272	309
Treatment	3,296	12,153	879
Total	**4,147**	**15,681**	**1,531**

Source: Idsos application.

** This handling is only for the waste generated by Grupo EPM, which is why differences may appear with the total amount of waste managed.*

57.39% of the hazardous waste generated was treated and 12.41% was used. The main generators were Adasa (60.66%), CENS (14.47%), EPM Guatemala (14.03%), EPM (4.38%), ENSA (3.23%) and CHEC (1.87%).

There was a decrease of 91.86% in the generation of hazardous waste.

Figures for 2018 and 2019 are adjusted for errors and adjustments.

Due to the emergency situation due to COVID-19, some of the maintenance activities were rescheduled and others suspended, establishing priorities in attention to health recommendations.

Waste management Hazardous generados por EPM (t)

Handling type	2018	2019	2020
Utilization	117	141	13
Final disposition	4	6	2
Storage	4	5	6
Treatment	61	101	34
Total	**187**	**253**	**55**

Source: Idsos application.

** This management is only for waste generated by EPM, which is why differences may appear with the total amount of waste managed.*

Of the 55 t of hazardous waste, 61.35% was treated and 23.36% was used. 4.46% of the total was taken to final disposal.

2019 figures are adjusted for errors and adjustments.

EPM annual goal (period 2020-2022):

- Hazardous waste managed ≤ 1.3% of total waste managed.

Results 2020:

- Hazardous waste generated by EPM = 55 t, which is equivalent to 0.28% of the total
- This goal was met in 2020

Management of waste not generated by Grupo EPM (t)			
Handling type	**2018**	**2019**	**2020**
Utilization	4,923	4,895	5,125
Final disposition	4,095	2,727	8,690
Storage	58	59	68
Treatment	783	1,831	167
Total	**9,860**	**9,512**	**14,051**

Source: Idsos application.

In 2020, Aguas del Oriente Antioqueño, Aguas de Malambo, CHEC and EPM reported. These LAST two companies reported handling of waste not generated for the three previous periods.

72.02% of these wastes are reported by EPM. The increase in non-generated waste corresponds especially to the fact that rubble is reported for the first time in CHEC and EPM generated by contractors in the execution of different projects, which were taken to final disposal.

61.85% of the waste not generated was taken to final disposal, 36.47% was used and 1.19% was treated.

2019 figures are adjusted for errors and adjustments.

CHEC took to final disposal 20,961 t of waste that was collected in intake grills, water mirrors of the reservoirs and channels of the water currents that supply the reservoirs.

GRI standards Contents and own indicators

306 - 2 Waste by type and disposal method.

306 - 4 Transportation of hazardous waste.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Aguas Nacionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Centrales Eléctricas del Norte de Santander - CENS

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Tecnología Intercontinental - Ticsa

Hidroecológica del Teribe - HET

Elektra Noreste - ENSA

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Quindío

Colombia – Santander

Colombia – Norte de Santander

Colombia – Malambo, Atlántico

Chile

El Salvador

Guatemala

México

Panamá

Business

Water

Sanitation

Electricity

Gas

Other efficient consumptions and practices

Back to content

Other efficient consumptions and practices

It includes actions focused on the optimization of consumption, the efficient use of materials and supplies and the minimization of the environmental effects derived from their use within the Grupo EPM.

The most representative consumption elements in the Grupo EPM are the supplies for the purification of water and the dielectric oil used in the generation, transmission and distribution of energy. Normally, the variation in the doses of chemical inputs that are required to make water drinkable is associated with the quality of the resource captured.

Through these actions, the aim is to create awareness in Grupo EPM's People to reduce, reuse and recycle various inputs, when feasible, in addition to achieving the optimal dosage of the chemicals used for drinking water, without affecting the quality of public services provided.

Performance in 2020

At EPM, the Power Transmission and Distribution business regenerates 100% of the oil necessary for the operation of substations and lines, as well as for the maintenance of network equipment.

In order to reduce chlorine gas emissions, EPM's purification plants began to replace the gaseous chlorine system with a hypochlorite system generated *in situ* from mine salt.

Inputs used in the purification of water Grupo EPM (t/Mm³)			
Input for purification	**2018**	**2019**	**2020**
Aluminum sulfate	36.36	31.80	39.00
Lime	7.46	5.86	9.75
Aluminum polychloride - PAC	4.14	4.27	7.34
Chlorine	3.42	3.69	3.74
Activated carbon	0.90	3.28	2.34
Sodium silicate	0.02	0.34	0.15
Others*		8.42	9.49

Source: Idsos application.

** In 2019 includes acetic acid, sodium hypochlorite, sodium hydroxide, sodium metabisulfite, 85% phosphoric acid, EDTA, praestol K 144L, polymer, praestol 2515 and nitric acid. In 2020, additionally, mine salt, chlorine dioxide and sodium tripolyphosphate are reported and praestol K144L is excluded.*

The total amount of inputs used in the purification processes increased by 0.90%. Aluminum sulfate represents 56.45% of the total inputs used, followed by lime with 13.96%.

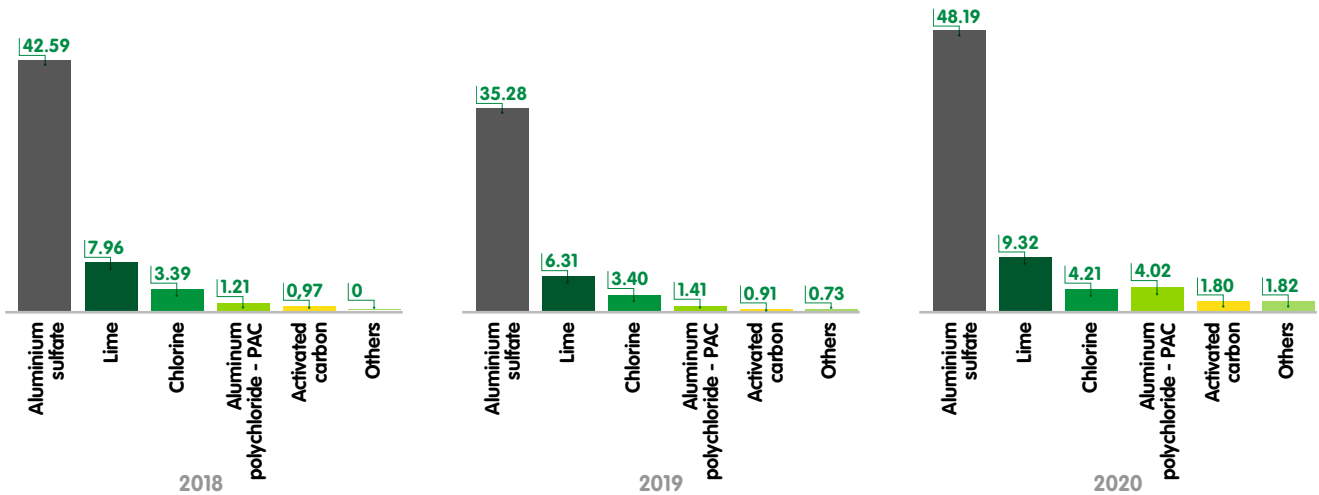
The element with the highest increase per unit of purified water compared to 2019 was poly aluminum chloride - PAC (75.15%), which ACTS as a primary coagulant in water purification systems. Activated carbon shows a decrease of 25.81%.

EPM is responsible for 77.59% of the inputs used for purification and Adasa for 15.84%, with the highest proportion for: polymer, sodium silicate, chlorine dioxide and sodium hypochlorite.

In 2020, Adasa is the ONLY ONE to report some inputs used in purification such as sodium hydroxide and acetic acid, among others.

The increase in different inputs used in EPM is an indication of the increasing deterioration of the quality of the water from the sources.

Inputs used in water purification - EPM (t/Mm³)



Source: Idsos application.

** In 2019 includes sodium hypochlorite, sodium silicate, sodium hydroxide, polymer and nitric acid. In 2020, additionally, mine salt and chlorine dioxide are reported and sodium silicate, sodium hydroxide and nitric acid are excluded.*

Dielectric oil consumption in Grupo EPM (t)

Handling type		2018	2019	2020
New oil required in	Existing infrastructure	140.98	122.19	1.70
	New projects or teams	399.00	41.36	71.50
Total		**539.98**	**163.55**	**73.19**
Reused Filtering		133.66	180.43	86.35
Reuse		24.75%	110.32%	117.97%

Source: Idsos application.

In the Grupo EPM, 86.35 t of oil were regenerated compared to the 73.19 t required of new oil, which represents a regeneration of 117.97% of the required oil.

All the dielectric oil required in new infrastructure or equipment for the year 2020 corresponds to ESSA, EPM Guatemala and CHEC, with an increase of 72.86% of that used in new projects or equipment compared to 2019.

Only 1.70 t of dielectric oil was used in existing infrastructure in Delsur, which represents a reduction of 98.61% compared to 2019.

Reused filtered oil decreased by 52.14% in 2020. The EPM company was the ONLY ONE that consumed reused dielectric oil.

Dielectric oil consumption EPM (t)

Handling type		2018	2019	2020
New oil required in	Existing infrastructure	133.25	96.28	0.00
	New projects or teams	399.00	35.81	0.00
Total		**532.25**	**132.09**	**0.00**
Reused Filtering		132.15	96.66	86.35
Reuse		24.83%	73.18%	-

Source: Idsos application.

EPM did not provide the dielectric oil required in the Group.

EPM decreased the consumption of dielectric oil in new projects and existing infrastructure by 100% compared to 2019.

The business's internal oil regeneration process allowed 100% of the oil required for the operation to be regenerated. There was a 10.67% decrease in used reused oil.

GRI standards Contents and own indicators

301 - 1 Materials used by weight or volume.

301 - 2 Recycled supplies.

Scope and coverage

Companies

Empresas Públicas de Medellín - EPM

Aguas Regionales EPM

Empresa de Aguas del Oriente Antioqueño

Aguas de Malambo

Central Hidroeléctrica de Caldas - CHEC

Electrificadora de Santander - ESSA

Empresa de Energía del Quindío - EDEQ

Distribuidora de Electricidad del Sur - Delsur

Empresa Eléctrica de Guatemala - Eegsa

Aguas de Antofagasta - Adasa

Geography

Colombia – Antioquia

Colombia – Caldas

Colombia – Malambo, Atlántico

Colombia – Quindío

Colombia – Santander

Chile

El Salvador

Guatemala

Business

Water

Electricity



Financial management

Grupo·epm

EPM Financial management

Back to content

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATE STATEMENT OF FINANCIAL POSITION

As of December 31, 2020 and 2019

Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Assets			
Non-Current Assets			
Property, plant and equipment, net	5	28,279,579	26,431,775
Investment property	6	152,365	126,822
Goodwill	7	260,950	260,950
Other intangible assets	7	550,895	537,497
Right of use assets	14	2,053,169	2,060,120
Investments in subsidiaries	8	9,027,864	7,406,556
Inversiones in associates	9	2,434,417	2,434,417
Investments in joint ventures	10	99	99
Trade and other receivables	12	1,726,355	1,513,822
Other financial assets	13	3,106,955	2,458,334
Other assets	16	79,943	94,757
Cash and cash equivalents (restricted)	18	71,708	17,787
Total non-current assets		**47,744,299**	**43,342,936**
Current assets			
Inventories	17	150,189	118,871
Trade and other receivables	12	2,172,577	2,222,783
Assets for current income tax	39	232,864	34,413
Other financial assets	13	2,139,736	557,208
Other assets	16	135,391	115,020
Cash and cash equivalents	18	792,923	861,236
Total current assets		**5,623,680**	**3,909,531**
Total assets		**53,367,979**	**47,252,467**
Liabilities and Equity			
Equity			
Issued capital		67	67
Reserves	19	1,609,297	1,704,818
Accumulated other comprehensive income	20	4,180,155	3,207,197
Retained earnings	19	18,015,300	16,702,294
Net profit for the year	19	2,539,915	2,706,035
Other components of equity	19	64,455	64,390
Total equity		**26,409,189**	**24,384,801**

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATE STATEMENT OF FINANCIAL POSITION

As of December 31, 2020 and 2019
Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Liabilities			
Non-current liabilities			
Borrowings and loans	21 and 41	16,414,803	13,783,442
Creditors and other accounts payable	22	13,012	3,726
Other financial liabilities	23	2,964,617	2,447,689
Employee benefits	25	394,712	351,968
Income tax payable	39	30,331	30,331
Deferred tax liabilities	39	1,859,510	2,002,164
Provisions	27	485,975	412,151
Other liabilities	28	31,411	31,774
Total non-current liabilities		**22,194,371**	**19,063,245**
Current liabilities			
Borrowings and loans	21 and 41	2,232,020	1,409,169
Creditors and other accounts payable	22	987,660	1,061,083
Other financial liabilities	23	478,710	337,205
Employee benefits	25	171,020	144,372
Income tax payable	39	88,426	140,636
Taxes, contributions and rates	26	222,393	116,424
Provisions	27	389,092	334,691
Other liabilities	28	195,098	260,841
Total current liabilities		**4,764,419**	**3,804,421**
Total liabilities		**26,958,790**	**22,867,666**
Total liabilities and equity		**53,367,979**	**47,252,467**

The accompanying notes are an integral part of the financial statements

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATED STATEMENT OF COMPREHENSIVE INCOME

For the years ended December 31, 2020 and 2019
Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Continuing operations			
Sale of goods	30	4,922	733
Rendering of services	30	9,465,193	8,484,806
Leases	30	43,565	51,520
Income from ordinary activities		**9,513,680**	**8,537,059**
Income for sale of assets	32	120	384
Other income	31	384,610	312,319
Total income		**9,898,410**	**8,849,762**
Costs of goods sold and services rendered	33	(5,870,970)	(4,548,376)
Administrative expenses	34	(1,053,454)	(902,731)
Impairment loss on accounts receivable	12	(59,169)	(26,287)
Other expenses	35	(60,827)	(131,067)
Financial income	36.1	179,402	340,584
Financial expenses	36.2	(1,101,520)	(1,103,798)
Net foreign exchange difference	37	(364,146)	(46,542)
Share of loss of equity accounted investees	8	671,716	866,903
Gain on equity investments	38	574,021	12,822
Income for the year before tax		**2,813,463**	**3,311,270**
Income tax	39	(273,548)	(605,235)
Profit for the year after taxes from continuing operations	19	**2,539,915**	**2,706,035**
Net profit for the year	19	**2,539,915**	**2,706,035**
Other comprehensive income			
Items that will not be reclassified to profit or loss:			
Remeasurement of defined benefit plans	20 and 39	(17,431)	(35,969)
Equity investments measured at fair value through equity	20 and 39	596,096	622,447
Equity accounted investees - share of OCI	20 and 39	162,520	(189,209)
Income tax related to components that will not be reclassified	20 and 39	4,439	141,668
		745,624	**538,937**
Items that may be reclassified subsequently to profit or loss:			
Cash flow hedges	20 and 39	**(24,071)**	**34,119**
Recognized profit for the year		(399,369)	(49,060)
Reclassification adjustment		375,299	83,179
Equity accounted investees - share of OCI	20 and 39	**241,365**	**(203,917)**
Recognized profit for the year		241,365	(203,917)
Income taxes related to components that can be reclassified	20 and 39	**10,086**	**17,673**
Recognized profit for the year		121,948	33,643
Reclassification adjustment		(111,862)	(15,970)
		227,380	**(152,125)**
Other comprehensive income, net of taxes	**39**	**973,004**	**386,812**
Total comprehensive income for the year		**3,512,919**	**3,092,847**

The accompanying notes are an integral part of the financial statements

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATED STATEMENT OF CHANGES IN EQUITY

Years ended December 31, 2020 and 2019

Amounts stated in millions of Colombian pesos

					Other comprehensive income					
	Issued capital	Reserves (note 19)	Retained earnings (note 19)	Other components of equity	Equity investments (note 20)	Defined benefit plans (note 20)	Cash flow hedging (note 20)	Reclassification of properties, plant and equipment to investment property (note 20)	Accumulated Share in other comprehensive income of subsidiaries (note 20)	Total
Balance at 1 January 2019	**67**	**1,961,034**	**17,677,168**	**49,944**	**2,152,464**	**(4,968)**	**(73,656)**	**12,079**	**831,193**	**22,605,325**
Profit for the period	-	-	2,706,035	-	-	-	-	-	-	2,706,035
Other comprehensive income for the period, net of income tax	-	-	-	-	752,104	(23,958)	51,792	-	(393,126)	386,812
Comprehensive income for the period	**-**	**-**	**2,706,035**	**-**	**752,104**	**(23,958)**	**51,792**	**-**	**(393,126)**	**3,092,847**
Surpluses or dividends declared	-	-	(1,289,652)	-	-	-	-	-	-	(1,289,652)
Movement of reserves	-	(256,216)	256,216	-	-	-	-	-	-	-
Transfers to retained earnings	-	-	138,392	-	(138,392)	-	-	-	-	-
Equity method on variations in equity	-	-	(79,830)	14,446	-	-	-	-	41,665	(23,719)
Balance at 31 December 2019	**67**	**1,704,818**	**19,408,329**	**64,390**	**2,766,176**	**(28,926)**	**(21,864)**	**12,079**	**479,732**	**24,384,801**
Balance at 1 January 2020	**67**	**1,704,818**	**19,408,329**	**64,390**	**2,766,176**	**(28,926)**	**(21,864)**	**12,079**	**479,732**	**24,384,801**
Profit for the period	-	-	2,539,915	-	-	-	-	-	-	2,539,915
Other comprehensive income for the period, net of income tax	-	-	-	-	594,259	(11,153)	(13,985)	-	403,883	973,004
Comprehensive income for the period	**-**	**-**	**2,539,915**	**-**	**594,259**	**(11,153)**	**(13,985)**	**-**	**403,883**	**3,512,919**
Surpluses or dividends declared	-	-	(1,488,319)	-	-	-	-	-	-	(1,488,319)
Movement of reserves	-	(95,521)	95,521	-	-	-	-	-	-	-
Equity method on variations in equity	-	-	(231)	65	-	-	-	-	(46)	(212)
Balance at 31 December 2020	**67**	**1,609,297**	**20,555,215**	**64,455**	**3,360,435**	**(40,079)**	**(35,849)**	**12,079**	**883,569**	**26,409,189**

The accompanying notes are an integral part of the financial statements

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATED STATEMENT OF CASH FLOWS

For the years ended December 31, 2020 and 2019
Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Cash flows from operating activities:			
Profit for the year		**2,539,915**	**2,706,035**
Adjustments to reconcile the net profit for the year to the net cash flows used in operating activities:		**1,162,799**	**1,200,765**
Depreciation and amortization of property, plant and equipment, right-of-use assets and intangible assets	33 and 34	623,980	577,736
Impairment loss on accounts receivable	12	59,169	26,287
Impairment of investments in subsidiaries, associates and joint ventures	11	879,062	-
Gain / loss due to exchange difference	37	364,146	46,542
Gain / loss due to valuation of investment property	6	17,040	(51,943)
Result for valuation of financial instruments and hedge accounting	36	16,343	(12,286)
Provisions, post-employment and long-term defined benefit plans	34	240,617	149,286
Provisions for tax, insurance and reinsurance obligations and financial updating	27	20,990	-
Deferred income tax	39	(124,209)	4,678
Current income tax	39	397,757	600,558
Share of loss of equity-accounted investees	8	(671,716)	(866,903)
Interest and yield income	36	(111,754)	(231,394)
Interest and commission expenses	36	996,539	1,011,776
Gain / loss due to disposal of properties, plant and equipment, right-of-use assets, intangibles and investment property	32 and 35	2,296	(383)
Gain / loss due to retirement of properties, plant and equipment, right-of-use assets, intangibles and investment property	35	4,073	85,097
Gain / loss due to disposal of financial instruments	13	-	47,534
Non-effective recoveries	31	(98,451)	(125,464)
Gain / loss from Business combinations	38	(1,353,203)	-
dividend income from investments	13	(99,880)	(60,356)
		3,702,714	**3,906,800**
Net changes in operating assets and liabilities:			
Change in inventories		(31,317)	(1,044)
Change in trade and other receivables		(106,046)	216,657
Change in other assets		(25,024)	(4,887)
Change in creditors and other accounts payable		(261,240)	12,473
Change in labor obligations		32,573	(1,947)
Change in provisions		(133,771)	(211,661)
Change in other liabilities		132,977	259,961
cash provided by operating activities		**3,310,866**	**4,176,352**
Interest paid		(1,160,598)	(1,454,068)
Income tax paid		(682,542)	(517,659)
Income tax refund		34,413	-
Net cash provided by operating activities		**1,502,139**	**2,204,625**
Cash flows from investing activities:			
Acquisition and capitalization of subsidiaries or ventures	8	(505,311)	(266,341)
Disposal of subsidiaries or business	8	-	782
Purchase of property, plant and equipment	5	(2,220,833)	(2,370,622)
Disposal of property, plant and equipment	35	(2,289)	541
Purchase of intangible assets	7	(48,402)	(40,888)
Disposal of investment properties	6	256	2,165
Purchase of investments in financial assets	13	(1,681,502)	(124,285)
Disposal of investments in financial assets	13	76,646	808,731
Dividends received from subsidiaries, associates and joint business	8 and 9	386,980	697,521
Other dividends received	13	72,826	56,137
Loans to economic associates		30,981	317,989
compensation received	5	369,700	531,607
Other cash flows from investment activities		16,786	23,883
Net cash flow used in investing activities		**(3,504,162)**	**(362,780)**
Cash from financing activities:			
Obtaining of borrowings and loans	21	4,612,201	7,463,935
Payments of borrowings and loans	21	(1,225,080)	(8,067,058)
Transaction costs due to issuance of debt instruments	21	(28,553)	(14,695)
Payments of liabilities for financial leasing	23	(11,580)	(10,010)
Dividends or surpluses paid	19	(1,488,319)	(1,289,652)
Payments of capital of derivatives designated as cash flow hedges	13	19,586	156,514
Payment of pension bonds	23	(6,435)	(19,515)
Other cash from financing activities		177,618	(30,898)
Net cash flows (used in) / provided by financing activities		**2,049,438**	**(1,811,379)**
Net increase in cash and cash equivalents		**47,415**	**30,466**
Effects of variations in exchange rates in the cash and cash equivalents		(61,808)	12,778
Cash and cash equivalents at beginning of the year		879,024	835,779
Cash and cash equivalents at end of the year	18	**864,631**	**879,023**
Restricted resources	18	97,417	84,565

The accompanying notes are an integral part of the financial statements

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

Content

- Note 1. Reporting Entity ____ 983
- Note 2. Significant accounting policies ____ 987
- Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements. ____ 1018
- Note 4. Significant transactions and other relevant aspects during the period. ____ 1022
- Note 5. Property, plant and equipment, net ____ 1029
- Note 6. Investment property ____ 1038
- Note 7. Goodwill and other intangible assets ____ 1039
- Note 8. Investment in subsidiaries ____ 1042
- Note 9. Investments in associates ____ 1046
- Note 10. Investment in joint ventures ____ 1047
- Note 11. Impairment of Assets ____ 1048
- Note 12. Trade and other receivables ____ 1052
- Note 13. Other financial assets ____ 1056
- Note 14. Leases ____ 1058
- Note 15. Warranties ____ 1061
- Note 16. Other assets ____ 1062
- Note 17. Inventories ____ 1063
- Note 18. Cash and cash equivalents ____ 1064
- Note 19. Equity ____ 1067
- Note 20. Accumulated other comprehensive income ____ 1069
- Note 21. Loans and borrowings ____ 1073
- Note 22. Trade and other payables ____ 1077
- Note 23. Other financial liabilities ____ 1078
- Note 24. Derivatives and hedging ____ 1080
- Note 25. Employee benefits ____ 1082

Content

- Note 26. Taxes, contributions and rates 1090
- Note 27. Provisions, contingent assets and liabilities 1091
- Note 28. Other liabilities 1107
- Note 29. Changes in liabilities due to financing 1109
- Note 30. Revenue 1110
- Note 31. Other income 1112
- Note 32. Gain on sale of property, plant, and equipment 1113
- Note 33. Costs of goods sold and services rendered 1114
- Note 34. Administrative expenses 1115
- Note 35. Other expenses 1116
- Note 36. Finance income and expense 1117
- Note 37. Net foreign exchange difference 1119
- Note 38. Gain on equity investments 1120
- Note 39. Income tax 1121
- Note 40. Information to be disclosed on related parties 1128
- Note 41. Capital management 1131
- Note 42. Financial risk management objectives and policies 1132
- Note 43. Measurement of fair value on a recurring and non-recurring basis 1142
- Note 44. Service concession arrangements 1146
- Note 45. Facts occurred after the period being reported 1148

Notes to the Separate Financial Statements of Empresas Públicas de Medellín E.S.P. for the years ended 31 December 2020 and 2019

(In millions of Colombian pesos, except when indicated otherwise)

Note 1. Reporting Entity

Empresas Públicas de Medellín E.S.P. and subsidiaries (hereinafter, "EPM Group") is the holding company of a multi-latin Enterprise group made up of 44 companies and a five structured entities[1]; that have presence in the provision of public utilities in Colombia, Chile, El Salvador, Guatemala, Mexico and Panama.

Empresas Públicas de Medellín E.S.P. (hereinafter EPM) is a municipal decentralized entity, created in Colombia through Decision 58 dated August 6, 1955 issued by the Administrative Council of Medellín, as an autonomous public institution. It was transformed into an industrial and commercial government company of municipal order through Decision 069 of December 10, 1997 of the Medellín Council. Due to its legal status, EPM is endowed with administrative and financial autonomy, and its own equity according to Article 85 of Law 489 of 1998. The share capital with which the company was constituted and currently operates, as well as its equity, is of public nature, being its only owner is the Municipality of Medellín. Its main corporate domicile is located at Carrera 58 No. 42-125 in Medellín, Colombia. It has not established a term of duration.

EPM provides domiciliary public utilities of water, sewage electricity and natural gas distribution. It can also provide the domiciliary public utility of waste management, treatment and disposal of solid waste, as well as the supplementary activities related to each and every one of the mentioned public utility services.

The company offers its services through the following segments, the activities of which are described in Note 48. Operating segments: Electric Power Generation, Distribution and Transmission; Distribution and Marketing of Natural Gas; Water supply; Waste water management; Solid waste management. Additionally, the Others Segment includes the participation in the telecommunications business, through the associate UNE EPM Telecomunicaciones S.A. and its subsidiaries: Edatel S.A. E.S.P, Orbitel Servicios Internacionales S.A. - OSI, Cinco Telecom Corporation - CTC and Colombia Móvil S.A .; and the associate Inversiones Telco S.A.S. and its subsidiary Emtelco S.A .; offering voice, data, Internet, professional services, data center, among others.

The separated financial statements corresponding to the year ended 31 December 2020, were authorized by the Board of Directors to be published on 23 March 2021.

1 Autonomous Equity Financiación Social of EPM, CHEC, EDEQ and ESSA. Under International Financial Reporting Standards -IFRS adopted in Colombia, they are considered structured entities that are part of the consolidation perimeter of the EPM Grupo's financial statements.

1.1 Legal and Regulatory Framework

The activity of EPM, i.e., providing residential public utilities, is regulated in Colombia mainly by Law 142, Public Utilities Act, and Law 143 of 1994, Electricity Act.

The functions of control, inspection and supervision of the entities that provide domiciliary public utilities are exercised by the Office of the Superintendent of Domiciliary Public Utilities (SSPD, for its Spanish initials).

Since the Company is an issuer of Bonds, it is subject to the control of the Superintendence of Finance of Colombia under Decree 2555 of 2015, by which the regulations of the financial, insurance sectors, and the stock market are collected and reissued, and other provisions are issued, establishes that the Integral System of Information of the Stock Market (SIMEV for its Spanish initials) is the set of human, technical and management resources that the Superintendence of Finance of Colombia shall use to allow and facilitate the supply of information to the market. Within these tools, there is the National Registry of Securities and Issuers (RNVE for its Spanish initials), which purpose is to keep a registry of securities issuers and their issues. EPM, when issuing bonds, is subject to control by this Superintendence and to the rules required for financial information purposes, especially to the External Circular Letter 038 of 2015 which reference is: Modification to the terms for the transmission of Quarterly and Year-End Intermediate Financial Statements under IFRS adopted in Colombia, Individual or Separate and Consolidated and their report in XBRL language (extensible Business Reporting Language) and unification of the instructions contained in External Circular Letters 007 and 011 of 2015.

For accounting purposes, it is regulated by the standards issued by the General Accounting Office of the Nation, as described in the accounting policies section.

For managing the health service as employee benefits, under the figure of the Adapted Health Company - EAS, it is supervised by the National Superintendency of Health.

Because of being a municipal decentralized entity, EPM is subject to the political control of the Council of Medellín, to the fiscal control of the Office of the General Comptroller of Medellín, and to the disciplinary control of the Office of the General Prosecutor.

1.2 Regulation commissions

Law 142 of 1994 in it is articles 68 y 69 delegates in the regulation commissions the presidential function of stating general policies of management and control of efficiencies in domiciliary public utilities.

These entities are:

- The Energy and Gas Regulatory Commission (CREG, for its Spanish initials), a technical body attached to the Ministry of Mines and Energy (MME), that regulates the rates for energy sales and the aspects related to the operation of the Wholesale Energy Market (MEM, for its Spanish initials) and to the provision of electric power and gas services.

- Regulatory Commission of Drinking Water and Sanitation (CRA, for its Spanish initials), regulates the rates of water, sewage and waste management, a technical body attached to the Ministry of Housing, City and Territory.

1.2.1 Regulation by sector

1.2.1.1 Activities of the water, sewage and waste management sector

Law 142, Public Utilities Act, defined the water, sewage and waste management services:

Water: Also called drinking water domiciliary public utility. Activity consisting of the municipal distribution of water, which is fit for human consumption, including its connection and measurement. It includes supplementary activities such as water catchment and its processing, treatment, storage, conduction and transportation.

Sewage: Activity that consists of the municipal collection of waste, mainly liquid, through piping and conduits. It includes the supplementary activities of transportation, treatment, and final disposal of such waste.

Waste management: Activity that consists of the municipal collection of waste, mainly solid waste. It includes the supplementary activities of transportation, treatment, disposal, and final disposal of such waste.

For the Water and Sewage utilities, the rate framework is established in Resolutions CRA 688 of 2014 and CRA 735 of 2015 issued by the Potable Water and Sewage Regulation Commission (CRA, for its Spanish initials). For the Waste management public utility, in resolution CRA 720 of 2015. These rules establish quality and coverage indicators, provide incentives to meet targets and define remuneration mechanisms to guarantee the company's financial sufficiency.

1.2.1.2 Electric sector activities

Law 143 of 1994 segmented the electric power service into four activities: generation, transmission, distribution, and commercialization, which may be developed by independent companies. The purpose of the legal framework is to supply the demand of electricity under economic and financial feasibility criteria and to tend to an efficient, secure, and reliable operation of the sector.

Generatin: It consists of the production of electric power from different sources (conventional or non-conventional), developing this activity either exclusively or combined with another or other activities of the electric sector, regardless of which of them is the main activity.

Transmission: The national transmission activity is the transportation of energy in the National Transmission System (hereinafter STN, for its Spanish initials). It encompasses the set of lines, with its corresponding connection equipment that operate in voltages greater than or equal to 220 kV. The National Transmitter is the legal entity that operates and transports electric power in the STN or has incorporated a company the purpose of which is the development of such activity.

Distribution: It consists of transporting electric power through a set of lines and substations, with the associated equipment, that operate at voltages lower than 220 KV.

Commercialization: An activity that consists of the purchase of electric energy in the wholesale market and its sale to other market participants or to the final regulated and non-regulated users, developing this activity either exclusively or combined with other activities of the electric sector, regardless of which of them is the main activity.

1.2.1.3 Activities of the natural gas sector

Law 142 of 1994 defined the legal framework for the provision of domiciliary public utilities, field in which natural gas is defined as a public service (utility).

Gas: It is the set of activities targeted to the distribution of gas fuel, through pipes or another mean, from a place of collection of large volumes or from a central gas pipeline to the facilities of a final consumer, including their connection and measurement. This Law will also be applied to the supplementary activities of commercialization from the production and transportation of gas through a main gas pipeline, or through other means, from the generation site and to that where it connects to a secondary network.

Note 2. Significant accounting policies

2.1 Basis for preparation of the financial statements

The Company's Separated Financial Statements have been prepared in accordance with the Accounting and Financial Reporting Standards accepted in Colombia (NCIF, for its Spanish initials) and adopted by the Nation's General Accounting Office through Resolution 037 of 2017 and Resolution 056 of 2020 (hereinafter "IFRS as adopted in Colombia"). These accounting and financial reporting standards are based on the International Financial Reporting Standards (hereinafter, IFRS) issued by the International Accounting Standards Board (hereinafter, IASB), as well as the interpretations issued by the International Financial Reporting Standards Committee (hereinafter, IFRIC). These financial statements are harmonized with the generally accepted accounting principles in Colombia as set forth in the Annex to Decree 2420 of 2015 and its subsequent amendments.

The presentation of financial statements in conformity with IFRS adopted in Colombia requires making estimates and assumptions that affect the amounts reported and disclosed in the financial statements, without undermining the reliability of the financial information. Actual results may differ from said estimates. Estimates and assumptions are constantly revised. Revision of accounting estimates is recognised for the period in which the estimates are revised if the revision affects such period or in the revision period and future periods, if it affects both the current and the future period. The estimates made by the Management, in applying the IFRS adopted in Colombia, that have a material effect on the financial statements, and those that imply significant judgments for the annual financial statements, are described in greater detail on Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements.

EPM and each of its subsidiaries present separate or individual financial statements, as applicable, for compliance before the controlling entities and for internal administrative follow-up purposes and provide information to the investors. Likewise, EPM as the main holding company presents consolidated financial statements under IFRS adopted in Colombia.

Assets and liabilities are measured at cost or amortized cost, with the exception of certain financial assets and liabilities and the investment properties that are measured at fair value. Financial assets and liabilities measured at fair value correspond to those that: are classified in the category of fair value assets and liabilities through profit, some equity investments at fair value through equity, as well as all finance derivatives, assets and liabilities recognised that are designated as hedged items in a fair value hedging, which recorded value is adjusted with the changes in fair value attributed to the risks subject matter of the hedging.

Separated financial statements are presented in its functional currency Colombian pesos and their figures are stated in millions of Colombian pesos.

2.2 Classification of assets and liabilities into current and non-current

An asset is classified as current asset when it is mainly maintained for negotiation purposes or it is expected to be realized over a term not exceeding one year, after the period being reported or it is cash and cash equivalents that is not subject to restrictions for exchange or use in the cancellation of a liability over a term not to exceed one year after the period being reported. All other assets are classified as noncurrent assets.

A liability is classified as current liability when it is mainly kept for negotiation purposes or when it is expected to be settled over a term not exceeding one year after the period being reported, or when the company does not have an unconditional right to postpone its settlement for at least one year after the period being reported. All other liabilities are classified as non-current liabilities.

All derivative instruments for which the hedging accounting does not apply are classified as current or non-current, or are divided into current and non-current portions, based upon assessment of facts and circumstances (i.e., the underlying contractual cash flows):

- When the company keeps a derivative, for which the hedging accounting is not applied, during a term exceeding twelve (12) months as from the presentation date, the derivative is classified as non-current (or divided into current and non-current portions) for it to correspond with the classification of the underlying item
- Derivative instruments that are designated as hedging instruments and that are effective, are classified coherently with the classification of the underlying hedged item. The derivative instrument is divided into a current portion and another non-current only if such allocation can be made in a reliable manner.

2.3 Cash and cash equivalents

Cash and cash equivalents in the statement of financial position and in the statement of cash flows include the money in cash and banks and the high-liquidity investments, easily convertible in a determined amount of cash and subject to a non-significant risk of changes in their value, with maturity of three months or less from their acquisition date. Callable bank overdrafts that are an integral part of the cash management of the company, represent a cash and cash equivalents component in the statement of cash flows.

2.4 Investments in subsidiaries, associates and joint ventures

A subsidiary is an entity controlled by EPM. The control is obtained when EPM controls the relevant activities of the subsidiary and is exposed, or has the right, to the variable returns of the subsidiary and has the capacity to influence said returns.

An associate is an entity on which EPM Group has significant influence over the financial and operation policy decisions, without getting to have their control or joint control.

A joint venture is an arrangement in which EPM has joint control, under which the Company has rights over the net assets of the arrangement, rather than rights over its assets and obligations for its liabilities.

On the acquisition date, the surplus of the acquisition cost over the share of the net fair value of the identifiable assets, liabilities and contingent liabilities assumed of the subsidiary is recognised as goodwill. Goodwill is included in the recorded value of the investment and is neither amortized nor individually subject to impairment tests of its value.

Investment in associates and joint ventures is measured in the consolidated financial statements by the Equity Method, except if the investment or a portion thereof is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations. Through this accounting methodology, the investment is initially recorded at cost and is later adjusted in terms of the changes experienced, after acquisition, by the portion of the net assets of the entity that corresponds to the investor. The profit or loss for the period for EPM includes its participation in the profit for the period of the investee and the other comprehensive income includes its participation in the other comprehensive income of the investee. When there are variations in the percentage of ownership in the subsidiary that do not imply a loss of control, the effect of these changes is recognized directly in equity. When ownership of the company in the loss of a subsidiary exceeds ownership of the company thereon (which includes any long-term ownership that, in substance, forms part of the net investment of the Group in the associate or joint venture), the company ceases to recognise its ownership in future losses. Additional losses are recognized provided that the company has contracted some legal or implied obligation or has made payments in the name of the subsidiary. When the subsidiary subsequently makes a profit, the company resumes recognition of its ownership therein only after its share in the aforementioned profit equals the share of unrecognized losses.

Investments in subsidiaries are accounted for using the equity method from the date when the entity in which the interest is held becomes a subsidiary.

Investments in associates and joint ventures are kept in the separate financial statements at cost.

Dividends received from the subsidiary, are recognized as reduction in the value of the investment, and those received from associate or joint venture are directly recognized in the profit for the period when the right of the company to receive payment is reestablished.

The Company analyzes periodically the existence of impairment indicators and if necessary, recognizes losses for impairment in the investment of the subsidiary, associate or joint venture. Impairment losses are recognized in the profit for the period and are calculated as the difference between the recoverable value of the subsidiary, associate or joint venture, that being the higher between the value in use and its fair value less the necessary costs for its sale, and its recorded value.

When control over the subsidiary or significant influence over the associate or the joint control over the joint venture is lost, the company measures and recognizes any residual investment that may keep in it its fair value. The difference between the recorded value of the subsidiary, associate or joint venture and the fair value of the retained residual investment, with the value coming from its sale, is recognized in the result for the period.

The Company discontinues the use of the equity method from the date on which the investment ceases to be a subsidiary, or the date on which the investment is classified as held for sale. Additionally, the company records all amounts previously recognized in other comprehensive income with relation to that subsidiary on the same basis that would have been required if said subsidiary had directly sold the financial assets or liabilities. Therefore, if a profit or loss previously recognized in other comprehensive income by the subsidiary had been reclassified into profits or losses at the moment of the sale of the related assets or liabilities, the company would reclassify the profit or loss from equity into profits or losses (as a reclassification adjustment) upon discontinuation of the usage of the equity method.

2.5 Joint Operations

Is a joint arrangement whereby the parties that have joint control of the arrangement have the right to the assets and obligations related to the liabilities, related to the arrangement.

In joint operations the company recognizes its share as follows: its assets, including its share in the assets jointly held; its liabilities, including its share in the liabilities jointly incurred in; its revenue from the sale of its share in the product that arises from the joint operation; its share in revenue from the sale of the product that is made by the joint operation; and its expenses, including it share in the jointly incurred in expenses. The company records the assets, liabilities, revenue, and expenses related to its ownership in a joint operation according to the guidelines applicable in particular to the assets, liabilities, revenue, and expenses.

2.6 Functional and Foreign Currency

The functional currency of the Company is the Colombian peso, that is the currency of the main economic environment where it operates, i.e., where it generates and uses cash.

Transactions in foreign currency are initially recorded at the exchange rates of the functional currency in force and effect on the transaction date. Subsequently, the foreign-currency denominated monetary assets and liabilities are translated using the exchange rate of the functional currency, in force and effect as of the period's closing date, the non-monetary items that are measured at their fair value are translated using the exchange rates as of the date when their fair value is determined and the non-monetary items that are measured at historic cost are translated using the exchange rates in force and effect on the date of the original transactions.

All exchange differences are recognized in the statement of comprehensive income in the section profit or loss for the period, except for amendments arising from interest costs that are capitalizable and those arising from loans in foreign currency to the extent that they are considered as adjustments to interest costs and the exchange difference arising from the conversion of the financial statements of subsidiaries abroad for the application of the equity method, which is recognized in the other comprehensive income.

2.7 Revenue

Revenue basically corresponds to the result of the company's main activity, which is the rendering of residential public utilities of electric power, natural gas, water supply and sewage, and are recognized when the service is rendered or at the time of the delivery of the goods, to the extent that they comply to the performance obligations of the company. Revenue is measured at the value of the consideration received or to be received, excluding taxes and other obligations. Discounts, compensations to customers because of the quality of the service and financial components that are granted, are recorded as adjustments to revenue. The financing component is only recognized if the contract with customers has a duration longer than one year.

The most representative income from the power business in Colombia are the following:

Reliability Charge: remuneration paid to a generating agent for the availability of generation assets with the declared characteristics and parameters for the calculation of the steady power for reliability charge (ENFICC, for its Spanish initials), which guarantees compliance with the Steady Power Obligation (OEF, for its Spanish initials) assigned in auction for the assignment of steady power obligations or the mechanism replacing it.

Long-Term Contracts: a contract for the sale of power between traders and generators which is settled in the power exchange, under this modality of power contract generators and traders freely agree on quantities and prices for the purchase and sale of electric power for periods longer than one day.

For long-term power purchase contracts, with price lower than that of the market and whose intention is not to use the energy purchased in the operation but to resell it in a market to obtain revenue, it is considered that it does not comply with the Exception for own use.

Secondary Market of Steady Power or Secondary Market: A bilateral market in which generators negotiate among themselves a back-up contract to ensure, for a given period, partial or total compliance with the steady power obligations acquired by one of them.

Non-Regulated Market Power Sales: Is the power sold in the market to customers whose maximum demand exceeds a value in MW (megawatts) or a monthly minimum energy consumption in MWh (megawatt-hour), defined by the regulatory body, by legalized installation, from which it does not use public networks of electric power transport and uses it in the same property or in contiguous estates. Such electricity purchases are made at freely agreed prices between buyer and seller.

Regulated Market Power Sales: Is the power sold to customers whose monthly consumption is less than a predetermined value and is not entitled to negotiate the price paid for it, since both concepts are regulated; usually uses power for its own consumption or as an input for its manufacturing processes and not to undertake marketing activities with it.

Automatic Generation Regulation (AGC): is a system for the control of the secondary regulation, used to accompany the variations of load through electricity generation, to control

the frequency within a range of operation and the programmed exchanges. The AGC can be programmed in centralized, decentralized or hierarchical mode.

Steady Power (or Firm Energy): is the incremental contribution of a company's generation plants to the interconnected system, which is carried out with a 95% reliability and is calculated based on a methodology approved by the commission and the operational planning models used in the national interconnected system.

Natural gas revenue comes from the distribution and sale of natural gas to the regulated and non-regulated markets.

In the water business, revenue comes from the provision of water and sewage utilities.

At the time of recognition of income, the Company assesses, based on specific criteria, whether it acts as a principal or as a commission agent and thus determines whether gross or net income must be recognized for commercial activities.

2.8 Contracts with Customers

When contract results can be reliably measured, the company recognizes revenue and expenses associated to contracts with customers, measuring the advance level in the fulfilment of the performance requirements using the resource method, as a function of the ratio represented by the costs earned by the work conducted to that date and the estimated total costs up to its completion.

The incurred cost includes the costs, including loan costs directly related to the contract, until the work has been completed. Administrative costs are recognized in the profit or loss for the period.

On the other hand, the incremental costs incurred by the company to obtain or fulfill contracts with customers are recognized as an asset in the statement of financial position within the Other assets item and are amortized on a linear basis over the life of the contract, provided that the term of the contract is greater than one year. Otherwise, the company recognizes it directly in the profit or loss for the period.

Payments received from customers before the corresponding work has been carried out, are recognized as a liability in the Statement of Financial Position as other liabilities.

The difference between revenue recognized in the statement of income for the year and the billing is presented as asset in the statement of financial position denominated Trade and other receivables, or as liability denominated Other liabilities.

For the initial recognition of an account receivable from a contract with a customer, the difference between the measurement of the receivable and the value of the corresponding revenue is presented as an expense in the statement of comprehensive income called Impairment of receivables.

2.9 Government grants

Government grants are recognized at fair value when there is reasonable security that those grants shall be received and that all conditions linked to them shall be met. Grants that pretend to offset costs and expenses already incurred in, without subsequent related costs, are recognized in profit or loss for the period in which they become enforceable. When the grants related to an asset, it is recorded as deferred income and is recognized in the result for the period on a systematic basis throughout the estimated lifespan of the corresponding asset. The benefit of a government loan at an interest rate below market is treated as a government grant, measured as the difference between the amounts received and the fair value of the loan based upon the market interest rate.

2.10 Taxes

The fiscal structure of each country, the regulatory frameworks, and the plurality of operations that the company undertakes make the company a taxable entity, i.e., a payer of taxes, rates and contributions on a national and territorial basis. These are liabilities generated from the central government, the states/departments, municipal entities and other active subjects, once the conditions foreseen in the corresponding acts and laws issued are met.

Amongst the most relevant taxes the income tax, the value-added tax and the wealth tax are detailed.

Income Tax

- Current: The current income tax assets and liabilities for the period are measured by the amounts that are expected to be recovered or paid to the fiscal authorities. The income tax expense is recognized in the current tax according to the cleaning made between the fiscal income and the recorded profit or loss affected by the income tax rate of the current year and pursuant to the provisions of the tax rules of the country. The tax rates and rules used for computing those values are those that are enacted or substantially approved at the end of the period being reported, in the countries where the company operates and generates taxable profits.

Tax income differs from profit for the period as income and expense items imposable or deductible in other years, and items that shall not be taxable or deductible in the future.

Current Income tax assets and liabilities are also offset if they relate to the same tax authority and if there is the intention to settle them for the net value or to realize the asset and settle the liability simultaneously.

- Deferred: the deferred income tax is recognized using the balance sheet method calculated on the temporary differences between the fiscal bases of the assets and liabilities and their recorded values. The deferred tax liability is generally recognized for all imposable temporary differences, while the deferred tax asset is recognized for all deductible temporary differences and for the future offsetting of fiscal credits and unused

fiscal losses to the extent that it is probable the availability of future tax gains against which they can be realized. Deferred taxes are not discounted.

The deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition of an asset or a liability in a transaction that is not a business combination and that, at the moment of the transaction, did not affected neither the book gain nor the fiscal profit or loss; and for the deferred tax liability case whenever it arises from the initial recognition of goodwill.

Deferred tax liabilities related to investments in subsidiaries, associates and participation in joint ventures, are not recognized when the revision opportunity of temporary differences can be controlled, and it is probable that those differences will not be reversed in the near future. Deferred tax assets related to investments in subsidiaries, associates and participation in joint ventures, shall be recognized only if a reversal in temporary differences for the near future is probable, and that availability of future taxable profits against which those deductible differences will be imputed is also probable.

The recorded value of the deferred tax assets is reviewed in each presentation date and is reduced to the extent that enough taxable profits available for use as a whole or in part of the deferred tax asset is no longer probable. The deferred tax assets that are not recognized are reassessed on each presentation report date and are recognized to the extent that it is probable that future taxable gains profits allow their recovery.

Deferred tax assets and liabilities are measured at the fiscal rates expected to be applied in the period when the asset is realized, or the liability is settled, based on fiscal rates and rules that were approved on the presentation date, or the approval procedure of which is about to be completed for such date. Measurement of deferred tax assets and liabilities will reflect the fiscal consequences to be derived from the manner in which the entity expects, at the end of the period being reported, to recover or settle the recorded value of its assets and liabilities.

The deferred tax assets and liabilities must be presented as non-current.

The deferred tax assets and liabilities are offset if there is a legally enforceable right for it and if they are related to the same tax authority.

The deferred tax is recognized in profit or loss for the period, except that related to items recognized outside profit or loss; in this latter case it will be presented in the other comprehensive income or directly in equity.

With the purpose of measuring the deferred tax liabilities and the deferred tax assets for investment properties that are measured using the fair value model, the recorded value of those properties is presumed that will be fully recovered through their sale, unless the presumption is challenged. The presumption is challenged when the investment property is depreciable and is kept within a business model which object is to consume, substantially, all the economic benefits that are generated by the investment property through time, and not through sale. Management reviewed the company's investment property portfolio and

concluded that none of the company's investment properties is kept under a business model which objective is to consume, substantially, all economic benefits generated by investment properties over time rather than through the sale. Therefore, the management have determined that the presumption of "sale" established in the modifications to IAS 12 Income tax, is applicable.

Whenever the current tax or deferred tax arises from the initial recording of the business combination, the fiscal effect is considered within the recording of the business combination.

Value-Added Tax - VAT

The company is responsible for this tax in the common regime as it performs sales of movable assets and provides taxed services and obtains exempt income for imports. Currently, the power, water, sewage, and domiciliary gas utilities are excluded from this tax.

The general rate for this tax in Colombia is 19% and exists a differential rate of 5%.

In Colombia, the generation of revenue excluded in the particular case of residential public utilities, VAT paid on purchases is part of a higher cost value. Also, when taxable income is generated, that is to say when taxed goods or services are sold, VAT paid on the purchase or acquisition of inputs for these sales will be deductible from the payable tax value. When the company generates income that is excluded from VAT, but at the same time generates income that is exempt and taxed, in that case a proration of paid VAT must be performed to determine the percentage of VAT to be discounted.

The tax generated is recognized as a sum to be paid to the tax office, from which the tax paid is deducted. Income is recognized without considering the value of the tax.

2.11 Property, Plant and Equipment

Property, plant and equipment are measured at cost, net of accrued depreciation and accrued impairment losses, if any. The cost includes the acquisition price; the costs directly related to putting the asset at the necessary place and conditions to operate in the way foreseen by the company, costs corresponding to loans of construction projects that take a substantial period to be completed, recognition requirements are complied with and the present value of the expected cost for the decommissioning of the asset after its use, if the criteria for recognition for a provision are met.

Constructions in progress are measured at cost less any impairment loss recognized and includes indispensable expenditure directly related to the construction of the asset, such as professional fees, work supervision, civil works and, in the case of those assets qualified, the borrowing costs are capitalized. Said constructions in progress are classified in the proper categories of property, plant and equipment at the time of their completion and when they are ready to use. The depreciation of these assets starts when they are ready to use in accordance with the same basis as in the case of other elements of property, plant and equipment.

The Company capitalizes as greater value of the assets, additions or improvements made thereof, provided that any of the following conditions is met: a) They increase their lifespan, b) They increase their productive capacity and operating efficiency thereof and c) They reduce costs to the Company. All other repair and maintenance costs are recognised in the statement of comprehensive income as incurred.

Inventory of spare parts for specific projects, which are expected to have no turnover in one year and meet the criteria to be capitalized, known as replacement assets, are presented in the other property, plant and equipment. They depreciate considering the permanence time in the storage and the technical lifespan of the asset once its use begins.

Depreciation begins when the asset is available for use and is calculated in a straight-line basis throughout the estimated lifespan of the asset as follows:

Plants, pipelines and tunnels				
Civil works	50	to	100	years
Equipment	10	to	100	years
Networks, lines and cables				
Electric transmission network	30	to	40	years
Electric distribution network	30	to	40	years
Aqueduct network	40	to	80	years
Wastewater network	30	to	80	years
Gas network	60	to	80	years
Buildings	50	to	100	years
Communication and computer equipment	5	to	40	years
Machinery and equipment	7	to	40	years
Furniture, fixtures and office equipment	10	to	15	years

Lifespans are determined considering, among others, the manufacturer's technical specifications, the knowledge of the technicians that operate and maintain the assets, the geographic location, and the conditions to which it is exposed.

The company calculates the depreciation by components, which implies depreciating individually the parts of the asset that should have different lifespans. The depreciation method used is the straight-line; the residual value calculated for the assets is not part of the depreciable amount.

A component of property, plant and equipment and any significant part initially recognized, is written off once disposed of or when it is not expected to obtain future economic benefits from its use or disposal. The gain or loss at the moment of writing the asset off, calculated as the difference between the net value of the disposal and the recorded value of the asset, is included in the statement of comprehensive income.

Assets temporarily classified as out-of-service continue to depreciate and are tested for impairment within the CGU to which they are assigned.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted, appropriate.

2.12 Leases

The determination of whether an arrangement constitutes or contains a lease is based upon the essence of the arrangement at its initial date, if compliance with the agreement depends upon the use of a specific asset(s) and if it transfers the right-of-use of said asset for a timespan in exchange for a consideration.

At the initial date of the lease contract, the company acting as lessee recognizes an asset for right-of-use and a liability for lease, except for leases with a duration of less than 12 months or those whose value at new of the underlying asset is less than 15 (fifteen) Current Monthly Minimum Legal Wage (SMMLV).

The company acting as lessor classifies the lease as operating or finance. A lease is classified as a finance lease when the risks and rewards incidental to ownership of the leased asset are substantially transferred to the lessee; otherwise, it is classified as an operating lease.

EPM as a Lessee

Assets leased under finance leases are recognized and presented as assets in the statement of financial position at the beginning of the lease, for the fair value of the asset leased or the present value of the minimum lease payments, whichever is lower. The corresponding liability is included in the statement of financial position as a finance lease liability.

Right-of-use assets are amortized over the lifespan of the asset using the straight-line method if ownership of the underlying asset is transferred at the end of the contract or if a purchase option is exercised. If ownership of the underlying asset is not transferred at the end of the lease term or if no purchase option on the asset is exercised, the asset is depreciated only up to the end of its lifespan or the lease term, whichever comes first.

Lease payments are divided between financial expenses and debt amortization. Finance charges are recognized in profit or loss for the period unless directly attributable to qualifying assets, in which case they are capitalized according to the company's policy for borrowing costs. Variable lease payments, which depend on an index or rate, are included in the valuation of the lease liability. Leases with a duration of less than 12 months or those whose value at new of the underlying asset is less than 15 (fifteen) SMMLV are recognized as operating leases in the profit or loss for the period over the term of the lease.

EPM as a Lessor

Assets leased under finance leases are not presented as property, plant and equipment since the risks associated with the property have been transferred to the lessee, instead a receivable is recognized for an amount equal to the net investment in the lease.

When a lease contract includes land and building components together, the company assesses the classification of each component separately as a finance or operating lease. If the lease payments cannot be allocated reliably between these two components, the entire lease is classified as a finance lease, unless it is clear that both components are operating leases, in which case the entire lease is classified as operating lease.

Income from variable leases, dependent on an index or rate, are included in the valuation of the net investment at lease.

Initial direct costs such as commissions, fees, legal, and internal costs that are incremental and directly attributable to negotiating and arranging the lease are included in the measurement of the net investment in the lease at inception and are reflected in the calculation of the implicit interest rate.

2.13 Borrowing Costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset that necessarily takes substantial time to be prepared for their destined use or sale, are capitalized as part of the cost of the respective asset until the asset is ready for their intended use. Income from the temporary investment in specific loans pending to be consumed in qualified assets is deducted from the borrowing costs that qualify for their capitalization. All other borrowing costs are recorded as expenses in the period when incurred. Borrowing costs consists of interest and other costs incurred in by the company regarding to the loan of funds. To the extent that the funds derive from generic loans and are used to obtain a qualified asset, the value of the costs susceptible of capitalization is determined by applying a capitalization rate (weighted average cost of loans applicable to general loans outstanding during the period) to expenditure made in that asset.

Capitalization of borrowing costs begins on the date when the following conditions are met:

- Expenditure made in relation to the asset.
- Borrowing costs are incurred, and
- Necessary activities to prepare the asset for the intended use or for sale are carried out.

Capitalization of borrowing costs is suspended during periods in which the development of activities of a qualifying asset for periods of more than one year is interrupted. However, the capitalization of borrowing costs over a period is not interrupted if important technical or administrative actions are being undertaken. Neither is capitalization of borrowing costs suspended when a temporary delay is required as part of the process of preparing an asset qualified for its use or sale.

Capitalization of borrowing costs is terminated when all activities necessary to prepare the asset for its use or sale have been substantially completed. When the asset has components that can be used separately while construction continues, the capitalization of borrowing costs on such components is stopped.

2.14 Investment Property

Investment property, are lands or buildings or part of a building or both, held to obtain rentals or capital revaluations (including the investment property under construction for said purposes). Investment properties are initially measured at cost, including transaction costs. The recorded value includes the replacement or substitution cost of one part of an existing

investment property at the moment when the cost is incurred in, if all criteria for recognition are met; and they exclude the daily maintenance costs of the investment property.

After initial recognition, investment properties are measured at the fair value reflected by market conditions on the presentation date. All profits and losses arising from changes in the fair values of the investment properties are included in the statement of comprehensive income in profit or loss when they arise.

Investment properties are derecognized, either at the moment of disposal, or when they are retired from use on a permanent basis, and no future economic benefit is expected. The difference between the net value of disposal and the recorded value of the asset is recognized in the statement of comprehensive income in profit or loss in the period when it was derecognized.

Transfers to or from investment property are conducted only when there is a change in their use. In the case of a transfer from an investment property to property, plant and equipment, the cost considered for its subsequent posting is the fair value on the date of use change. If a property, plant and equipment become an investment property, it shall be recorded at its fair value, the difference between the fair value and the recorded value shall be recorded as revaluation surplus applying the IAS 16 Property, plant and equipment.

2.15 Intangible Assets

Intangible assets acquired separately are measured initially at their cost. The cost of the intangible assets acquired in business combinations is their fair value at the acquisition date. After their initial recognition, the intangible assets are recorded at cost less any accumulated amortization and any accumulated loss for impairment. Intangible assets generated internally are capitalized provided that they meet the criteria for their recognition as asset and the generation of the asset must be classified as: research phase and development phase; if it is not possible to distinguish the research phase from the development phase, expenditure must be reflected in the statement of comprehensive income in the period in which they incurred.

Lifespan of intangible assets are determined as finite or indefinite.

Intangibles assets with finite lifespans are amortized throughout their economic lifespan in a straight-line and assessed to determine if they presented any impairment, whenever there are indications that the intangible asset may have suffered such impairment. The amortization period and the amortization method for an intangible asset with a finite lifespan are reviewed at least at the end of each year. Changes in the expected lifespan or in the expected pattern of consumption of the future economic benefits of the asset are recorded if the amortization period or method changes, as applicable, and are treated as changes in accounting estimates. The amortization expense of intangible assets with finite lifespans is recognised in profit or loss in the statement of comprehensive income in the expense category consistent with the function of the intangible asset.

Intangibles assets with indefinite lifespans are not amortized, but they are subject to annual tests to determine whether they suffer any impairment, either individually or at the cash-generating unit level (CGU). Assessment of the indefinite lifespan is revised on an annual basis to determine whether such indefinite lifespan continues to be valid. If that is not the case, the change of lifespan from indefinite to finite is made prospectively.

Lifespans of intangible assets are:

Concessions and similar rights	according to the term of the contract, indefinite - according to the term of the contract
Easements	contract
Capitalized development expenses	Indefinite
Software and IT applications	Finite 3 to 5 years
Licenses	Finite 3 to 5 years
Rights	As contract effective term
premium gas service stations and intangibles related to customers	As contract effective term
Other intangible assets	Finite 7 to 15 years

An intangible asset is derecognized upon disposal, or whenever future economic benefits are not expected from their use or disposal. The profits or losses arising when an intangible asset is derecognized are measured as the difference between the value obtained in the disposal and the recorded value of the asset, and it is recognized in profit or loss in the statement of comprehensive income.

1000

Research and Development Costs

Research costs are recorded as expenses as incurred. Development outlays in an individual project are recognized as intangible assets whenever the company can demonstrate:

- The technical feasibility of finalizing the intangible asset so that it is available for use or sale.
- Its intention of finalizing the asset and its capacity to use or sell the asset.
- How the asset will generate future economic benefits, considering, among others, the existence of a market for production that generates an intangible asset for the asset itself, or the profit of the asset for the entity.
- The availability of technical and financial resources to complete the asset and to use and sell it.
- The capacity of reliably measuring the expenditure during development.

In the statement of financial position, the development expenditure asset is recognized from the moment the element meets the aforementioned conditions for its recognition, and its cost less accrued amortization and the value impairment accrued losses are recorded.

When the development of an intangible asset related to an electricity generation project begins, costs are accumulated as constructions in progress.

Amortization of the asset starts when the development has been completed and the asset is available for use. It is amortized throughout the period of the expected future economic benefit. During the development period the asset is subject to annual tests to determine whether there is impairment of its value.

Research costs and development costs that do not qualify to capitalization are recorded as expenses in profit or loss in the statement of comprehensive income.

Goodwill

Goodwill represents the difference between the cost of a business combination and the fair value at the moment of acquisition of the acquired assets, liabilities assumed, and contingent liabilities of the acquired party.

Goodwill represents the difference between the cost of a group of assets constituting a business over which control is acquired and the fair value at the time of acquisition of this group of acquired assets.

Goodwill is not amortized, it is measured at cost less any value impairment accrued loss and is subject to annual value impairment tests, or more frequently when there are impairment indicators. Value impairment losses are recognized in profit or loss in the statement of comprehensive income.

For the Cash Generating Units (CGU), which have been assigned goodwill, on an annual basis the Company verifies the value impairment, which implies the calculation of the value at use of the CGUs to which it is assigned. The value at use requires determining the future cash flows that must arise from the CGUs and an appropriate discount rate to calculate the current value. When the actual future cash flows are less than expected, an impairment loss may arise.

2.16 Financial Instruments

A financial instrument is a contract that gives rise to a financial asset in one entity and simultaneously to a financial liability or equity instrument in another entity.

Financial assets and liabilities are recognized in the statement of financial position when the company becomes a party according to the contractual conditions of the instrument.

2.16.1 Financial Assets

The company recognizes its financial assets at fair value at the outset. Transaction costs directly attributable to the financial asset are added to or deducted from its fair value if subsequently measured at amortized cost or fair value through other comprehensive income or are recognized immediately in the statement of comprehensive income if the assets are measured at fair value through profit or loss.

For subsequent measurement, financial assets are classified at amortized cost or fair value (through other comprehensive income or through profit and loss) depending on the

company's business model for managing the financial assets and the characteristics of the instrument's contractual cash flows.

- **Financial assets at fair value through profit or loss**

  Financial assets at fair value through profit or loss are assets whose contractual cash flows are highly liquid. The company classifies a financial asset in this category if it is acquired mainly for the purpose of being sold in the short term.

  This includes investments made to optimize surplus liquidity, i.e. all those resources that are not immediately allocated to the development of the activities that constitute the company's corporate purpose. The investment of surplus liquidity is made under the criteria of transparency, security, liquidity and profitability, under the guidelines of adequate control and under market conditions without speculative purposes (EPM General Management Decree 2015-DECGGL-2059 of February 6, 2015). Profit or losses arising from changes in fair value are included in the statement of comprehensive income under the heading of financial income or expense, in the period in which the aforementioned changes in fair value occur.

  Dividend income is recognised when the company's right to receive payment is established.

  At the same time, the company can irrevocably allocate a financial asset as measured at fair value through profit or loss.

- **Financial assets at fair value through other comprehensive income**

  Debt instruments are classified as assets measured at fair value through other comprehensive income if they are held under a business model whose objective is achieved by obtaining the contractual cash flows and selling the instruments and the instrument also provides, on specific dates, cash flows that correspond solely to payments of principal and interest on the outstanding principal value.

  Changes in the fair value of the investment are recorded in other comprehensive income, except for impairment losses or recoveries, interest income and foreign exchange gains and losses which are recognized in profit or loss for the period.

  The company has made an irrevocable decision to present subsequent changes in the fair value of certain investments in equity instruments that are not held for trading in other comprehensive income. Dividends from such investments are recognized in profit or loss when the right to receive payment is established.

  On disposal of equity investments at fair value through other comprehensive income, the accumulated value of the gains or losses is transferred directly to retained earnings and is not reclassified to profit or loss for the period.

- **Financial assets at amortized cost**

  A financial asset is subsequently measured at amortized cost using the effective interest rate[2] if the asset is held within a business model whose objective is to maintain it in order to obtain the contractual cash flows and contractual terms of the asset that provide, on specific dates, cash flows that are solely payments of principal and interest on the outstanding principal value.

Impairment of financial instruments

At each reporting date, the Company recognizes a correction in value for expected credit losses on financial assets measured at amortized cost or at fair value through changes in Other comprehensive income, including receivables from leases, contract assets or loan commitments and financial guarantee contracts to which the impairment requirements are applied over the life of the asset.

Expected credit loss is estimated considering the probability that an impairment loss by uncollectability may or may not occur and are recognized as profit or loss in profit or loss in the Statement of comprehensive income, reducing the value of the financial asset. The company assesses the credit risk of accounts receivable on a monthly basis at the time of presenting the reports in order to determine the value correction for expected credit loss on financial assets-.

The company assesses on a collective basis the expected losses for financial assets that are not individually relevant. When the collective assessment of expected losses is performed, receivables are gathered by similar credit risk characteristics, allowing identification of repayment capacity of the debtor, in accordance with the contractual terms of receivables.

The company determines that a customer's credit risk increases significantly when there is any default event in the financial agreements by the counterpart, or when information, be it internal or obtained from external sources indicates that debtor's payment unlikely, without considering held securities.

Default in agreements is measured generally when having 2 past-due accounts, however, there are agreements or individual contracts that indicate default immediately when a payment or obligation is not met-.

The company determines that a financial asset exhibits credit impairment when:

- Evidences default in a customers' payment for two (2) or more accounts.
- It is known or there is evidence of the customer entering processes of corporate restructuring or in insolvency or liquidation.
- The rise of social turmoil, be it of public order or natural disasters, which according to experience are directly correlated with default of accounts.

2 The effective interest rate method is a method of calculating the amortized cost of a financial asset and allocating the income over the relevant period. The effective interest rate is the discount rate that exactly matches the future cash flows of a financial asset (including all fees, commissions and points paid or received that are an integral part of the effective interest rate, transaction costs and other premiums and discounts) over the expected life of the instrument, or if appropriate, a shorter period, to its recorded value at initial recognition.

Credit risk is affected when there are changes in financial assets, the policy of the Company to reassess the recognition of credit loss is basically supported on the customer or counterpart payment record. When there is evidence of an improvement in the historical record of a customer payments, a reduction in risk is recorded and, if there is an increase in the portfolio default age, an increment in the impairment of the asset is recorded.

The amortized financial assets may still be subject to collection execution activities under the recovery procedures of the company, considering judicial collection when appropriate. Recoveries performed are recognized in the profit for the period.

Derecognition of Financial Assets

A financial asset or part of it, is derecognized from the statement of financial position whenever it is sold, transferred, expires or the company losses control on the contractual rights or on the cash flows of the instrument.

The company derecognizes a financial asset when:

- Possesses information indicating that the counterpart is in severe financial difficulties and there are no realistic prospects of recovery.
- The counterpart has been put into liquidation or has initiated a bankruptcy process or, in the case of receivables.
- Amounts exceed two years due, whichever occurs earlier.

If the company does not transfer nor substantially retains all risks and advantages inherent to that property and continues to retain the control of the asset transferred, the company will recognize its share in the asset and the obligation associated for the amounts that it would have to pay, in the same way, if the company retains substantially all risks and advantages inherent to the ownership of a financial asset transferred, the company will continue to recognize the financial asset and will also recognize a guaranteed loan in the shape of a collateral for the received income.

In the total derecognition of a financial asset measured at fair value with changes in profit, the difference between the recorded value of the assets and the sum of the consideration received and to be received, is recognized in profit or loss in the Statement of comprehensive income. In case of financial assets measured at fair value with change in other comprehensive income, the difference between the recorded value of the asset and the sum of the consideration received and to be received is recognized in profit or loss in the Statement of comprehensive income and the profit or loss that would have been recognised in the Other comprehensive income will be reclassified to accumulated profit.

Refinancing of loans

When the contractual cash flows of a financial asset are renegotiated or otherwise modified, and the renegotiation or modification does not result in derecognition of that financial asset in accordance with IFRS 9 adopted in Colombia, the company recalculates the gross recorded

value of the financial asset and recognises a profit or loss due to modification in the profit or loss for the period. The gross recorded value of the financial asset is recalculated as the present value of the modified or renegotiated contractual cash flows that are discounted at the original effective interest rate of the financial asset (or effective interest rate adjusted for credit quality for financial assets with credit deterioration purchased or originated) or, when applicable, the revised effective interest rate. Any cost or commission incurred adjusts the recorded value of the modified financial asset and is amortized over the remaining term of the latter.

2.16.2 Financial liabilities

The company recognizes its financial liabilities at fair value at the outset. Transaction costs directly attributable to the acquisition or obtainment of the financial liability are deducted from its fair value if they are subsequently measured at amortized cost or are recognized through profit or loss if the liabilities are measured at fair value. Subsequently, financial liabilities are measured as follows:

- **Financial liabilities at fair value through profit or loss,** include liabilities held for trading, financial liabilities designated on initial recognition as at fair value through profit or loss, and derivatives. Profit or loss on liabilities held for trading are recognized in profit or loss. At initial recognition, the company did not designate financial liabilities as at fair value through profit and loss.
- **Financial liabilities at amortized cost,** are measured using the effective interest rate. Profits and losses are recognized in profit and loss for the period.

Compound instruments

Financial instruments that contain both a liability and an equity component (compound financial instruments) are recognized and accounted for separately. Therefore, for the initial measurement the liability component is determined by the fair value of the future cash flows and the residual value is assigned to the equity component.

For subsequent measurement, the liability component is measured at amortized cost including the effect of amortization costs, interests and dividends. The equity component retains the measurement of the initial recognition.

Financial guarantee contracts

The financial guarantee contracts issued by the company are those contracts that require the making of a specific payment to reimburse the holder for the loss incurred when a specified debtor defaults their payment obligation, according to the conditions of a debt instrument. The financial guarantee contracts are initially recognized as a liability at fair value, adjusted by the transaction costs that are directly ascribable to the issuance of the guarantee. Subsequently, the liability is measured at: (i) the amount of the adjustment in value for the expected losses and (ii) the value initially recognized less, the accrued recognized profit.

Derecognition of financial liabilities

A financial liability or part of it is derecognized from the statement of financial position when the contractual obligation has been settled or has expired.

Whenever an existing financial liability is replaced by another coming from the same lender under substantially different conditions, or if the conditions of an existing liability are substantially modified, such exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability and the difference in the respective recorded values is recognized through profit and loss.

In the event changes are not substantial the company recalculates the gross recorded value of the financial liability and recognizes a profit or loss from changes in the profit or loss. The gross recorded value of the financial liability is recalculated as the current value of the modified or renegotiated contractual cash flows that are discounted at the original effective interest rate of the financial liability or, when applicable, the revised effective interest rate. Any cost or commission incurred adjusts the recorded value of the modified financial liability and is amortized over its remaining term.

2.16.3 Equity Instruments

An equity instrument consists of any contract showing a residual interest on an entity's assets, after deducting all its liabilities. Equity instruments issued by the company are recognized through income received, net of direct issuance costs.

The repurchase of the company's own equity instruments is recognized and directly deducted in equity. No profit or loss is recognized in operations, coming from the purchase, sale, issuance, or cancellation of the company's own equity instruments.

2.16.4 Derivative Financial Instruments

A financial derivative is an instrument which value varies in response to changes in a variable such as an interest rate, exchange rate, the price of a financial instrument, credit rating or index. This instrument does not require an initial investment or is inferior than other financial instruments with a similar response to changes in market conditions and is generally settled at a future date.

The company uses derivative financial instruments, like term contracts (Forward), futures contracts, financial barters (Swaps) and options to hedge several financial risks, mainly the interest rate, exchange rate and commodities price risks. Such derivative financial instruments are initially recognized at their fair values on the date when the derivative contract is entered into, and subsequently they are measured again at their fair value. Derivatives are recorded in the statement of financial position as financial assets when their fair value is positive, and as financial liabilities when their fair value is negative.

Commodity contracts that meet the definition of a derivative, but that are entered into in conformity with the expected purchase requirements of the company, are recognized in the Statement of comprehensive income as cost of sales.

Any gain or loss that arises from the changes in derivatives' fair value is directly recognized in the Statement of comprehensive income in the section Statement of income, except for those that are under hedge accounting.

Generally, the derivatives embedded in host contracts are treated as separate derivatives whenever they meet the definition of a derivative and when their risks and characteristics are not closely related to those main contracts and the contracts are not measured at fair value with change in profit. However, derivatives embedded in contracts where the host is a financial asset in the scope of IFRS 9 are never split. Instead, the hybrid financial instrument as a whole is assessed for financial asset classification.

Hedge Accounting

At the beginning of a hedging relationship, the company designates and formally documents the hedging relationship to which they want to apply hedging accounting, and the objective of the risk management and the strategy to carry out the hedging. The documentation includes the identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the company shall assess the effectiveness of the changes in fair value of the hedging instrument when offsetting the exposure to changes in the fair value of the hedged item or in the cash flows, attributable to the risk hedged. Such hedges are expected to be highly efficient in achieving the offsetting of changes in the fair value or in the cash flows, and for this end they are permanently assessed throughout the information periods for which they were designated.

For hedging accounting purposes, hedges are classified and recorded as follows, once the criteria for their recording are complied with:

- **Fair value hedging,** when they hedge the exposure to fair value changes of assets or liabilities recognized or of non-recognized firm commitments.

  A change in the fair value of a derivative that is a hedging instrument is recognized in profit or loss in the statement of comprehensive income as finance cost or income. A change in the fair value of the item hedged attributable to the risk hedged is recorded as part of the recorded value of the hedged item and is also recognized in profit or loss in the statement of comprehensive income as finance cost or income.

  For the fair value hedging related to items recorded at amortized cost, the adjustments to the recorded value are amortized in profit or loss in the statement of comprehensive income throughout the remaining term until their expiration. Amortization of the effective interest rate may begin as soon as there is an adjustment to the recorded value of the hedged item, but it must start at the latest when the hedged item is no longer adjusted for their fair value changes ascribable to the risk being hedged. Amortization of recorded value adjustments is based upon the effective interest rate recalculated on the amortization starting date. If the hedged item is derecognized, the non-amortized fair value is immediately recognized in profit or loss in the Statement of comprehensive income.

When a non-recognized firm commitment is designated as a hedged item, the subsequent accrued change in the fair value of the firm commitment attributable to the hedged risk shall be recognized as an asset or liability with their corresponding profit or loss recognized in the statement of comprehensive income.

- **Cash flow hedging,** when they hedge the attributed cash flow variations exposure, either to a particular risk associated to a recognized asset or liability or to a highly probable foreseen transaction, or to the exchange rate risk in a non-recognized firm commitment.

  The purpose of cash flow hedge accounting is to recognize in other comprehensive income the fair value of variations of the hedging instrument in order to apply them to the statement of comprehensive income when and at the rate that the hedged item affects them.

  The effective portion of the profit or loss for the measurement of the hedging instrument is immediately recognized in the Other comprehensive income, whereas the ineffective portion is immediately recognized in profit or loss in the Statement of comprehensive income period as finance cost.

  Values recognized in the Other comprehensive income are reclassified into the profit or loss for the period when the hedged transaction affects the profit, as well as when the hedged financial income or financial expense is recognized, or when the foreseen transaction takes place. When the hedged item constitutes the cost of a non-financial asset or liability, the values recognized in the Other comprehensive income are reclassified at the initial recorded value of the no-financial asset or liability. If the foreseen transaction or the firm commitment is no longer expected to happen, the accrued profit or loss previously recognized in the Other comprehensive income is reclassified into the profit or loss for the period.

  If the hedging instrument expires or is sold, it is resolved, or is exercised without a replacement or successive renovation of a hedging instrument for another hedging instrument, or if its designation as hedging is revoked, any accrued profit or loss previously recognized in other comprehensive income remains in the other comprehensive income until the foreseen operation or the firm commitment affects profit or loss.

- **Hedging of a net investment abroad,** when they hedge the exposure to the variations in the translation of foreign businesses into the presentation currency of the company associated to the exchange rate risk.

  The objective of the foreign-currency net investment hedging is to hedge the exchange rate risks that a Principal or Intermediate Parent Company having businesses abroad may have on the impact on the translation of financial statements from functional currency to presentation currency. The hedging of net investment in foreign currency is a hedging to the exposure in foreign currency, not a hedging of the fair value due to changes in the investment value.

Profits or losses of the hedging instrument related to the effective portion of the hedging are recognized in other comprehensive income, whereas any other profit or loss related to the ineffective portion is recognised in the statement of comprehensive income. For the disposal of the business abroad, the accrued value of the profits or losses recorded in the Other comprehensive income are reclassified through profit or loss for the period.

2.16.5 Off-setting of Financial Instruments

Financial assets and liabilities are subject to off-set in order to inform the net value in the Statement of financial position, only if (i) at the current time, there is a legally enforceable entitlement of off-set of recognized values; and (ii) there is the intention of settling them at their net value, or of simultaneously realizing the assets and cancelling the liabilities.

2.17 Inventories

Goods acquired with the intention of selling them during the ordinary course of business or of consuming them in the service rendering process are classified as inventories.

Inventories are valued at cost or net realizable value, whichever is lower. The net realizable value is the estimated sale price in the normal course of business, less the estimated finalization costs and the estimated costs necessary to make the sale.

Inventories include merchandise in stock that do not require transformation, such as electricity, gas and water meters and procurement goods. They include materials such as minor spare parts and accessories for the rendering of services and the goods in transit and held by third parties.

Inventories are valued using the weighted average method and their cost includes the costs directly related to the acquisition and those incurred to give them their current conditions and location.

2.18 Impairment loss of non-financial assets

As of every presentation date, the company assesses whether they have any indication that a tangible or intangible asset may be impaired. The company estimates the recoverable value of the asset or Cash Generating Unit (CGU), at the moment it detects an indication of impairment, or annually (as November 30 and it is reviewed if there are relevant or significant events presented for the month of December that merit analyzing and to be included in the calculation of impairment) for goodwill and intangible assets with indefinite lifespan and those that are still being developed.

The recoverable value of an asset is the greatest value between the fair value less the costs of sale, either of an asset or a Cash-Generating Unit (CGU), and its value in use is determined for an individual asset, unless the asset does not generate cash flows that are substantially independent of those of other assets or groups of assets, in which case the asset must be grouped to a CGU. When a reasonable and consistent basis for distribution is identified, common/corporate assets are also allocated to the individual CGUs or distributed to the

smallest group of CGUs for which a reasonable and consistent basis for distribution can be identified. When the recorded value of an asset or a CGU exceeds its recoverable value, the asset is considered impaired and its value is reduced to its recoverable amount.

When calculating the value in use, the estimated cash flows, either for an asset or a CGU, are discounted at their current value through a discount rate before taxes that reflects the market considerations of the temporary value of money and the specific risks of the asset. An adequate assessment model is used for determining the reasonable value less the costs of sale.

Losses for impairment of continuing operations are recognized in profit or loss in those expense categories corresponding to the function of the impaired asset. Losses for impairment attributable to a CGU are assigned proportionately based on the recorded value of each asset to the non-current assets of the CGU after exhausting goodwill. The CGU is the smallest identifiable group of assets, which generates cash inflows in favor of the company, which are largely, independent of cash flows derived from other assets or groups of assets. The company defined CGUs considering: 1) The existence of revenue and costs for each group of assets, 2) The existence of an active market for the generation of cash flows and 3) the way in which its operations are managed and monitored. In order to assess impairment losses, the assets are grouped in the following CGU: Generation, Distribution, Wastewater management, Water supply, Gas and Transmission.

Impairment for goodwill is determined by assessing the recoverable value of each CGU (or group of CGUs) to which the goodwill relates. Impairment related to goodwill cannot be reverted in future periods.

For assets in general, excluding the goodwill, on each presentation date an assessment is conducted about whether there is any indication that the impairment losses previously recognized no longer exist or have decreased. If such indication exists, the company makes an estimate of the asset or CGU recoverable value. An impairment loss previously recognized only can be reverted if there was a change in the assumptions used for determining the recoverable value of an asset since the last time when it was recognized the last impairment loss. The reversal is limited in such a way that the recorded value of the asset neither exceeds its recoverable amount, nor exceeds the recorded value that would have been determined, net of depreciation, if no impairment loss had been recognized for the asset in the previous years. Such reversal is recognized in profit or loss in the Statement of comprehensive income.

2.19 Provisions

Provisions are recorded when the company has a current, legal or implicit obligation, as a result of a past event. It is probable that the company has to give off resources that incorporate economic benefit to settle the obligation, and a reliable estimate can be made for the value of the obligation. In cases in which the company expects the provision to be reimbursed as a whole or in part, the reimbursement is recognized as a separate asset, but only in the cases when such reimbursement is practically certain, and the asset value can be reliably

measured. In the company, each provision is only used for dealing with disbursement for which it was initially recognized.

Provisions are measured with the best estimate from management of expenditure necessary to settle the present obligation, at the end of the period being reported, considering the risks and the corresponding uncertainties. When a provision is measured using the estimated cash flow to settle the present obligation, its recorded value corresponds to the present value of said cash flow, using for the discount a rate calculated with reference to market yields for the bonds issued by the National Government. In Colombia, the yield of TES Bonds (public debt securities issued by the General Treasury of the Nation) at the end of the reporting period must be used.

The expense corresponding to any provision is presented in profit or loss in the Statement of comprehensive income net of all reimbursement. The increase in provision due to the time elapsed is recognized as finance expense.

Provisions for decommissioning

The company recognizes as part of the cost of a fixed asset in particular, to the extent that there is a legal or implicit obligation of decommissioning or restoring, the estimation of the future costs in which the company expects to incur in to perform the decommissioning or restoring and its balancing entry is recognized as a provision for decommissioning and restoring costs. The decommissioning cost is depreciated over the estimated useful life of the fixed asset.

Decommissioning or restoring costs are recognized at the present value of the expected costs of cancelling out the obligation using estimated cash flows. Cash flows are discounted at a particular rate before taxes, that should be determined by taking as a reference the market yield of Bonds issued by the National Government. In Colombia, for risk-free rates, the yield of TES Bonds (public debt securities issued by the National Treasury) must be used.

Future estimated decommissioning or restoring costs are annually revised. Changes in the future estimated costs, on the estimated dates for expenditure, or on the discount rate applied are added or deducted from the asset cost, without exceeding the recorded value of the asset. Any surplus is immediately recognized in profit or loss. The change in the provision value associated to the time elapsed is recognized as financial expense in profit or loss in the Statement of comprehensive income.

Onerous Contracts

The company recognizes as provisions the current obligations that are derived from an onerous contract, as provisions and its offsetting is in the Statement of comprehensive income in profit or loss. An onerous contract is the one in which the unavoidable costs of complying with the obligations it implies, exceed the economic benefits that are expected to receive therefrom.

Contingent Liabilities

The possible obligations that arise from past events and the existence of which shall be only confirmed by the occurrence or non-occurrence of one or more uncertain future events that are not entirely under control of the company or the current obligations, that arise from past events, but that it is not probable, but possible, that an outflow of resources including economic benefits shall be required to liquidate the obligation or the amount of the obligation cannot be measured with enough reliability, are not recognized in the Statement of financial position, they are rather disclosed as contingent liabilities. Contingent liabilities generated in a business combination are recognized at fair value on the acquisition date.

Contingent Assets

Assets of a possible nature, that arise from past successes, the existence of which has to be confirmed only by the occurrence, or the non-occurrence, of one or more uncertain events in the future, that are not entirely under the company's control, are not recognized in the Statement of financial position, they are instead disclosed as contingent assets when their occurrence is probable. Whenever the contingent fact is true the asset and the income associated are recognized in the profit or loss for the period. Contingent assets acquired in a business combination are initially measured at their fair values, on the acquisition date. At the end of subsequent periods being reported, those contingent liabilities are measured at the greatest amount it would have been recognized and the amount initially recognized less the accrued amortization recognized.

2.20 Employee Benefits

2.20.1. Post-Employment Benefits

Defined Contribution Plans

The contributions to the defined contribution plans are recognized as expenses in profit or loss in the Statement of comprehensive income at the moment when the employee has rendered the service that grants them the right to make the contributions.

Defined benefit plans

Post-employment benefit plans are those in which the company has the legal or implicit obligation to respond for the payments of the benefits that were left to their charge.

For the defined benefit plans, the difference between the fair value of the plan assets and the present value of the plan obligation, is recognized as asset or liability in the statement of financial position. The cost of giving benefits under the defined benefit plans is determined separately for each plan, through the actuarial assessment method of the projected credit unit, using actuarial assumptions on the date of the period being reported. Plan assets are measured at fair value, which is based upon the market price information and, in the case of quoted securities, it constitutes the published purchase Price.

The actuarial profits or losses, the yield of plan assets, excluding the values included in the

net interest on the net defined benefits on the liabilities (assets), and the changes in the asset ceiling effect are recognized in other comprehensive income. The actuarial profits or losses include the effects of changes in the actuarial assumptions as well as adjustments due to experience.

The net interest on liabilities (assets) for net defined benefits includes the interest income for the plan assets, interest cost for the obligation for defined benefits and interests for the asset ceiling effect and is recognized in profit or loss.

The current service cost, the past service cost, any settlement, or reduction of the plan are immediately recognized in profit or loss in the statement of comprehensive income when they arise.

2.20.2. Short-term benefits

The company classifies as short-term employee benefits those obligations with the employees that it expects to settle in the twelve months period following the closing of the accounting period when the obligation was generated, or the service was rendered. Some of these benefits are generated from the current labor legislation, from collective bargaining agreements, or from non-formalized practices that generate implicit obligations.

The company recognizes the short-term benefits at the moment the employee has rendered their services, as the following:

A liability for an amount that shall be repaid to the employee, deducting the amounts already paid before, and its balancing entry as expense for the period, unless another chapter obliges or allows including the payments in the cost of an asset or inventory, for instance, if the payment corresponds to employees the services of whom are directly related to the construction of a work, it will be capitalized to that asset.

The amounts values already paid before corresponding, for instance, to advanced payments of salaries, advanced allowances, among others, if they exceed the corresponding liability, the company will have to recognize the difference as an asset in the prepaid expenses account, to the extent that the advanced payment gives place to a reduction in the payments to be made in the future or to a cash reimbursement.

According to the foregoing, the accounting recognition of short-term benefits is made upon occurrence of the transactions, regardless of when they are paid to the employee or to the third parties to which the company has entrusted the provision of certain services.

2.20.3. Long-term benefits

The company classifies as long-term employee benefits those obligations that it expects to settle after the twelve months following the closing of the accounting year or the period where employees provide the related services, i.e. from the thirteenth month forward; they are different from the short-term benefits, post-employment benefits, and contract termination benefits.

The company measures long-term benefits in the same way as post-employment defined benefit plans. Although their measurement is not subject to the same uncertainty level, the same following methodology will be applied for its measurement:

- The company should measure the surplus or deficit in a long-term employee benefit plan, using the technique applied for post-employment benefits both for estimating the obligation as well as for the plan assets.
- The company should determine the value of net long-term employee benefits (assets or liabilities) finding the deficit or surplus of the obligation and comparing the asset ceiling.

Benefits employees receive year after year throughout their working life should not be considered "long term" if at the accounting year closing each year the company has fully delivered them.

2.20.4. Termination Benefits

The company recognizes as termination benefits, the considerations granted to the employees, payable as result of the decision of the company to terminate the employment agreement to an employee before the normal retirement date or the decision of an employee to accept the voluntary resignation in exchange for such benefits.

2.21 Service concession arrangements

The company recognizes the service concession arrangements pursuant to the interpretation requirements of the IFRIC 12 Service Concession Arrangements.

This interpretation is applicable to those concessions where:

- The grantor controls or regulates which services the operator with the infrastructure should provide, to whom and at what price.
- The grantor controls, through the ownership, the right-of-use, or otherwise, any significant residual ownership in the infrastructure at the end of the term of the arrangement.

The company does not recognize these infrastructures as property, plant and equipment, it recognizes the consideration received in the contracts that meet the above conditions at its fair value, as an intangible asset to the extent that the company receives an entitlement to make charges to users of the service, provided that these entitlements are conditioned to the service use level, or as a financial asset, to the extent that there is an unconditional contractual right to receive cash or other financial asset, either directly from the assignor or from a third party. In those cases where the company receives payment for the construction services, partly through a financial asset and partly through an intangible asset, each component of the consideration is recorded separately.

Financial assets of service concession arrangements are recognized in the statement of financial position and subsequently are measured at amortized cost, using the effective interest rate. Assessment of impairment of these financial assets is made according to the value impairment policy of the financial assets.

Intangible assets of service concession arrangements are recognized in the Separate statement of financial position as intangible assets denominated "intangible assets for service concession agreements" and are amortized on a linear basis within the term of duration thereof.

Revenue and costs related to the operating services are recognized according to the accounting policy of revenue and the services related to construction or improvement services according to the accounting policy of construction contracts. Contractual obligations assumed by the company for maintenance of the infrastructure during its operation, or for its return to the assignor at the end of the concession arrangement in the conditions specified therein, to the extent that it does not assume an income-generating activity, is recognized following the provisions accounting policy.

2.22 Fair Value

The fair value is the price that would be received when selling an asset or that would be paid when transferring a liability in an orderly transaction between market participants on the measurement date, regardless of whether that price is directly observable or estimated using another assessment technique.

When estimating the fair value, the company considers the characteristics of the asset or liability in the same way market participants will consider them when setting the value of the asset or liability on the measurement date. Fair value for measurement and disclosure purposes in the present financial statements is determined on that basis, except for the transactions of stock-based payments, lease transactions, and measurements that have certain similarities with fair value but that are not fair value, such as the net realizable value or the value at use.

The fair value of all financial assets and liabilities is determined on the date of presentation of the financial statements, for recognition or disclosure in the notes to the financial statements.

Fair value is determined:

- Based on prices quoted in assets or liabilities markets identical to those the company can access on the measurement date (level 1).
- Based on inputs applied on valuation methodologies commonly used by market participants, which are different from observable quoted prices for assets or liabilities, directly or indirectly (level 2).
- Based on internal valuation techniques of cash flow discounts or other valuation models, using variables estimated by the company that are non-observable for the asset or liability, in the absence of variables observed in the market (level 3).

Note 42 Measurement of fair value on a recurring and non-recurring basis provides an analysis of the fair values of financial instruments and non-financial assets and liabilities and more detail of their measurement.

2.23 Cash dividends distributed to the owner of the company

The company recognizes a liability to make the distributions to the owner of the company in cash when the distribution is authorized, and it is no longer at the company's discretion. The corresponding amount is recognized directly in the net equity.

2.24 Changes in accounting policies

2.24.1 Presentation Changes

At the end of the 2020 period, changes were made in the presentation of some items in the statement of comprehensive income and the statement of cash flows, for comparative purposes 2019 is also adjusted, these changes do not affect decision-making, since they

basically consist of In reclassifications between items of the same financial statement and that are intended to facilitate their reading by users, the reclassified items were the following:

Concept	Previous presentation	Current presentation	2020	2019
Statement of Comprehensive Income				
Fees	Other income	Provision of services	737	6.268
Commissions	Other income	Provision of services	702	29.604
Gain on derecognition of rights of use	Other income	Gain on sale of assets	73	15
Other income	included in the subtotal of revenue from ordinary activities	included in income subtotal	384.610	312.319

Amounts stated in millions of Colombian pesos

Concept	Previus presentation	Current presentation	2020	2019
Statement of cash flows				
Reversal of impairment loss on accounts receivable	Reversal of impairment loss on accounts receivable and accounts receivable impairment	Impairment loss on accounts receivable	59,169	26,287
Gain / loss due to disposal of right-of-use assets	Gain / loss due to retirement of properties, plant and equipment, right-of-use assets, intangibles and investment property	Gain / loss due to retirement of properties, plant and equipment, right-of-use assets, intangibles and investment property	2,298	(383)
Gain / loss due to retirement of properties, plant and equipment	Other non-effective incomes and expenses, net	Gain / loss due to retirement of properties, plant and equipment, right-of-use assets, intangibles and investment property	4,073	85,097
Income tax refund	Income tax paid	Income tax refund	34,413	-
Return for monetary readjustment and other financial income	Other non-effective incomes and expenses, net	Interest income and commissions	(111,752)	231,394
Non-effective recoveries	Other non-effective incomes and expenses, net	Non-effective recoveries	(98,451)	(125,464)
Banking and financial commissions	Other non-effective incomes and expenses, net	Interest expenses and commissions	996,539	1,011,776
Interest administration and issuance of securities	Other non-effective incomes and expenses, net	Result for valuation of financial instruments and hedge accounting	649	653
Other financial expenses	Other non-effective incomes and expenses, net	Result for valuation of financial instruments and hedge accounting	15	23,475
Share of loss of equity-accounted investees	Other non-effective incomes and expenses, net	Gain / loss due to disposal of financial instruments	-	47,534
Difference in exchange for minority interest or non-controlling interest	Other cash flows from investment activities	Gain / loss due to exchange difference	(61,808)	12,778
Financial Provisions update	Other non-effective incomes and expenses, net	Provisions for tax obligations, insurance and reinsurance and financial restatement	20,988	-
Payment of pension bonds	Other cash from financing activities	Payment of pension bonds	(6,435)	(19,515)

Amounts stated in millions of Colombian pesos

Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements.

The following are the significant judgments and assumptions, including those that involve accounting estimates that the company's management used in the application of the accounting policies under IFRS adopted in Colombia, and that have significant effect on the values recognized in the separated financial statements.

Estimates are based upon historic experience and as a function of the best information available on the facts analyzed by the cut-off date. These estimates are used for determining the value of the assets and liabilities in the separated financial statements when it is not possible to obtain such value from other sources. The company assesses its estimates on a regular basis. Actual results may differ from those estimates.

The significant estimates and judgments made by the company are described below:

- **Assessment of impairment indicators for assets, goodwill, and asset valuation for determining impairment.**

  The condition of the assets is revised on each report presentation date, in order to determine whether there are indications that any of them has suffered an impairment loss. If there is impairment loss, the recoverable amount of the asset is affected, if the estimated recoverable amount is lower, its value is reduced to its recoverable value and impairment loss is immediately recognized in profit or loss for the period.

  Assessment of impairment indicators is based on external and internal factors, and in turn on quantitative and qualitative factors. Assessment is based on financial results, on the legal, social and environmental settings, and on market conditions; significant changes in the scope or in the way in which the asset or CGU is used or expected to be used and evidence of obsolescence or physical deterioration of and asset or CGU, among others.

  Determining whether goodwill has suffered impairment implies the calculation of the value at use of the CGUs to which it has been assigned. The calculation of the value at use requires that the entity determines future cash flows that should arise from CGUs and a discount rate appropriate to calculate the current value. When the actual future cash flows are lower than expected, an impairment loss may arise.

- **Assumptions used in the actuarial estimate of post-employment obligations with employees.**

  The assumptions used in the actuarial studies include: demographic assumptions and financial assumptions, the former refer to the characteristics of the current and past employments, and relate to the mortality rate, employee turnover rates, the latter relate to the discount rate, the increases in future salaries, and the changes in future benefits.

- **Lifespan and residual values of property, plant and equipment and intangibles.**

  In the assumptions used for determining the lifespans, technical aspects such as the following are considered: periodical maintenances and inspections made to the assets, failure statistics, environmental conditions and operating environment, protection systems, replacement processes, obsolescence factors, recommendations of manufacturers, climate and geographical conditions, and experience of the technicians that know the assets. Aspects such as market values, reference magazines, and historic sales data are considered for determining the residual value.

- **Assumptions used for calculating the fair value of financial instruments including the credit risk.**

  The company discloses the fair value corresponding to each class of financial instrument in such a way it allows comparing it with the recorded values. Macro-economic projections calculated within the company are used. Investment portfolio is valued at market price. In its absence, a similar one is looked for in the market and if not, assumptions are used:

  - Derivatives are estimated at fair value.
  - Receivables are estimated at the market rate in force and effect for similar credits.
  - Receivables from employees are valued in a similar way as massive debtors, except for mortgage credits.
  - For equity investments, the methodology is cash flow; it is estimated at the market price for those listed.

- **Likelihood of occurrence and value of contingent or uncertain-value liabilities.**

  The assumptions used for uncertain or contingent liabilities include the classification of the legal process by the "expert judgment" of the area professionals, the type of contingent liability, the possible legislative changes, and the existence of high-court rulings that applies to the concrete case, the existence of similar cases in the company, the study and analysis of the substance of the issue, the guarantees existing at the time of the events. The company shall disclose and not recognized in the financial statements those obligations classified as possible; obligations classified as remote are not disclosed nor recognized.

- **Future expenditure for asset decommissioning and retirement obligations.**

  In the assumptions used for determining future expenditure for asset decommissioning and retirement obligations, aspects such as the following were considered: estimate of future outlays in which the company must incur for the execution of those activities associated to asset decommissioning on which legal or implicit obligations have been identified, the initial date of decommissioning or restoration, the estimated date of finalization and the discount rates.

- **Determination of existence of finance or operating leases based on risk transfer and benefits of the leased assets.**

  The significant assumptions considered to determine the existence of a lease include the assessment of the conditions if the right to control the use of the asset is transmitted for a period of time in exchange for a consideration, i.e., the existence of an identified asset is assessed; the right to obtain substantially all economic benefits from the use of the asset over the period of use; the right to direct how and for what purpose the asset is used throughout the period of use; the right to operate the asset over the period's use without any changes in the operating instructions.

- **Recoverability of deferred tax assets.**

  Deferred tax asset has been generated by the temporary differences that generate future fiscal consequences in the financial position of the company. These differences are essentially represented in fiscal assets that exceed the assets under IFRS adopted in Colombia, and in fiscal liabilities, lower than the liabilities under IFRS adopted in Colombia, such as it is the case of the pension liability components, the amortized cost of bonds, financial leasing, and other sundry provisions and contingency provisions.

  The company's deferred tax asset is recovered in the net income taxed on the current income tax generated.

- **Assessment of portfolio impairment**

  For the calculation of the expected credit loss, each obligation is assigned an individual probability of non-payment that is calculated from a probability model involving sociodemographic, product and behavior variables.

  The model will be applied based on the Scorecard developed considering the information of the company. The models are defined according to the information available and the characteristics of the population groups for each one. Even though the methodology applies to all accounts with balance, some exclusions must be considered, such as: derecognized accounts; self-consumptions; contributions; public lighting and in general charges from third parties. For its calculation, it is previously defined the moment from which it is considered that an obligation was defaulted and will not be recovered.

  To calculate the credit loss of trade and other receivables (except accounts receivable among economically related parties), the following formula is used:

  PE = Exposed balance * PD * LGD

  Where, the PD component (probability of default) is derived from the result of a statistical model that provides the probability that each account will default on the following twelve months. This individual probability is located within a range found in order to attenuate fluctuations in the value of the general provision from one month to the next and stabilize its behavior, resulting in a standard PD by rank.

The loss given the default (LGD) is defined as the economic deterioration that the entity would incur in the event of any of the situations of default. It is a percentage obtained from a table taken from the current regulations of the Superintendencia Financiera de Colombia (Superintendence of Finance of Colombia), Chapter II of External Circular 100 of 1995.

Revenue estimates

The company recognizes income from the sale of goods and the rendering of services to the extent that the performance requirements for the company are met, regardless of the date on which the corresponding invoice is issued, to carry out this estimate information from contracts or agreements with customers is taken and so the value to be recognized in revenue is stablished.

When the moment at which revenue should be recognized is uncertain, the company determines to recognize revenue at the moment in which the performance obligation is satisfied, for those performance obligations that are satisfied over time it is common to use the method of the measured resource as the actually executed costs compared to the estimated costs.

For other concepts different from the supply of residential public utilities, the company estimates and recognizes the value of revenue from sales of goods or rendering of services based on the terms or conditions of interest rate, period, etc., of each contract that causes the sale.

In the month after recording the estimated revenue, its value is adjusted by the difference between the value of the actual revenue already known against the estimated revenue.

Note 4. Significant transactions and other relevant aspects during the period.

Significant transactions and other relevant aspects that occurred during the period, different from those of the normal business of the Group, are related with:

4.1 Expenses and others related to the contingency of the Ituango Hydroelectric Project:

- Construction and repair work to mitigate risks continues.
- The sale continues, through the auction figure, of the useless equipment derived from the contingency.
- The protocol for attention to events and crises (PADEC) continues to prevent the spread of the coronavirus (COVID-19). With about 6,000 workers in the Project facilities, there are 109 confirmed cases of COVID-19 in recent months. This data continues to demonstrate the strong adherence of employees to biosafety protocols and the effectiveness of the strategies implemented such as proximity handles, which allows timely decision-making.
- On August 10, 2020, Empresas Públicas de Medellín E.S.P. (hereinafter, EPM) requested the Office of the Attorney General of the Nation to summon the (i) Generación Ituango Consortium and also the companies that currently comprise it (Integral S.A. and Integral Ingenieria de Supervisión S.A.S.); (ii) Consorcio CCC Ituango, as well as the companies that comprise it (constituted by Construções e Comércio Camargo Corrêa S.A., Conconcreto S.A. and Coninsa - Ramón H. S.A.); (iii) Ingetec-SEDIC Consortium, and the companies that compose it (Ingetec S.A. and Sedic S.A.); (iv) Seguros Generales Suramericana SA, and (v) Chubb Seguros to a hearing for a preliminary ruling in law, in order to settle the differences that have arisen between the aforementioned, due to the events arising on April 28, 2018 in the Ituango´s hydroelectric project. Likewise, EPM filed an arbitration claim against Mapfre Seguros Generales de Colombia S.A. under the all-risk construction policy No. 2901211000362. Faced with the failure of the conciliation hearings, the claims were filed on January 12, 2021 before the Administrative Litigation Jurisdiction and the Medellín Chamber of Commerce, respectively.
- On December 23, 2020, the following bilateral modification acts (AMB) were signed until December 31, 2021 for the following contracts of the Ituango Hydroelectric Project, as follows: AMB N ° 39 Construction of the Dam, Power Plant and associated Works of the project: Consorcio CCC Ituango. (Made up of firms Camargo Corrêa Infra S.A., Constructora Conconcreto S.A. and Coninsa - Ramón H. S.A.); AMB N°12 Advice during the construction of the project, with the Generación Ituango Consortium (Made up of firms Integral Ingeniería de Supervisión S.A.S. and Integral Ingeniería de Consulta S.A.) y AMB N°6 Audit Service during the construction of the civil works and the assembly of the electromechanical equipment of the Project, contractor: Ingetec-Sedic Consortium.

Regarding the contingency, the EPM has recognized the next items in its consolidated financial statements as of 31 December 2020:

- Cost and progress of construction of the Ituango hydroelectric project for $11,140,307 (See note 5).
- Receivables from the insurance company Mapfre for $378,639 for impairment of civil works and total loss of machinery and equipment covered by the all-risk and construction policy and, $8,000 for non-contractual civil liability (see note 12).
- Provision for $ 45,985 for the care of those affected by Puerto Valdivia, for compensation for emergent damage, loss of earnings, and non-pecuniary damage, due to the rising waters of the Cauca River as a result of the plugging of the project on April 28, 2018. During 2020, $ 35,043 has been recognized as a provision and payments for $ 24,931 have been made (see note 27.1.7)
- Provision for $ 5,616 for the care of people who had to evacuate as a result of said event. During 2020, $ 7,323 has been recognized as a provision and payments have been made for $ 5,963 (see note 27.1.7).
- Provision for $ 88,547 for environmental and social contingency, established by the specific action plan for the recovery of the parts affected by the events of the plugging of the diversion tunnel of the Cauca river that the project had on April 28, 2018 and by the closure of gates that decreased the flow of the river downstream of the project. During 2020 $ 57,989 has been recognized as a provision and payments for $ 24,295 have been made (see note 27.1.1).
- Provision for $ 174,318 for non-compliance from July 2021 to November 2022, to the Intercolombia transporter for the months after the connection infrastructure of the Ituango project came into operation. During 2020 $ 65,687 has been recognized as a provision and no payments have been made for this concept (see note 27.1.6).
- Additionally, other expenses of $4,278 were recognized in the Statement of Comprehensive Income for the attention of the community affected by the contingency (see note 35).

4.2 Effect of the difference in exchange:

As of December 31, 2020, an accumulated expense was recognized for the net exchange difference of $ 374,260, originated by the accumulated devaluation of the Colombian peso against the US dollar of 4.74% and a closing rate of $ 3,432.50. The devaluation observed in the period January - December 2020, presented two relevant moments; the first between March and May 2020 has been generated by the high volatility in financial markets due to the economic crisis as a consequence of the COVID-19 pandemic and the uncertainty generated by the reactivation of the economy, and the price war of the oil in the first quarter of the year, leading the exchange rate to reach historical maximum levels above $ 4,100 and with a devaluation above 24%, leading at that time to an effect on exchange difference of the order of $ 1.3 trillion. The second moment comes from June where the intervention of central banks worldwide with injection of liquidity and interest rate cuts, the OPEC agreements with cuts in oil production and better prospects for vaccination plan against COVID 19 at a global level, generated a decrease in the volatility of the exchange rate and a favorable evolution in its price, until reaching December 31 the closing rate of $ 3,432.50.

Once some stabilization of the financial markets occurred and the approval of external and internal regulations had been obtained, EPM executed hedging operations on the exchange exposure of its financial debt for an amount of US $ 1,454 million at an average exchange rate of $ 3,672. These operations neutralize the exchange risk, at the rates agreed in each transaction, from the moment of its execution until the expiration of the same (Nov-2021, Jul-2029 and Feb-2031).

4.3 COVID-19:

The sector of public services companies and therefore the companies of the EPM Group, are faced with the health emergency due to COVID-19, government measures for the management of the pandemic, the impacts of the trade war for the oil and macroeconomic changes as a result of the volatility of international financial markets, which manifests itself in a recession in the global economy and the consequent high volatility of the exchange rate. As a consequence, a risk is generated for the operation of the businesses, which has been affected by the decrease in demand and lower prices due to the displacement in the application of rate increases and normally automatic indexations of rates, due to the measures taken by the government and some decisions of the Company.

- **Government measures in Colombia:**

  The Ministry of Health and Social Protection, through Resolution 385 of March 12, 2020, declared the health emergency until May 30, 2020, with the aim of preventing and controlling the spread of COVID-19 and mitigating its effects. Which was extended until August 31, 2020 by Resolution 844 of 2020, a date that will be taken as a reference for the extension of the terms of some of the provisions provided in the resolutions issued.

  The National Government decreed the State of Economic, Social and Ecological Emergency throughout the territory of the Republic, through Decree 417 of March 17, 2020, as a consequence of COVID-19, announcing some measures to mitigate the adverse effects it generates in the social and economic sector.

  On the occasion of the declaration of the State of Economic, Social and Ecological Emergency, the National Government has adopted additional measures necessary to avert the crisis and prevent the extension of its negative economic effects and the Government will have the necessary budgetary operations to carry them out.

  These measures have also been aimed at the home public services sector in order to guarantee continuous provision to users and provide them with support and economic relief during the period of confinement, minimizing in turn the impact on the financial stability of the sector; within these measures we have:

  - Legislative Decree 441 of March 20, 2020 of the Ministry of Housing, City and Territory (MVCT), by which the measures adopted in the sector of drinking water and basic sanitation are established to face the economic, social and ecological emergency, and to guarantee the supply of drinking water and thus allow all citizens to adopt hygiene and health measures required to slow the spread of the COVID-19 virus, including (i) reinstatement and / or immediate reconnection of the aqueduct service to the residential subscribers suspended and / or cut off, (ii) access to drinking water in health emergencies, (iii) use of the resources of the General Participation System for drinking water and basic sanitation (iv) suspension of the tariff increases of the domiciliary public services of aqueduct and sewerage.

- Legislative Decree 517 of April 04, 2020 of the Ministry of Mines and Energy (MME), through which provisions were issued on the matter of public services of electricity and fuel gas, such as: Guarantee the continuous and effective provision of public services; grant deadlines for the payment of the consumption of said services; finance the payment without any interest or financial cost being transferred to the end user for the deferral of the collection; generate incentives for timely payment; creation of the voluntary contribution, among others.
- Decree 528 of April 7, 2020 of the MVCT, which establishes measures to guarantee access to water to the population, without the economic restrictions that prevent the timely payment of the billing, justifying the non-provision of the service, for which, provisions are created that the entities that provide water Public aqueduct, sewerage and cleaning services can offer users the possibility of deferring the payment of bills caused during the economic, social and ecological emergency, under the same conditions that are designed to give liquidity to the public service providers for these purposes. Among the measures for companies that provide public water supply, sewerage and / or cleaning services, there are: (i) deferred payment of the fixed charge and unsubsidized consumption of water supply, sewerage and cleaning services, (ii) payment financing without transferring any interest or financial cost to the end user for the deferral of the collection, (iii) within the framework of commercial management they may design options or incentives in favor of their subscribers and / or users who pay the invoices on time to their charge during this period, in order to contribute to the recovery of the portfolio and guarantee its financial sustainability.

- **Going Concern:**

EPM committed to guaranteeing the continuity and provision of the service, as well as to mitigating the impacts that the crisis generates on its finances, for which it has been implementing measures that are summarized as: Review the non-mandatory investment plan and prioritize costs and expenses, without putting the operation at risk and postponing expenditures that do not generate income in the short term. Together with the above, a strategy was implemented to ensure the liquidity of the Group's companies, which involved the disbursement of loans for $ 2,453,720 and the placement of bonds in the international capital market by EPM for USD750 million equivalent to $ 2,727,496 and of the subsidiary Aguas de Antofagasta SA for CLP94,734 million equivalent to $ 445,209 (see note 22. Credits and loans), ensuring a strong cash position. Likewise, a

Crisis Committee was created, working at home was adopted and teleworking has been strengthened in all the processes in which it is possible, and biosafety protocols were implemented, in order to ensure the health of employees. , contractors and suppliers of the Company.

Financial impacts:

The effects of the economic situation in general have resulted in a decrease in collection levels, with the consequent increase in the deterioration of accounts receivable from customers and the costs of financing them, in addition, demanding greater working capital. Likewise, lower income and higher expenses have been generated in the operation for the attention of COVID-19, among which stand out, lower consumption or demand of public services, costs of mandatory reconnections to clients who did not have the service and those related to the implementation of established biosafety protocols and unbilled default interest.

As of December 31, 2020, the most significant effects on the company financial statements are detailed below:

- Lower value in the collection of accounts receivable for $ 318,061 (see note 12).
- Higher expense for portfolio impairment of $ 37,249 (see note 12).
- Lower income from ordinary activities for $ 485,042 due to lower consumption or demand for public services, variation in invoiced rates, discounts for timely payment and decreases in other services rendered (see note 30).
- Lower costs for the provision of services, net of $ 160,614 related to lower consumption or demand for public services, saving measures, reconnections, general costs and orders and contracts (see note 33).
- Increase in administrative expenses and other ordinary expenses for $ 9,921 related to general expenses, personal services, social measures such as contributions and donations (see notes 34 and 35).
- Lower financial income of $ 9,127 related to the refinancing of accounts receivable and unbilled interest on arrears (see note 36.1).

4.4 Judicial process against the Municipality of Bello:

After approximately nine (9) years of the processing of a judicial process, advanced by EPM against the Municipality of Bello, based on a lawsuit filed against the administrative act that determined the participation and liquidation of the capital gain generated by the change of land use In the area where some of the properties owned by the Company are located, the Fourth Section of the Council of State in a decision of second instance against which no appeal proceeds, declared the nullity of the act and ordered the return in favor of EPM of the sum of $ 89,527, which must be indexed from December 29, 2009, the date on which the payment of the tax was made and until the execution of the sentence (December 10, 2020), onwards, they will pay interest.

Note 5. Property, plant and equipment, net

The breakdown of the recorded value for property, plant and equipment is as follows:

Property, plant and equipment	2020	2019
Cost	33,040,921	30,657,277
Accrued depreciation and impairment loss	(4,761,342)	(4,225,502)
Total	28,279,579	26,431,775

Amounts stated in millions of Colombian pesos

The following is the breakdown of the recorded value for temporarily idle property, plant and equipment:

Temporarily idle Property, plant and equipment	2020	2019
Networks, lines and cables	1,045	248
Plants, pipelines and tunnels	5,132	4,463
Land and buildings	15,617	15,231
Machinery and equipment	355	313
Other property, plant and equipment	824	277
Total temporarily idle Property, plant and equipment	22,973	20,532

Amounts stated in millions of Colombian pesos

The company possesses property, plant and equipment that have been removed from use and have not been classified yet as non-current assets held for sale, corresponding to the Rio Piedras power plant that was transferred from the generation business to the water supply business, which has to recover the mini power plant as a business strategy, the cucarachos los naranjos pumping station that is expected to be modernized, and the land of the Porce IV project that was not executed out and about which the company has not yet made any decisions, and the land of the Espíritu Santo project that has not yet been put into operation; the recorded value of these assets is as follows: for 2020 the cost amounts to $22,973 (2019 $20,532), accrued depreciation is $4,385 (2019 $2,806) and accrued impairment is $895 (2019 $923).

The most significant variation is due to generation equipment, water equipment, substation, and distribution plants, which after of being taken out of operation are stored as unexploited assets for a future operation.

The following is the movement of cost, depreciation and impairment of property, plant and equipment:

2020	Networks, lines and cables	Plants, pipelines and tunnels	Construction in progress[1]	Land and buildings	Machinery and equipment	Communication and computer equipment	Furniture, fixtures and office equipment	Other property, plant and equipment[2]	Total
Initial balance	6,089,644	7,670,703	11,049,463	5,045,873	232,120	233,971	88,584	246,919	30,657,277
Additions[3]	26,911	22,959	2,464,661	5,312	6,187	25,489	906	50,113	2,602,438
Advances payments (amortized) made to third parties	-	-	24,191	-	-	-	-	-	24,191
Transfers (-/+)	485,589	177,210	(726,689)	9,222	31,589	1,262	7,262	(9,689)	(24,253)
Disposals (-) (sales)	(9)	-	-	-	-	-	-	-	(9)
Withdrawals	(5,529)	(10,129)	(291,464)	(48)	(656)	(11,036)	(59)	(129)	(319,050)
Corporate reorganizations *	19,979	3,740	31,261	28,966	193	377	93	990	85,599
Other changes	(275)	97,910	17,817	(38,235)	1,293	78	-	(62,860)	14,728
Cost final balance	**6,616,310**	**7,982,373**	**12,569,240**	**5,051,090**	**270,717**	**250,081**	**96,786**	**224,344**	**33,040,921**
Accumulated depreciation and impairment loss									
Initial balance of accrued depreciation and impairment losses	(1,580,844)	(1,689,609)	-	(699,235)	(105,459)	(132,709)	(42,754)	(65,532)	(4,225,502)
Depreciation for the period	(190,062)	(206,427)	-	(56,410)	(13,155)	(27,584)	(9,312)	(5,648)	(498,818)
Disposals (-) (sales)	1	-	-	-	-	-	-	-	1
Withdrawals	4,036	7,888	-	44	611	10,685	59	108	23,351
Corporate reorganizations*	(8,193)	(1,607)	-	(9,742)	(1)	(159)	(63)	(801)	(20,566)
Other changes	343	(38,898)	-	(201)	(632)	(238)	(82)	(100)	(39,808)
Final balance accrued depreciation and impairment loss	**(1,764,719)**	**(1,928,133)**	**-**	**(679,944)**	**(118,636)**	**(150,225)**	**(52,112)**	**(71,973)**	**(4,761,342)**
Total final net balance Property, plant and equipment	**4,851,591**	**6,054,240**	**12,569,240**	**4,375,146**	**152,081**	**99,856**	**44,674**	**152,371**	**28,279,579**
Advances payments made to third parties									-
Initial balance	-	-	38,485	-	-	-	-	497	38,982
Movement (+)	-	-	42,964	-	-	-	-	-	42,964
Corporate reorganizations*	-	-	8,000	-	-	-	-	-	8,000
Movement (-)	-	-	(26,773)	-	-	-	-	-	(26,773)
Final balance	**-**	**-**	**62,596**	**-**	**-**	**-**	**-**	**497**	**63,093**

Amounts stated in millions of Colombian pesos

2019	Networks, lines and cables	Plants, pipelines and tunnels	Construction in progress[1]	Land and buildings	Machinery and equipment	Communication and computer equipment	Furniture, fixtures and office equipment	Other property, plant and equipment[2]	Total
Initial balance	5,632,717	9,102,206	10,271,370	5,192,549	223,490	216,411	35,858	239,204	30,963,800
Additions	74,825	16,780	2,580,289	6,173	10,492	37,186	382	36,254	2,722,581
Advanced payments (amortized) made to third parties	-	-	(28,149)	-	-	-	-	(1,804)	(29,953)
Transfers (+/-)	419,988	293,686	(831,072)	53,236	4,113	1,503	2,245	(23,530)	(79,825)
Disposals (-)	-	-	-	-	(60)	-	-	(1,037)	(1,097)
Withdrawals (-)	(352)	(138,948)	(904,057)	(4,956)	(3,008)	(18,785)	(92)	(1,519)	(1,062,911)
Impact due to adoption of IFRS 16 As of January 20194	-	(1,690,257)	1,886	(204,590)	-	-	-	-	(1,812,871)
Other changes	2,466	(771)	(40,804)	2,571	(2,916)	(2,344)	-	(649)	(42,447)
Cost final balance	6,089,644	7,670,703	11,049,463	5,045,873	232,120	233,971	88,584	246,919	30,657,277
Accrued depreciation and impairment loss									
Initial balance of accrued depreciation and impairment loss	(1,416,949)	(1,558,408)	-	(628,228)	(98,268)	(126,552)	(34,004)	(60,916)	(3,923,313)
Depreciation for the period	(164,059)	(186,109)	-	(56,102)	(11,097)	(23,323)	(8,767)	(6,808)	(456,270)
Disposals (-)	-	-	-	-	21	-	-	917	938
Withdrawals (-)	51	55,192	-	1,162	2,607	15,746	89	1,347	76,194
Impact due to adoption of IFRS 16 As of January 20194	-	-	-	77,012	-	-	-	-	77,012
Other changes	113	309	-	(3,085)	1,278	1,423	(32)	(72)	(64)
Final balance accrued depreciation and impairment loss	(1,580,844)	(1,689,009)	-	(609,235)	(105,459)	(132,709)	(42,714)	(65,532)	(4,225,502)
Total final net balance property, plant and equipment	4,508,800	5,981,694	11,049,463	4,436,638	126,661	101,262	45,870	181,387	26,431,775
Advanced payments made to third parties									
Initial balance	-	-	66,553	-	-	-	-	2,302	68,855
Movement (+)	-	-	26,946	-	-	-	-	7,014	33,960
Movement (-)	-	-	(55,095)	-	-	-	-	(8,818)	(63,913)
Final balance	-	-	38,404	-	-	-	-	498	38,902

Amounts stated in millions of Colombian pesos

[1] Includes capitalization of borrowing costs for $336,803 (2019: $366,052), the weighted average effective rate used to determine the amount of borrowing costs was 7.64% in Colombian pesos (2019 8.28%) and 4.195% in USA dollars (2019: 5.19%). Additionally, it includes assets for right-of-use associated with constructions in progress amounting to $2,032.

Back to content

The following are the main projects under construction:

Project	2020	2019
Ituango building project [1.1]	11,140,306	9,961,227
Interconex Caldas - La Estrella	145,293	68,093
Playas Recovery Project	72,597	86,876
Cadena de occidente	64,551	40,469
San Nicolas valley	60,994	35,425
La Garcia Basin	47,404	11,972
Modernization of Ayura plant	46,066	12,985
Adequacy of Drinking Water Plant	42,201	-
Expansion of Yulimar Manantiales Circuit	38,749	6,193
Envigado Capiro sector expansion	32,072	14,156
Modernization of Central Substation	32,019	10,663
Measurement code	29,717	27,827
Modernization of the Itagüí Manzanillo pumping system	28,966	5,926
Santo Domingo project	27,635	27,634
Convenio Unidos por el Agua Sanitation	24,298	16,653
Replacement of poles and trafos	23,057	-
Uraba Nueva Colina Connection	22,026	11,859
Calizas Substation-Associated Lines	21,715	13,176
Unidos por el Agua Agreement Water supply	21,506	13,062
La Iguana Basin	20,114	25,529
Modernization of El Buey Collection	19,412	12,975
Coverage Expansion Plans	17,114	-
SDL expansion E.R. coverage	17,046	1,987
Modernization of Guayabal Substation	14,392	10,332
South Interceptor	13,686	10,933
Other projects [1.2]	546,304	623,508
Total	**12,569,240**	**11,049,460**

Amounts stated in millions of Colombian pesos

[1.1] As of December 31, 2020, the Ituango hydroelectric project presented a physical progress of 80.62% (31 December 2019: 76.7%), the physical progress presented as of the date of the period on which the separate financial statements are reported, corresponds to the new version of the the contingency, stabilization and commissioning schedule of the project approved in April 2020.

It is estimated that the commissioning of the first two power generation units will be able to enter in 2022. However, this start-up date is very dynamic, due to the changes that occur in the technical variables, the evolution and efficiency of the measures implemented to address the contingency and the effects that the COVID-19 pandemic may cause. in the project.

As a result of the contingency that occurred on April 28, 2018, caused by a geological event that occluded the Cauca River auxiliary diversion gallery (ADG), which generated an unscheduled damming, it was necessary to execute additional activities not contemplated in the schedule. Due to the above, a new schedule was made which includes recovery activities and longer terms. This schedule is susceptible to changes and/or modifications, since the actual state of the underground works is not yet known, and it has not yet been possible to inspect it directly.

As a consequence of the above, EPM has prioritized its decisions to protect firstly the communities and the environment and secondly the project infrastructure. Therefore, on May 7, 2018, the decision was made to evacuate the dammed water through the powerhouse of the future power generation plant so that it would be channeled back into the Cauca River, and thus return to its traditional flow and the water level of the dam would drop. On January 16 and February 5, 2019, the water intake gates #2 and #1, respectively, were closed, thus suspending the flow of water through the powerhouse, which allowed the inspection of the main cavern where the powerhouse is located, the transformer areas and beacon 1. With this, the cleaning and water pumping activities began in order to determine the severity of the works, the condition of the powerhouse and the work that must be done for its recovery. Consequently, at the date of the financial statements, although it is true that a large part of the project's works have been explored, some directly and others indirectly, for example through drilling and geophysical tests, as with the southern area of the cave complex, it is not yet possible to have a precise estimate of the total and exact value of the damages associated with the civil works; However, as of December 31, 2020 equipment and civil works have been written off for a value of $1,273,777; additionally, the project has been tested for impairment, considering the provisions of IAS 36 and no impairment has been evidenced.

The Company continues in the process of quantifying the damages, the replacement of equipment and the repairs of the project as it progresses in its diagnosis, design and contracting, which is permanently informed within the adjustment process. Regarding the compensation of the damages occurred, the Mapfre insurer has made the following disbursements for material damage in civil works and equipment as follows: on December 4, 2019 $ 525,438 (USD 150 million) and on September 15, 2020 $ 369,700 (USD100 million).

On May 29, 2019, the closure of one of the two gates of the Auxiliary Deviation Gallery (GAD) was completed, in a new milestone in the project's risk mitigation work. With the closure of the first gate, on the left, the work of nearly three months was completed. After closure of the left GAD gate, the next work will focus on the closure of the right gate to complete the full closure. Subsequently, a 22-meter plug will be built downstream of the tailgate chamber in the axis of the dam.

In July 2019, dam construction was completed, which translates into risk reduction for downstream populations. During September, the dam wall was built on reinforced earth between units 2 and 3 and< the material filling in 3A, in units 1 and 2 of the powerhouse cavern; also, heavy equipment was brought into the powerhouse to clean and remove

materials from the assembly room to the south sector of the powerhouse, the rehabilitation of the access tunnel to the powerhouse was completed and the road between the north portal of the road tunnel and the road leading to Puerto Valdivia, up to km 13+610, began to be levelled.

On November 8, 2019, urban planning work was completed and the road over the top of the project's dam was handed over to the community of the municipality of Ituango, so that its inhabitants can have continuous mobility to and from their town.

On December 18, 2019, the second gate of the Auxiliary Deviation Gallery (GAD) was closed. The pre-positioning of the GAD, with its two gates duly closed, reduces risks for communities downstream of the works and means the continuation of the project's recovery process.

On January 12, 2020, the concrete pouring began in the cavity that originated from the contingency between pressure shafts 1 and 2, advancing to elevation 272 and drilling for the micropiles began, deepening below the sill of the right diversion tunnel, in addition to the installation of pipe for grouting these micropiles.

In February 2020, the sale process began, through the auction figure, of the scrap of the 19 power transformers of the project, which were under water during the flooding of the powerhouse, which produced their total deterioration.

On February 19, 2020, EPM recommended to the Unified Command Post, National PMU No. 146, to start works in the powerhouse to avoid deterioration of the works and risk to the communities, in addition, a report was presented on the progress that have been achieved in the Ituango hydroelectric project, since July of last year to date.

In March 2020, the ANLA reiterated to EPM the provisions of Resolution 0820 of 2018, indicating that EPM could continue with the engineering works and works that must be executed, to guarantee the integrality of the project and prevent and mitigate the risks associated with the contingency presented. With this, it will be possible to carry out the works that allow to dissipate in an optimal way, through the turbines that will be housed in the powerhouse, the energy of the water contained in the reservoir.

Additionally, the protocol for attention to events and crises (PADEC) was activated to prevent the spread of the coronavirus (COVID-19). Consequently, 1,170 workers from the Ituango hydroelectric project went to rest to comply with the mandatory quarantine in their places of origin.

In April 2020, a new version of the schedule was made (April 2020), which includes the additional work requirements that result as the different work fronts are inspected, to guarantee the stability of the project. In this version, all the information provided by the equipment manufacturers was included, as well as the plans of the main works contractor, CCCI.

EPM announced that as of June 30, 2020, 601 positive cases for coronavirus COVID 19 had been presented, of which 243 people recovered. It is expected that, by the end of next July, around 450 people will remain in the project facilities, to guarantee the minimum operational required in works and facilities, to maintain stable conditions of the works.

During the period, the works on the following work fronts were inactive, due to the withdrawal of personnel from the main works Contractor, to comply with protocols as a result of the pandemic generated by COVID-19: slope of the upper part of the plaza de gates (Romerito), upper part of the 500 kV substation, the upper south gallery and concrete in the plaza 435, substitute road on the left bank between km 0 + 900 to km 1 + 190, construction of filters and ditches on the shoulder downstream of the dam.

As of July 4, 2020, activities are suspended on all work fronts in response to the protocols for the management of the pandemic generated by COVID-19. On July 15, the withdrawal of all personnel ended, in order to comply with the COVID 19 protocol of all activities that seek to overcome the risks to downstream populations. Subsequently, 3,500 officials from all the companies involved in the development of the project joined the project with the use of technology for greater control of the virus. Now, workers organize themselves using smart cells (bubbles) or narrow circles of behavior to take care of each other and establish safe and responsible contacts for the protection of the group. Additionally, each worker must use a smart handle, with Bluetooth wireless technology, with which those who were in close contact will be identified in a timely manner, in the event that if a member of a cell manifests symptoms associated with the coronavirus, they will be identified for control and tracing. The re-entry of the workers was carried out in a controlled manner during the last days of July and the first days of August by groups of approximately 400 people, who were integrated in accordance with compliance with the biosafety protocol established for both entry, permanence and departure from the facilities.

On August 12, 2020, the Ituango hydroelectric project reported zero positive cases for COVID-19, a total of 903 people were recovered and one deceased.

In August 2020, the CCCI Consortium restarted its activities, reported that it has 2,342 collaborators on site, activities have resumed in the power house, beacon 1, suction tunnels 1 and 2, the removal of transformers from the cavern , the lower conduit, the slope of the upper part of the gate square (Romerito), the 500 kV Substation, the gate shafts, the intermediate discharge, the pre-plug 2 of the right diversion tunnel and the GAD by-pass.

As of September 2020, the emptying of section 1 to the complete section of the regrowth in plug 12, intermediate discharge, was completed. The removal of the metal platform installed above the assembly room, to carry out the treatments. The removal of the full of 3A material and the wall on reinforced earth on units 3 and 4 was completed. The removal of the transformers by the company LITO S.A.S was completed; Dynamic load test is performed on the 25-ton overhead crane.

As of October 2020, the removal of the metal platform from the powerhouse assembly room, the concrete pouring of sections 2-3 into the cavity under the suction tube of unit 1, and the removal of the wall were completed. in ramada land and in the fill on units 5 and 6 of the powerhouse

As of November 2020, the Assembly of the provisional 25 t overhead crane was completed by EPM personnel, the cutting and removal of the armor from the suction tunnel of unit 1, the Construction of the aeration gallery to beacon 2, the demolition of the walls of the generator enclosure of unit No.3, the treatments in cavity 2 of beacon 1, towards the discharge tunnel 2, the demolition of the portico of beacon 1 and the downstream gable treatments, the lifting with scanner in the lower pipes 1 to 4 and pressure wells 1 and 2 in charge of personnel of the company ARG.

On December 23, 2020, the following bilateral modification acts (AMB) were signed until December 31, 2021 for the following contracts of the Ituango Hydroelectric Project, as follows: AMB No. 39 Construction of the Dam, Power Plant and associated Works of the Project: CCC Ituango Consortium. (Formed by the firms Camargo Corrêa Infra S.A., Constructora Conconcreto S.A. and Coninsa - Ramón H. S.A.); AMB N° 12 Advice during the construction of the project, with the Generación Ituango Consortium (Made up of the firms Integral Ingeniería de Supervisión SAS and Integral Ingeniería de Consulta SA) and AMB N ° 6 Audit Service during the construction of the civil works and the assembly of the equipment electromechanical of the Project, contractor: Ingetec-Sedic Consortium.

As of December 2020, the first ferrules for the assembly of the suction tube of unit No.1 were entered into the power house, which are part of the replacement equipment affected during the 2018 contingency, and during the period the treatments in the gables of units 1 and 2 of the power house, treatments in the gables of beacon 1, the concrete for the extension of the floor cladding of gallery 285, the emptying of the wall upstream of unit 1, up to the elevation 217,45 and concrete lining of the upper conduction tunnel No.4.

The protocol for attention to events and crises (PADEC) continues to prevent the spread of the coronavirus (COVID-19). With about 6,000 workers in the Project facilities, there are 109 confirmed cases of COVID-19 in recent months. This data continues to demonstrate the strong adherence of employees to biosafety protocols and the effectiveness of the strategies implemented such as proximity handles, which allows timely decision-making.

[1.2] Other projects: refers to other projects of the company, among these the most significant is merchandise for projects for $119,959, Yondó circuit for $13,260, Santa Elena Conduction Modernization for $ 11,971 among others.

[2] Includes fleet equipment and vehicles, medical and scientific equipment, property, plant and equipment being assembled, property, plant and equipment in transit and replacement assets, equipment, catering, kitchen, pantry and hotel equipment.

[3] Includes purchases, capitalizable disbursements that meet recognition criteria, assets received from third parties and costs for decommissioning and removal of property, plant

and equipment. At the end of December 2020 and December 2019, were not received government subsidies.

[4] Corresponds to the merger with the EPRIO subsidiary in January 1, 2020 represented as follows: cost of $ 85,599, accumulated depreciation and impairment of $ -20,566 and advances paid to third parties $ 8,000.

Additions to property, plant and equipment of $ 2,602,438 (2019 2,722,581) are taken as effective items, less the movement of advances of $24,191 (2019 $-29,953), capitalized interest of $336,803 (2019 $366,052), additions of right-of-use of $2,032 (2019 $3,053) and the environmental and decommissioning provisions of $ 18,579 (2019 $47,206) of the statement of cash flows.

At the closing of the period, all assets associated with electricity Generation, Distribution, Transmission, Gas, Water Supply and Wastewater management Cash Generating Units, which have intangible assets with an indefinite useful life, were tested for impairment, which showed no evidence of impairment.

As of December 31, 2020, there are restrictions on the realization of property, plant and equipment, associated with some equipment of the vehicle fleet for a net book value of $2 (2019 $2). These restrictions are given for theft and have been affected as a guarantee for the fulfillment of obligations.

The most significant commitments for the acquisition of property, plant and equipment of the Company at December 31, 2020 amount to $ 2,809,340 (2019 $2,290,755).

The following is the historical cost of the fully depreciated property, plant and equipment that continue in operation as of December 31, 2020 and 2019.

Group	2020	2019
Communication and computer equipment	18,574	20,345
Machinery and Equipment	14,946	11,703
Plants, pipelines and tunnels	15,340	15,225
Networks, lines and cables	7,808	5,386
Furniture, fixtures and office equipment	3,695	3,281
Other properties, plant and equipment	3,524	3,153
Buildings	1,437	1,601
Total	65,324	60,694

Amounts stated in millions of Colombian pesos

Note 6. Investment property

The fair value of investment property is based on an appraisal made by experts with recognized professional capacity and recent experience in the category of real estate investments subject to assessment; this value has been determined by *Valores Ingeniería Inmobiliaria S.A.S* and *TecniTasa Colombia*. This activity is performed at least once a year. To determine the fair value of investment property, the comparative or market method is used, which consists of deducting the price by comparing transactions, supply and demand and valuations of similar or comparable properties, previous time adjustments, conformation and location; the residual method, which applies only to buildings and is based on the determination of the updated cost of the construction less the depreciation for age and state of conservation; and the rent method, which is used to determine the possible value of a good according to its capacity to generate income, taking into account the probable monthly rental fee that tenants would be willing to pay in the lease market. See Note 43. Fair value measurement on a recurring and non-recurring basis.

Investment property	2020	2019
Initial balance	126,822	77,828
Net income or loss due to adjustment of far value[1]	(17,040)	51,651
Dispositions (-)	(256)	(2,164)
Transfers[2] (-/+)	42,839	(493)
Total	152,365	126,822

Amounts stated in millions of Colombian pesos

[1] See detail in Note 33. Other Income and Note 35. Other Expenses.

[2] Includes transfers to property, plant and equipment from investment properties, and corresponds to the building and land of UNE Los Balsos.

At December 31, 2020, lease income from investment property for the period amounted $478 (2019: $679), and the Direct expenses of the period related to investment property was $71 (2019: $63).

As of December 31, 2020 there are restrictions on the property located in the Mamatoco sector of the municipality of Santa Marta, a direct reparation process is currently being carried out against said municipality, due to the omission of the municipal administration generated a process of massive invasion of the property, which makes its recovery difficult through police protection processes; fair value is $ 1,392 (2019: $ 1,392).

Note 7. Goodwill and other intangible assets

The breakdown of the recorded value for Goodwill and other intangible assets is as follows:

Intangibles	2020	2019
Cost	**1,266,953**	**1,197,682**
Goodwill	260,950	260,950
Concessions and franchises	469,032	452,743
Rights	8,488	7,984
Licenses	99,393	85,491
Software	218,493	186,842
Easements	168,866	167,172
Disbursements Development Phases	40,346	33,522
Other intangibles	1,385	2,978
Accrued amortization and impairment	**(455,108)**	**(399,235)**
Concessions and franchises	(279,736)	(251,226)
Rights	(2,118)	(1,727)
Licenses	(48,548)	(41,015)
Software	(122,955)	(102,039)
Easements	(1,261)	(1,237)
Other intangibles	(490)	(1,991)
Total	**811,845**	**798,447**

Amounts stated in millions of Colombian pesos

The movement of cost, amortization and impairment of intangible assets is detailed below:

2020	Goodwill	Concessions and similar rights	Capitalized development expenditures	Software and IT applications	Licenses	Rights	Other intangible assets[1]	Total
Initial balance cost	260,950	452,743	33,522	186,842	85,491	7,984	170,150	1,197,682
Additions[2]	-	2,093	6,824	29,536	8,433	-	1,517	48,402
Transfers (+/-)	-	13,021	-	3,971	5,483	-	137	22,612
Disposals	-	-	-	(1,860)	(495)	-	(1,591)	(3,948)
Corporate reorganizations[3]	-	-	-	5	400	504	38	947
Other changes	-	1,175	-	-	81	-	2	1,258
Final balance cost	260,950	469,032	40,346	218,493	99,393	8,488	170,251	1,266,953
Initial balance accrued amortization and impairment	-	(251,226)	-	(102,039)	(41,015)	(1,727)	(3,228)	(399,235)
Amortization for the period[3]	-	(27,966)	-	(22,702)	(7,491)	(391)	(983)	(59,733)
Disposals	-	-	-	1,808	489	-	1,593	3,890
Corporate reorganizations[4]	-	-	-	(5)	(269)	-	(24)	(294)
Other changes	-	(544)	-	(17)	(66)	-	891	264
Final balance accrued amortization and impairment	-	(279,736)	-	(122,955)	(48,548)	(2,118)	(1,751)	(455,108)
Final balance of intangible assets Net	260,950	189,296	40,346	95,538	50,845	6,370	168,500	811,845

Amounts stated in millions of Colombian pesos

2019	Goodwill	Concessions and similar rights	Capitalized development expenditures	Software and IT applications	Licenses	Rights	Other intangible assets[1]	Total
Initial balance cost	260,950	281,291	22,980	168,556	70,180	7,984	167,494	1,080,395
Additions[2]		3,020	9,444	17,920	9,955	-	948	40,887
Transfers (-/+)	-	68,472	-	2,182	7,116	-	2,057	79,827
Disposals	-	-	-	(1,469)	(2,020)	-	-	(3,489)
Other changes	-	-	98	(347)	260	-	51	62
Final balance cost	260,950	452,743	32,522	186,842	85,491	7,984	170,150	1,197,682
Initial balance accrued amortization and impairment	-	(226,551)	-	(79,396)	(31,855)	(1,418)	(2,910)	(342,130)
Amortization for the period[3]	-	(24,633)	-	(24,268)	(10,348)	(309)	(1,211)	(60,762)
Disposals	-	-	-	1,332	1,528	-	-	2,860
Other changes	-	(42)	-	293	(147)	-	893	797
Final balance accrued amortization and impairment	-	(251,226)	-	(102,039)	(41,015)	(1,727)	(3,228)	(399,235)
Final balance of intangible assets Net	260,950	201,517	32,522	84,803	44,476	6,257	166,922	798,447

Amounts stated in millions of Colombian pesos

[1] Includes easements, intangible assets related to customers and other intangibles corresponding to premiums at gas service stations.

[2] Includes purchases, capitalizable expenditure that meets the recognition criteria and concessions. In 2020, purchases associated with capitalized development expenditure were earmarked for IT projects: Digital transformation, Sentinel project, Treasury project.

[3] See note 33 Costs of services rendered and note 34 Administrative expenses.

[4] Corresponds to the merger with the EPRIO subsidiary in January 1, 2020 represented as follows: cost of $ 8,000 accumulated depreciation and impairment of $ -294.

At the end of the period, impairment testing was performed on assets for those intangibles with an indefinite lifespan, which showed no evidence of impairment.

Amortization of intangibles is recognized as costs and expenses through profit or loss in the Statement of comprehensive income, in the item Costs of services rendered and administrative expenses.

The historical cost recorded at the cut-off date and the remaining amortization period for significant assets is:

Significant intangible assets	Lifespan	Remaining amortization period	2020	2019
Ituango Generation Plant Project	Indefinite	-	177,667	177,667
Espiritu Santo	Indefinite	-	82,980	82,980
Easement Lines Corridor 53	Indefinite	-	63,040	63,040
Bello circuit distribution network	Defined	93	59,657	54,558
Loca and Hato secondary network	Defined	44	42,685	41,957

Amounts stated in millions of Colombian pesos

The following intangible assets have an indefinite lifespan: goodwill and easements, the latter are agreed in perpetuity. By definition, an easement is the real, perpetual or temporary right over another property, under which it can be used, or exercise certain rights of disposal, or prevent the owner from exercising some of their property rights (Art. 2970 of the Colombian Civil Code). In EPM, easements are not treated individually, since they are constituted for

public utility projects, where the general interest prevails over the individual, considering that the objective is to improve the quality of life of the community; the aforementioned projects do not have a definite temporality, that is why they are constituted in perpetuity supported in their use. However, there are some easements with a definite useful life, because they are tied to the useful life of the main asset required by the easement.

As of 31 December 2020, have a recorded value of $429,778 and 2019 for $428,122.

Intangible assets with indefinite lifespan	2020	2019
Goodwill		
Ituango Generation Plant Project	177,667	177,667
Espíritu Santo	82,980	82,980
Surtigás Necoclí	303	303
Subtotal goodwill	**260,950**	**260,950**
Other intangible assets		
Easements	168,828	167,172
Subtotal other intangible assets	**168,828**	**167,172**
Total intangible assets with indefinite lifespan	**429,778**	**428,122**

Amounts stated in millions of Colombian pesos

Note 8. Investment in subsidiaries

The breakdown of the subsidiaries of the EPM at the date of the reporting period is the following:

Name of subsidiary	Location (country)	Main Activity	Percentage of participation and voting rights		Date of establishment
			2020	2019	
Empresa de energía del Quindío S.A. E.S.P. EDEQ	Colombia	Provides public utilities of electric energy, purchase, sale, and distribution of electric energy.	19.26%	19.26%	22/12/1988
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	Colombia	Provides public energy services, operating electric energy generating plants, transmission and sub-transmission lines, and distribution networks, as well as marketing, importing, distributing and selling electric energy.	24.44%	24.44%	09/09/1950
Electrificadora de Santander S.A. E.S.P. ESSA	Colombia	Provides public utilities of electric energy, purchase, sale, marketing and distribution of electric energy.	0.28%	0.28%	16/09/1950
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	Colombia	Provides public utilities of electric energy, purchase, export, import, distribution and sale of electric energy, construction and operation of generating plants, substations, transmission lines and distribution networks.	12.54%	12.54%	16/10/1952
Caribemar de la Costa S.A.S. ESP AFINIA [1]	Colombia	Provides public electric energy distribution and commercialization services, as well as the performance of all related activities, works, services and products.	85.00%	0.00%	1/10/2020
Hidroecológica del Teribe S.A. HET	Panamá	Finances the construction of the Bonyic hydroelectric project, required to meet the growing energy demand of the Isthmus of Panama.	99.68%	99.68%	11/11/1994
Gestión de Empresas Eléctricas S.A. GESA	Guatemala	Provides advisory and consulting services to electric power distribution, generation and transportation companies.	99.98%	99.98%	17/12/2004
Aguas Nacionales EPM S.A. E.S.P. *	Colombia	Provides domiciliary public utilities of water, sewage and sanitation, waste treatment and utilization, complementary activities, and engineering services related to these utilities.	99.97%	99.97%	29/11/2002
Aguas Regionales EPM S.A. E.S.P. *	Colombia	Guarantees the provision of domiciliary public utilities of water, sewage and sanitation, and compensates for the backlog in the infrastructure of these services in the member municipalities.	72.45%	67.25%	18/01/2006
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	Colombia	Provides domiciliary public utilities of water and sewage, as well as other complementary activities related to each of these public utilities.	56.01%	56.01%	22/11/1999
Aguas de Malambo S.A. E.S.P.	Colombia	Dedicated to guarantee the provision of domiciliary public utilities of water, sewage and sanitation in the jurisdiction of the municipality of Malambo, department of Atlantico.	98.03%	98.03%	20/11/2010
Empresas Públicas de Rionegro S.A. E.S.P. - EP RIO [1]	Colombia	Rendering of domiciliary public utilities, including water and sewage services, as well as complementary and related activities; specifically the administration, operation, maintenance and investments of the water and sewage systems of the Municipality of Rionegro, the execution of programs and projects on the environment and renewable and non-renewable natural resources; to promote its sustainable development. In addition, the company will provide maintenance services for the public lighting network in the municipality of Rionegro.	0.00%	100.00%	9/12/1996
Empresas Varias de Medellín S.A. E.S.P.	Colombia	Subsidiary dedicated to providing public sanitation services within the framework of integrated solid waste management.	64.98%	64.98%	11/01/1964
EPM Inversiones S.A.	Colombia	Dedicated to the investment of capital in national or foreign companies organized as public utility companies.	99.99%	99.99%	25/08/2003
Maxseguros EPM Ltd	Bermuda	Negotiation, contracting and management of reinsurance for the policies that cover the equity.	100.00%	100.00%	23/04/2008
Panamá Distribution Group S.A. PDG	Panamá	Equity investment in companies.	100.00%	100.00%	30/10/1998
Distribución Eléctrica Centroamericana DOS S.A. DECA II	Guatemala	Makes equity investments in companies engaged in the distribution and commercialization of electric power, and provides telecommunications services.	99.99%	99.99%	12/03/1999
EPM Capital México S.A. de CV	México	Develops infrastructure projects related to energy, lighting, gas, telecommunications, sanitation, water treatment plants, sewerage, wastewater treatment, buildings, as well as their operation and services.	51.28%	51.28%	04/05/2012
EPM Chile S.A.	Chile	Develops energy, lighting, gas, telecommunications, sanitation, drinking water treatment plants, sewage and wastewater treatment projects, as well as the provision of such services and participation in all types of bids.	99.99%	99.99%	22/02/2013
patrimonio Autónomo Financiación Social [1]	Colombia	Manages the resources and payments of the social financing program created to facilitate the purchase of electric appliances, gas appliances and products related to information technology.	100.00%	100.00%	14/04/2008

[1] On 30 December 2019, in accordance with public deed No. 4641 of the Second Notary Office of Rionegro - Antioquia, registered at the Cámara de Comercio de Oriente Antioqueño Chamber of Commerce on 31 December 2019, the approval of the merger by absorption by which EPM absorbs Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO was protocolized. Based on the merger commitment, it was established that, for accounting purposes, the final operation is

perfected based on the figures shown in the accounts of the two companies, as of the last day of the month in which the respective deed is executed, i.e. 31 December 2019. Consequently, the operations of Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO. (absorbed company) are carried out by EPM (absorbing company) from 1 January 2020.

[2] In July, 2020, EPM capitalized Patrimonio Autónomo Financiación Social for $ 10,000.

[3] On October 1, 2020, EPM obtained the control of CaribeMar de la Costa S.A.S. E.S.P through the acquisition of 85% of participation, as a new provider of electric power service for the market of the Caribbean Region.

The value of the investment amounts to $ 778,696, explained as follows: $ 1,353,203 for business combination as a result of the difference between the consideration transferred and the fair value of the identifiable net assets acquired; $ 368,326 for capitalization, $ -879,062 and $ -63,770 for impairment and by equity method

The result of the business combination is presented in the statement of comprehensive income in the item participation in equity investments.

[4] On November 23, 2020, EPM capitalized *Aguas Nacionales EPM* S.A. E.S.P. for $ 113,397.

[5] In December 2020, EPM capitalized Aguas Regionales EPM S.A. E.S.P. for $ 13,587, said capitalization was made in two rounds with payments made on December 28, 2020 for $ 10,087 and on January 6, 2021 for $ 3,500, in accordance with the terms of the share subscription regulations.

The above items are disclosed as part of the acquisition and capitalization of subsidiaries or businesses item in the statement of cash flows.

Subsidiaries in which less than 50% of direct participation, control is obtained through the indirect participation that the other companies of the EPM Group have.

The value of investments in subsidiaries at reporting date was:

Subsidiaria	31 de diciembre de 2020					31 de diciembre de 2019				
	Valor de la inversión				Total	Valor de la inversión				Total
	Costo	Método de la participación	Deterioro	Dividendos[1]		Costo	Método de la participación	Deterioro	Dividendos[1]	
EPM Inversiones S.A.	1,561,331	163,254	-	(233,678)	1,490,907	1,561,331	94,126	-	(195,513)	1,459,944
Aguas Nacionales EPM S.A. E.S.P.	1,665,513	225,321	-	(58,794)	1,832,040	1,552,115	100,135	-	(8,578)	1,643,672
EPM Chile S.A.	1,044,935	309,135	-	-	1,354,070	1,044,935	59,062	-	-	1,103,997
Distribución Eléctrica Centroamericana DOS S.A. DECA II	1,009,257	914,538	-	(12,740)	1,911,055	1,009,257	926,266	-	(356,353)	1,579,170
Hidroecológica del Teribe S.A. HET	524,536	(226,059)	(86,963)	-	211,514	524,536	(191,769)	(86,963)	-	245,804
Caribemar de la costa S.A.S. E.S.P.	1,721,528	(63,770)	(879,062)	-	778,696	-	-	-	-	-
Panama Distribution Group S.A. PDG	238,116	336,755	-	-	574,871	238,116	275,838	-	(21,657)	492,297
EPM Capital México S.A. de C.V.	177,436	(177,436)	-	-	-	177,436	(177,436)	-	-	-
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	140,663	25,698	-	(34,292)	132,069	140,663	42,153	-	(34,941)	147,875
Aguas de Malambo S.A. E.S.P.	70,718	(34,623)	(1,641)	-	34,454	70,718	(32,181)	(1,641)	-	36,896
Maxseguros EPM Ltd.	63,784	135,839	-	-	199,623	63,784	107,955	-	(2,944)	168,795
Patrimonio Autónomo Financiación Social	71,914	106,314	-	-	178,228	61,914	87,359	-	-	149,273
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	57,052	(9,621)	-	-	47,431	57,052	(16,735)	-	-	40,317
Aguas Regionales EPM S.A. E.S.P.	60,816	26,130	-	-	86,946	47,228	19,390	-	-	66,618
EMPRESAS PUBLICAS DE RIONEGRO SAS ESP	-	-	-	-	-	46,905	25,587	-	-	72,492
Empresas Varias de Medellín S.A. E.S.P.	32,967	96,213	-	(13,921)	115,259	32,967	106,949	-	(21,444)	118,472
Empresa de Energía del Quindío S.A. E.S.P. EDEQ	28,878	12,489	-	(6,989)	34,378	28,878	13,038	-	(5,938)	35,978
Gestión de Empresas Eléctricas S.A. GESA	25,782	17,167	-	(4,370)	38,579	25,782	15,912	-	(3,704)	37,990
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	2,774	2,576	-	-	5,350	2,774	1,759	-	-	4,533
Electrificadora de Santander S.A. E.S.P. ESSA	2,514	290	-	(410)	2,394	2,514	287	-	(368)	2,433
Total	**8,500,514**	**1,860,210**	**(967,666)**	**(365,194)**	**9,027,864**	**6,688,905**	**1,457,695**	**(88,604)**	**(651,440)**	**7,406,556**

- Cifras en millones de pesos colombianos -

[1] Dividends for $370,194 (2019 $654,583) have been received. Including $5,000 owed by Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC of the year 2019.

The breakdown of the equity method recognized in the profit or loss and in other comprehensive income is as follows:

Subsidiary	December 31, 2020			December 31, 2019		
	Period share method		Total	Period share method		Total
	Result for the period	Otro resultado integral		Result for the period	Otro resultado integral	
EPM Inversiones S.A.	224,321	40,269	264,592	287,285	(38,225)	249,060
Aguas Nacionales EPM S.A. E.S.P.	133,769	-	133,769	147,088	-	147,088
EPM Chile S.A.	79,534	170,719	250,253	200,747	(114,982)	85,765
Distribución Eléctrica Centroamericana DOS S.A. DECA II	210,220	131,565	341,785	176,756	(112,332)	64,424
Hidroecológica del Teribe S.A. HET	(49,709)	15,416	(34,293)	6,386	(1,969)	4,417
Caribemar de la costa S.A.S. E.S.P.	(63,702)	(69)	(63,771)			
Panamá Distribution Group S.A. PDG	37,603	46,881	84,484	53,457	(26,014)	27,443
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	18,858	(354)	18,484	30,125	(355)	29,570
EPM Capital México S.A. de CV	(1,767)	(2,229)	(3,996)	(120,357)	(95,534)	(215,791)
Maxseguros EPM Ltd	25,288	5,541	30,829	9,674	1,257	10,931
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	8,517	(1,403)	7,114	8,153	(543)	7,610
Aguas de Malambo S.A. E.S.P.	(2,441)	-	(2,441)	(5,228)	-	(5,228)
Aguas Regionales EPM S.A. E.S.P.	6,240	-	6,240	4,284	-	4,284
Empresas Públicas de Rionegro S.A. E.S.P. - EP RIO	-	-	-	15,758	-	15,758
Empresas Varias de Medellín S.A. E.S.P.	13,216	(2,478)	10,738	18,139	(4,369)	13,770
Empresa de Energía del Quindío S.A. E.S.P. EDEQ	5,247	43	5,290	6,903	(101)	6,802
Gestión de Empresas Eléctricas S.A. GESA	4,968	(9)	4,959	5,111	(124)	4,987
Electrificadora de Santander S.A. E.S.P. ESSA	382	(10)	372	440	66	506
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	814	3	817	736	-	736
Patrimonio Autónomo Financiación Social	19,776	-	19,776	21,376	-	21,376
Total	**671,716**	**403,885**	**1,075,601**	**866,903**	**(393,125)**	**473,778**

Amounts stated in millions of Colombian pesos

The financial information of the company's subsidiaries as of the date of the reporting period is as follows. All subsidiaries are accounted for by the equity method in the separated financial statements:

December 31, 2020	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Ordinary income	Result for the period		Other comprehensive income	Total comprehensive income
						Continuing operations	discontinued operations		
Empresa de energía del Quindío S.A. E.S.P. EDEQ	100,519	224,823	78,856	80,686	258,682	27,739		286,421	314,160
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	285,823	913,502	340,688	379,975	832,197	77,663		909,259	986,921
Electrificadora de Santander S.A. E.S.P. ESSA	335,426	1,688,591	516,286	826,830	1,268,295	138,137		1,406,432	1,544,569
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	286,548	1,024,373	243,313	720,709	856,035	67,938		923,973	991,911
Hidroecológica del Teribe S.A. HET	20,715	417,035	16,837	189,186	51,483	(50,793)		693	(50,100)
Gestión de Empresas Eléctricas S.A. GESA	15,973	-	532	-	7,479	4,969		12,448	17,417
Caribemar de la Costa S.A.S. ESP AFINIA	2,758,089	568,676	495,413	2,384,482	867,554	9,231		876,785	886,016
Aguas Nacionales EPM S.A. E.S.P.	140,338	1,936,991	55,382	135,364	264,676	152,940		417,619	570,562
Aguas Regionales EPM S.A. E.S.P.	55,767	175,462	58,346	66,090	60,355	9,294		69,649	78,943
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	5,949	6,301	1,365	404	3,871	1,454		5,325	6,779
Aguas de Malambo S.A. E.S.P.	4,218	49,503	7,674	6,983	14,437	(2,504)		11,933	9,429
Empresas Varias de Medellín S.A. E.S.P.	158,260	202,056	145,164	155,513	249,328	20,669		269,985	290,592
EPM Inversiones S.A.	6,918	1,462,654	470	8,300	9	224,823		224,832	449,655
Maxseguros EPM Ltd	293,880	174,402	268,658	-	32,873	25,288		57,161	82,449
Panama Distribution Group S.A. PDG	755,021	2,149,089	1,240,798	868,983	2,076,607	74,435		2,151,042	2,225,477
Distribución Eléctrica Centroamericana DOS S.A. DECA II	1,135,795	3,214,700	1,265,884	1,240,847	3,516,067	280,640		3,796,707	4,077,347
EPM Capital México S.A. de CV	235,711	523,908	157,326	299,744	181,187	3,749		184,936	188,685
EPM Chile S.A.	268,773	1,402,449	177,674	2,339,931	659,210	76,293		735,503	791,796

Amounts stated in millions of Colombian pesos

8.1 Changes in Participation of Subsidiaries that did not result in Loss of Control

During 2020, there were changes in participation of the following subsidiaries

As of December 2020, there was a change in the participation of the subsidiary Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO, due to the merger in which EPM absorbs 100% of the participation of EP RIO and consequently the operations of Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO since January 1, 2020.

The percentage of participation in Caribemar de la Costa S.A.S. E.S.P. – AFINIA was acquired by EPM Group through the purchase of the 85% of the shares. The remaining 15% was acquired by EPM Latam. For 100% control of the subsidiary.

The percentage of participation in *Aguas Nacionales EPM* S.A. E.S.P. increased to 99.97%, due to the capitalization of EPM. This variation had an effect on the application of the equity method, decreasing the investment by $4, directly recognized in equity.

The percentage of participation in Aguas Regionales EPM S.A. E.S.P. increased to 72.45%, due to the capitalization of EPM. This variation had an effect on the application of the equity method, decreasing the investment by $1,597, directly recognized in equity.

Note 9. Investments in associates

The breakdown of Investment in Associates of EPM at the date of the reporting period is:

Name of associate	Location (country)	Main activity	Percentage of participation and voting rights		Date of establishment
			2020	2019	
Hidroeléctrica Ituango S.A. E.S.P.	Colombia	Promotion, design, construction, operation, maintenance and commercialization of energy at national and international level of the Pescadero Ituango Hydroelectric Power Plant.	46.33%	46.33%	29/12/1997
Hidroeléctrica del Río Aures S.A. E.S.P.	Colombia	Generation and commercialization of electric energy through a hydroelectric power plant, located in the jurisdiction of the municipalities of Abejorral and Sonsón, Department of Antioquia.	32.99%	32.99%	14/05/1997
UNE EPM Telecomunicaciones S.A.	Colombia	Provision of telecommunication services, information and communication technologies, information services and complementary activities.	50.00%	50.00%	29/06/2006
Inversiones Telco S.A.S.	Colombia	Invest in companies whose corporate purpose is based on the provision of business process outsourcing (BPO) services for companies, especially but not limited to telecommunications companies.	50.00%	50.00%	5/11/2013

The amount of investment in associates at the reporting date was:

Associate	2020				2019			
	Value of investment			Dividends[1]	Value of investment			Dividends[1]
	Cost	Impairment	Total		Cost	Impairment	Total	
Hidroeléctrica Ituango S.A. E.S.P.	34,227	-	34,227	-	34,227	-	34,227	-
Hidroelectrica del Rio Aures S.A. E.S.P.	2,478	-	2,478	-	2,478	-	2,478	-
UNE EPM Telecomunicaciones S.A.	2,342,488	-	2,342,488	12,547	2,342,488	-	2,342,488	-
Inversiones Telco S.A.S.	55,224	-	55,224	14,508	55,224	-	55,224	3,103
Total investments in associates	2,434,417	-	2,434,417	27,055	2,434,417	-	2,434,417	3,103

Amounts stated in millions of Colombian pesos

[1] In 2020 were declared dividends for $27,055 from Inversiones Telco remains outstanding $10,268 that will be paid in February 2021.

Note 10. Investment in joint ventures

The breakdown of joint ventures of EPM at the reporting date is as follows:

Name of the join venture	Location (Country)	Main activity	percentage of participation and voting rights		Date of establishment
			2020	2019	
Parques del Río S.A.S. [1]	Medellín	Construction, operation, administration and maintenance of the Parques del Río Medellín project, as well as acting as the project's urban manager.	33%	33%	26/12/2015

[1] Joint Venture established on November 26, 2015, in which the Municipality of Medellín, Interconexión Eléctrica S.A. E.S.P. (ISA), Empresa de Transporte Masivo del Valle de Aburrá Ltda. (Metro) y EPM participate. The Entity seeks promote the next urban developments in the city, the department and the country, taking advantage of synergies in the infrastructure, mobility, environmental and social areas, among others.

The value of investments in joint Ventures at the reporting date was:

Name of the join venture	2020				2019			
	Investment value			Dividends	Investment value			Dividends
	Cost	Impairment	Total		Cost	Impairment	Total	
Parques del Río S.A.S.	99	-	99	-	99	-	99	-
Total investments in joint ventures	99	-	99	-	99	-	99	-

Amounts stated in millions of Colombian pesos

Note 11. Impairment of Assets

11.1 Impairment of investments in subsidiaries, associates and joint ventures

11.1.1 Caribemar de la Costa S.A.S. E.S.P.

The approach used to determine the value in use of Caribemar de la Costa S.A.S. E.S.P. and each of the key hypotheses is as follows:

Tariff projections were made based on the current regulatory framework applicable to the Afinia market. For customers with historical series, a trend growth applicable to the area was estimated. Regarding demand, the growth of the main variables considered the application of the loss plan, customer normalization campaigns and the collection evolution plan.

The projection of costs and expenses considered the current conditions of the Afinia market and the efforts required to develop the different commercial and operational strategies approved by management, the evolution of investment and population growth. These costs evolve in real terms, as indicated above, and in nominal terms due to inflation.

The CAPEX projection considered the current conditions of the Afinia market and its infrastructure, as well as what is required to meet regulatory obligations, signed management obligations, strategies defined by management and population growth. These investments grow in real terms, as indicated above, and in nominal terms due to inflation.

The following shows the accrued effect for the recognized impairment:

Investment	Recorded value		Impairment losses (reversal)
	2020	2019	2020
Subsidiary			
Hidroecológica del Teribe S.A. HET	86,963	86,963	-
Aguas de Malambo S.A. E.S.P.	1,641	1,641	-
Caribemar de la Costa S.A.S. E.S.P.	879,062	-	879,062
Total subsidiaries	**967,666**	**88,604**	**879,062**

Amounts stated in millions of Colombian pesos

The following are the key assumptions used by the company for the assessment of the value in use/fair value less selling costs:

Concept	Key assumption
Business plan update	A general update of the business plan was made which is part of the process of reviewing the company's strategy and management scheme, enabling the new capital requirements of the company to be estimated.
Income	Tariff aspects: the tariff applied corresponds to one denominated by the regulation as "reduced costs" that is not directly associated with the company's real investments and costs, what generates an imbalance and causes revenues to be lower than expected.
	Commercial aspects: improvement in the portfolio has been difficult due to the low payment culture in the region.
Cost and expenses	It has been necessary to purchase water in block from the Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla S.A. E.S.P. - AAA for a longer than estimated, since it was initially considered that the neighborhoods served by this means would be interconnected to the system. Similarly, by resolution of the Water Regulation Commission, the price was increased by three times its initial value.
	The company paid obligations generated before to the entry of EPM that by shareholder agreement should be covered by the previous owner. These costs and expenses are beign recovered.
Investment	Master plan: A master plan is required for the main water and wastewater projects, which diagnoses the current infrastructure, identifies the needs and proposes solutions over time for a population both in terms of investment and operational. The contract for their preparation was added in time to include a wider range of customers. Similary, there were delays due to problems in the networks that did not allow the studies to performed, in addition to the fact that the length of the networks exceeded the contract's estimates. The fact that we did not have a definitive master plan until the end of 2013 meant a delay in the investment plan, fewer user were conected and service continuity was not improved.

11.2 Impairment of cash generating units (CGU)

The recorded value of goodwill and intangible assets with indefinite useful life associated with each CGU is broken down below:

Cash Generating Unit	Recorded value	
	2020	2019
Segment Electricity Generation		
Goodwill	260,647	260,647
Easements	444	444
CGU - Electricity Generation-	**261,091**	**261,091**
Segment Electricity Transmission		
Easements	128,555	127,059
CGU - Electricity Transmission-	**128,555**	**127,059**
Segment Electricity Distribution		
Easements	29,473	29,433
CGU - lectricity Distribution-	**29,473**	**29,433**
Gas Segment		
Goodwill	303	303
Easements	3,692	3,692
CGU - Natural Gas-	**3,995**	**3,995**
Water Supply Segment		
Easements	5,112	4,713
CGU - Water Supply-	**5,112**	**4,713**
Sanitation Segment		
Easements	1,552	594
CGU - Sanitation-	**1,552**	**594**

Amounts stated in millions of Colombian pesos

Description of the CGUs is broken down below:

- CGU Electricity Generation, which activity consists of electricity generation and the commercialization of large electric power blocks, based on the acquisition or development of a portfolio of power proposals for the market.
- CGU Electricity Distribution, which activity consists of transporting electric power through a set of lines and substations, with their associated equipment, operating at voltages below 220 KV, the commercialization of power to the end user of the regulated market and the development of related and complementary activities. Includes the Regional Transmission System (STR), the Local Distribution System (SDL), the public lighting utility and the rendering of associated services.
- CGU Electricity Transmission, which activity consists of the transporting of energy in the National Transmission System (STN), composed of the set of lines, with their corresponding connection equipment, which operate at voltages equal to or greater than 220 KV. The National Transmitter (TN) is the legal entity that operates and transports electric power in the STN or has established a company whose purpose is the development of said activity.

- CGU Natural Gas distribution and commercialization, which activity consists of driving combustible natural gas from the city gate to the end user, through medium and low-pressure pipes. It includes the sale of natural gas by different systems, including distribution by network, vehicular natural gas, compressed natural gas and service stations.
- CGU Water, which activity consists in conceptualizing, structuring, developing and operating systems for supplying water. It includes carrying out the commercial management of the portfolio of services related to the water supply for different uses, in addition to the use of the productive chain, specifically in the electricity generation, and the supply of raw water.
- CGU Sanitation, includes the activities of conceptualizing, structuring, developing and operating Sewage and Waste Management systems, in addition to taking advantage of the productive chain, specifically in the production of energy and gas.

Goodwill is assigned mainly to the segment/CGU Electricity Generation, which presented a balance as of 31 December 2020 for $260,647 generated as a result of the liquidation of the subsidiary EPM Ituango S.A E.S.P. and Espiritu Santo whose assets were transferred to EPM, additionally, goodwill in the CGU Natural Gas for the business combination with the Surtidora de Gas del Caribe S.A. E.S.P. in the municipality of Necocli for $303

The intangible easement with indefinite lifespan is assigned to the CGUs: Electricity Generation, Electricity Transmission, Electricity Distribution, Natural Gas, Water and Sanitation, which present a balance of $168,828 (2019 $165,935).

As of 31 December 2020 and 2019, impairment testing was performed on the CGUs with associated intangible assets with indefinite lifespan, and no associated impairment was found.

The value in use and recorded value of CGUs at the end of 2020 with indefinite lifespan is detailed below:

CGU	Value in use	Recorded value
Generation	23,716,701	16,773,466
Distribution	6,316,929	4,393,121
Transmission	1,135,573	790,875
Natural Gas	1,593,116	826,863
Water supply	3,860,233	2,761,331
Sanitation	1,874,895	1,239,062
Total CGU	**38,497,447**	**26,784,718**

Amounts stated in millions of Colombian pesos

Note 12. Trade and other receivables

The breakdown of trade and other receivables as of the dates of the periods being reported is as follows:

Trade and other receivables	2020	2019
Non-current		
Public utilities debtors[1]	465,156	343,524
Impairment loss of public utilities	(154,032)	(103,022)
Economic associates	1,148,697	1,135,512
Employee loans	96,224	92,525
Impairment loss employee loans	(10)	(2)
Compensations[2]	110,865	-
Other debtors receivable	63,081	45,285
Impairment loss other debtors	(3,626)	-
Total non-current	**1,726,355**	**1,513,822**
Current		
Public utilities debtors[1]	1,735,304	1,708,935
Impairment loss of public utilities	(217,395)	(204,529)
Economic associates	15,079	27,797
Employee loans	25,325	30,958
Dividends and participations receivable[3]	10,269	5,000
Impairment loss employee loans	(58)	(291)
Construction contracts	245	246
Compensations[2]	317,620	465,959
Other services	7,827	7,983
Other loans	335,118	243,862
Impairment loss other debtors	(56,757)	(63,137)
Total current	**2,172,577**	**2,222,783**
Total	**3,898,932**	**3,736,605**

Amounts stated in millions of Colombian pesos

[1] The increase in the portfolio of public service debtors is mainly explained as a consequence of the measures taken to mitigate the economic and social effects generated by the COVID-19 pandemic. Finally, a lower collection was evidenced for $318,061, distributed as follows: $ 277,579 of deferred, $ 10,351 discount for timely payment and $ 30,131 for frozen financing installments.

[2] Receivables from Mapfre insurance company for $378,639 in respect of civil works and total loss of machinery and equipment covered by the all-risk and construction policy and $8,000 in respect of non-contractual civil liability for the Ituango´s proyect. $ 110,865 is recorded in the non-current portion and $ 275,774 in the current portion.

[3] The balance in the dividend account of $ 10,269 corresponds to dividends from Inversiones Telco, caused in December 2020 with payment date of February 2021.

The balance in the other loans account includes the follows concepts: $ 131,733 for the recovery associated with the claim won to the Municipio de Bello, $ 12,699 for capital gains, fines and penalties with the client Energética del Oriente, $ 11,195 for the power supply to the client Electrificadora de Santander, $ 12,845 associated with agreements subscribed with the Municipality of Medellín, $ 21,958 for an advance to Biomax, $ 24,379 for Pension quotas and $ 13,272 associated with FEPEP loans.

Long-term accounts receivable are measured at amortized cost under the effective interest rate method and short-term accounts receivable are presented in their nominal amount, except for accounts receivable in EPM Matrix of: Biomax for $ 20,643 associated with the firm supply contract for liquid fuel (ACPM) for the Termoeléctrica La Sierra and Termodorada plants and the Municipio de Rionegro receivable for $2,594 (See note 43); these are included in the item of other debtors receivable.

Receivables Impairment

The company measures portfolio impairment for expected losses using the simplified approach, which consists in taking the present value of credit loss arising from all possible default events at any time during the lifetime of the operation.

This alternative is taken given that the volume of customers is very high and the measurement and control of the risk by stages can lead to errors and to an underassessment of impairment.

The expected loss model corresponds to a forecasting tool that projects the probability of portfolio default in the next twelve months. Each obligation is assigned an individual probability of default calculated from a probability model that involves sociodemographic, product and behavioral variables.

Although the forecast of impartment for the annual period is obtained based on payment behavior data of customers during the period under consideration; it is not the same when the monthly records that comprise the annual period register impairment. In the latter case, impairment recorded for the month under assessment is obtained with the payment behavior data of the previous month.

At the cut-off date, the ageing analysis of accounts receivable at the end of the reporting period that are impaired is:

	2020		2019	
	Gross recorded value	Lifetime expected credit losses value	Gross recorded value	Lifetime expected credit losses value
Public utility debtors				
Not past due nor impaired	1,874,779	(169,469)	1,730,479	(113,726)
Less than 30 days	105,558	(7,989)	102,654	(6,989)
30-60 days	17,081	(3,749)	22,675	(4,280)
61-90 days	6,856	(3,027)	7,658	(3,759)
91-120 days	5,216	(3,076)	5,409	(3,119)
121-180 days	4,528	(3,182)	7,353	(5,299)
181-360 days	13,026	(11,077)	14,413	(12,077)
Greater than 360 days	173,416	(169,858)	161,818	(158,302)
Total Public utility debtors	**2,200,460**	**(371,427)**	**2,052,459**	**(307,551)**
Other debtors				
Not past due nor impaired	2,054,058	(7,001)	1,969,088	(10,117)
Less than 30 days	2,607	(534)	14,657	(2,611)
30-60 days	1,819	(455)	2,722	(823)
61-90 days	1,008	(324)	2,125	(524)
91-120 days	818	(282)	6,232	(645)
121-180 days	1,530	(996)	1,605	(1,210)
181-360 days	6,245	(3,187)	17,112	(6,461)
Greater than 360 days	62,265	(47,672)	41,586	(41,039)
Total Other debtors	**2,130,350**	**(60,451)**	**2,055,127**	**(63,430)**
Total debtors	**4,330,810**	**(431,878)**	**4,107,586**	**(370,981)**

Amounts stated in millions of Colombian pesos

Receivables for public utility displays an increase mainly explained by the effects of the Covid-19 pandemic, that mean an increase for the receivables and the overdue ages of the portfolio. Consequently, the value of expected credit losses increases in $ 37,249.

Reconciliation of the expected credit losses in the portfolio is as follows:

Asset lifetime expected credit losses	2020	2019
Initial balance	(370,981)	(347,284)
Changes in impairment of receivable held at the beginning of the period [2]	(284,426)	-
Financial assets not derecognized during the period	784	2,570
New financial assets originated or purchased	-	(264,315)
Write-offs	225,257	238,028
Corporate Reorganization [1]	(2,648)	-
Changes in models/risk parameters	-	-
Other movements	135	20
Final balance	**(431,879)**	**(370,981)**

Amounts stated in millions of Colombian pesos

[1] Corresponds to the merger with EP RIO subsidiary in January 1, 2020.

[2] It is disclosed as part of the account receivable impairment, net of the statement of cash flows.

Portfolio reconciliation is as follows:

Portfolio balance	2020	2019
Initial balance	4,107,586	3,988,555
New financial assets originated or purchased	13,463,717	18,120,105
financial assets-Write-offs	(13,342,709)	(17,414,648)
Derecognized Financial of assets	(784)	(2,571)
Corporate Reorganization [1]	9,315	-
Valuation at amortized cost	(17,631)	(6,582)
Other movements	-	(577,273)
Difference in exchange attributable to	111,316	-
Final balance	**4,330,810**	**4,107,586**

Amounts stated in millions of Colombian pesos

[1] Corresponds to the merger with EP RIO subsidiary in January 1, 2020.

The company derecognizes, against impairment recognized in a corrective account, the values of impaired financial assets when it becomes evident there are obligations that cannot be recovered by executive, coercive or ordinary means, actions of which the supports must be attached to the files where the request for derecognition is documented.

The grounds for requesting approval of portfolio derecognition in EPM are the following:

- Recorded receivables do not represent certain rights, assets or obligations for EPM.
- Rights or obligations do not have the proper documents and support to advance the relevant procedures for collection or settlement.
- It is not possible to collect the right or obligation, by coercive or judicial collection once the pre-legal collection stage has been exhausted.
- When it is impossible to identify and individualize the natural or legal entity to carry out portfolio collection.
- When the cost-benefit ratio is assessed and established, it is more onerous to advance the collection process than the value of the obligation.
- Upon prescription of the security and executive title or expiration of the right.
- When once the enforcement process has been advanced and there are no assets to settle the obligation.
- When the process of liquidation of the natural or legal entity has been advanced in legal terms, and the assets received as dation in payment do not cover the total debt; in this case the unpaid balance is derecognized.

Bodies responsible for derecognizing

Derecognition in EPM is approved by the Portfolio Derecognition Committee which is chaired by the Accounting and Financial Services Manager, assisted by the Director of Financial Transactions and the head of the Credit and Portfolio Management Unit. The Committee meets periodically or when a particular situation calls for it.

Note 13. Other financial assets

The breakdown of other financial assets at the closing of the period is as follows:

Other financial assets	2020	2019
Non-current		
Derivatives designated as hedging instruments under hedge accounting		
Swap contracts[2]	46,269	33,336
Total derivatives designated as hedging instruments under hedge accounting	46,269	33,336
Financial assets measured at fair value through profit or loss for the period		
Variable income securities[2]	119,210	98,348
Fiduciary rights[1]	423,094	404,365
Total financial assets measured at fair value through profit or loss for the period	542,304	502,713
Financial assets designated at fair value through other comprehensive income		
Equity instruments	2,518,382	1,922,285
Total financial assets designated at fair value through other comprehensive income	2,518,382	1,922,285
Total other non-current financial assets	3,106,955	2,458,334
Current		
Derivatives designated as hedging instruments under hedge accounting		
Swap contracts[2]	16,105	11,727
Total derivatives designated as hedging instruments under hedge accounting	16,105	11,727
Financial assets measured at fair value through profit or loss		
Derivatives that are not under hedge accounting[1]	128,204	-
Fixed-income securities[2]	1,994,631	539,511
Pledged investments	796	5,970
Total financial assets measured at fair value through profit or loss	2,123,631	545,481
Total other current financial assets	2,139,736	557,208
Total other financial assets	5,246,691	3,015,542

Amounts stated in millions of Colombian pesos

Conventional purchases and sales of financial assets are accounted for by applying the trade date.

[1] Corresponds to the climatic derivative contracted to cover the existing risk of dry seasons that imply a decrease in hydraulic generation and a rise in energy prices on the stock market. This financial instrument aims to provide protection to EPM parent company when events materialize that may prevent the fulfillment of contractual commitments that imply buying energy on the stock market at market prices that may be unfavorable. With the climate derivative, part of this impact is transferred to the market, which would reduce the effect on the Group's financial results.

[2] Includes the follows concepts: $ 1,681,502 for the acquisition of investments in financial instruments, $ 76,646 for the disposition of investments in financial instruments, $ 19,586 for principal payments of the derivative for cash flow hedging purposes.

13.1 Other financial assets measured at fair value with changes in other comprehensive income

13.1.1 Other financial assets measured at fair value through other comprehensive income

The breakdown of other financial assets measured at fair value through other comprehensive income, different from equity investments, is:

Equity investment	2019	2019
Interconexión Eléctrica S.A. E.S.P. [1]	2,511,518	1,915,398
Other investments	6,864	6,887
Total	2,518,382	1,922,285
Accumulated gain (loss) through changes in fair value transferred to retained earnings/loss for the period[2]	-	(47,534)
Dividends recognized during the period related to investments that are recognised at the end of the period [3]	99,880	60,356
Dividends recognized during the period	99,880	12,822

Amounts stated in millions of Colombian pesos

[1] As of 31 December 2020, the market price of Interconexión Eléctrica S.A. E.S.P. closed at $25,700 (2019: $19,600) Colombian pesos per share.

[2] In the month of July 2019, 14,881,134 ISA shares were sold, generating a loss of $47,620 due to the difference in the value of the share between the sale price and the valuation of the share on the day of sale, resulting in loss on the sale of the investment. (15,700/share - 18,900/share = 3,200) and in November 2019 the sale of the total Gasoriente shares generated a profit of $86.

[3] In 2020 have been received Dividends for $ $89,611 (2019: $60,356) that consists in $ 16,786 of subsidiaries and $ 72,826 of financial instruments, both reflected in the statement of cash flows (2019 $ 3,103 from subsidiaries and $ 57,253 from financial instruments), remains outstanding $10,268 of extraordinary dividends of Inversiones Telco.

The equity investments indicated in the table above are not held for trading purposes, but rather are held for strategic medium- and long-term purposes. Management believes that the classification for these strategic investments provides more reliable financial information, reflecting changes in their fair value immediately in the results of the period.

Note 14. Leases

14.1 Finance lease as a lessor

At the cut-off date, the recorded value of assets with right-of-use is as follows (excluding assets with right-of-use associated with construction in progress, which are included in note 5 Property, plant and equipment):

2020	Right to use land	Right of use of buildings	Right of use plants, ducts and tunnels	Right of use networks, lines and cables	Right of use machinery and equipment	Right of use communication and computing equipment	Right of use Transport, traction and lifting equipment	TOTAL
Cost opening balance	5,378	461,274	1,696,549	15,983	3,859	4,006	10,775	2,197,816
Additions[1]	331	21,335	31,189	804	4,937	103	-	58,699
Transfers	-	1,758	-	-	-	-	-	1,758
Disposals (-)	-	(717)	-	-	-	-	-	(717)
Other changes	-	(1,359)	-	-	-	-	-	(1,359)
Cost final balance	**5,701**	**482,291**	**1,727,738**	**16,787**	**8,796**	**4,109**	**10,775**	**2,256,197**
Accrued amortization and impairment								
Beginning balance of accumulated amortization and impairment	(239)	(87,720)	(41,975)	(806)	(1,325)	(1,813)	(3,769)	(137,697)
Amortization of the period	(397)	(15,780)	(43,094)	(900)	(1,012)	(382)	(4,029)	(65,424)
Disposals (-)	-	118	-	-	-	-	-	118
Other changes	-	(4)	-	-	-	-	(21)	(25)
Final balance accrued amortization and impairment	**(686)**	**(103,316)**	**(85,069)**	**(1,706)**	**(2,337)**	**(2,095)**	**(7,819)**	**(203,028)**
Total final balance assets for net right of use	**5,015**	**378,975**	**1,642,669**	**15,081**	**6,459**	**2,014**	**2,956**	**2,052,169**

Amounts stated in millions of Colombian pesos

2019	Right of use land	Right of use buildings	Right of use plants, ducts and tunnels	Right of use networks, lines and cables	Right of use machinery and equipment	Right of use communication and computer equipment	Right of use transport, traction and lifting equipment	TOTAL
Cost opening balance								
Additions[1]	653	7,800	86,293	7	34	30	(186)	94,630
Re-expression by policy change	5,595	458,230	3,630,257	17,096	1,261	1,596	10,961	2,105,438
Disposals (-)	-	(293)	-	-	-	-	-	(293)
Other changes	(879)	(4,443)	-	(1,080)	2,063	2,300	-	(1,959)
Cost final balance	**5,369**	**461,274**	**1,696,549**	**15,983**	**3,860**	**4,006**	**10,775**	**2,197,816**
Accrued amortization and impairment								
Amortization of the period	(280)	(13,486)	(41,975)	(806)	(160)	(226)	(3,761)	(60,782)
Re-expression by policy change	-	(77,013)	-	-	-	-	-	(77,013)
Disposals (-)	-	27	-	-	-	-	-	27
Other changes	-	2,751	-	-	(1,164)	(1,587)	(8)	(8)
Final balance accrued amortization and impairment	**(288)**	**(87,721)**	**(41,975)**	**(806)**	**(1,324)**	**(1,813)**	**(3,769)**	**(137,696)**
Total final balance assets for net right of use	**5,081**	**373,553**	**1,654,574**	**15,177**	**2,530**	**2,193**	**7,006**	**2,060,120**

Amounts stated in millions of Colombian pesos

[1] Corresponds to the subsequent measurement of the liability for finance leasing, which generates increases each time there are changes in the tariff in its component Average Cost of Investment in pesos per cubic meter charged by *Aguas Nacionales* to EPM, this increase is regulated every time the Consumer Price Index (CPI) accumulates 3% and additional on the dates when the increases by tariff are applied.

At the cut-off date, future minimum payments and the present value of the minimum lease liability payments are distributed as follows:

Finance lease	2020		2019	
	Minimum payments	Present value of minimum payments	Minimum payments	Present value of minimum payments
One year	191,870	182,920	185,942	177,241
More than one year and up to five years	717,211	539,408	688,252	517,512
More than five years	16,304,571	1,623,258	16,333,712	1,547,936
Total leases	**17,213,652**	**2,345,586**	**17,207,906**	**2,242,689**
Less - value of unearned interest	14,868,066	-	14,965,217	-
Present value of minimum lease payments	**2,345,586**	**2,345,586**	**2,242,689**	**2,242,689**

Amounts stated in millions of Colombian pesos

The most relevant finance lease arrangements are:

Sewer Interconnection Contract CT- 2013-002297-A421 of 26 November 2018, held between EPM (THE BENEFICIARY) and *Aguas Nacionales EPM* (THE SUPPLIER), regulates the conditions of interconnection to the wastewater transport and treatment subsystems owned by *Aguas Nacionales*, for the rendering of service by EPM of the public sewerage utility to the users of the interconnected system of the Aburrá Valley. This interconnection will also allow for the drying and final disposal of biosolids resulting from the treatment of wastewater from the entire interconnected system.

Termination of the contract is on 1 July 2021, date on which the tariff formula ends, in accordance with Article 113 of Resolution CRA 688 of 2014, modified by Article 41 of Resolution CRA 735 of 2015. If, in accordance with the provisions of the last paragraph of Article 126 of Law 142 of 1994, the validity of the tariff formula is extended, the contract shall be understood to be in effect until the Water and Basic Sanitation Regulation Commission determines a new formula.

Before the expiring of the term of the contract, the parties may by mutual agreement extend the term of the contract by means of a written document, it being understood that there will be no automatic extension of the term of the contract.

EPM does not intend to financially acquire the *Aguas Claras* wastewater treatment plant (WTP) or to enter into any purchase option for said asset.

Lease payments of the contract paid by EPM to *Aguas Nacionales EPM* are per Average Investment Cost, determined in pesos per cubic meter of treated wastewater and are updated as indicated in the following paragraph and Annex No. 4 of the Contract:

Paragraph first. The supplier will apply to the reference costs an update factor per Average Investment Cost every time the Consumer Price Index, reported by National Administrative Department of Statistics (DANE, by its Spanish initials) accumulates a variation of at least three percent (3%).

According to Annex No. 4 of the contract: the increases per tariff path are as follows:

January 2019: 5.75%

January 2020: 2.40%

January 2021: 2.16%

January 2022: 1.63%

Empresas Públicas de Medellín Building lease contract CT-085 of 12 February 2002, held between *EPM* (THE COMPANIES) and the *MUNICIPALITY OF MEDELLIN* (MUNICIPALITY), the MUNICIPALITY agrees to lease to THE COMPANIES, and the latter agree to receive on the same basis, the use and enjoyment of the real estate owned by them called "*Edificio Empresas Públicas de Medellín*", with all its constructions and improvements.

The term of the contract is 50 years from 21 December 2001, date on which the MUNICIPALITY OF MEDELLIN became the owner of the property.

Contract lease payments are adjusted each year by a percentage equal to the national Consumer Price Index certified by DANE for the immediately preceding year.

Lease liabilities are included in Other financial liabilities in the statement of financial position.

Interest on lease liability amounts to $222,721 (see note 36 Finance income and expense).

Total cash outflows from leases during the period are $180,106.

14.2 Operating lease as lessee

The most significant operating lease agreements are for the electrical infrastructure for the installation of networks by telecommunications operators. The contingent payments of these leases are determined based on the updating of the producer price index (PPI) and consumer price index (CPI) variables as well as the updating of the lease payments. Leases agreements provide for an option to be renewed by mutual agreement between the parties and do not provide for a purchase option.

The value of operating lease income is:

Operating leases	2020	2019
Year one	62,223	46,873
Year two	2,811	6,458
Year three	1,553	3,412
Year four	1,494	1,722
Year five	1,494	1,722
More than five years	11,952	13,775
Total leases	**81,527**	**73,962**

Amounts stated in millions of Colombian pesos

14.3 Leases that do not generate assets by right-of-use as a lessee

The most significant operating lease agreements are for spaces for the installation and operation of antennas in weather stations, shift management system, user printing infrastructure, among others, which have no restrictions. The contingent payments of these leases are determined based on the consumer price index (CPI) as well as the updating of the lease payments and these contracts can be renewed.

At the cut-off date, future commitments for short-time lease are $7,219.

The total future minimum non-cancellable sublease payments on assets acquired under operating leases is $54. Lease payments recognized as expense for the period are $5,119.

Total cash outflows from leases during the period are $1,942.

Note 15. Warranties

The company has not granted warranties in which the third party is authorized to sell or pledge without default by the company.

The company has not received warranties in which it is authorized to sell or pledge without default by the owner of the warranty.

Note 16. Other assets

The breakdown of other assets at the end of the periods being reported is as follows:

Concept	2020	2019
Non-current		
Advance payments[1]	7,631	10,820
Employee benefits	41,005	42,047
Advances to suppliers[2]	9,088	18,995
Deferred loss from leaseback	20,933	21,610
Goods received as dation in payment	1,286	1,285
Total other non-current assets	**79,943**	**94,757**
Current		
Advance payments[1]	67,714	67,852
Advances to suppliers[2]	67,097	46,053
Sales tax	99	-
Other recoverables due to other taxes	388	1,000
withheld industry and commerce tax	-	18
Other advance payments or recoverables due to taxes and contributions	93	97
Total other current assets	**135,391**	**115,020**
Total other assets	**215,334**	**209,777**

Amounts stated in millions of Colombian pesos

[1] The non-current portion includes the premium on legal stability contracts for $6,466 (2019: $7,357) and leases for $1,165 (2019: $1,214). For 2020 there is no non-current portion for the insurances (2019: $2,249).

The current portion includes insurance for $55,333 (2019: $59,233), comprised primarily of all-risk policies for $37,655 (2019:$36,865), of which $1,435 (2019: $5,620) is from the Ituango Hydroelectric Project, and other insurance for $17,678 (2019: $22,368); goods and services for $8,274 (2019: $4,423) and leases and maintenance for $4,108 (2019: $4,195).

[2] Corresponds to advances and resources given in administration, mainly from agreements with: Empresa de Desarrollo Urbano - EDU for $9,067 (2019: $18,749),Corporación Cuencaverde for $2,242 (2019: $630) and Aguas Regionales por $5,000 (2019: $5,700) and advances to Chevron for $8,867 (2019: $24,083) and Ecopetrol for $10,910 (2019: $10,910).

Note 17. Inventories

Inventories at the end of the period were represented as follows:

Inventories	2020	2019
Materials for rendering of services[1]	141,583	114,131
Goods in stock[2]	4,105	3,922
Goods in transit	4,501	818
Total inventories at cost or net realizable value, whichever is lower	**150,189**	**118,871**

Amounts stated in millions of Colombian pesos

[1] Includes materials for the rendering of services held by third parties, which are those delivered to contractors that perform activities related to the rendering of services.

[2] Includes goods in stock that do not require transformation, such as electricity, gas and water meters, and supply goods, as well as those held by third parties.

Inventories were recognised for $75,947 (2019: $92,124) as the cost of the merchandise sold or cost to provide the service during the period.

The company has recognized a impairment losses in the inventories for $ 59 (2019: 84)

The company has no committed inventories as liability guarantee.

Note 18. Cash and cash equivalents

The composition of cash and cash equivalents at the end of the period is as follows:

Cash and cash equivalents	2020	2019
Cash on hand and in banks	610,057	305,910
Other cash equivalents[2]	254,572	573,113
Total cash and cash equivalents reported in the statement of financial position	**864,629**	**879,023**
Cash and cash equivalents reported in the statement of cash flows	864,629	879,023
Restricted cash[1]	**97,417**	**84,565**

Amounts stated in millions of Colombian pesos

[1] Of this $71,708 (2019: $17,787) corresponds to non-current restricted cash.

[2] Includes $120,784 of fiduciary commissions and $ 36,371 of fixed income securities.

Cash investments mature within three months from their date of acquisition and bear market interest rates for this type of investment

The company has restrictions on cash and cash equivalents detailed below. At 31 December 2020, the fair value of restricted cash equivalents is $97,417 (2019: $84,565).

Fund or agreement	Destination	2020	2019
Fondo de Vivienda Sintraemdes	Contribute to the acquisition and improvement of housing for employees who are beneficiaries of the agreement signed between EPM and the unions.	28.506	19.199
Fondo de Vivienda Sinpro	Contribute to the acquisition and improvement of housing for employees who are beneficiaries of the agreement signed between EPM and the unions.	27.943	21.210
Renta premio Corpb. 6972005469	Address possible contingencies following the acquisition of EPRIO by EPM.	8.797	-
cuenta de garantía ituango	Deposit the resources (approximately 56,000,000,000,000) that EPM must contribute, in order to support the issuance of a bank guarantee for the Ituango Project.	6.666	-
Ministerio de Minas y Energía - Fondo Especial Cuota Fomento	Co-financing agreement for the construction, distribution infrastructure and connection to lower income users in the municipalities of Amagá, Santafé de Antioquia, Sopetrán, San Jerónimo and Ciudad Bolívar. Compressed Natural Gas and connection to users in Don Matías, Entrerríos, San Pedro, Santa Rosa and Yarumal. Agreement No. 106: construction of infrastructure to connect users in Valle de Aburrá, La Ceja, La Unión and El Retiro. Agreement 179: includes the municipality of Sonsón.	5.771	5.635
Convenio firmado entre el Área Metropolitana del valle de aburra y Empresas Públicas de Medellín E.S.P., Acta de ejecución N°4 del convenio marco No. CT 2015-000783 de 2015	Support the construction of the southern interceptor of the Aburra River - Medellín.	2.654	10.760
Contrato No. CT-2019-001105	Contract for the supply of energy and electric power for the unregulated market and support of contracts of the energy distributor and marketer S.A. E.S.P., DICEL S.A. E.S.P.	2.478	2.000
Fondo de Educación Sinpro	Promote the welfare of the servers to meet the needs of payment of tuition, texts and equipment required to advance their own studies and those of the family group.	2.389	2.292
Fondo Entidad Adaptada de Salud y Fondo Fosyga	Control and monitoring mechanism for the collection of contributions of the General Social Security Health contribution System.	2.283	152

Amounts stated in millions of Colombian pesos

Fund or agreement	Destination	2020	2019
Fondo de Educación Sintraemdes	Promote the welfare of the servants to attend to the needs of payment of matriculation, texts and equipment that are required to advance their own studies and those of the family group.	2,172	2,274
Convenio puntos SOMOS	Provision of services for the operation of the key capabilities associated with the Points element of the Large Scale Loyalty Program for the EPM Group.	1,775	1,727
Fondo de Calamidad Sintraemdes	Promote the well-being of your servants to meet their urgent and unforeseen needs or those of their primary family group.	1,587	1,674
Fondo de Calamidad Sinpro	Promote the welfare of their servants employees to meet their urgent and unforeseen needs or those of their primary family group.	1,297	1,448
Contrato Interadministrativo Número Pc-2017-001532 De 2017.	Construction and intervention of water and sewage network connections in the Pepe Sierra I, Barrios de Jesús, el Progreso and la Cañada del Niño neighborhoods.	611	1,438
Convenio 5 Esc. Indígenas 2019-20	Co-finance the development of indigenous educational centers within the framework of the villages programme, for the improvement of the quality of life of the indigenous communities in the department of Antioquia.	413	995
Fondo de Reparación de motos	To promote the welfare of official workers who work in the regional market and use motorcycles owned by them to carry out their work.	396	426
Crédito BID 2120	Disbursement for the construction of the Bello wastewater treatment plant (PTAR).	351	334
Convenio Interadministrativo CT -2017-001388 (4600070099)	Agreement for the construction of 7 indigenous schools in 5 municipalities	292	253
Programa Aldeas	To take advantage of the wood that completes its maturation cycle in the forests planted by EPM around its reservoirs, to build social interest housing in the municipalities of Antioquia outside the Aburrá Valley and deliver it to low-income families, preferably in a situation of forced or voluntary displacement.	217	731
Municipio de Medellín - Aguas	Integrated management of water for human consumption by the inhabitants of the municipality of Medellín.	205	509
Convenios tasas de alumbrado público y de aseo con los municipios	Agreement to manage the resources of the territorial entities for the payment to the municipalities with agreements of collection of the rates of public lighting and cleanliness, they are exempt from the 4x1000.	202	51
Depósitos Ley 820	Guarantee demanded by the landlord to the tenant, for the payment of public services. According to Article 15 of Law 820 of 2003 and Regulatory Decree 3130 of 2003.	75	68
Administración de recursos para la construcción de infraestructura en Madera para Envarias en el relleno sanitario La Pradera.	Administration of resources for the construction of infrastructure in wood for Envarias in the La Pradera sanitary landfill.	64	114
Municipio de Medellín - Terrenos	Acquisition of land identified and characterized within the watershed protection zones that supply water systems in the municipality of Medellín.	03	01
Espíritu Santo	EPM - Liquidation Espíritu Santo	03	62
Procesos Judiciales o administrativos	Posting of seizure for judicial or administrative proceedings	45	-
IDEA Convenio 4600003283	To join efforts for the construction of home gas connections in the different sub-regions of the Department of Antioquia under the "Gas without Borders" program.	1	1

Fund or agreement	Destination	2020	2019
Aporte Municipios de Pueblorrico y Ciudad Bolívar	Agreement for the construction of 7 Indigenous Rural Schools	1	1
Municipio de Medellín - Moravia	Construction, repair and replacement of aqueduct and sewerage networks and teh paving in the municipality of Medellín of the roads affected by these works in the Moravia neighborhood.	-	3
Transacciones Internacionales de energía	Guarantee corresponding to the "compensation" that must be made between the invoice for stock exchange transactions and the advace payments, seeking the actual payment to XM.	-	5,274
Departamento de Antioquia, Convenio construcción vía el Aro Municipio de Ituango	Manage the resources provided by the Government of Antioquia to co-finance the construction of the El Aro Road - Puerto Valdivia Road Connection - Dam site - Municipality of Ituango.	-	2,721
Cuenca Verde	Manage the resources assigned for compliance whit the objectives of the Corporation CuencaVerde.	-	2,167
Municipio de Guatapé y Cornare	Join efforts to improve the technical, economic and social conditions for the execution of phase 1 of the project to improve the environmental and landscape infrastructure of the Malecon San Juan del Puerto, for the development of sustainable tourism in the Municipality of Guatape.	-	448
Corporación Autónoma de Guatapé	Join efforts to improve the technical, economic and social conditions for the execution of phase 1 of the project to improve the environmental and landscape infrastructure of the Malecon San Juan del Puerto, for the development of sustainable tourism in the Municipality of Guatape.	-	311
Bogota Galería Bolívar	Adapting the 51 (Bolívar) race between 44th (San Juan) and 57th (La Paz) streets and converting this segment fo the road into what will be called La Galería Bolívar.	-	15
IDEA convenio 4600003912	Inter-administrative agreement to join efforts for the design and construction of electrical energy generation and distribution systems in rural areas in the Department of Antioquia.	-	2
Ministerio de Minas y Energía	Contributions from the Ministry of Mines and Energy in accordance with the provisions of FAER GGC 430 contract of 2015 for rural electrification works in the Municipality of Ituango.	-	1
Total restricted resources		97,417	84,365

Amounts stated in millions of Colombian pesos

Note 19. Equity

19.1 Capital

The company does not have its capital divided into shares and has not had any increase or decrease in capital in the period reported.

19.2 Reserves

Of the items that conform equity, the reserves at the cut-off date were constituted by:

Reserves	2020	2019
Legal reserves		
Initial balance	1,123,219	1,379,435
Release	(95,521)	(256,216)
Final balance of legal reserves	1,027,698	1,123,219
Occasional reserves		
Initial balance	574,008	574,008
Final balance of occasional reserves	574,008	574,008
Other reserves		
Initial balance	7,591	7,591
Final balance other reserves	7,591	7,591
Total reservas	1,609,297	1,704,818

Amounts stated in millions of Colombian pesos

The nature and purpose of the company's equity reserve are described below:

Legal Reserves

The company has constituted legal reserves, in compliance with the tax provisions of Colombia that were contained in Articles 130 of the Tax Code, which was repealed by Law 1819 of 2016 (reserve of 70% for the excess of tax depreciation over the accountable) and Decree 2336 of 1995 (for revenue incorporated to income or loss in the application of the equity method applied under local regulation).

Occasional Reserves

In accordance with article 211 of the Tax Code, the company has created the reserves in order to enjoy the special tax treatment and obtain cuts in the income and complementary taxes.

Other Reserves

Includes equity funds (resources appropriated prior to 1999 for granting housing loans to workers, Financing plan, self-insurance fund, housing fund).

The Board of Directors, at its meetings of 26 March 2020 and 24 March 2019, approved:

- Release reserves of $95,521 (2019: $256,216) appropriate in prior periods, by authorization of the Board of Directors.

19.3 Accrued profit or loss

Movement of accrued profit or loss during the period was:

Retained profit	2020	2019
Initial balance	19,408,329	17,677,168
Movement of reserves	95,521	256,216
Surpluses or dividends decreed	(1,488,319)	(1,289,652)
Transfer from other comprehensive income	-	138,392
Equity method for changes in equity	(231)	(79,830)
Total cumulative profit before net income or loss for the year	**18,015,300**	**16,702,294**
Net profit for the period	**2,539,915**	**2,706,035**
Total retained profit	**20,555,215**	**19,408,329**

Amounts stated in millions of Colombian pesos

Surplus paid during the year was $1,488,319 (2019: $1,289,652), $811,810 (2019: $703,447) ordinary and $676,509 (2019: $586,205) extraordinary.

Note 20. Accumulated other comprehensive income

The breakdown of each component of the other comprehensive income for the separated statement of financial position and the corresponding tax effect is as follows:

Accumulated other comprehensive income	2020			2019		
	Gross	Tax effect	Neto	Gross	Tax effect	Neto
Reclassification of property, plant and equipment and other assets to investment property	13,439	(1,360)	12,079	13,439	(1,360)	12,079
New measurements of defined benefit plan	(65,393)	25,314	(40,079)	(47,962)	19,036	(28,926)
Equity investments measured at fair value through equity	3,340,436	(1)	3,340,435	2,766,339	1,837	2,766,176
Participation in other comprehensive income of subsidiaries	861,965	21,454	883,569	460,679	19,053	479,732
Cash flow hedges	(16,054)	(19,795)	(35,849)	8,016	(29,880)	(21,864)
Total	4,154,393	25,762	4,180,155	3,198,511	8,686	3,207,197

Amounts stated in millions of Colombian pesos

A reconciliation of the opening and closing balances at the cut-off date is presented below for each component of comprehensive income:

20.1 Component: reclassification of property, plant and equipment to investment property

The component of reclassification of property, plant and equipment to investment property of other comprehensive income corresponds to transfers from property, plant and equipment to investment property, which are measured at fair value. changes in fair value do not reclassify to profit or loss for the period.

Reclassification of property, plant and equipment to investment property	2020	2019
Initial balance	12,079	12,079
Total	**12,079**	**12,079**

Amounts stated in millions of Colombian pesos

20.2 Component: new measurements of defined benefit plans

The component of new measurements of defined benefit plans represents the accrued value of actuarial profits or losses, the return on plan assets and changes in the effect of the asset ceiling, excluding the values included in the net interest on the liability (asset) of net defined benefits. the net value of the new measurements is transferred to retained profit and does not reclassify to the results of the period.

Component new measurements of defined benefit plans	2020	2019
Initial balance	(28,926)	(4,968)
Profit or loss for the period due to new measurements of defined benefit plans	(17,430)	(35,969)
Associated income tax (or equivalent)	6,277	12,011
Total	(40,079)	(28,926)

Amounts stated in millions of Colombian pesos

20.3 Component: equity investments measured at fair value through equity

The component of other comprehensive income from equity investments measured at fair value through equity represents the accumulated value of the profits or losses from the assessment at fair value less the values transferred to retained profit when these investments have been sold. Changes in fair value do not reclassify to the result of the period.

Equity investments measured at fair value through equity	2020	2019
Initial balance	2,766,176	2,152,465
Net earnings due to changes in the fair value of investment property	596,096	622,447
Associated income tax (or equivalent)	(1,837)	129,657
Accumulated income transferred to the accumulated income for the period	-	(138,393)
Total	**3,360,435**	**2,766,176**

Amounts stated in millions of Colombian pesos

20.4 Component: participation in other comprehensive income of subsidiaries

The component of other comprehensive income from participation in other comprehensive income of subsidiaries represents the accumulated value of applying the equity method to profits and losses of other comprehensive income of subsidiaries. The accrued value of the profits or losses will be reclassified to the profit or loss for the period or to the accrued profit or loss, depending on the items that originated the equity method, when these investments have been sold.

Participation in other comprehensive income of subsidiaries	2020	2019
Initial balance	479,732	831,193
New measurements of defined benefit plans	(30,673)	(31,836)
Equity investments measured at fair value through equity	191,471	(169,196)
Hedging operations	(2,759)	(1,916)
Result from translation of foreign operations	243,207	(203,267)
Assets held for sale or to be distributed to owners	51	(51)
Associated income tax (or equivalent)	2,586	13,140
Total other comprehensive income for the period	**403,883**	**(393,126)**
Accumulated gains (losses) transferred to retained earnings/losses for the period - new defined benefit plan measures	(1)	(728)
Gains transferred to retained earnings of the period - Equity investments measured at fair value through equity	(51)	41,348
Cumulated gain (loss) transferred to retained earnings/loss for the period - Hedging transactions		281
Accumulated losses transferred to retained earnings for the period - Result from translation of foreign operations	40	21
Associated income tax (or equivalent) - Accumulated gains (losses) transferred to the accumulated profits losses of the period	(34)	743
Total accumulated other comprehensive income	**(46)**	**41,665**
Total	**883,569**	**479,732**

Amounts stated in millions of Colombian pesos

20.5 Component: cash flow hedges

The component of other comprehensive income from cash flow hedges represents the accumulated value of the effective portion of the gains or losses that arise from changes in the fair value of hedged items in a cash flow hedge. The accumulated value of the profits or losses will reclassify to the profit or loss for the period only when the hedged transaction affects the profit or loss for the period or the highly probable transaction is not expected to occur, or is included, as part of its recorded value, in a heading non-financial item.

Cash flow hedges	2020	2019
Initial balance	(21,864)	(73,656)
Losses due to changes in fair value of hedging instruments	(399,370)	(49,060)
Associated income tax (or equivalent)	121,948	33,643
Cumulative losses due to changes in the fair value of hedging instruments reclassified as profit/loss for the period	375,299	83,179
Associated income tax (or equivalent)	(111,862)	(15,970)
Total	(35,849)	(21,864)

Amounts stated in millions of Colombian pesos

Note 21. Loans and borrowings

The following is the breakdown of the recorded value of loans and borrowings:

Loans and borrowings	2020	2019
Non-current		
Commercial bank loans	539,567	530,908
Multilateral bank loans	2,765,208	3,326,049
Development bank loans	835,299	775,412
Bonds and securities issued	12,274,729	-
Other bonds and securities issued	-	9,151,073
Total other loans and borrowings non-current	**16,414,803**	**13,783,442**
Current		
Commercial bank loans	1,004,022	40,162
Multilateral bank loans	196,978	268,895
Development bank loans	698,992	210,402
Bonds and securities issued	332,028	392,585
Other bonds and securities issued	-	497,125
Total other loans and borrowings current	**2,232,020**	**1,409,169**
Total other loans and credits	**18,646,823**	**15,192,611**

Amounts stated in millions of Colombian pesos

During 2020, the following disbursements of credits were received:

April

- HSBC International syndicated and other banks: USD 250 million disbursement

May

- Local loan from Banco Popular for COP 120,000

July

- BNP Paribas Bank as lead lending agent for USD 200 million
- 144A/Regs international bond issuance for USD 575 million
- Reopening of global peso bonds maturity 2017 for COP 635,519

The breakdown of loans and borrowings is as follows:

Subseries	Original Currency	Initial date	Term	Nominal interest rate	2020				2019			
					IRR	Nominal value	Amortized cost value	Total amount	IRR	Nominal value	Amortized cost value	Total amount
BONOS IPC III TRAMO	COP	21/04/2009	15	CPI + 6.24%	7.66%	198,400	3,728	202,128	10.74%	198,400	4,321	202,721
BONOS IPC IV TRAM 2	COP	14/12/2010	12	CPI + 4.2%	5.56%	119,900	715	120,615	8.18%	119,900	513	120,413
BONOS IPC IV TRAM 3	COP	14/12/2010	20	CPI + 4.94%	6.47%	267,400	1,291	268,691	8.59%	267,400	634	268,034
BONOS IPC V TRAMO II	COP	4/12/2013	10	CPI + 4.53%	6.26%	96,219	(51)	96,179	8.80%	96,210	(206)	96,004
BONOS IPC V TRAM III	COP	4/12/2013	20	CPI + 5.03%	6.72%	229,190	(1,399)	227,791	9.24%	229,190	(1,560)	227,630
BONOS IPC VI TRAMO I	COP	29/07/2014	6	CPI + 3.53%	0.00%	-	-	-	7.98%	125,000	1,289	126,289
BONOS IPC VI TRAMO II	COP	29/07/2014	12	CPI + 4.17%	5.88%	125,000	277	125,277	8.26%	125,000	489	125,489
BONOS IPC VI TRAM III	COP	29/07/2014	20	CPI + 4.5%	6.17%	250,000	(209)	149,245	8.68%	250,000	219	250,219
BONOS IPC V TRAM IV	COP	20/03/2015	9	CPI + 3.65%	6.11%	130,000	458	130,458	8.64%	130,000	369	130,369
BONOS IPC VII TRAMO I	COP	20/03/2015	5	CPI + 2.72%	0.00%	-	-	-	6.81%	120,000	217	120,217
BONOS IPC VII TRAMO II	COP	20/03/2015	12	CPI + 3.92%	5.43%	120,000	425	120,425	7.94%	120,000	132	120,132
BONOS IPC VII TRAM III	COP	20/03/2015	23	CPI + 4.43%	5.94%	260,000	1,500	261,500	8.40%	260,000	886	260,886
BID 1664-1	COP	31/03/2016	10	7.8%	8.68%	237,308	2,415	239,723	9.14%	284,769	3,938	288,707
BID 2120	USD	25/03/2009	25	Libor 6M + 0%	0.00%	-	-	-	2.83%	353,055	(5,661)	347,394
BID 2120-1	COP	27/05/2014	9	6.27%	8.32%	190,295	(1,454)	188,841	7.49%	190,295	(2,750)	187,545
BANK OF TOKYO-MITSUB	USD	29/09/2008	15	Libor 6M + 0.95%	1.18%	171,584	3,225	174,809	1.24%	235,441	5,037	227,478
GLOBAL 2021 COP	COP	31/01/2011	10	8.375%	14.64%	130,822	9,484	149,306	14.03%	130,822	2,998	133,820
GLOBAL 2024 COP	COP	10/09/2014	10	7.625%	7.73%	965,745	18,867	984,611	7.74%	965,745	17,919	983,664
AGRARIO	COP	24/06/2014	16	IBR + 2.4%	4.55%	110,200	(1,944)	108,256	8.94%	116,000	(862)	115,138
AFD	USD	10/08/2012	15	4.311%	4.40%	677,165	11,580	688,745	4.47%	738,575	12,333	750,908
BID 2120-3	COP	23/08/2016	18	7.5%	8.96%	338,019	(68)	337,951	8.23%	363,057	(679)	362,378
BNDES	USD	26/04/2016	24	4.887%	5.36%	166,345	(4,892)	161,453	5.42%	158,247	(4,503)	153,744
GLOBAL 2027 COP	COP	8/11/2017	10	8.375%	8.45%	4,165,519	51,489	4,217,008	8.45%	3,530,000	28,768	3,558,768
BID 2120-3	COP	8/12/2017	16	6.265%	7.47%	168,285	873	169,158	6.71%	180,750	825	181,575
CAF	USD	3/10/2016	18	Libor 6M + 3.1%	3.58%	686,500	(2,407)	684,093	5.26%	655,428	3,432	658,860
IDB INVEST tramo 12 años	USD	29/12/2017	12	Libor 6M + 2.75%	4.01%	1,287,188	(54,183)	1,233,005	5.66%	1,228,928	(44,316)	1,184,612
IDB INVEST tramo 8 años	USD	29/12/2017	8	Libor 6M + 2.125%	3.70%	257,438	(9,670)	247,768	5.26%	245,786	(8,528)	237,258
BANCOLOMBIA	COP	11/02/2019	3	IBR 6M + 2.5%	3.00%	450,000	4,962	454,962	7.12%	450,000	9,484	459,484
HSBC	USD	26/11/2018	3	Libor 6M + 1.65%	2.00%	836,125	1,536	859,661	0.00%	-	(3,471)	(3,471)
BONOS USD 2029	USD	18/07/2019	10	4.25%	4.39%	3,432,500	43,268	3,475,768	4.39%	3,277,140	39,066	3,316,206
BANCO POPULAR	COP	5/05/2020	1	IBR 6M + 2.1%	3.88%	120,000	710	120,710	0.00%	-	-	-
BANCO INTERAMERICANO DE DESARROLLO	COP	17/06/2020	14	5%	5.88%	365,202	5,629	370,921	0.00%	-	-	-
BONOS USD 2030	USD	15/07/2020	11	4.375%	4.60%	1,973,688	12,516	1,986,284	0.00%	-	-	-
						18,548,128	98,695	18,646,823		15,128,438	64,173	15,192,611

Amounts stated in millions of Colombian pesos

It is disclosed as part of the public credit and treasury obtainment line item of $4,612,001 (2019: $7,463,935); public credit and treasury payments of $1,225,080 (2019: $8,067,058); interest paid on credit operations of $998,372 (2019: $1,243,709) and transaction costs on issuance of debt instruments of $28,553 (2019: $14,695) in the statement of cash flows.

Net foreign exchange loss (gain) was $24,286 (2019: $58,707).

Subseries	Original Currency	Initial date	Term	Nominal interest rate	2020				2019				Amount awarded						
					IBR	Nominal value	Amortized cost value	Total amount	IBR	Nominal value	Amortized cost value	Total amount	Amount awarded 2019	Amount awarded 2018	Amount awarded 2017	Amount awarded 2016	Amount awarded 2015	Amount awarded 2014	Amount awarded 2013
A10a	COP	4/12/2013	10	CPI + 4.52%	5.26%	96,210	-31	96,179	4.80%	96,210	1,006	96,004	96,210	96,210	96,210	96,210	96,210	96,210	96,210
A10c	COP	20/09/2015	4	CPI + 3.68%	6.11%	130,000	458	130,458	6.44%	130,000	369	130,369	130,000	130,000	130,000	130,000	130,000	-	-
A12a	COP	14/12/2010	12	CPI + 4.2%	5.56%	119,900	715	120,615	6.08%	119,900	513	120,413	119,900	119,900	119,900	119,900	119,900	119,900	119,900
A11a	COP	29/07/2014	12	CPI + 4.17%	5.98%	125,000	277	125,277	6.29%	125,000	409	125,409	125,000	125,000	125,000	125,000	125,000	125,000	-
A12a	COP	20/08/2015	12	CPI + 3.92%	5.42%	120,000	425	120,425	7.94%	120,000	152	120,152	120,000	120,000	120,000	120,000	120,000	-	-
A16a	COP	21/04/2009	15	CPI + 6.24%	7.94%	198,800	1,324	200,124	10.24%	198,800	4,421	203,221	198,800	198,800	198,800	198,800	198,800	198,800	198,800
A20a	COP	14/12/2010	20	CPI + 4.94%	6.47%	267,400	1,291	268,691	8.99%	267,400	634	268,034	267,400	267,400	267,400	267,400	267,400	267,400	267,400
A20c	COP	4/12/2013	20	CPI + 5.02%	6.72%	229,190	-1,399	227,791	9.24%	229,190	(1,540)	227,650	229,190	229,190	229,190	229,190	229,190	229,190	229,190
A20g	COP	29/07/2014	20	CPI + 4.5%	6.17%	250,000	226	249,774	8.68%	250,000	239	250,239	250,000	250,000	250,000	250,000	250,000	250,000	-
A20h	COP	20/08/2015	20	CPI + 4.42%	5.94%	260,000	1,500	261,500	8.48%	260,000	888	260,888	260,000	260,000	260,000	260,000	260,000	-	-
A5a	COP	20/08/2015	5	CPI + 3.72%	5.06%	-	-	-	6.81%	120,000	237	120,237	120,000	120,000	120,000	120,000	120,000	-	-
A6a	COP	29/07/2014	6	CPI + 3.57%	5.06%	-	-	-	7.98%	125,000	1,289	126,289	125,000	125,000	125,000	125,000	125,000	125,000	-
Bono Internacional	COP	31/01/2011	10	8.375%	14.64%	136,822	9,484	146,306	14.03%	130,822	2,998	133,820	130,822	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Bono Internacional	COP	10/09/2014	10	7.625%	7.71%	965,745	18,867	984,667	7.74%	965,745	17,919	983,664	965,745	965,745	965,745	965,745	965,745	965,745	-
Bono Internacional	COP	31/01/2007	10	8.375%	8.45%	4,146,519	51,489	4,217,008	8.45%	3,580,000	28,768	3,558,768	3,580,000	3,580,000	3,580,000	-	-	-	-
Bono Internacional	USD	16/07/2014	10	4.75%	4.75%	3,422,500	43,258	3,475,758	4.78%	3,277,340	39,066	3,316,358	3,277,340	-	-	-	-	-	-
Bono Internacional	USD	15/07/2020	11	4.375%	4.48%	1,472,687	12,516	1,346,203	0.00%	-	-	-	-	-	-	-	-	-	-
TOTAL						12,434,173	142,184	12,606,257		9,966,807	95,974	10,062,781	9,966,807	9,556,845	9,556,845	4,256,845	4,256,845	3,625,845	2,361,100

Amounts stated in millions of Colombian pesos, the exchange rate used was the MRR at the closing of each period.

Covenant debt / EBITDA

The EPM Group has different financial commitments (covenants), established in the loan agreements signed with the French Development Agency - AFD, Inter-American Development Bank, CAF- Development Bank of Latin America, National Bank for Economic and Social Development - BNDES, HSBC, Bancolombia, IDB Invest and Guarantee of Japan Bank for International Cooperation - JBIC. These contracts include some of the following covenants: Debt/EBITDA LTM, Net Debt/EBITDA LTM, EBITDA/ Financial Expenses, Net EBITDA/Financial Expenses, and Long-Term Debt/Equity. The contracts with Bancolombia and HSBC include a clause indicating that the measurement of compliance with the stipulated covenant will only be activated in the event that the company loses the investment grade level in the international scale ratings granted by any of the rating agencies that evaluate the company.

Covenant	Credit Type	December 31, 2020	December 31, 2019	Limit
DEBT / EBITDA LTM	JBIC - AFD	4.37	3.49	3.5
Financial Liabilities		25,150	20,988	
EBITDA last twelve months		5,760	6,011	

Amounts stated in millions of Colombian pesos

Contractually, one of the management schemes to avoid defaulting on this type of commitment is the issuance of waivers by the creditors.

It should be noted that when EPM Group exceeds the agreed Debt/EBITDA covenant, it does not generate a direct activation of the declaration of default by the banks, nor of prepayment, since it is an action contractually subject to the decision of the bank(s) to exercise or not that declaration and additionally to the fact of having remedial periods agreed in the contracts to address a possible default.

The EPM Group must report compliance with the Long-Term Financial Debt/EBITDA indicator as follows: to the Japan Bank for International Cooperation -JBIC- on a quarterly basis and to the French Development Agency -AFD- on a semi-annual basis.

The EPM Group obtained the required waiver for the JBIC loan as of December 2020; with respect to the AFD loan, there is a verbal agreement to contractually modify the covenant to Net Debt/EBITDA <=4 times, therefore, a renegotiation process of the Covenant clauses was initiated through an amendment to the contract. This process is being carried out to date in compliance with the requirements of current regulations and is in the approval stage at the Ministry of Finance and Public Credit.

IDB Invest contract management

On December 29, 2017 EPM and IDB Invest signed a credit contract, which to date presents a bank balance to capital of USD $ 450 million.

Subsequent to its signing, the parties agreed on the condition of signing an amendment to the credit agreement, with the objective of incorporating a series of technical, environmental and institutional commitments.

In this sense, IDB Invest granted EPM at the end of December 2020 and February 22, 2021 waivers for not having signed the Amendment.

To date, the Amendment clause is in an advanced stage of negotiation of its clauses between EPM and IDB Invest, and then go to its external approval process, in accordance with Colombian regulations on public debt.

Default events

During the reporting period, the company has not defaulted on any principal or interest payment of its loans.

Note 22. Trade and other payables

Trade and other payables are measured at amortized cost and consist of:

Trade and other payables	2020	2019
Non-current		
Adquisition of goods and services	628	628
Deposits received as collateral1	11,329	2,049
Resources received for management	998	998
Construction contracts	57	51
Total Trade and other payables non-current	13,012	3,726
Current		
Creditors2	383,378	459,065
Adquisition of goods and services	570,611	565,920
Allocated grants	24,152	17,206
Deposits received as collateral	310	310
Received advanced payments	506	506
Resources received for management	5,562	14,950
other accounts payable	318	655
Construction contracts	713	361
Commissions payable	2,110	2,110
Total Trade and other payables current	987,660	1,061,083
Total Trade and other payables	1,000,672	1,064,809

Amounts stated in millions of Colombian pesos

[1] The Increase is explained by the merger of EPRIO for $8,736; the deposits received in guarantee correspond to the value of the guarantee retention fund for purposes of attending the losses suffered by EPM and/or the expenses that EPM has to incur for the attention of processes derived from these losses. The foregoing in accordance with the indemnity obligation of the sellers in exclusive charge of the Municipality of Rionegro contained in the EPRIO purchase and sale agreement, the yields generated in the specific purpose bank account will be a greater value of the guarantee retention fund.

[2] The decrease is explained by the cost and expense saving measures implemented by the company as a consequence of the Covid 19 pandemic.

The term for payment to suppliers is generally 30 days with the exception of:

- Payments less than ten (10) legal monthly minimum wages in force (SMMLV).
- Those destined to cover penalties, fines, indemnities, and taxes.
- And others that apply according to business rule 2019-RN-107.

Default events

During the accounting period, the company has not defaulted on payments of creditors and other accounts payable.

Note 23. Other financial liabilities

The other financial liabilities consist of:

Other financial liabilities	2020	2019
Non-current		
Finance leases	2,323,709	2,218,947
Derivatives for cash flow hedging purposes[1] (ver nota 24)	347,399	-
Pension bonds	214,099	228,742
Financial liabilities measured at fair value through profit or loss for the period	79,410	-
Total other financial liabilities non-current	**2,964,617**	**2,447,689**
Current		
Pension bonds[2]	346,619	313,464
Derivatives for cash flow hedging purposes[1] (ver nota 24)	69,196	-
Financial liabilities measured at fair value through profit or loss for the period	41,018	-
Finance leases[2]	21,877	23,741
Total other financial liabilities current	**478,710**	**337,205**
Total other financial liabilities	**3,443,327**	**2,784,894**

Amounts stated in millions of Colombian pesos

[1] The process of authorization from the Ministry of Finance and Public Credit for the exchange risk hedging of the international bond issue made in 2019 was completed; additionally, the authorization for the exchange hedging of the bond issue in dollars issued in July 2020 and the HSBC international syndicated loan was presented, complying with the requirements of the applicable regulations. With these authorizations, the company was able to develop its market risk management plan and carried out hedging operations for US$1,350 million in 2020.

[2] Includes the following items: payment of pension bonds for $6,435 and payment of financial lease liabilities for $11,580 reflected in the statement of cash flows.

23.1 Financial liabilities designated at fair value through profit or loss

Financial liability for premiums payable for the weather derivative, which has been contracted to hedge against dry seasons that imply a decrease in hydroelectric generation and the increase in energy prices in the stock market. It is measured at fair value through profit or loss, in order to achieve the asymmetry or "matching" of the financial asset (derivative/option, measured at fair value through profit or loss) with the financial liability (premiums payable).

23.1.2 Financial liabilities designated at fair value through profit or loss, with the effects of the change in the liability's credit risk recognized in profit or loss for the period

Concept	2020	2019
Gain (loss) for the period from changes in fair value attributable to changes in credit risk recognized in profit or loss for the period	2,057	-
Difference between the book value and the value payable at the time of liquidation:	(2,626)	-
Recorded value of liability (ies)	120,429	-
Value to be paid at settlement	123,055	-

Amounts stated in millions of Colombian pesos

The Company has determined that presenting the effects of changes in the credit risk of a liability in other comprehensive income would create or increase an accounting asymmetry in the result for the period, this asymmetry is generated given that EPM's rating is BBB and NewRe is AA. It should be clarified that this liability arises from a contract that is linked to an option type derivative instrument, which represents an asset for EPM. The derivative instrument (asset) is valued at fair value (including credit risk) with changes in results since it is not designated in hedge accounting.

Note 24. Derivatives and hedging

The company carries out cash flow hedging, which consists of hedging the variation in future cash flows attributable to certain risks, such as interest rate and exchange rate that may impact results, whose fair values at the end of the reporting period amounted to a liability of $354,221 (2019: $45,062 Right). The risks that have been hedged in these operations are presented below:

Hedge Classification	Description	risk covered	Trench	Hedged item	Recorded value of hedged item	Recorded value of hedged instrument	Changes in the fair value of the hedging instrument for the period	Changes in the fair value of the hedged item for the period	Hedge effectiveness recognized in the profit or loss for the period	Hedge effectiveness recognized in other comprehensive income	Reclassification of other comprehensive income to profit for the period[1]
Cash flow hedging											
Swaps	Cross Currency Swap	USD/COP exchange rate and Libor/Fixed rate for debt service	Part of the cash deal and AFD credits	Credit in U.S. Dollars	[illegible]	[illegible]	[illegible]	[illegible]	N.A.	[illegible]	[illegible]

Amounts stated in millions of Colombian pesos

[1] Reclassification of other comprehensive income to profit or loss for the period, for swap instruments, affected the interest item, difference in exchange, difference in interest and capital of the right; and for the instrument futures contracts affected the item of electricity sales in the stock market. Additionally, $10,322 were capitalized as borrowing costs mainly to the Ituango Project.

The exchange risk hedging operations are part of the public debt operations regulated in Decree 1068 of 2015, therefore, they require the general approval of the operation via resolution and additional official approval of each of the confirmation letters of the financial entities that may possibly have participation in the respective specific operations. This approval process, according to the entities that govern the subject in the country, can only be initiated once the respective resources have been disbursed. During the period in which the approval process is carried out, there is a stage in which the company is exposed to the exchange risk without having the possibility of executing this type of exchange hedging operations.

During 2020, the process of authorization from the Ministry of Finance and Public Credit for the exchange risk hedging of the international bond issue made in 2019 was completed; additionally, the authorization for the exchange hedging of the bond issue in dollars issued in July 2020 and the HSBC international syndicated loan was presented, complying with the requirements of the applicable regulations. With these authorizations, the company was able to develop its market risk management plan and carried out hedging operations for US$1.35 billion in 2020.

Conversion to pesos of credits denominated in dollars: some of the IDB credits -public wing-, have a contractual clause that allows the conversion to Colombian peso of the balance in dollars, eliminating the exchange risk of the exposed balance. EPM made the following conversion in 2020:

On June 17, EPM applied a currency conversion to the IDB 2120 loan for USD104 million.

Hedging cash flow

The characteristics of the main cash flow hedging instruments that are under hedge accounting are the following:

Characteristics									
Hedged Underlying	Loan AFD	Loan AFD	Loan AFD	Loan AFD	Loan AFD	Loan HSBC	Loan HSBC	Loan HSBC	Loan HSBC
Closing date	3-feb-17	6-feb-17	10-feb-17	24-mar-17	30-mar-17	5-jun-20	18-jun-20	19-jun-20	23-jun-20
Derivative type	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS
Counterpart	BNP Paribas	BNP Paribas	BNP Paribas	CITI BANK	CITI BANK	JP Morgan	JP MORGAN	Goldman Sachs	Goldman Sachs
Nominal amount(USD)	64.750.000	47.381.250	85.312.500	11.164.375	85.312.500	50.000.000	100.000.000	50.000.000	50.000.000
Spot exchange rate	2.850	2.855	2.850	2.899	2.878	3.587	3.756	3.738	3.709
Expiring date	31-jul-22	31-jul-22	31-jul-22	31-jul-22	31-jul-22	26-nov-21	26-nov-21	26-nov-21	26-nov-21

* CCS : Cross Currency Swap

Characteristics											
Hedged Underlying	Bonds 2029	Bonds 2029	Bonds 2029	Bonds 2029	Bonds 2029	Bonds 2029	Bonds 2029	Bonds 2031	Bonds 2031	Bonds 2031	Bonds 2031
Closing date	8-jun-20	7-jul-20	15-jul-20	15-jul-20	15-jul-20	9-nov-20	12-nov-20	11-sep-20	16-sep-20	22-set-20	25-set-20
Derivative type	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS
Counterpart	BNP PARIBAS	JP Morgan	JP Morgan	Scotia Bank	Goldman Sachs	Goldman Sachs	BBVA	JP Morgan	JP Morgan	Sumitomo Mitsui Banking Corporation, New York Branch	JP Morgan
Nominal amount(USD)	100.000.000	50.000.000	100.000.000	100.000.000	100.000.000	125.000.000	125.000.000	100.000.000	100.000.000	100.000.000	100.000.000
Spot exchange rate	3.597	3.627	3.617	3.606	3.606	3.617	3.642	3.739	3.766	3.774	3.774
Expiring date	15-jul-29	15-jul-29	15-jul-29	15-jul-29	15-jul-29	15-jul-29	15-jul-29	15-feb-31	15-feb-31	15-feb-31	15-feb-31

* CCS : Cross Currency Swap

Note 25. Employee benefits

The item of employee benefits recognized at the reporting date have the following composition:

Employee benefits	2020	2019
Non-current		
Post-employment benefits	344,000	305,919
Long-term benefits	50,712	46,049
Total employee benefits non-current	394,712	351,968
Current		
Short-term benefits	119,271	90,764
Post-employment benefits	51,749	53,608
Total employee benefits current	171,020	144,372
Total	565,732	496,340

Amounts stated in millions of Colombian pesos

25.1 Post-employment benefits

Consists of the defined benefit plans and the defined contribution plans detailed below:

25.1.1 Defined benefit plans

Defined benefit plans	Pensions[1]		Retroactive severances[2]		Educational assistance plan[3]		Total	
	2020	2019	2020	2019	2020	2019	2020	2019
Current value of liabilities due to defined benefit								
Initial balance	460,939	443,415	92,986	89,675	66	81	553,991	533,171
Current service cost	-	-	2,889	2,954	-	-	2,889	2,954
Profit (or loss) due to interests cost	29,346	29,316	5,115	5,444	2	3	34,463	34,763
Actuarial gains or losses due to changes in:								
Assumptions by experience	(561)	21,805	22	4,524	6	14	(533)	26,343
Financial assumptions	17,535	10,666	4,101	2,662	1	0	21,637	13,328
Cost of past service	-	(4,670)	-	-	-	-	-	(4,670)
Payments made by the plan[4]	(37,152)	(39,593)	(12,402)	(12,206)	(26)	(32)	(49,580)	(51,831)
Other changes - Payments withheld	-	-	-		-	-	-	-
Current value of liabilities as of December 31	470,107	460,939	92,711	93,053	49	66	562,867	554,058
Fair value of plan assets								
Initial balance	194,531	220,010	-	-	-	-	194,531	220,010
Payments made by the plan[5]	(42,551)	(43,048)	-	-	-	-	(42,551)	(43,048)
Interest income	11,464	13,884	-	-	-	-	11,464	13,884
Expected plan yields (excluding profits due to interest)	3,674	3,685	-	-	-	-	3,674	3,685
Fair value of plan assets as of December 31	167,118	194,531	-	-	-	-	167,118	194,531
Surplus or (deficit) of the defined benefit plan	302,989	266,408	92,711	93,053	49	66	395,749	359,527
Net assets (or liabilities) of the defined benefit plan	302,989	266,408	92,711	93,053	49	66	395,749	359,527
Total defined benefits	302,989	266,408	92,711	93,053	49	66	395,749	359,527

Amounts stated in millions of Colombian pesos

[1] Includes a retirement pension plan recognized prior to the effective date of the General Pension System of Law 100 of 1993 with its respective replacements, which are distributed in the actuarial calculation by groups, differentiating between life annuities, those shared with Colpensiones, pension replacements and those that generate part of the retirement quota. The plan is made up of EPM retirees, and retirees belonging to the pension commutation by the liquidation of Empresa Antioqueña De Energía EADE. It includes contributions to social security and funeral assistance. The retirement pensions are of

the legal under the parameters of Law 6 of 1945 and Law 33 of 1985. No risks have been identified for EPM, generated by the plan. During the period, the plans have not undergone modifications, reductions or settlements that represent a reduction in the present value of the obligation.

[2] Includes a retroactive severance plan, it is a post-employment benefit that applies to approximately 8% of EPM employees, consisting of the recognition of an average monthly salary multiplied by the years of service, payable through advances and at the time of contract termination. The source that gives rise to the plan is the "Sixth Law of 1945, by which some provisions are issued on labor conventions, professional associations, collective conflicts and special labor jurisdiction" and the National Decree 1160 of 1989, which partially regulates Law 71 of 1988, which issues rules on pensions and other provisions. For the retroactive severance plan, no possible risks or significant modifications are identified during the period.

[3] It includes an educational assistance plan that is provided for each of the children of eligible EPM retirees, including assistance for secondary, technical or university studies. It originates in Article 9 of Law 4 of 1976, which establishes rules on pension matters in the public, official, semi-official and private sectors and provides that companies or employers shall grant scholarships or aid for secondary, technical or university studies to the children of their retired personnel, under the same conditions as they grant or establish for the children of active workers.

The weighted average duration, in years, of the defined benefit plan obligations at the cut-off date is as follows:

Benefit	2020		2019	
	From	To	From	To
EPM Pension	8.5	11.5	8.5	11.5
Educationla assistance EPM	1.1	1.1	1.2	1.2
Retroactive severances	5.2	5.2	5.7	5.7

[4] Includes $48,616 (2019: $51,831) of amounts paid for plan settlements, corresponding to pensions, retroactive severance payments and educational assistance plan.

The company has no restrictions on the current realization of defined benefit plan surplus.

The company made no defined benefit contributions during 2019 and does not expect to make contributions for the next annual period.

Fair value of the plan assets is composed as follows:

Assets that support the plan	2020		2019	
	% Participation	Fair value	% Participation	Fair value
Cash and cash equivalents	3.25%	5,437	1.17%	2,276
Equity instruments	0.00%	0	0.00%	0
Debt instruments				
AAA	85.01%	142,075	89.67%	174,426
AA+	0.97%	1,621	0.00%	0
AA	5.81%	9,713	6.14%	11,949
Investment funds[1]	4.95%	8,272	3.02%	5,880
Total debt instruments	**96.75%**	**161,681**	**98.83%**	**192,255**
Total assets that support the plan	**100.00%**	167,118	**100.00%**	194,531

Amounts stated in millions of Colombian pesos

[1] Includes a collective investment fund with a conservative profile, with immediate availability of resources called *Rentaliquida*, managed by *Fiduciaria Davivienda*, with a balance of COP 1.576 billion pesos (2018: COP 1.522 billion) and an Exchange Trade Fund (ETF), which follows the behavior of *Colcap*, with a balance of COP 4.304 billion pesos (2019: COP $4,304 billion).

The main actuarial assumptions used to determine the obligations under the defined benefit plans are as follows:

Assumptions	Post-employment benefits	
	2020	2019
Discount rate (%)	6.10 - 2.70	6.60 - 4.70
Yearly salary increase rate (%)	4.6	4.6
Real rate of return on plan assets	6.96	4.83
Future yearly pension increase rate	3.5	3.5
Yearly inflation rate (%)	3.5	3.5
Mortality rate table	Valid rentiers 2008 table	

The following table shows the effect of a variation of plus 1% and minus 1% in the salary increase, in the discount rate and in the increase in the benefit on the obligation for defined post-employment benefit plans:

Assumptions	Increase in discount rate by +1%.	Decrease in discount rate by -1%.	Salary increase by +1%.	Salary decrease by 1%	Increase in benefit increasement by +1%.	Decrease in benefit increasement by 1%
EPM pension	324,426	381,232	-	-	-	-
social security contributions epm	23,963	27,896	-	-	-	-
Educational assistance EPM	49	50	-	-	50	49
EADE Pension	82,720	103,012	-	-	-	-
Social security contributions EADE	1,025	1,226	-	-	-	-
Retroactive severance	88,610	97,150	100,496	85,365	-	-
Total post-employment benefits	520,792	610,566	100,496	85,365	50	49

Amounts stated in millions of Colombian pesos

The methods and assumptions used to prepare the sensitivity analysis for the Present Value of Defined Benefit Obligations (DBO) were made using the same methodology that for actuarial calculation as of December 31, 2019: Projected Unit of Credit (PUC) Method. The sensibility does not present neither limitations nor changes in the methods or assumptions used to prepare the current period analysis.

Pension liabilities and commutations calculation according to current fiscal requirements in Colombia

Resolution 037 of 2017 issued by the General Accountancy of the Nation established the obligation to disclose the calculation of pension liabilities in accordance with the parameters established in Decree 1625 of 2016 and Decree 1833 for pension commutations; therefore, the figures presented below do not correspond to the requirements of IFRS adopted in Colombia.

Pension liabilities

The actuarial calculation of pensions was prepared with the following technical bases:

Actuarial assumptions - Pension commutation	2020	2019
Real technical interest rate	4.8	4.8
Salary increase rate	3.64	3.91
Pension increase rate	3.64	3.91
Mortality rate table	RV08 (Valid annuitants)	

The following table is the calculation of the pension liability with the above parameters:

Description	2020		2019	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by the Company	627	155,709	643	159,241
Personnel pensioned with amounts share with Colpensiones (state pension system)	389	55,820	437	62,414
Personnel benefit shared with Colpensiones	469	61,440	468	61,161
Personnel pensioned with amounts shared with other institutions	384	42,753	356	39,119
Total	**1,869**	**315,722**	**1,904**	**321,935**

Amounts stated in millions of Colombian pesos

Below are Pension Bonuses related to Pension Obligations:

Description	2020		2019	
	Número de personas	Valor de reserva	Número de personas	Valor de reserva
Retirement payment type A modality 1	243	2,832	244	2,707
Retirement payment type A modality 2	4,080	179,414	4,113	175,568
Retirement payment type B	2,227	315,403	2,248	309,734
Retirement payment type T	5	280	5	277
Other -Include type of pension bond-	174	5,349	176	5,175
Difference	**6,729**	**503,278**	**6,786**	**493,461**

Amounts stated in millions of Colombian pesos

Following, the differences between the pension liabilities calculated under IFRS adopted in Colombia and the fiscal pension liabilities are shown:

	2020	2019
Pension commutation liabilities	377,122	370,311
Fiscal pension commutation liability	819,000	815,394
Difference	**(441,878)**	**(445,083)**

Amounts stated in millions of Colombian pesos

Pension commutation liabilities

The actuarial calculation of pension commutation was prepared with the following technical basis:

Actuarial assumptions - Pension commutation	2020	2019
Real technical interest rate	4.8	4.8
Salary increase rate	3.64	3.91
Pension increase rate	3.64	3.91
Mortality rate table	RV08 (Valid annuitants)	

The following table is the calculation of the pension commutation with the previous parameters:

Description	2020		2019	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by the Company	86	21,911	92	25,716
Personnel pensioned with amounts share with Colpensiones (state pension system)	355	47,999	346	44,513
Personnel benefit shared with Colpensiones	42	4,284	37	3,167
Personnel pensioned with amounts shared with other institutions	21	2,510	31	3,693
Total	504	76,703	506	77,089

Amounts stated in millions of Colombian pesos

Below are the pension bonuses related to pension commutation liabilities:

Description	2020		2019	
	Número de personas	Valor de reserva	Número de personas	Valor de reserva
Retirement payment type A modality 1	12	39	12	38
Retirement payment type A modality 2	255	11,309	255	10,803
Retirement payment type B	206	20,662	219	21,928
Retirement payment type T	3	22	3	84
Other -Include type of pension bond-	1	41	3	115
Difference	477	32,074	492	32,968

Amounts stated in millions of Colombian pesos

Following, are showed the differences between pension commutation liability as calculated under IFRS adopted in Colombia, and the tax pension commutation liability are shown below:

	2020	2019
Pension commutation liabilities	93,034	90,694
Fiscal pension commutation liability	108,777	110,055
Difference	**(15,743)**	**(19,361)**

Amounts stated in millions of Colombian pesos

The Company's policy is to prepare actuarial calculations for the annual closing of the period, therefore, the estimated data for 2020 are presented.

25.1.2 Defined contribution plans

The company made contributions to defined contribution plans for $65,726 (2019: $53,999), recognized in profit or loss for the period as an expense $20,573 (2019: $17,336), cost $35,909 (2019: $29,428) and investment projects $9,244 (2019: $7,234).

25.2 Long-term employee benefits

Long-term benefits	Seniority premium[1]	
	2020	2019
Current value of liabilities due other long-term benefits		
Initial balance	46,049	42,745
Present service cost	4,848	4,369
Profit (or expenses) due to interests	2,902	2,835
Assumptions by experience	1,420	886
Financial assumptions	1,960	874
Payments made by the plan	(6,468)	(5,660)
Final balance of current value of liabilities	50,711	46,049
Net liabilities due to long-term benefits	50,711	46,049

Amounts stated in millions of Colombian pesos

For these benefits the company has no assets to support the plan.

[1] Includes a seniority premium plan. It is a long-term benefit granted to employees through the collective labor agreement, in EPM it is granted in relation to years of continuous or discontinued service. It is recognized and paid once in the respective period and according to the established terms: every 5 years, 12, 17, 23, 30, 35 and 40 days of basic salary will be paid, respectively. The form of payment may be in money, in time off or a combination of the two at the employee's choice. For personnel who resign from the company to access the old-age or disability pension, they are entitled to proportional payment for the time of service, if they are less than one year away from completing the next five-year period at the time of resignation. For the Seniority Bonus plan, no possible risks were identified.

The weighted average duration in years, of the obligations for long-term benefit plans at the report date, is as follows:

Benefit	2020		2019	
	From	To	From	To
Seniority premium	7	7	6.8	6.8

The company does not expect to make contributions to the plan for the next year period.

The main actuarial assumptions used to determine the obligations for long-term employee benefit plans are the following:

Assumptions	Concept	
	2020	2019
Discount rate (%)	5.8	6.4
Yearly salary increase rate (%)	4.85	4.85
Yearly inflation rate (%)	3.5	3.5
Mortality rate table	RV08 (Valid annuitants)	

The following table shows the effect of a variation of plus 1% and less 1% in the Salary Increase, in the discount rate and in the increase in the benefit over the obligation for long-term benefit plans:

Assumptions	Increase in discount rate by +1%.	Decrease in discount rate by -1%.	Salary increase by +1%.	Salary decrease by -1%.
Seniority premium	47,523	54,331	54,588	47,240
Total long-term benefits	47,523	54,331	54,588	47,240

Amounts stated in millions of Colombian pesos

The methods and assumptions used to prepare the sensitivity analysis for the present value of defined benefit obligations (DBO) were made using the same methodology that for actuarial calculation as of 31 December 2020: Projected Unit of Credit (PUC). The sensibility does not present neither limitations nor changes in the methods or assumptions used to prepare the current period analysis.

25.3 Short-term employee benefits

The composition of the short-term benefits is as follows:

Short-term benefits	2020	2019
Payroll payable	8,249	3
Severances	42,193	37,395
Interest on severances	4,956	4,356
Vacations	20,126	15,613
Vacation bonus	41,175	31,455
Service premium	-	(6)
Holidays (christmas) bonus	27	18
Bonuses	2,460	1,899
Other bonuses, salaries and legal benefits	85	31
Total Short-term benefits	**119,271**	**90,764**

Amounts stated in millions of Colombian pesos

Note 26. Taxes, contributions and rates

The detail of taxes, contributions and rates, other than income tax, is as follows:

Taxes, contributions and rates	2020	2019
Current		
Withholding tax on income and stamp duty	79,669	65,392
Industry and commerce tax	21,543	20,832
Appreciation tax	-	64
Customs tax and charges	2,939	1,431
Cuota de fiscalización y auditaje	2,726	-
Contributions	81,855	7,689
National consumption tax	5	5
Other national taxes	696	696
Other municipal taxes	2	85
Value added tax	4,063	4,442
Total taxes, contributions and rates Current	222,393	116,424
Total taxes, contributions and rates	222,393	116,424

Amounts stated in millions of Colombian pesos

Note 27. Provisions, contingent assets and liabilities

27.1 Provisions

The reconciliation of provisions is as follows:

Concept	Dismantling and restoration[1]	Onerous contracts[2]	Lawsuits	Contingent consideration - Business combinations	Implied subsidiary obligations	Warranties[3]	Other provisions	Total
Initial balance	137,679	32,246	187,772	133,346	60,008	108,630	87,161	746,842
Additions	-	-	22,981	-	-	-	41,338	64,319
Uses	(26,892)	(28,630)	(699)	-	-	-	(69,967)	(126,148)
Unused amounts reversed (-)	(8,722)	-	(12,217)	(46)	-	-	(2,856)	(23,840)
Adjustment for changes in estimates	55,672	5,945	1,564	16,197	3,016	60,100	34,872	179,366
Capitalizable decommissioning	18,579	-	-	-	-	-	-	18,579
Corporate reorganization	-	-	1,195	-	-	-	-	1,195
Exchange difference	-	-	507	3,177	-	-	-	3,764
Other changes, Financial Expense	6,187	420	5,375	704	-	5,888	3,697	20,999
Final balance	182,543	-	206,558	155,378	63,024	174,318	93,246	875,067
Non-current	120,122	-	28,612	147,389	63,024	90,287	35,641	485,075
Current	62,421	-	177,946	7,989	-	83,531	57,605	389,992
Total	182,543	-	206,558	155,378	63,024	174,318	93,246	875,067

Amounts shown in millions of Colombian pesos

[1] Increase is due to an adjustment to the valuation of the environmental and social recovery plan for the Ituango Project. (See note 27.1.1).

[2] Correspond to the contract signed with Transportadora de Gas Internacional S.A. E.S.P. (TGI) that was ended in December 2020.

[3] Increase due to a valuation adjustment (See note 27.1.6).

[4] Is disclosed as part of the provisions for tax obligations, insurance and reinsurance and financial restatement in the statement of cash flows.

27.1.1. Decommissioning or environmental restoration

EPM is obliged to incur costs for decommissioning or restoring its facilities and assets. Currently EPM keeps three provisions for decommissioning or restoring:

- Provision for environmental impact in the construction of infrastructure projects: this arises as a legal obligation derived from the granting of the environmental license to compensate for the loss of biodiversity during the construction phase, as well as compensation for the subtraction of reserve areas, affectation of prohibited species and forest use; obligations that are formalized through resolutions of the ANLA (National Environmental Licensing Authority), CAR - Regional Autonomous Corporation and / or MADS - Ministry of Environment and Sustainable Development.

  The execution of the biotic environmental compensations of the project extends beyond the time in which the asset begins to operate technically, being necessary to implement the figure of the provision with the intention that these expenditures remain as greater value of the construction in course. The Group has committed to compensate the loss of biodiversity, subtraction and closures from 2016 to 2019 according to the resolutions: Res. 1313/2013 ANLA, Res. 519/2014 ANLA, Res LA. 0882/04/08/2014 ANLA, Res. 1166/2013 MADS, Res. 1852/2013 CAR, Res. 2135/2014 CAR, Resolution 1189/22/07/2104 MADS,

Res. 1120907/17-03-2015 CORNARE, Res. 141011206/16-10-2014 CORANTIOQUIA,Res LA. EIA1-9872 21/04/2014 CVS, among others. The provision is recognized for the present value of the expected costs to settle the obligation using estimated cash flows. The main assumptions considered in the calculation of the provision are estimated costs, CPI and TES fixed rate.

- Environmental compensation and compulsory investment of 1%: Law 99 of 1993, established the mandatory nature of environmental licensing for the development of any activity that could cause serious damage to renewable natural resources or the environment, or introduce considerable or noticeable modifications to the landscape and depending on the type of activity, the size and location of the project, and assigned the powers in relation to environmental licensing to the National Environmental Licensing Authority, the Regional Autonomous Corporations, or the metropolitan areas.

  Article 321 of Law 1955 of 2019 indicates that all holders of an environmental license who have investments pending as of 25 May 2019 may benefit from the percentage increase in the value of the liquidation basis of the compulsory investment of not less than 1%, according to the year of commencement of activities authorized in the environmental license and defined the requirements and procedures to update pending investments and benefit from new terms of execution subject to the approval of the ANLA.

  For EPM, the relative obligations for the use of water taken directly from natural sources, in the projects carried out in La Sierra, Porce II, Porce III and Hidroituango are contemplated.

- Jepírachi: Due to non-compliance with the technical standard issued by resolution CREG 060 of 2019, it was determined that the Jepírachi Wind Farm should be removed from the National Interconnected System and the respective decommissioning should be carried out. The main assumptions considered in the calculation of the provision are estimated costs, CPI and TES fixed rate. As of 31 December 2019, the provision was recorded for $8,722.

- As a result of the Hidroituango project contingency, caused by the rising waters of the Cauca River as a consequence of the collapse and subsequent uncovering of the project's diversion tunnel, which occurred between April and May 2018, a provision of $31,388 was created in the same year to attend to the recovery of the affected infrastructure in the municipalities located downstream of the project.t also includes the environmental restoration caused by the closure of the floodgates of the tunnel in 2019, which reduced the flow of the Cauca River and the events that could arise from the technical milestones to be reached, typical of the contingency, as well as the execution of the project itself.

  In December 2020 an upward adjustment was made to the social and environmental recovery plan for $1,590; this took into account the evaluation of the status of concentrations of mercury, lead, nickel, chromium, cadmium and arsenic, methylmercury in fish, water, sediments and suspended material, cyanobacteria in water and possible health effects on the riparian inhabitants of the middle and lower Cauca river basin; and the Humboldt Framework Agreement: Biodiversity (Standardization of monitoring in the middle and

lower Cauca River basin, compliance with pending commitments in the compensation plan, analysis of possible reserve area).

The specific action plan for recovery should consider three framework programs:
a. Recovery of affected bogs
b. Recovery of affected fish fauna
c. Re-establishment of the aquatic habitats located in the affected area
These three programs correspond to the environmental component as a response to the identifying of the caused damage, as well as the discretionary actions. Also included are social programs, economic activities, infrastructure, and risk management, among others.

The different actions are to be developed between the municipalities of Valdivia to Nechí, however, if they are identified in the municipalities that are part of La Mojana, will also be the subject of intervention.

The balance of the provision as of December 31, 2020 is $88,547, during the year the provision has been adjusted by $57,989 and payments of $24,295 have been made.

27.1.2. Onerous Contracts

As of December 31, 2020, the provision for the fuel supply and transportation contract signed between EPM and TGI-Transportadora de Gas Internacional S.A. is terminated. E.S.P, since 2008, has the objective of supporting the Termosierra plant and obtaining the income from the reliability charge established by the Energy and Gas Regulatory Commission through the resolution CREG 071 of 2006.

The main assumptions considered in the calculation of the provision were: costs associated to the contract with the conditions referred to in each quarter, utilization factor or cessation of payments for maintenance of the contract, Libor rate, fixed rate in pesos TES (Colombian Government debt security), TRM of the quarter and macroeconomic scenario.

The main assumptions used on the events were: Suspension of the contract for 30 days during the year and its use for only 15 days due to generation of the Termosierra plant and the rest of the time without using the contract would be paid (only fixed costs).

27.1.3. Lawsuits

This provision covers the estimated probable losses related to labor, administrative, civil and tax lawsuits arising in the operations of EPM. The main assumptions considered for calculating the provision are: Average CPI to actual data in previous years and projected data in future years, fixed rate TES in Colombian pesos to discount, estimated value to be paid, and the estimated payment date for those lawsuits rated as probable. As of today, no future events have been foreseen that may affect the calculation of the provision.

In order to minimize the uncertainty that may arise regarding estimated dates of payment and values to be paid in a lawsuit rated as probable, the company uses business rules based on statistic studies to obtain the average length of processes per action as well as case law

to estimate the maximum amounts the law defines for the value of the extra-economic or intangible claims when they exceed their amount, as described below:

Average duration of processes per action

Administrative and tax processes

Type of legal action or procedure	Average length (in years)
Abbreviated	4
Petition for compliance	4
Group action	6
Representative actions	4
Conciliation (pre-trial)	2
Partie civile proceedings	4
Contractual (Breach of contract)	13
Survey and demarcation	5
Executive	5
Singular excecutive	3
Exporpriation	4
Comprehensive reparation incidet (criminal)	2
Imposition of easements	4
Nullification of administrative acts	5
Nullification and reinstatement of rights	10
Nullification and reinstatement of labour rights	11
Ordinary litigation	7
Ordinary of membership	5
Accusatory Criminal (Law 906 of 2004)	4
Division's lawsuit	4
Protection of consumer rights	6
Police grievance	3
Right to reclaim	7
Direct compensation	12
Oral	5

Labor processes

Type of legal action or procedure	Average length (in years)
Labor solidarity	3.5
Pension	3.5
Extra hour	3.5
Job reinstatement	4
Salary scale equalization	3.5
Unfair dismissal compensation	3.5
Reassessment of social benefits	3.5
Compensation for work accident	4
Refund of Health_Pension contribution	4

Application of case law

Typology: the values of claims for compensation of extra-patrimonial damages will be recorded according to the following typology:

- Non-material damage.
- Damage to health (physiological or biological damage), derived from a physical or psychophysical injury.
- Damage to relationship life.
- Damage to constitutional and conventional property.

The values of other extra-matrimonial claims not recognized by the jurisprudence will not be recorded, unless it can be inferred from the claim that, despite its name, it corresponds to one of the accepted typologies. Nor shall claims for extra-patrimonial compensation for damage to property be recorded.

Quantification: The amounts of extra-patrimonial damage claims will be recorded uniformly as follows, regardless of its typology:

Direct victim compensation	100 monthly minimum legal wage enforced (MMLWE)
Indirect victim compensation	50 monthly minimum legal wage enforced (MMLWE)

The following are the recognised lawsuits:

Third party (Plaintiff)	Complaint	Amount
Oscar Elias Arboleda Lopera	It includes 173 plaintiffs who worked for EADE; and, they state that in the dissolution and liquidation of said company there was an employer substitution with EPM, which obligates it to all labor claims.	105,258
Consorcio Dragados Porce II	To pay the plaintiffs, among others, the sums of money resulting from the refund of the total compensation illegally deducted by EPM in the contracting process No. CD002376.	28,696
Various labor	149 processes with an average of $117 and an amount of less than $1,074.	17,480
Departamento del Valle del Cauca	By way of reestablishment of rights, the Department of Valle del Cauca is ordered to return the amounts withheld in respect of Stamps for Pro-Public University Hospitals and Pro-Universities of Valle del Cauca with the respective interest.	8,092

Third party (Plaintiff)	Complaint	Amount
Municipio de Yumbo (Valle)	Industry and commerce and its complementary signs adn boards and public lighting.	5,156
Various administrative	21 processes with an average of 5$233 and an amount of less than $916.	4,885
Consorcio Dragados Porce II	That EPM be ordered to recognize and pay the amount of damages caused to the good name of the companies that constituted the CONSORCIO DRAGADOS CONCONCRETO PORCE II.	4,276
John Walter Jaramillo	Declare the nullity of the dimissal, with their respective salaries and their increases, social benefits until he/she is effectively reinstalled.	4,266
Oliver Antonio Aguirre Soto	Request for reinstatement, salaries and social benefits.	3,283
Various prosecutors	9 procesess with an average of $290 and an amount of less than $5,156.	2,610
Unión Temporal Energía Solar S.A. y Estructuras Arbi Ltda.	Declare that the bid submitted by the plaintiffs to bid N° ES-2043- GI called by EPM, was legally apt to be taken into account at the time of awarding the respective contract of bid N° ES-2043- GI.	2,050
General Fire Control Ltda.	To declare the nullity of the Communications suscribed by EPM, whereby the fines imposed, as of 07/04/2011 at USD 153.957,00, at 03/09/2009 for non-compliance in the delivery term, for US$263.368,60, based on numeral 5.13 Condiitons of the Contracting No. 029158, and on the occasion of the execution of Contract No. 29990329557, are updated.	2,033
Construcciones Pico y Pala Ltda.	That resolutions 95070 of 04/05/1999, issued by EPM,whereby it unilaterally liquidated contract 1/DJ-682/15 executed between EPM and the Consorcio Trainco S.A. and 113701 of 03/15/2000, also issued by EPM, whereby it negatively resolved the appeal for reconsideration filed against resolution 95070 of 04/05/1999, are null and void.	1,886
Humberto Hernando Gómez Franco	To declare administratively and patrimonially liable, for the injuries suffered by Mr. HUMBERTO HENANDO GÓMEZ FRANCO, when he was electricuted by higgh voltage cables owned by the defendant entity, on 10/23/2013, at the La Playa farm owned by Mr. Antonio Lopera, located in the La Virgen sector, in the Hoyorrico Village, jusrisdiction of the Municipality of Santa Rosa de Osos.	1,864
General Fire Control Ltda.	That EPM be ordered to pay the material damages, consequential damages and loss of profits thet were caused, with the non-recognition and payment of the claimed concepts in accordance with what is proven in the process, amount that must be updated in its value in accordance with the provisions of article 178 of the C.C.AS. Thar EPM be ordered to pay the costs. That the judgment that puts an end to the pricess shall be complied with in accordance with the terms of Articles 176 and 177 of the C.C.A.	1,783
Francisco Javier Muñoz Usman	Decree the nullity of the conciliation agreement signed due to a defect in consent and consequently order the reestablishment of the employee contract, the reinstatement, the payment of all salaries and benefits foregone, as well as the payment of social security contributions made to the integral Social Security System.	1,702
Carlos Olimpo Cardona	That the plaintiffs be reintegrated to the same position or trade another of equal or higher category that they had been performing, and that as a consequential compensation, all salaries and legal social benefits foregone should be paid, in addition to all contributions made to the Integral Social Security System.	1,330
Seguros del Estado S.A.	That in the event that the Policy has been enforced, EPM be ordered to reimburse the insurer the amount paid for the indemnity, duly updated. USD285.000	1,305

Third party (Plaintiff)	Complaint	Amount
Accesorios y Sistemas S.A.	To declare the nullity of resolution 3077 of 12/11/200, issued by the General Manager of EPM, by means of which it was resolved to declare the realization of the risk of quality and correct operation of the vehicles object of contract 090321557.	1,268
Carga de Saldos PPA de EP Rio		1,195
Consultel Ltda.	To declare EPM responsible for the breach of Contract No: 299901-26731, whose object is "CONSTRUCTION OF INTERNAL AND EXTERNAL GAS NETWORKS AND CONNECTION OF CUSTOMERS TO THE NATURAL GAS DISTRIBUTION SYSTEM OF EPM, IN THE VALLEY OF ABURRÁ AND ITS CONNECTED WORK AND ACTIVITIES".	1,164
TRAINCO S.A.	Declare the nullity of resolutions 161052 del 05/03/2001, issued by EPM, whereby it unilaterally liquidated contract 2101870 executed between EPM and Trainco S.A. and 178702 of 07/06/2001.	1,108
Didier De Jesús Restrepo Montoya	THe plaintiffs claim payment of moral damages allegedly caused by the eviction of their homes installed on a properly owned by EPM for the construction of the Porce III Hydroelectric Project, which were subject to eviction ordered by the Mayor's Office of the Municipality of Anorí.	1,081
Omar Augusto Lugo Hoyos	Decree the nullity of the conciliation agreement signed due to a defect in consent and consequently order the reestablishment of the emplyment contract, the reinstatement, the payment of all salaries and benefits foregone, as well as the payment of social security contributions from the time of dismissal until the plaintiff is effectively reinstated.	1,075
General Fire Control Ltda.	That EPM be ordered to return the amounts withheld due to the imposition of fines for not complying with the technical specifications and characteristics, plus the moratoriuminterest caused from the date of the withholding and until the date of the actual return based on item 5.13 DEDUCTIONS FOR NONCOMPLIANCE (FINES), of the bidding conditions of cantracting process No. 029158, and due to the execution of contract No. 29990329557.	916
Consorcio Dragados Porce II	Recor difference in exchange Account 271005 Litigation N° 14000857, 14000832 and 14000893.	796
Total recognised lawsuits		**206,558**

Amounts stated in millions of Colombian pesos

27.1.4. Contingent consideration - on business combination

Corresponds to contingent considerations mainly related to the acquisition of the following group of assets that constitute a business: Espiritu Santo Energy S. de R.L. subsidiary and Empresas Varias de Medellín S.A. E.S.P. - EMVARIAS subsidiary, the balance as of 31 December 2019 is $133,346.

The main assumptions considered in the calculation of the contingent consideration related to the acquisition of Espiritu Santo are: the estimated date of occurrence of the milestones associated with the contingent payment, the associated probability of occurrence and additionally, the discount of the payment flows was considered by applying a discount rate (LIBOR rate) in accordance with the risk of the liability. To date, no future events that could affect the calculation of the provision have been evidenced.

The main assumption used in the future events of the contingent consideration related to the acquisition of EMVARIAS are: ongoing lawsuits against EMVARIAS at the date of the transaction, definition of the year of materialization of each lawsuit, definition of the

related amount to each of the disputes, estimate of future contingent outlays related to the estimated lawsuits for each year and discount rate (TES fixed rate) to discount future contingent expense flows. To date, there have been no future events that could affect the calculation of the provision.

27.1.5. Implicit subsidiary obligations

Corresponds to the implicit obligation of the subsidiary EPM Capital México S.A. de CV derived from the application of the equity method.

27.1.6. Warranties

Constitution, in June 2018, of the provision for guarantee No. 10090002278 - Reliability charge of USD 41.5 million ($121,633) to cover the construction and commissioning of the Hydroelectric Plant and its monthly adjustments. In accordance with Resolution CREG 061 of 2017, the warranties of the reliability charge for the entry of new electricity generation projects are executed when the entry into commercial operation of the plant is delayed by more than one year. The contingencies presented in the diversion tunnel cause the Ituango Hydroelectric Project to incur in this type of delay and, therefore, under the current regulations, this guarantee must be executed.

EPM managed before the Energy and Gas Regulatory Commission (CREG, by its Spanish initials) and the Government in general, an amendment to the regulation of guarantees of the charge for reliability that would provide some opportunity to continue with the obligations of steady energy and in turn prevent the execution of the guarantee in question. However, through Resolution 154 of 2019, CREG confirmed its Resolution 101 of 2019 in which it had declared the loss of Hidroituango's energy obligations with a starting date of 1 December 2018. The consequence of this decision is the loss of income associated with these obligations and the execution of a guarantee in the amount of USD 43.1 million.

In December 2018 EPM created for $107,797 (approximately USD 3.5 million per month) a provision for the default that would be incurred, from January to October 2021, to the transporter Intercolombia for the months following the entry into operation of the Ituango project connection infrastructure. In December 2020, the provision for non-compliance of the transmission project was adjusted and the operation start date was moved from October 2021 to November 2022 (20 months) in the amount of $74,693 million. In 2020, $65,687 has been recognized as a provision and no payments have been made, for a balance of $174,318.

27.1.7. Other provisions

- **Other contingency provisions _ Attention affected Ituango:** Provision for the attention of the affected people of Puerto Valdivia who were evacuated and sheltered, and to whom compensation was recognized for consequential damages, loss of profits and moral damages; the recovery of the families affected by the total or partial loss of their homes and economic activities caused by the Hidroituango Project when there was a rise in the waters of the Cauca River as a result of the unclogging of the project's detour tunnel on May 12, 2018. The balance of the provision as of December 31, 2020 is $45,985, during the year the provision has been adjusted by $35,043 and payments have been made for $24,931.
- **Environmental sanctioning procedure:** Corresponds to sanctions imposed on EPM for not implementing environmental management measures for the execution of works or executing them without the respective authorization or modification of the environmental license. As of 31 December 2020, there is a balance of $7,533 for four fines imposed by the ANLA and one by Corantioquia.

  ANLA:

  - The first for building or modifying a tunnel without prior authorization and disposing of excess material on the road to San Andrés de Cuerquia ($1,718);
  - the second for having initiated activities related to the construction of the Auxiliary Deviation System (SAD) and its associated infrastructure within the Ituango Project without having previously processed and obtained the modification of the environmental license.

  The balance of the provision as of December 31, 2020 is $5,510, during the year the provision has been adjusted by ($-1,105) and payments have been made for $5,249.

  On the other hand, Corantioquia declared EPM environmentally responsible for carrying out an intervention on natural forest, in March 2014, in Vereda las Palmas of the Municipality of Envigado without having requested or obtained the permit ($305).

  - **Sanctions:** Fines imposed by the competent authority for not applying the law or regulation indicated by the respective body. As of December 2020, there is a provision of $1,216 imposed by the Superintendency of Residential Public Services - SSPD- due to a failure in the provision of the SDL service.
  - EPM keeps other provisions oriented to the welfare and quality of life of its employees and family group, such as: employer policy, multiplier points, Somos program, technical reserve and provision for high cost and catastrophic diseases.

The main assumptions considered for the calculation of welfare and quality of life provisions are:

Employer policy: Awarded to EPM workers as an extralegal benefit. An aggregate deductible was taken out from 1 July 2019 through 31 July 2020, for $4,000. The main assumptions considered in the calculation for each type of provision are fixed rate TES discount rate, estimated value to be paid and estimated date of payment. To date, no future events that could affect the calculation of the provision have been evidenced.

Multiplier points: Points obtained during the year must be recognized at the request of the interested party or by decision of the Directorate of Human Talent Development and each accounting closure of the period must be paid through payroll. The value of each point is equivalent to 1% of the minimum wage (SMMLV) and point accumulation is not to be allowed from one year to the other, so all points must be exchanged every year.

Puntos Verdes GNV program: This program works under the point accumulation modality. According to the behavior of the statistics the points are counted with a probability of 80% of redemption.

High cost and catastrophic diseases: The basis for calculating this provision is that corresponding to the analysis of the entire population of members and beneficiaries of the Adapted Health Entity (EAS) of EPM, who suffer from any of the authorized pathologies.

- **Technical reserve:** The basis for calculating the reserve is that corresponding to all service authorizations issued and which on the cut-off date have not been redeemed, except those corresponding to authorizations with more than twelve months of issue or those which, at least four months after they have been issued, are known not to have been used.
- **Other provisions for contingency Ituango:** Provision created for the reconstruction of community infrastructure destroyed by the rising waters of the Cauca River, which was caused by the opening of the Ituango project's diversion tunnel on 12 May 2018. As of December 31, 2020, the balance of the provision amounts to $ 5,616, during 2020, $ 7,323 has been recognized between estimated expense and interest and payments have been made in the amount of $ 5,963.
- **Union contribution:** In 2018 a collective bargaining process was advanced between EPM and the union organization UNIGEEP, since the parties did not reach an agreement for the signing of a Collective Bargaining Agreement, an Arbitration Court was convened, as established in the Substantive Labor Code. Thus, in February 2020, this Court issued an Arbitration Award ordering EPM to pay the amount of $150 for union dues, divided in $75 per year of validity (2020-2021). To date, this decision is being reviewed by the Supreme Court of Justice and therefore it has not

been complied with; for this reason, since there is no certainty as to the date of the decision of this entity and given the probability that in 2021 it will be notified, it is necessary to provision this item, in case the decision is unfavorable for EPM.

27.1.8. Estimated payments

The estimate of the dates on which the company may have to disburse payments related to contingent liabilities included in the statement of financial position of EPM at the cut-off date, is the following:

Estimated payments	Dismantling and restoration	Lawsuits	Contingent consideration	Subsidiary constructive obligations	Warranties	Other provisions	Total
2021	63,698	178,156	7,589	-	83,531	55,202	388,176
2022	57,964	10,849	4	-	90,787	17,175	176,799
2023	24,742	2,100	143	-	-	4,087	31,072
2024 and others	38,543	18,717	147,642	63,024	-	7,428	275,354
Total	184,967	209,922	155,378	63,024	174,318	83,892	871,501

Amounts stated in millions of Colombian pesos

27.2 Contingent assets and liabilities

The composition of contingent assets and liabilities is as follows:

Description	Contingent liabilities	Contingent assets	Neto
Lawsuits	1,363,289	33,480	(1,329,809)
Total	**1,363,289**	**33,480**	**(1,329,809)**

Amounts stated in millions of Colombian pesos

The company has lawsuits or procedures currently in progress before jurisdictional, administrative and arbitral bodies. Considering the reports of the legal advisors, it is reasonable to appreciate that such lawsuits will not significantly affect the financial situation or solvency, even in the event of an unfavorable conclusion of any of them.

The main pending lawsuits and judicial and extrajudicial disputes to which the company is party as of the court date are indicated below:

Contingent liabilities

Third party (Plaintiff)	Complaint	Amount
ISAGEN S.A. E.S.P.	Order EPM to compensate ISAGEN for the damages it suffered as a consequence of the fire and the consequent unavailability of the Guatapé Power Plant.	330,954
Various Administrative	319 Litigios inferiores a $10,112 con promedio de $927.	295,792
Galadier Díaz Rivera	It is declared to the Consorcio Hidroeléctrica Hidroituango S.A. E.S.P., Nation - Ministry of Environment and Sustainable Development, Nation - Special Administrative Unit "National Authority of Environmental Licenses - ANLA", Nation - Ministry of Mines and Energy, Nation - Mining and Energy Planning Unit, CORPOURABA, CORANTIOQUIA, INGETEC S.A.S, SEDIC S.A., Construcoes e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Corinsa Ramón H. S.A - Department of Antioquia - EPM and the Mayor's Office of Medellín, jointly and severally and administratively liable for all the pecuniary and non-pecuniary damages caused to the plaintiffs, due to the overflowing of the Cauca River that originated in the Ituango Hydroelectric Project. The defendant entities to pay EIGHTY SEVEN MILLION SEVEN HUNDRED EIGHTY THOUSAND THREE HUNDRED PESOS $87,780,300 for each of the plaintiffs for moral damages.	172,884
Elis María Ramos	It is declared to the Consorcio Hidroeléctrica Hidroituango S.A. E.S.P., Nation - Ministry of Environment and Sustainable Development, Nation - Special Administrative Unit "National Authority of Environmental Licenses - ANLA", Nation - Ministry of Mines and Energy, Nation - Mining and Energy Planning Unit, CORPOURABA, CORANTIOQUIA, INGETEC S.A.S, SEDIC S.A., Construcoes e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Corinsa Ramón H. S.A - Department of Antioquia - EPM and the Mayor's Office of Medellín, jointly and severally and administratively liable for all the pecuniary and non-pecuniary damages caused to the plaintiffs, due to the overflowing of the Cauca River that originated in the Ituango Hydroelectric Project. The defendant entities to pay EIGHTY SEVEN MILLION SEVEN HUNDRED EIGHTY THOUSAND THREE HUNDRED PESOS $87,780,300 for each of the plaintiffs for moral damages.	154,686
Elsa María Sajayo Carvajal	It is declared to the Consorcio Hidroeléctrica Hidroituango S.A. E.S.P., Nation - Ministry of Environment and Sustainable Development, Nation - Special Administrative Unit "National Authority of Environmental Licenses - ANLA", Nation - Ministry of Mines and Energy, Nation - Mining and Energy Planning Unit, CORPOURABA, CORANTIOQUIA, INGETEC S.A.S, SEDIC S.A., Construcoes e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Corinsa Ramón H. S.A - Department of Antioquia - EPM and the Mayor's Office of Medellín, jointly and severally and administratively liable for all the pecuniary and non-pecuniary damages caused to the plaintiffs, due to the overflowing of the Cauca River that originated in the Ituango Hydroelectric Project. The defendant entities to pay EIGHTY SEVEN MILLION SEVEN HUNDRED EIGHTY THOUSAND THREE HUNDRED PESOS $87,780,300 for each of the plaintiffs for moral damages.	109,190
Barrio Villa Esperanza	Immaterial damage in the amount of 100 SMLMV for each of the members of the group, that is, for one thousand two hundred and ninety-six (1296) persons, which in total is equivalent to One hundred and thirteen thousand seven hundred and sixty three million one hundred and thirty-nine thousand two hundred pesos ($113,763,139,200). Material damage by way of consequential damage for the destruction of each one of the houses, calculated in an individual value per house of five million pesos ($5,000,000), which in total amounts to 377, for a total of one thousand eight hundred eighty-five million pesos ($1,885,000,000).	106,452
Aura De Jesús Salazar Mazo	They request 100 SMLMV for damage to the mining activity; and for moral damages, which they appraise at an equivalent of 200 SMLMV for each of the persons in the group, approximately 113.	40,817
Aura De Jesús Salazar Mazo	Collective right approximately 113 people each claiming $1,133,400 for Consolidated Loss of Profit and $78,753,854 for Future Loss of Profit, for destroying, interrupting and cutting the ancestral bridle paths that lead from the Alto Chirí trail in the municipality of Briceño to the Valle de Toledo township.	32,026
Obras Civiles E Inmobiliarias S.A - Oceisa	Declare that ERM's failure to comply with the main obligation to deliver studies and designs prevented OCEISA from executing the contract and that it is not contractually liable for those portions of the work that could not be executed by third parties due to events beyond the control of the parties that prevented the normal execution of the contract.	18,801
Luis Fernando Anchico Indaburo	Declare EPM administratively liable as the cause of the antijuridical damage for having destroyed the fishery resource of the Montecristo marsh complex, which is due to the construction of the IHP (Ituango Hydroelectric Project) and request the recognition and payment of a minimum wage for each family nucleus from February 2019 until the judgment is rendered, this is called by the plaintiffs as consolidated loss of profits.	16,051
Luis Fernando Anchico Indaburo	To declare EPM administratively liable, as the cause of the antijuridical damage by having destroyed the fishery resource of the Montecristo marsh complex, which is due to the construction of the IHP (Ituango Hydroelectric Project); that a minimum wage be recognized and paid for each family nucleus from February 2019 until the judgment is rendered and the recognition of a future loss of earnings that goes from the time of the judgment until the probable period of life of each one of the plaintiffs.	16,045
Various Labor	162 Litigation under $1,290 with an average of $94.	15,190
Unión Temporal Nueva Esperanza	Declare that EPM breached and unbalanced the contract CT-2013-000641 whose purpose was the execution of the construction and electromechanical assembly works of the transmission lines at 230KV Guavio - Nueva Esperanza and associated reconfigurations paraíso - Nueva Esperanza - Circo and paraíso - Nueva Esperanza - San Mateo.	12,947
Maikol Arenales Chaves	Declare the defendants administratively liable as the cause of the antijuridical damage caused by the destruction of the fishery resource of the Ciénagas de Montecristo complex, which is due to the construction of the IHP.	11,980
Maikol Arenales Chaves	Declare the defendants administratively liable as the cause of the antijuridical damage caused by the destruction of the fishery resource of the Ciénagas de Montecristo complex, which is due to the construction of the IHP.	11,980
Javier Mauro Rojas	Declare EPM administratively liable as the cause of the antijuridical damage for having destroyed the fishery resource of the Montecristo marsh complex, which is due to the construction of the IHP (Ituango Hydroelectric Project) and request the recognition and payment of a minimum wage for each family nucleus from February 2019 until the judgment is rendered, this is called by the plaintiffs as consolidated loss of profits.	10,113
Mocaine Olave De Larios	Relatives of former integral worker who died in Ituango, claim for full compensation for moral damages caused. Solidarity.	5,763
Rosa Disney Quintero Florez	The families of some deceased former workers of the contractor CONSORCIO REDES DE IGUANÁ, formed by the companies Sanear S.A. and Paecla S.A.S. were sued. Also, Seguros del Estado S.A., Sociedad Estudios Técnicos S.A.S. and Seguros Generales Suramericana S.A. were sued.	1,290
Ciudadela Comercial Unicentro Medellín PH	Declare the nullity of the administrative act issued by EPM with file number 20190130037817 of 2019-02-27. Order the reestablishment of the plaintiff's rights by ceasing the collection of the electric energy tax contemplated by Law 142 of 1994, Law 143 of 1994 and Law 223 of 1995; and, make the refund of what was paid for said concept from January 1, 2017 and until the date of judicial notification that puts an end to the	320
Total contingent liabilities		**1,363,289**

Amounts stated in millions of Colombian pesos

Regarding the uncertainty of the estimated payment date and the estimated value payable, the same business rules indicated in note 14.1.3 apply to contingent liabilities.

EPM also has as a contingent liability, Environmental Sanctioning Procedures, with the following information:

Third party (Plaintiff)	Complaint	Amount
Área Metropolitana del Valle de Aburrá	Discharge of wastewater from the San Fernando WWTP failing to comply with the removal level of minimum 80% for the parameters BOD5_Biochemical Oxygen Demand_; TSS_Total Suspended Solids_; fats and oils established in Article 72, new user, of Decree 1594 of 1984_ Metropolitan Resolution No. S.A. 003415 of April 28, 2014.	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	Construction of mini power plant without authorization and use of ecological flow to generate energy without being authorized in environmental license (Force III hydroelectric power plant)_Auto 4335 of December 17, 2013.	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	Charge against EPM for having prevented the contribution of the ecological flow, by closing the bottom discharge valves of the Force III Hydroelectric Power Plant, in order to carry out the repair activities of the slopes of the spillway dissipation basin, the dam and the discharge of the ecological flow without having the pronouncement of the competent environmental authority. Auto 6426 of September 26, 2017.	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	Termocierra 1. For performing the air quality sampling reported in ACI 13, 14 and 15, without the periodicity established by the Industrial Air Quality Surveillance System, authorized in the environmental instrument corresponding to this project. 2. For performing environmental noise monitoring reported in ICA 12, 14 and 15, with an Environmental Laboratory not accredited by IDEAM_Auto 350 of February 5, 2018.	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	Use of explosives in the construction of the Nueva Esperanza tower. The environmental license granted by this resolution does not cover any type of work or activity different from those described in the Environmental Impact Study, the Environmental Management Plan and in this administrative act. Auto 80574 of June 27, 2017 ANLA_.	Not possible to know the sanction to be imposed.
Área Metropolitana del Valle de Aburrá	Discharge of domestic wastewater from the rupture of the sewage pipe that carries such water, on a pasture and then on the Doña María stream, property called Torremolino.	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	For having disposed leftover material from the excavation activities of the construction of the Puerto Valdivia Road (Dam Site - Ituango) on the bed and protection strip of the "Quebrada Tamara"; and, for having carried out the replacement of the bridges located along the Puerto Valdivia Road to build two (2) Box Culverts without the authorization to do so; and, for having discharged wastewater to an infiltration field in the property "El Ciruelar". (SAN0143-05-2018_Auto 3196 of 2018).	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	To have carried out the occupation of the "Río Ituango" riverbed for the installation of a pumping system without having the respective authorization; and, to have carried out the collection of water resources from the "Río Ituango" source by pumping without having previously obtained the modification of the environmental license. (SAN0047-00-2019_Auto 2919 of 2019)	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	Failure to implement the environmental management measures established in the Environmental License granted for the development of the "Construction and Operation of the Pescadero - Ituango Hydroelectric Power Plant" project related to the management and proper disposal of excess excavation material from the construction of the Puerto Valdivia road, dumping it on the slopes of the road and the "Río Cauca" and "Quebrada la Guamera" water sources; and, to have formed the deposits "La Planta" and "Cacharime" less than thirty meters (30 meters) from the water source "Río Cauca". (SAN0046-2019_Auto 0522 of 2016).	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	To have carried out inadequate practices with respect to surface water sources in the area of influence of the project; to have collected water from the "El Roble", "Buriticá", "Bolivia" and "Guacimal" streams, in flows higher than those granted and/or authorized for the development of the project; not having implemented in each of the concessioned water bodies, the infrastructure that would allow monitoring the remaining flows, in order to be presented in the environmental compliance reports; not having carried out and delivered the monitoring of water quality and hydrobiological communities in the "Río Cauca", under the conditions established in the environmental license. For not having carried out the reconformation and recovery of the riverbed of the "Río San Andres" and its flood zone to its natural conditions, within the granted terms; for having carried out the exploitation of petreous materials coming from the "Río San Andres", without the updated environmental permits; for not having delivered the results of the sediment monitoring of the "Río Cauca", in order to establish the baseline for comparison at the moment of starting the operation phase of the project. Having exceeded the maximum permissible levels of PST (particulate matter) and atmospheric contaminants in the asphalt plant located in the "El Valle" Industrial Zone; for not having built the necessary facilities and infrastructure in the chimney of the asphalt plant to monitor emissions from stationary sources; for failing to comply with the management measures of the "Plan de Manejo y Disposición de Materiales y Zonas de Botadero" (Materials Management and Disposal Plan and Landfill Areas)); for disposing of plant material mixed with inert material inside the deposits; and for not signaling the material disposal areas that remain active. All this in the area of influence of the project "construction, filling and operation of the Pescadero - Ituango Hydroelectric Project... (SAN0033-00-2019_Auto 2920 of 2015);	Not possible to know the sanction to be imposed.
Dirección de Bosques, Biodiversidad y Servicios Ecosistémicos del Ministerio de Ambiente y Desarrollo Sostenible	For having intervened 100 HAS that contained forest species subject to national prohibition without the previous Resolution authorizing its filling and that were located in the area of the Ituango Hydroelectric Project reservoir. (SAN027 (Minambiente)_Resolution 835 of 2017). Presentation of discharges with file number E1-2017-032747 of November 28, 2017_probative period Auto 272 of June 2018.	Not possible to know the sanction to be imposed.
Autoridad Nacional de Licencias Ambientales "ANLA"	Auto 00009 of January 8, 2021 the ANLA initiates the environmental sanctioning procedure for the contingency associated with the auxiliary deviation system, to verify the following facts: 1. failure to report within the term provided by law (24 hours) the contingent event occurred on April 28, 2018. 2. To have continued with the construction of the SAD and its infrastructure, without having sufficient technical information related to the environmental characterization of the intervened area for the geology and geotechnical components. 3. For allegedly generating negative impacts to renewable natural resources. 4. Not having guaranteed for the first days of May 2018 and before the evacuation of dammed water from the Cauca River by the project's powerhouse began, the ecological flow of said source downstream of the dam site, to ensure the integrity of ecosystem services and environmental protection assets that are part of the water source. for the contingency associated with the Auxiliary Diversion System. "No charges have been filed; however, a request for the cessation of the sanctioning procedure was filed through file no. 20180064295-4-	Not possible to know the sanction to be imposed.

Third party (Plaintiff)	Complaint	Amount
Autoridad Nacional de Licencias Ambientales "ANLA"	"Initiation of an environmental administrative sanctioning procedure for having carried out forest harvesting activities outside the authorized area for the execution of works that are part of the construction of the Puerto Valdivia - Presa road (Zona Orgánica). "No charges have been filed. (SAN0013-2017_Auto 04905 of 2018)	Without charges. It is considered by the lawyer as possible.
Autoridad Nacional de Licencias Ambientales "ANLA"	"Initiation of sanctioning procedure for not guaranteeing downstream of the dam of the "Construction and operation of the Pescadero - Ituango hydroelectric project" project the ecological flow to ensure the integrity of ecosystem services and environmental protection assets that are part of the "Cauca River" water source. "No charges have been filed. (SAN0001-2019_Auto 0960 of 2019)	Without charges. It is considered by the lawyer as possible.
Autoridad Nacional de Licencias Ambientales "ANLA"	1. Discharge into intermittent dry riverbed at coordinates X=1157241 and Y=1281586. 2. Discharge into the rainwater channel from the mixer washing system located in the industrial zone of the main works. ANLA opened a sanctioning file but it has not been formally initiated. Through Resolution N° 1222 of December 03, 2013 the ANLA imposed a preventive measure of suspension of the discharge. Through Resolution N° 1363 of October 31, 2017, the ANLA lifted the preventive measure in mention. Through Order No. 01282 of March 22, 2019, the ANLA breaks down the proceedings related to this preventive measure of the license file LAM2227 so that they are included in the file SAN0031-2019.	Without charges. It is considered by the lawyer as possible.
Autoridad Nacional de Acuicultura y Pesca_"AUNAP"	"Preliminary investigation initiated for damage to fishing activity during the closure of the powerhouse gates. "No charges have been filed. (on file AUNAP_Auto 002 of February 14, 2019).	Without charges. It is considered by the lawyer as possible.
Autoridad Nacional de Licencias Ambientales "ANLA"	Repeated failure to comply with obligations imposed. Auto 11359 of December 19, 2019. SAN0284-00-2019 _December 19, 2019_.	Situation not resolved. No charges have been filed to date.
Autoridad Nacional de Licencias Ambientales "ANLA"	HIDROELECTRICA ITUANGO S.A. E.S.P. - HIDROITUANGO S.A. E.S.P. Non-compliance with contingency obligations: - Failure to permanently carry out adequate management of non-domestic wastewater and seepage on the left margin of Gallery 203 AV. - Failure to submit the hydrogeological model of the right margin of the project. - Failure to submit cartographic information related to water quality and hydrobiological monitoring that should have been carried out at different points downstream of the project's dam site. - Failure to submit the results of the monitoring of offensive odors, water quality and physicochemical quality of the sludge during the pumping activity of the powerhouse. Order No. 2423 of March 10, 2020, which initiates environmental sanctioning proceedings. SAN0303-00-2020. March 30, 2020. To date no charges have been filed.	Situation not resolved. No charges have been filed to date.
Autoridad Nacional de Licencias Ambientales "ANLA"	HIDROELECTRICA ITUANGO S.A. E.S.P. - HIDROITUANGO S.A. E.S.P. Repeated failure to comply with the obligations imposed in the context of the contingency. Initiation of the environmental sanction procedure by means of Order No. 06576 of July 17, 2020. SAN0285-00-2019 _ July 13, 2020_ To date no charges have been filed.	Situation not resolved. No charges have been filed to date.
Autoridad Nacional de Licencias Ambientales "ANLA"	HIDROELECTRICA ITUANGO S.A. E.S.P. - HIDROITUANGO S.A. E.S.P. _ To carry out air quality and odor monitoring without complying with the protocols established by the ministry of Environment. Perform analysis of samples for air quality and odor sampling by laboratories not accredited by IDEAM. Initiation of the environmental sanction procedure by means of Order No. 07774 of August 14, 2020. SAN0258-00-2019 _ August 14, 2020_ To date no charges have been filed.	Situation not resolved. No charges have been filed to date.

Contingent assets

Third party (Plaintiff)	Complaint	Amount
La Nación Ministerio de Salud y Protección Social	MINSALUD has the legal and constitutional obligation to recognize and cancel the value of the services rendered to the affiliates in relation to medicines and/or procedures, interventions or elements not included in the Mandatory Health Plan (POS).	8,369
Various Administrative	112 Procesos de cuantía inferior a $889 con promedio $64.	7,189
Constructora Monserrate de Colombia SAS	the expropriation in favor of EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. for the Project "Expansion of the Primary Distribution Capacity in the Western Sector of Medellín - Western Chain - Calazans Tank", property named Lot 7, located in the sector Altos de Calazans, Municipality of Medellín, owned by the Company CONSTRUCTORA MONSERRATE DE COLOMBIA SAS.	7,124
Interconexión Eléctrica S.A. E.S.P. ISA	Declare that Interconexión Eléctrica S.A. E.S.P., ISA is civilly liable for not recognizing to EPM, the value that corresponds to it, of the remuneration that ISA received between 1995 and 1999, for the line modules that correspond to assets of use of the STN in the Playas and Guatapé substations represented by it, in which there is shared property, value that to date has not been made, generating an unjust enrichment by increasing the patrimony of the defendant at the expense and to the detriment of the plaintiff's	3,744
Poblado Club Campestre Ejecutivo S.A.	To declare Poblado Club Campestre Ejecutivo S.A., Optima S.A. Vivienda y Construccion and the Municipality of Envigado responsible for the damage to the collector owned by EPM, which collects and transports the wastewater from the sanitary basin of the La Honda stream in the Municipality of Envigado, and to indemnify EPM for the value of all the proven pecuniary damages resulting from the damage to the collector that collects and transports the wastewater from said sanitary basin.	3,567
Fiduciaria Bogotá S.A. - FIDUBOGOTÁ S.A.	Impose in favor of EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. an energy conduction easement over the land lot or property named LA BOCA DEL PANTANO, with real estate registration number 50 C-1497258 located in a rural area of the Municipality of Madrid (Cundinamarca) for the 500 Kv transmission lines, and for one (1) tower point (with its grounding) of the Nueva Esperanza Transmission Project.	960
Municipality of Envigado	To declare the nullity of the administrative act contained in Resolutions 2636 of August 13, 2007 and 4176 of October 26 corresponding to the sanction imposed for the alleged violation of Municipal Decree 259 of August 14, 2002; to declare the inapplicability of Decree 259 of August 14, 2002 of the Municipality of Envigado (Antioquia), "Whereby urban development sanctions are established", for being contrary to the Political Constitution, the Law and the Regime of Domiciliary Public Services. Order, by way of reestablishment of rights, that EPM be reimbursed $655'460,000 for the sanction imposed in the administrative acts whose nullity is requested.	889
CORANTIOQUIA - Corporación Autónoma Regional del Centro de Antioquia	To declare the nullity of Article Five of Resolution No. 110 TH - 1302 - 9864 issued by the Territorial Director TAHAMIES of "CORANTIOQUIA" for the fee for the use of surface water for the period 2011, of the source Río Grande, in a flow of 19.5 mts3/sec; to reimburse Empresas Públicas de Medellín E.S.P., the higher amount paid for the fee for the use of surface water Dec. 155 - 4742, Hydrological Unit: RIO MAGDALENA - CAUCA, between January 1, 2011 and December 31, made through invoice TH - 1927 of April 30, 2012. That Corantioquia be CONDEMNED to recognize and pay to EPM the legal interest, current and default interest legally caused; to pay the costs and agencies at law that may be applicable in accordance with the provisions of Article 188 of Law 1437 of 2011 and other concordant rules.	804
Municipality of Caldo	ZERO PROVISION. 1) Declare the nullity of: -Resolution No. 035 of 2012, (Declares not proven the exceptions proposed by EPM against the payment order and orders to go ahead with the execution) and, -Resolution No. 039 of 2012, (Resolves Appeal for Reposition). //2) That by way of reinstatement, the Municipality of Caldo reimburse EPM for any amount paid by EPM for ICA, by virtue of what has been raised in this lawsuit, and that said amount be returned with commercial interest //3) That the Municipality be ordered to pay the costs.	767
Other fiscal	Proceeding for amounts less than $766	67
Total contingent assets		33,480

Amounts stated in millions of Colombian pesos

As of 30 December 2020, the amount determined by the experts to compensate is $33,480.

Estimated payments and collections

The estimated dates on which the company expects to make payments related to the contingent liabilities or receive collections related to the contingent assets included in this note to the statement of financial position of EPM at the cut-off date are as follows:

Year	Contingent liabilities	Contingent Assets
2021	86,562	12,514
2022	40,600	1,991
2023	27,237	4,056
2024 and other	2,084,740	18,160
Total	**2,239,139**	**36,721**

Amounts stated in millions of Colombian pesos

Note 28. Other liabilities

The composition of other liabilities is as follows:

Other liabilities	2020	2019
Non-current		
collections in favor of third parties [1]	10	10
Income received in advance[2]	2,478	2,685
Assets received from customers or third parties	7,904	7,990
Other deferred credits	21,019	21,089
Subtotal other liabilities, non-current	**31,411**	**31,774**
Current		
collections in favor of third parties [1]	123,844	158,430
Income received in advance[2]	71,254	102,411
Subtotal other liabilities current	**195,098**	**260,841**
Total other liabilities	**226,509**	**292,615**

Amounts stated in millions of Colombian pesos

[1] The decrease is explained by the lower collections received from the sewage tax to Emvarias, public lighting to the different municipalities of Antioquia and the commercial representation contract that EPM has with ESSA and CHEC, as a consequence of the Covid 19 pandemic.

[2] Corresponds to the collection associated with the long-term energy sales and biller's compensation.

28.1 Payment received in advance

The breakdown of payment received in advance as of the cut-off date was:

Payment received in advance	2020	2019
Non-current		
Leases	1,857	2,030
Sale of energy utility	621	655
Total non-current Payment received in advance	**2,478**	**2,685**
Current		
Leases	173	173
Sales	40,797	70,947
Sale of energy utility	9,578	13,040
Sale of fuel gas utility	2,534	-
Sale of fuel gas service	2,483	10,277
Other payment received in advance	15,689	7,974
Total current payment received in advance	**71,254**	**102,411**
Total payment received in advance	**73,732**	**105,096**

Amounts stated in millions of Colombian pesos

[1] The decrease is explained by lower values received in long-term energy contracts.

Note 29. Changes in liabilities due to financing

The reconciliation of liabilities due to financing activities is as follows:

Reconciliation of liabilities due to financing activities 2020	Initial balance	Cash flows	changes other than cash		Other changes[1]	Total
			Foreing exchange	Changes in fair value		
Loans and borrowings (see note 21)	15,192,611	3,358,568	24,286	-	71,356	18,646,821
Lease liabilities (see notes 14 and 23)	2,242,689	(11,580)	-	-	114,477	2,345,586
Pension bonds (see note 25)	542,206	(6,435)	-	-	24,945	560,716
Hedging instruments (see notes 13, 23 and 24)	(45,062)	19,586	-	399,283	(19,586)	354,221
Dividends or surpluses paid (see note 19)	-	(1,488,319)	-	-	1,488,319	-
Other financing cash flows	-	177,614	-	-	(177,614)	-
Total liabilities from financing activities	17,932,444	2,049,434	24,286	399,283	1,501,897	21,907,344

Amounts stated in millions of Colombian pesos

Reconciliation of liabilities due to financing activities 2019	Initial balance	Cash flows	changes other than cash		Other changes[1]	Total
			Foreing exchange	Changes in fair value		
Loans and borrowings (see note 21)	15,844,613	(617,818)	98,879	-	(133,062)	15,192,612
Lease liabilities (see notes 14 and 23)	1,805,579	(10,010)	-	-	432,219	2,227,788
Pension bonds (see note 25)	535,050	(19,515)	-	-	26,672	542,207
Hedging instruments (see notes 13, 23 and 24)	(186,230)	(92,131)	-	47,249	186,050	(45,062)
Dividends or surpluses paid (see note 19)	-	(1,289,652)	-	-	1,289,652	-
Other financing cash flows	-	143,447	-	-	(143,447)	-
Total liabilities from financing activities	17,999,012	(1,885,679)	98,879	47,249	1,658,084	17,917,545

Amounts stated in millions of Colombian pesos

[1] Includes interest paid during the year for $998,372 (2019: $1,232,367), that by company's policy are classified as operating activities in the statement of cash flows; the variation in the measurement at amortized cost of loans and borrowings $729,002 (2019: $794,754); and dividends earned and not payed during the year are classified as investing activities in the statement of cash flows.

Note 30. Revenue

For presentation purposes, the company breaks down its income from the services it provides according to the lines of business in which it participates and the way in which management analyses them. The detail of revenue is as follows:

Revenue from ordinary activities	2020	2019
Sales of goods	4,922	733
Rendering of services		
Electricity generation services1	3,833,028	2,959,949
Electricity distribution services	3,404,025	3,382,717
Electricity transmission service	174,261	172,786
Fuel gas service	907,076	869,777
Aqueduct service	683,198	643,799
Sanitation service	531,682	507,461
Financing services	-	-
Financing component	55,287	-
Other services	52,627	56,789
Billing and collection services	30,102	-
IT services	9,474	7,679
Commissions	804	29,606
Fees	737	6,267
Construction contracts	71	501
Refunds	(217,179)	(152,525)
Total services rendered	**9,470,115**	**8,485,539**
Leases	43,565	51,520
Total	**9,513,680**	**8,537,059**

Amounts stated in millions of Colombian pesos

[1] The increase in the generation service is mainly originated in EPM Parent Company due to higher energy sales in long-term contracts for new contracts signed based on the expected power generation of the Ituango project and higher sales to the EPM distributor.

As of December 31, 2020, the impacts of the coronavirus pandemic (COVID -19) that have been estimated in relation to revenue from ordinary activities are: lower consumption or demand of public services for ($213,320), lower invoiced rates for ($261,543) and discount for timely payment in national subsidiaries according to Resolution No. 517 of 2020 for ($10,179).

The Company recognizes all of its revenues from the satisfaction of performance obligations and most of its contracts with customers have a duration of less than one year.

The company recognized the following values in the period, for the contracts in effect at the cut-off date described in the previous paragraph:

Other contracts with customers

2020	Contract asset balance at beginning of period	Contract asset balance at the end of the period	Contract liability at the beginning of the period	Contract liability at the end of the period	Income recognized during the period corresponding to prior period liabilities	Income recognized during the period from performance obligations satisfied in prior periods
Contract of Uniform Conditions for Regulated Services[1]	504,423	606,449	13,875	6,851	3,190	9,615
Non-Regulated Market - MNR or Large Customers[2]	126,680	126,329	10,098	8,365	3,072	-
Total	631,103	531,778	23,973	15,216	6,262	9,615

Amounts stated in millions of Colombian pesos

2019	Contract asset balance at beginning of period	Contract asset balance at the end of the period	Contract liability at the beginning of the period	Contract liability at the end of the period	Income recognized during the period corresponding to prior period liabilities	Income recognized during the period from performance obligations satisfied in prior periods
Contract of Uniform Conditions for Regulated Services[1]	352,720	504,423	14,080	13,875	4,359	-
Non-Regulated Market - MNR or Large Customers[2]	136,800	126,680	34,642	10,098	86,562	-
Total	489,520	631,103	48,728	23,973	91,321	

Amounts stated in millions of Colombian pesos

[1] The purpose of this contract is to define the uniform conditions by which Empresas Públicas de Medellín E.S.P., identified with TIN 890904996-1, hereinafter EPM, provides public residential utilities of water and/or sewage in exchange for a price in money, which will be fixed according to the current rates, and according to the use given to the service by the users, subscribers or owners of properties, hereinafter the USER, who by benefiting from the water and/or sewage utilities provided by EPM, accepts and abides by all the provisions defined herein.

[2] Resolution 131 of 23 December 1998 of the Energy and Gas Regulation Commission (CREG) establishes the conditions for the supply of energy and power to large consumers and indicates in Article 2 the power or energy limits for a user to contract for the supply of energy in the competitive market; The aforementioned resolution allows the conclusion of contracts with large consumers to establish by common agreement the prices for the supply of energy and power; the object of the contract is to supply energy and power to the consumer, as an unregulated user, to meet its own demand.

Another important contract is the XM representation contract, which is not disclosed since there are no balances in assets and liabilities.

Note 31. Other income

The detail of other income, which forms part of revenue, is as follows:

Other income	2020	2019
Valuation of investment properties[1]	5,694	51,942
Surpluses	302	-
Recoveries[2 5]	239,740	145,613
Leverages	5,085	4,857
Compensation[3]	88,110	104,087
Other ordinary income[4]	45,679	5,720
Total	384,610	312,219

Amounts stated in millions of Colombian pesos

[1] This decrease obeys the 2019 valuation of some properties due to urban developments in the sectors around these.

[2] Mainly includes $ 89,527 for the return judgment in favor of EPM of the judicial process, advanced by the company against the Municipality of Bello, based on the lawsuit filed against the administrative act that determined the participation and liquidation of the capital gain generated by the change in land use in the area where some properties owned by the company are located; $ 73,832 for the commissioning of the assets of the Jepírachi Wind Farm permitted by CREG resolution 136 of 2020; $ 14,630 for compensation for consequential damage due to the incident that occurred in 2017 at the Playas Hydroelectric Power Plant; $ 8,597 recovery of provisions for administrative litigation and $ 8,011 recovery of provision for high-cost illnesses.

[3] Corresponds in EPM Parent to the compensation received from loss of earnings for the low hydrology policy $ 65,848 (USD 17.6 million); $ 9,241 for loss of earnings due to the incident that occurred in 2017 at the Playas Hydroelectric Power Plant; $ 8,000 for non-contractual civil liability of the Ituango project and $ 4,107 received for lost profits from the Jepírachi Wind Farm.

[4] Mainly includes in EPM Matrix $ 42,206 of the indexation since December 29, 2009, the date on which the payment of the tax was made and until the execution of the sentence (December 10, 2020) of the processing of the judicial process, advanced by EPM against the Municipality of Bello.

[5] Includes $ 98,451 of ineffective recoveries from the statement of cash flows.

Note 32. Gain on sale of property, plant, and equipment

The detail of the gain on sale of property, plant and equipment is as follows:

Gain on sale of assets	2020	2019
Gain on sale of property, plant and equipment[1]	2	265
Gain on disposal of rights of use	73	15
Gain on sale of investment properties	45	104
Total	120	384

Amounts stated in millions of Colombian pesos

[1]The variation is due to the vehicle sales, which could not be performed for the coronavirus pandemic (COVID-19).

Note 33. Costs of goods sold and services rendered

The detail of the costs of services rendered is as follows:

Costs for services rendered	2020	2019
Block purchases[1]	1,300,670	636,795
Use of lines, networks and pipelines	1,063,665	963,668
Purchases in exchange1[1]	762,702	558,725
Cost of distribution and/or commercialization of natural gas2[2]	540,410	349,249
Personal services	540,785	488,261
Depreciation	462,226	422,584
Orders and contracts for other services	287,511	293,716
Licenses, contributions and royalties	238,358	143,737
Maintenance and repair orders and contracts	141,572	149,194
Materials and other operating costs	88,026	107,363
Insurance	84,643	99,135
General	72,559	58,788
Connection cost[3]	53,133	50,091
Amortization of rights of use	50,847	47,758
Amortization	43,415	40,491
Taxes and fees	37,000	37,132
Commercial and financial management of the service	25,763	25,021
Fees	25,030	27,878
Consumption of direct inputs	23,193	30,260
Utility services	10,013	7,425
Liquefied natural gas	7,477	4,979
Other	6,002	1,109
Leases	4,263	4,074
Costs associated with wholesale market transactions	1,707	943
Total	5,870,970	4,548,376

Amounts stated in millions of Colombian pesos

[1] Increase is explained by higher energy purchases in long term contracts for new contracts based in the expected energy generation of the Ituango project and for the increase of the purchases in the energy exchange due to the lower power generation given for the low hydrology. Furthermore, the effects of the Covid-19 pandemic were reflected in lower purchases in the energy exchange estimated in lower costs of $163,137.

[2] The growth is explained by the demand increase and for the higher prices due the exchange rate impact. Furthermore, the effects of the Covid-19 pandemic were reflected in lower costs of services rendered estimated in $10,183.

[3] Includes the impacts of the coronavirus pandemic (COVID-19) for $2,247 that were allocated for the reconnection of public services. Additionally, due to the pandemic, costs of $ 10,458 were allocated mainly for the implementation of biosafety measures.

Note 34. Administrative expenses

The breakdown of administrative expenses is as follows:

Administrative expenses	2020	2019
Personnel expenses		
Wages and salaries	261,009	239,794
Social security expenses	83,482	88,418
Pension expenses4	17,881	15,450
Other post-employment benefit plans other than pensions4	1,506	1,676
Other long-term benefits	4,004	3,248
Termination benefits	-	-
Interest rate benefits to employees	6,308	6,563
Total personnel expenses	**374,190**	**355,149**
Taxes, contributions and fees	104,213	103,314
Commissions, fees and services	70,091	59,692
Provision for guarantees1 4	60,099	15,756
Provision for contingencies2 4	58,909	17,444
Maintenance	57,545	46,609
Provision for decommissioning, retirement or rehabilitation4	55,672	60,880
Intangible assets	52,720	38,214
Depreciation of property, plant and equipment	36,593	33,687
Other miscellaneous provisions4	40,605	37,275
General insurance3	33,621	10,935
Other general expenses	30,575	32,327
Amortization of intangibles	16,320	20,270
Amortization of rights of use	14,576	12,944
Christmas lighting	10,731	10,925
Studies and projects	9,017	19,753
Surveillance and security	7,519	6,376
Promotion and dissemination	7,503	8,380
Advertising and publicity	7,010	12,000
Provision for onerous contracts4	5,945	801
Total general expenses	**679,264**	**547,582**
Total	**1,053,454**	**902,731**

Amounts in millions of Colombian pesos.

[1] Corresponds to the update of the provision in the parent EPM of the guarantee for non-compliance from April 2021 to November 2022, to the Intercolombia transporter for the months after the connection infrastructure of the Ituango project enters operation.

[2] Increase due to the updating of provisions, mainly in the provision for the care of those affected by the Ituango project, which represented an expense of $33,509.

[3] Explained increase in the premiums of the all-risk policy due to high claims and in the directors and administrator's policy.

[4] It is disclosed under provisions, post-employment, and long-term defined benefit plans in the statement of cash flows.

Additionally, as of December 31, 2020, the impacts of the coronavirus pandemic (COVID -19) that have been estimated in relation to administration expenses represent an increase of $9,920 due to biosecurity measures and other expenses associated with the management of the COVID-19 and that had an effect on general expenses and personal services.

Note 35. Other expenses

The detail of other expenses is as follows:

Other expenses	2020	2019
Loss on retirement of property, plant and equipment1 5	4,073	85,096
Contributions in non-corporate entities	15,869	14,947
Judgments	1,099	353
Arbitration awards and out-of-court settlements	2,598	2,565
Loss on changes in the fair value of investment properties2	22,734	291
Loss on retirement of inventories	42	-
Loss on disposal of intangible assets4	3	-
Loss on sale of investment property4 6	2,413	-
Effective interest financing services	128	-
Other ordinary expenses3	11,868	27,815
Total	**60,827**	**131,067**

Amounts stated in millions of Colombian pesos

[1] In December 2019 was included the retirement of the Parque Eólico Jepírachi assets.

[2] The Increase is explained for the appraisal made in 2020, because some properties have a lower fair value than the previous year.

[3] The is Decrease explained for the care given to the affected of the Ituango project contingency recognized in 2019.

[4] It is disclosed as result of disposal of property, plant and equipment, rights of use, intangibles and investment properties, less $ 120 for profit from the sale of assets (note 32) of the statement of cash flows.

[5] It is disclosed as withdrawal of property, plant and equipment, rights of use, intangibles and investment properties of the statement of cash flows.

[6] It is disclosed as disposal of property, plant and equipment decreasing the following items: $ 11 for profit on sale of property, plant and equipment, $4 for loss in retirement of intangibles, $73 of gains in withdrawal of use rights, $ 44 for profit on sale of investment properties and adding $8 for disposal of property, plant and equipment of the cash flow statement.

Note 36. Finance income and expense

36.1 Finance income

The breakdown of finance income is as follows:

Financial income	2020	2019
Interest revenue:		
Bank deposits4	9,219	17,391
Interest on receivables and arrears1 4	96,206	211,944
Restricted funds4	1,593	-
Funds received in administration4	2,314	-
Gain from valuation of financial instruments at fair value2 3	32,741	79,240
Profit on trust rights3	34,907	29,949
Other financial income4	2,422	2,060
Total financial income	**179,402**	**340,584**

Amounts stated in millions of Colombian pesos

[1] Decrease due to the suspension of the collection of delinquent interest to users for the implementation of relief measures for the coronavirus pandemic (COVID -19) for $9,127.

[2] Decrease in the valuation of financial instruments that is explained by the behavior of the market that has presented significant devaluations and is thus reflected in the temporary investments of the portfolio. They are included in the caption of results for valuation of financial instruments and hedge accounting of the statement of cash flows.

[3] It is disclosed as part of the results from valuation of financial instruments and hedge accounting in the statement of cash flows.

[4] It is disclosed under the heading of interest income and income in the statement of cash flows.

36.2 Financial expenses

The breakdown of finance expenses is as follows:

Financial expenses	2020	2019
Interest income:		
Interest on obligations under lease[4]	222.721	209.583
Other interest expense[4]	146	441
Total interest	**222.867**	**210.024**
Short-term domestic financing operations[1 4]	3.632	30.464
Long-term internal financing operations[1 4]	114.419	158.318
Short-term external financing operations[4]	7.190	-
Long-term external financing transactions[4]	603.762	605.971
Financial instruments for hedging purposes[4]	42.777	-
Fees and commissions other than amounts included in the determination of the effective interest rate[4]	1.892	2.114
Other financial expenses[2 3]	104.981	96.907
Total financial expenses	**1.101.520**	**1.103.798**

Amounts stated in millions of Colombian pesos

[1] Decrease in EPM Parent company due to the partial prepayment of the Bancolombia

loan, renegotiation of interest rates and payments due to maturity of some local bond issues, additional in 2019 included several treasury loans.

[2] Includes in EPM a loss from valuation of financial instruments and other investments for $ 83,297 and the financial update of provisions for $ 20,988, mainly the valuation of provisions of the Ituango project: $ 5,588 provision of guarantee, $ 2,759 provision corresponding to the environmental and social recovery plan, $ 2,167 forced investment of 1% and $ 1,807 provision for the care of those affected, thus reflecting higher financial expenses.

[3] Includes the following items: $11,161 for loss from valuation of financial instruments at fair value, $30,379 for amortized cost, $41,756 for non-hedging derivatives, $32 for loss on trust rights, $649 for administration and issuance of securities and $15 for other financial expenses from the result of valuation of financial instruments and hedge accounting of the statement of cash flows.

[4] It is disclosed in the item of expenses for interests and commissions of the statement of cash flows.

Note 37. Net foreign exchange difference

The effect of transactions in foreign currency is the following:

Foreign exchange difference, net	2020	2019
Foreign exchange difference gain, net		
Own position		
For goods and services and others	29,658	32,820
For liquidity	65,511	12,777
Receivables	117,526	292,368
Other exchange difference adjustments	121	-
Financing transaction		
Gross income	358,392	22,207
Debt hedging	-	-
Total foreign exchange difference income	571,208	360,172
Foreign exchange difference expense		
Own position		
For goods and services and others	3,752	11,115
For liquidity	213,249	18,459
Receivable accounts	1,002	254,050
Other exchange difference adjustments	24,924	2,004
Financing operation		
Gross expense	382,679	121,086
Debt coverage	309,748	-
Total foreign exchange difference expense	935,354	406,714
Foreign exchange difference, net	(364,146)	(46,542)

Amounts stated in millions of Colombian pesos

The accumulated net expense of $ 374,260 corresponds mainly in EPM Parent Company to the restatement of the debt in dollars, associated with the accumulated devaluation of the Colombian peso of 4.74% and a rate of closing $ 3,432.50.

The rates used for the conversion of foreign currency in the separated financial statements are:

Currency	Currency code	Direct exchange rate conversion to USD as of December 31		Exchange rate as of December 31		Average exchange rate	
		2020	2019	2020	2019	2020	2019
Dólar de Estados Unidos	USD	1.00	1.00	3,432.50	3,277.14	3,693.36	3,281.09
Quetzal	GTQ	7.79	7.70	440.41	425.67	478.29	426.21
Peso mexicano	MXN	19.93	18.88	172.27	173.54	172.27	170.45
Peso chileno	CLP	710.50	751.95	4.83	4.36	4.67	4.67
Euro	EUR	0.82	0.89	4,199.84	3,678.59	4,214.08	3,671.66
Yen	JPY	103.25	108.67	33.25	30.16	34.61	30.11
Libra	GBP	0.73	0.75	4,692.06	4,341.39	4,735.59	4,188.11
Franco Suizo	CHF	0.88	0.97	3,883.14	3,384.25	3,937.95	3,302.52

Note 38. Gain on equity investments

The Participation on Equity Investments is as follows:

Participation in equity investments	2020	2019
Dividends and participations 1	99,880	60,356
Result from business combinations 2	1,353,203	-
Gain (loss) on sale of equity investments3	-	(47,534)
Impairment of investments in subsidiaries, associates and joint ventures4	(879,062)	-
Total	**574,021**	**12,822**

Amounts stated in millions of Colombian pesos

[1] Includes dividends of investments classified in Financial Instruments for $99,880 (2019 $60,356) See note 13. Other financial assets.

[2] During the period, a business combination result of $1,353,203 was recognized for the acquisition of control on October 1, 2020 of the subsidiary Caribemar de la Costa S.A.S. E.S.P. - AFINIA, arising from the difference between the consideration transferred and the fair value of the identifiable net assets acquired.

The consideration transferred was established based on the valuation of the company that considers the future investments (investments in capital assets - capex - that were executed when a business invests in the purchase of a fixed asset or to add value to an existing asset) that it must make to guarantee its viability and an adequate provision of public services; which generates a negative value of the same.

[3] Corresponds to the loss generated in July 2019 on the sale of 14,881,134 ISA shares, arising from the difference between sale price and share valuation on the day of the transaction ($15,700 COP/share - $18,900 COP/share = $-3,200 COP/share) and the sale of all the Gasoriente shares, generating a profit of $86.

[4] Corresponds to the subsidiary Caribemar de la Costa S.A.S. E.S.P. - AFINIA, (see note 11).

Note 39. Income tax

39.1 Tax provisions

Tax Provisions applicable and in effect, establish the following:

- The nominal Income tax rate is 32%.
- Tax income from occasional income tax is taxed at 10% rate.
- Public domestic utilities provider companies in Colombia are excluded from determining income tax by the presumptive income system calculated on the basis of fiscal liquid assets of the immediately preceding year.
- On June 11, 2008, EPM and the Nation (through the Ministry of Mines and Energy) entered into a legal stability contract for the Power Generation activity for a 20-year period. Among the stabilized tax regulations are: ordinary income tax rate, equity tax, presumptive income, tax cost of fixed assets, depreciation deduction, special deduction of 40% for investments in real productive fixed assets.

Ley de Financiamiento Colombia (Financing Law Colombia)

In the taxable year 2018, the National Government issued Law 1943, which introduced important changes in tax matters. During 2019, this Law was the subject of lawsuits filed with the Constitutional Court, seeking a declaration of unconstitutionality due to procedural defects in its formation.

Thus, through Ruling C - 481 of 16 October 2019, the Constitutional Court accepted the claims of one of the lawsuits and declared that the articles contained in the financing law are unconstitutional. Thus, the rules contained in Law 1943 of 2018, remain in force during the taxable period 2019, since the ruling of the Constitutional Court was made with deferred effect, that is, maintaining the validity of the law until 31 December 2019.

According to the above, the Congress of the Republic had a limited term to issue a regime to ratify, repeal, modify or subrogate the contents of the law that was declared unconstitutional.

Ley de Crecimiento Económico 2019 Colombia (Economic Growth Act 2019 Colombia)

During the last quarter of 2019, the National Government submitted to Congress a bill on economic growth, in order to comply with the Constitutional Court's ruling.

Under this scenario and after exhausting the stages required by the Colombian legal system for the creation of the law, on 27 December 2019, Law 2010 of 2019 was passed "By means of which regulations are adopted for the promotion of economic growth, employment, investment, the strengthening of public finances and the progressiveness, equity and efficiency of the tax system, in accordance with the objectives that Law 1943 of 2018 promoted on this matter, and other provisions are issued".

Thus, among the main modifications, we can highlight:

General rate of income and supplementary taxes:

The income tax rate will have the following modification:

Year 2020: will be 32%

Year 2021: will be 31%

Year 2022: will be 30%

Presumptive Income

Year 2020: will be 0.5%

Year 2021 and following: will be 0%

Other elements

- In accordance with the provisions of Article 258-1 ET, the VAT paid on the acquisition, importation, construction and formation of real productive fixed assets, including the services necessary to put the good in conditions of use, and the assets acquired through leasing, is maintained as a tax discount in the income tax. It is important to point out that the Constitutional Court by Ruling C-379/20 of September 2, 2020 declared conditionally executory this article under the understanding that the benefit is also applicable for taxpayers not liable for sales tax.
- The possibility of taking as a tax deduction of 50% of the payed industry and commerce tax is kept. The economic growth law establishes that as from the year 2022 this discount will be 100%.
- The tax on dividends received by national companies continues in effect to the general rate of 7.5% by way of withholding tax on income, that will be transferable and imputable to the resident natural person or investor resident abroad.
- The sale of electricity generated from wind energy, biomass or agricultural waste, solar, geothermal or sea energy by electricity generating companies, as defined in Law 1715 of 2014 and Decree 2755 of 2003, will continue to be exempt of income tax for a period of 15 years as from 2017, as defined by Law 1715 of 2014 and Decree 2755 of 2003.
- The Colombian Holding Companies (CHC) framework is ratified as an instrument to promote foreign investment in the country.
- Decree 1157 of 2020 regulated the requirements for accessing the tax benefits of the Mega-Investment mechanism with the possibility of accessing a tax stability regime.
- The amendments made by Law 1943 of 2018 to the sub-capitalisation rule in Article 118-1 of the Tax Code remain in force, limiting the deductibility of interest paid when there is over-indebtedness, specifying that such limitations only apply to debts incurred between economic associates.

- Article 117 of Law 2010 of 2019 modified the term of finality for income tax returns in which tax losses are liquidated or compensated, or which are subject to the transfer pricing regime, to 5 years.
- It should be clarified that this term of firmness contained in Article 714 of the tax code was modified by Law 1819 of 2016 to 6 years. For this reason, tax returns filed by EPM as of 2017 will be covered by the above-mentioned provision, but the 2019 return to be filed in 2020 will be subject to the change established in law 2010.

New regulation

During 2020, due to the situations derived from the declaration by the National Government of the economic, social and ecological emergency, added to the declaration and extension of the sanitary emergency decreed by the Ministry of Health and Social Protection, several regulations with tax scope were issued that generate effects in the recognition of the economic facts by the company and in the determination of its tax burden.

A favorable aspect was the decrease in the value added tax from 19% to 5%, effective until December 31, 2021, for passenger air transportation, a situation that occurred through the issuance of Decree 575 of April 15, 2020. This reduction favors the execution of costs and expenses of the entity in the use of air transportation by employees. The validity of this measure was extended until December 31, 2022 by Law 2068 of 2020

Through Decree 789 of June 4, 2020, it was determined the exclusion of the value added tax to all hotel and tourism services in the country until December 31, 2020, this situation also generates benefits in the execution of costs and expenses in the cases in which the employees make use of the lodging service. This regulation will be in force until December 31, 2021 in accordance with Law 2068 of 2020.

Legislative Decree 799 of 2020 ordered the temporary suspension, until December 31, 2020, of the payment of the surcharge or special contribution in the electricity sector referred to in paragraph 2. of article 211 of the Tax Statute -ET- for tourism service providers with active and current registration in the National Tourism Registry and that develop as main economic activity one of those described by the regulation. Although this decision constitutes a relief in the costs of the hotel sector, it may generate an imbalance in the reconciliation of subsidies and contributions for the domiciliary public utilities companies, to the extent that these are contributions that are no longer collected. The validity of this rule was extended until December 31, 2021 according to Law 2068 of 2020.

On the other hand, a circumstance that favors the growth and massification in the use of non-conventional renewable energy sources, a business of high importance for the company, is the incorporation as exempt goods in Article 477 of the Tax Statute by Law 2069 of 2020, of components for electricity generation through solar panels..

Law 2069 of 2020 incorporates as a tax deduction and discount, in articles 158-1 and 256 of the Tax Statute, the donations made in favor of iNNpulsa Colombia by taxpayers.

Finally, Law 2070 of 2020 adds a subsection to Article 392 of the Tax Statute in order to establish a withholding tax rate of 4% for cultural and creative activities.

39.2 Effective rate Reconciliation

Reconciliation between the applicable tax rate and the effective rate and the composition of income tax expense for the periods 2020 and 2019 is as follows:

Income tax and complementary	2020	%	2019	%
Income before taxes	2,813,463		3,311,270	
Nominal income tax rate		32%		33%
Income tax nominal rate	900,308		1,092,719	
Effects of changes in tax rates	-			0%
Effect of permanent tax differences:	**(505,688)**	**-18%**	**(340,691)**	**-10%**
Dividend income	113,576	4%	249,910	8%
Impairment of subsidiary investments	281,300	10%	0	
Tax-only income	118,304	4%	194,444	6%
Special deduction refund	37,307	1%	118,768	4%
Non-deductible provisions	37,566	1%	43,612	1%
Loss on asset	1,303	0%	28,082	1%
Equity method	(214,949)	-8%	(328,122)	-10%
Gain on bargain purchase	(433,025)	-15%	-	0%
Untaxed dividends	(140,063)	-5%	(147,548)	-4%
Compensation for consequential damages	(125,794)	-4%	(173,991)	-5%
Exempt income	(15,403)	-1%	(138,605)	-4%
Special deduction of real productive fixed assets	(184,580)	-7%	(196,923)	-6%
Net result of other permanent differences	18,769	1%	9,681	0%
Rate difference adjustment (current/different tax)	13,912	0%	-67136	-2%
Tax deductions	(31,163)	-1%	(39,146)	-1%
Occasional Profits	2,487	0%	133	0%
Income adjustments from previous years	(106,308)	-4%	-40644	-1%
Income tax at effective rate	**273,548**	10%	**605,235**	12%
Detail of current and deferred expense				
Current tax	397,757	14%	600,557	18%
Deferred tax	(124,209)	-4%	4,678	0%
Current tax	**273,548**	10%	**600,557**	18%

Amounts stated in millions of Colombian pesos

The best indicator to measure the tax burden is the effective tax rate. This directly measures the total tax burden imposed by national regulations on companies, in proportion to the profits they make from their activities

In accordance with the above, to arrive from the tax calculated from the nominal rate, to the effective tax that will affect the profit or loss of the company, fiscal depurations are executed in conformity to the regulations in force and the result obtained is the tax to be paid by the Entity.

Thus, in the years 2020 and 2019 it can be observed in the amendment that there are several items that reduce the tax calculated at the nominal rate and that make the theoretical tax to be modified as a result of application of tax provisions.

39.3 Income tax recognized through profit or loss

The most significant components of income tax expense at the cut-off date are:

Income tax	2020	2019
Current income tax		
Expense (revenue) due to current income taxes	535,228	680,347
Adjustments recognized in the current period related to current income tax of previous periods	(106,308)	(40,645)
Tax benefits from tax losses, tax credits or temporary differences utilized in the period	(31,163)	(39,145)
Total current income tax	**397,757**	**600,557**
Deferred income tax		
Net deferred tax expense (revenue) due to deferred tax related to the origen and reversal of temporary differences	(12,347)	4,678
Reclassification of deferred tax from other comprehensive income to profit or loss for the period	(111,862)	-
Total deferred tax	**(124,209)**	**4,678**
Income tax	**273,548**	**605,235**

Amounts stated in millions of Colombian pesos

The rates used to determine deferred tax are:

Year	2021	2022	2023
Income	31%	30%	30%
Total rate	**31%**	**30%**	**30%**

39.4 Income tax assets and liabilities

The value of the current income tax asset or liability is as follows:

Description	2020	2019
Asset or liability for current income taxes		
Total asset current tax	**118,757**	**56,027**
recoverable balance of income tax	118,757	56,027
Total assets income tax	**232,864**	**34,413**
Income tax credit balance	232,864	34,413
Total assets (or liabilities) for income taxes	**114,107**	**(21,614)**

Amounts stated in millions of Colombian pesos

39.5 Income tax through other comprehensive income

The breakdown of the tax effect corresponding to each component of "other comprehensive income" in the separated statement of comprehensive income is as follows:

Other comprehensive income in the statement of comprehensive income	2020			2019		
	Gross	Tax effect	Net	Gross	Tax effect	Net
Items that will not be reclassified subsequently to profit or loss for the period						
Re-measurement of defined benefit plans	(17,431)	6,277	(11,154)	(35,969)	12,011	(23,958)
Equity investments measured at fair value through shareholders' equity	596,096	(1,837)	594,259	622,447	129,657	752,104
Participation in other comprehensive income of subsidiaries	160,798	1,722	162,520	(201,032)	11,823	(189,209)
Items that can be reclassified subsequently to profit or loss for the period						
Cash flow hedges	(24,071)	10,086	(13,985)	34,119	17,673	51,792
Participation in other comprehensive income of subsidiaries	240,499	866	241,365	(205,235)	1,317	(203,918)
Total	**955,891**	**17,113**	**973,004**	**214,330**	**172,481**	**386,811**

Amounts stated in millions of Colombian pesos

39.6 Deferred tax

The breakdown of deferred taxi s as follows:

Deferred tax assets	2020	2019
Deferred tax assets	873,760	509,907
Deferred tax liability	2,733,270	2,512,071
Total net deferred tax assets	(1,859,510)	(2,002,164)

Amounts stated in millions of Colombian pesos

39.6.1 Deferred tax asset

Deferred tax assets	Initial balance 2019	Net changes included in profit or loss 2019	Changes included in ORI 2019	Final balance 2019	Net changes included in profit or loss 2020	Changes included in ORI 2020	Recognized directly to equity	Final balance 2020
Assets	**183,462**	**31,251**	**1,836**	**216,549**	**146,932**	**(1,837)**	**4,096**	**365,740**
Property, plant and equipment	40,560	(40,558)	-	2	(3,266)	-	3,266	2
Intangible property	7,119	(7,119)	-	-	(2)	-	2	-
Right of use assets	-	51,801	-	51,801	87,674	-	-	139,475
Investments and derivative instruments	-	-	1,836	1,836	75,635	(1,837)	-	75,634
Receivables	119,881	4,926	-	124,807	23,551	-	828	149,186
Cash and cash equivalents	-	-	-	-	1,231	-	-	1,231
Other assets	15,902	22,201	-	38,103	(37,891)	-	-	212
Liabilities	**473,514**	**(192,167)**	**12,011**	**293,358**	**191,970**	**21,477**	**1,215**	**508,020**
Loans and borrowings	212,677	(115,300)	-	97,377	7,344	-	-	104,721
Payables	-	6,031	-	6,031	17,929	-	404	24,364
Employee benefits	18,161	8,347	12,011	38,519	(4,089)	6,276	-	40,706
Derivatives	221	(221)	-	-	111,866	15,201	-	127,061
Provisions	158,032	(18,278)	-	139,754	53,330	-	-	193,084
Other liabilities	84,423	(72,744)	-	11,677	5,596	-	811	18,084
Deferred tax assets	**656,976**	**(160,916)**	**13,847**	**509,907**	**338,902**	**19,640**	**5,311**	**873,760**

amounts stated in millions of Colombian pesos

39.6.2 Deferred tax liability

Deferred tax liabilities	Initial balance 2019	Net changes included in profit or loss 2019	Changes included in ORI 2019	Final balance 2019	Net changes included in profit or loss 2020	Changes included in ORI 2020	Recognized directly to equity	Final balance 2020
Assets	**2,682,532**	**(94,930)**	**(97,942)**	**2,489,660**	**197,334**	**5,115**	**974**	**2,693,083**
Property, plant and equipment	2,414,901	10,967	-	2,425,868	99,186	-	3	2,525,057
Intangible assets	23,943	5,459	-	29,402	9,069	-	50	38,521
Investment property	1,360	10,910	-	12,270	2,739	-	-	15,009
Right of use assets	-	-	-	-	54,988	-	-	54,988
Investments and derivative instruments	199,664	(87,113)	(97,942)	14,609	(98)	5,115	-	19,626
Receivables	33,301	(33,301)	-	-	34,337	-	921	35,258
Other assets	9,963	(1,852)	-	8,111	(2,887)	-	-	5,224
Liabilities	**131,272**	**(61,308)**	**(47,553)**	**22,411**	**17,359**	**-**	**417**	**40,187**
Loans and receivables	-	316	-	316	33,798	-	-	34,114
Payables	69,256	(50,011)	-	19,245	(13,589)	-	417	6,073
Employee benefits	4,287	(1,437)	-	2,850	(2,850)	-	-	-
Derivatives	57,729	(10,176)	(47,553)	-	-	-	-	-
Deferred tax liabilities	**2,813,804**	**(156,238)**	**(145,495)**	**2,512,071**	**214,693**	**5,115**	**1,391**	**2,733,270**
Total deferred tax asset/liability	**2,156,828**	**4,678**	**(159,342)**	**2,002,164**	**(124,209)**	**(14,525)**	**(3,920)**	**1,859,510**

Amounts stated in millions of Colombian pesos

39.6.3 Temporary differences

Temporary differences associated with investments in subsidiaries, associates and joint ventures, for which no deferred tax liabilities have been recognized, amount to $5,832,720 (2019 $4,661,434).

The greatest impacts on deferred tax are represented by property, plant and equipment, which presents significant differences in tax and accounting costs, basically originated in the recognition of the attributed cost, tax inflation adjustments and in the use of different useful lives and depreciation methods; in accounts receivable in relation to portfolio impairment due to the difference presented in the application of the accounting and tax standard and due to the effect of the implicit interest recognized in the accounting standard. The unrealized exchange difference on accounts receivable, is another representative item in temporary differences, a concept introduced by Law 1819/2016.

With respect to liabilities, the items that have the greatest impact on the calculation of deferred tax are: long-term employee benefits, accounting provisions and unrealized exchange differences on loans and accounts payable.

The temporary differences on which no deferred tax was generated included investments in subsidiaries, associates and joint ventures, in accordance with paragraph 39 of IAS 12, and items that do not have future tax consequences, such as tax liabilities and finance income generated on plan assets, for being exempt.

The approval of dividends after the presentation date and before the financial statements were authorized for publication, does not generate income tax consequences since it is an established policy for national subsidiaries to distribute only non-taxed profits and reserves. Tax effects that could be generated by dividends declared by the foreign subsidiaries, with the entry into force of Article 69 of Law 1943/2018, will be considered exempt income from capital in application of the Colombian Holding Companies (CHC) regime.

Note 40. Information to be disclosed on related parties

EPM is a decentralized municipal entity, whose sole owner is the Municipality of Medellín. The capital with which it was constituted and operates, as well as its assets, is of a public nature. The Mayor of Medellín chairs EPM's Board of Directors.

Related parties of EPM are subsidiaries, associates and joint ventures, including subsidiaries of associates and joint ventures, key management personnel, as well as entities over which key management personnel may exercise control or joint control and post-employment benefit plans for the benefit of employees.

The total value of the transactions performed by the company with its related parties during the corresponding period is presented below:

Transactions and balances with related parties	Income[1]	Costs/ expenses[2]	Amounts receivable[3]	Amounts payable[4]	Guarantees received
Subsidiaries					
2020	916,908	400,702	1,348,495	133,236	-
2019	566,511	406,004	1,230,790	89,002	-
Associates					
2020	75,033	38,448	2,132	7,498	-
2019	67,377	30,926	6,539	4,411	-
Key management personnel from the company or its controller:					
2020		9,807	1,068	2,784	288
2019		8,675	627	2,380	521
Other related parties:					
2020	84,253	87,076	23,646	8,992	-
2019	49,517	63,479	16,997	2,846	-

Amounts stated in millions of Colombian pesos

Transactions between EPM and its related parties are performed under conditions equivalent to those existing in transactions between independent parties, in terms of their purpose and conditions.

[1] The breakdown of income obtained from the company's related parties is as follows:

	Income	2020	2019
Subsidiaries	Sale of goods and renderong services	706,701	414,478
	Interests	168,562	116,775
	Professional fees	4,492	8,035
	Other	37,152	27,223
Total Subsidiaries		**916,907**	**566,511**
Associates	Sale of goods and renderong services	49,333	46,365
	Other	25,700	21,012
Total Associates		**75,033**	**67,377**
Other related parties	Sale of goods and renderong services	81,014	45,724
	Interests	1,526	-
	Professional fees	28	34
	Other	1,685	3,759
Total Other related parties		**84,253**	**49,517**

Amounts stated in millions of Colombian pesos

[2] The breakdown of costs and expenses incurred by the company with its related parties is as follows:

	Costost and expenses	2020	2019
Subsidiaries	Purchase of goods and services	396,188	402,964
	Interests	-	4
	Professional fees	753	753
	Other	3,761	2,283
Total Subsidiaries		**400,702**	**406,004**
Associates	Purchase of goods and services	36,013	28,861
	Professional fees	2,393	2,048
	Otros	42	17
Total Associates		**38,448**	**30,926**
Other related parties	Purchase of goods and services	39,365	41,741
	Interests	4	1
	Professional fees	242	1,143
	Other	47,465	20,594
Total Other related parties		**87,076**	**63,479**

Amounts stated in millions of Colombian pesos

[3] The breakdown of loans made by the company to its related parties is as follows:

	Granted Loans	Original currency	Term	Nominal interest rate	2020			2019		
					Nominal value	Amortized cost value	Total amount	Nominal value	Amortized cost value	Total amount
Hidroecológica del Teribe S.A. HET	Loan 1	USD	23 years	Libor 3U + 4.43	198,803	11,814	203,430	191,379	14,800	209,579
HEROSUR	Loan 1	CLP	8.5 years	1.077	956,195	1,377	958,712	951,214	1,116	953,130
Aguas de Malambo	Loan 1	COP	1 year	IBR 6M + 1.42	1,000	19	1,020	-	-	-
	Loan 2	COP	1 year	IBR 6M + 1.42	402	4	406	-	-	-

Amounts stated in millions of Colombian pesos

[4] Transactions between the company and its related parties are performed under conditions equivalent to those existing in transactions between independent parties, in terms of their purpose and conditions.

Transactions and balances with government- related entities

The total financial surplus paid to the Municipality of Medellín as of December 2020 was $1,488,319 (2019 $1,289,652).

Compensation to the Board of Directors and key Personnel of the company:

The members of the Key management personnel of the company includes:

Description	2020	2019
Wages and other short-term employee benefits	9,073	6,936
Other long-term employee benefits	734	918
Compensation to key management personnel	**9,807**	**7,854**

Amounts stated in millions of Colombian pesos

Amounts disclosed are those recognized as Costs or Expenses during the period report for compensation to key management personnel.

Note 41. Capital management

Capital of the company includes indebtedness through the Capital Market, Commercial Banks, Development Banks, Development Agencies and Multilateral Banks, at national and international level.

The company manages its capital in order to plan, manage and assess the attainment of financial resources in the national and international financial markets, for strategic investments, and investment projects, through different options that optimize costs, that guarantee the stability of adequate financial indicators and adequate credit rating, and minimize financial risk. For this, the following capital management policies and processes have been defined:

Financing Management: financing management comprises the performance of all long-term credit operations, in order to guarantee the timely availability of the resources required for the normal operation of the company and to materialize the investment and growth decisions, striving to optimizing financing costs.

The company has not made any changes to its capital financing management objectives, policies and processes during the period ended as of 31 December 2020 and December 2019.

In order to face the changes in the economic conditions, the company implements proactive management mechanisms for its financing, enabling as far as it is feasible, different financing alternatives, so that at the time performance of any long-term credit operation is required, there will be access to the source that each time has availability of competitive market conditions at the necessary time.

Below are presented the values that the company manages as capital:

	2020	2019
Bonds and loans		9,648,197
Commercial bank loans	1,543,589	571,071
Multilateral bank loans	2,962,186	3,594,944
Development bank loans	1,534,291	985,814
Bonds and securities issued	12,606,757	392,585
Total debt	**18,646,823**	**15,192,611**

Amounts stated in millions of Colombian pesos

Note 42. Financial risk management objectives and policies

The company is exposed to the financial risk, which is defined as the possibility of occurrence of an event that affects negatively the financial results, among which are price risk, liquidity risk, credit risk and operating risk.

Price risk refers to the changes or volatility of market variables that can generate economic losses. Market variables refer to exchange rates, interest rates, securities, commodities, among others; and their changes may impact, for example, the financial statements, cash flow, financial indicators, contracts, project viability and investments.

Credit risk refers to the possible default of payment obligations by third parties derived from contracts or financial transactions performed.

Liquidity risk is the scarcity of funds and the inability to obtain the resources at the time they are required to cover the contractual obligation and execute investment strategies. The scarcity of funds leads to the need to sell assets or to contract financing operations in unfavorable market conditions.

Finally, operating risk, from a financial standpoint, is defined as deficiencies or failures in the processes, technology, infrastructure, human resources or occurrence of unforeseen external events.

The objective of the Integral Risk Management Department is to lead the definition and implementation of strategies for integral risk management, to achieve adequate protection and assurance of the assets, resources and interests of the EPM Group.

The Group's policy is to manage risks that affect its activity and environment, adopting the best practices and international standards of Integrated Risk Management (IRM), as a way of facilitating compliance with the purpose, strategy, objectives and business goals, both statutory and legal. It has an information system that facilitates integral risk management, guarantees the confidentiality, availability and reliability of the information and allows analysis and monitoring of risks and improvement plans. It has implemented an integral risk management system and deploys a methodology for the identification, analysis, assessment, control and monitoring of risks, among which are those associated with money laundering and financing of terrorism, which allows reducing vulnerability, and propose and implement effective mechanisms for the proper development of business, processes, projects and contracts. As valuation criteria there are tables for the evaluation of the consequences of the materialization of risks and probability tables, which are applicable to the different management levels defined in the methodological guide for integral risk management.

The monitoring and review activity to the integral risk management is aligned with the follow-up process to the management established in the Group, in order to propose and implement

improvement actions. The monitoring and review scheme established assesses, among others, the following aspects:

- The implementation strategy for integrated risk management.
- Changes in the internal and external context that imply adjusting the treatment of identified risks or that generate new risks.
- The variation of risks in terms of frequency, probability and consequence.
- The assessment criteria for the probability and consequence of the risks.
- The implementation and effectiveness of the treatment plans.

EPM manages financial risks associated with the different levels of management by identifying the risks within the market, liquidity and credit groupings that are classified as financial risks, quantifying their impact and implementing strategies to mitigate them.

42.1 Market risk

42.1.1 Pricing risks

Price risk is the risk that the fair value of the future cash flows of a financial instrument may fluctuate because of changes in market prices. The company has identified that the financial instruments affected by price risk include:

- Cash and cash equivalents
  - Fiduciary assignment
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
  - Swaps

The methods and assumptions used in developing the sensitivity analysis consist of:

- For cash and cash equivalents, fixed income securities and investments pledged as collateral: the methodology used for measuring price risk is Value at Risk (VaR), which consists of quantifying the maximum loss that the portfolio could present in a month with a 95% reliability level. For the quantification of VaR, an own methodology defined within the EPM Group is used.

The sensitivity to market prices is detailed below:

	VaR COP diary*	VaR % COP
Investment portfolio	51,253	1.58%

Amounts stated in millions of Colombian pesos

- For swaps, the sensitivity analyses were performed under the assumption of maintaining constant the hedges contracted according to their indexation rates.

42.1.2 Interest rate risk

Interest Rate Risk is the risk that the fair value or future cash flows of a financial instrument may fluctuate as a result of changes in market interest rates. EPM has identified that financial instruments affected by interest rate risk include:

- Cash and cash equivalents
  - Fiduciary assignment
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
  - Swaps
- Loans and borrowings
- Trade and other receivables

Concentration of Interest Rate Risk materializes when there are large individual exposures and significant exposures to counterparties whose probability of default is determined by factors such as the economic sector, currency and credit ratings. Interest rate risk management seeks to preserve capital and maintain or increase profitability. EPM has defined policies on risk in interest rates through the identification of risks, the determination of the position of rates and the simulation of possible hedging strategies. This assist decision making, oriented to maintaining the position to hedge it, and later the results of the executed strategies are assessed.

Analysis of sensitivity to interest rates

The following table indicates the sensitivity to a possible reasonable change in the interest rates of financial instruments exposed to this risk, without considering the effect of hedge accounting. Keeping all other variables constant, the pre-tax income or loss and the equity of EPM would be affected by changes in variable interest rates as follows:

	Increase/decrease in basic points	Value Exposed	Financial effect	
			In earnings before taxes	In equity
2020				
Financial assets measured at fair value through profit or loss				
Investments at fair value with change in profit or loss	100	2,021,798	(5,234)	(4,187)
	(100)	2,021,798	5,234	4,187
Financial assets measured at amortized cost				
Receivables in foreign currency	100	202,620	2,026	1,621
	(100)	202,620	(2,026)	(1,621)
Financial liabilities measured at amortized cost				
Loans and borrowings	100	3,586,307	(35,063)	(28,050)
	(100)	3,586,307	35,063	28,050
Financial liabilities measured at fair value with changes in other comprehensive income				
Derivative instruments	100	215,715	(49,666)	(37,333)
	(100)	215,715	49,666	37,333
2019				
Financial assets measured at fair value through profit or loss				
Investments at fair value with change in profit or loss	100	814,769	(1,407)	(1,126)
	(100)	814,769	1,407	1,126
Financial assets measured at amortized cost				
Receivables in foreign currency	100	210,028	2,100	1,680
	(100)	210,028	(2,100)	(1,680)
Financial liabilities measured at amortized cost				
Loans and borrowings	100	4,332,069	(54,287)	(43,430)
	(100)	4,332,069	54,287	43,430
Financial liabilities measured at fair value with changes in other comprehensive income				
Derivative instruments	100	186,230	(6,451)	(5,160)
	(100)	186,230	6,451	5,160

Amounts stated in millions of Colombian pesos

The company considers that the sensitivity analysis is representative in respect to the exposure of the interest rate risk.

Foreign exchange risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

EPM has identified that financial instruments affected by foreign exchange risk include:

- Cash and cash equivalents
  - Fiduciary assignment
- Other financial assests:
  - Fixed income securities
  - Investments pledged as collateral
  - Swaps
- Loans and borrowings
- Trade and other receivables
- Loans to economic associates

The exposure to foreign exchange rate risk relates, firstly, to financing activities in a currency other than the functional currency and to contracted hedging operations. The company manages its foreign exchange rate risk by means of hedging operations on a medium-term horizon. It is EPM's policy not to close speculative hedging transactions, so the terms of the hedging derivative instruments replicate the terms of the underlying in order to maximize the effectiveness of the hedge. EPM covers its exposure to exchange rate fluctuations by using different hedging instruments, among which are Swaps, Forwards and Options at different terms.

Analysis of sensitivity to foreign exchange rates

The following table indicates the sensitivity to a possible reasonable change in foreign exchange rates for $100 pesos in the currency against the U.S. dollar without considering the effect of hedge accounting. The impact is caused by the change in monetary and non-monetary assets. Holding all other variables constant, pre-tax income or loss and equity would be affected by changes in foreign exchange rates as follows:

	Increase/decrease in COP		Financial effect	
		Value Exposed	In earnings before taxes	In equity
2020				
Financial assets measured at fair value through change in profit or loss				
Other financial assets -Fixed income securities	100	2,002,066	58,327	46,662
	(100)	2,002,066	(58,327)	(46,662)
Cash and cash equivalents	100	127,813	3,724	2,979
	(100)	127,813	(3,724)	(2,979)
Financial assets measured at amortized cost				
Receivables in foreign currency	100	1,162,251	2,149	1,712
	(100)	1,162,251	(2,149)	(1,712)
Financial liabilities measured at amortized cost				
Loans and borrowings	100	9,510,531	(277,021)	(221,658)
	(100)	9,510,531	277,021	221,658
Financial liabilities measured at fair value with change in other comprehensive income				
Derivative instruments	100	4,827,331	140,637	112,509
	(100)	4,827,331	(140,637)	(112,509)
2019				
Financial assets measured at fair value through change in profit or loss				
Other financial assets -Fixed income securities	100	497,866	1,176	941
	(100)	497,866	(1,176)	(941)
Cash and cash equivalents	100	38,550	15,192	12,154
	(100)	38,550	(15,192)	(12,154)
Financial assets measured at amortized cost				
Receivables in foreign currency	100	1,234,058	2,477	1,981
	(100)	1,234,058	(2,477)	(1,981)
Financial liabilities measured at amortized cost	100	6,875,899	228,458	182,766
Loans and borrowings	(100)	6,875,899	228,458	182,766
Financial liabilities measured at fair value with change in other comprehensive income				
Derivative instruments	100	277,078	8,455	6,764
	(100)	277,078	(8,455)	(6,764)

Amounts stated in millions of Colombian pesos

The company considers that the sensitivity analysis is representative in respect to the exposure of the foreign Exchange Risk.

42.2 Credit Risk

Credit Risk is the risk that one of the counterparts does not comply with the obligations derived from a financial instrument or purchase contract and that this will translate in a financial loss. EPM has identified that the financial instruments affected by credit risk include:

- Cash and cash equivalents
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
- Swaps
- Trade and other receivables

Credit Risk Management by type of financial instrument is detailed below:

- **Cash and cash equivalents, fixed income securities and investments pledged as collateral:** For credit risk management in EPM, quotas are assigned per issuer, per counterparty and intermediary, taking into account the financial, risk and fundamental analysis of the entities, emphasizing shareholder support. The methodology considers the characteristics of the investment portfolio and applicable regulations. Credit risk concentration is limited since it obeys the provisions of the business rules manual for treasury operations. The description of the factors that define risk concentration is as follows:
    - Quotas are updated quarterly based on the latest available financial statements of the entities analyzed.
    - When the value of the consolidated portfolio of temporary investments exceeds the equivalent of 10,000 minimum wages (SMMLV), no more than 20% of this value must be concentrated in the same issuer, counterparty or intermediary, with the exception of securities issued by governments that comply with current regulations.
    - Securities market intermediaries, other than supervised banking establishments, may act as counterparties for transactions but cannot be considered as eligible issuers.
    - Brokerage firms acting as counterparties to treasury operations must have at least the second risk rating in strength or quality of portfolio management.
    - Stockbrokerage companies backed by banks, i.e. banked counterparties, must have a minimum net worth of 30,000 minimum wages (SMLMV).

Finally, efforts to avoid the concentration of risk are aimed at establishing, analyzing, monitoring and controlling quotas, for which purpose the current quotas and their occupation status are controlled. Justifications related to the need to temporarily exceed the quotas are submitted for approval.

Investments referred to are constituted with banking establishments that have the following risk rating, according to the term of the investment:

- For investments with a term equal to or less than one (1) year, the banking establishment must have a current rating corresponding to the maximum category for the short term in accordance with the rating scheme used by the rating companies that grant it and must have at least the second best current rating for the long term used by the respective companies;
- For investments with a term greater than one (1) year, the banking establishment must have the maximum rating in force for the long term according to the rating scheme used by the rating companies and the maximum rating for the short term according to the scale used for this term.

Swaps: EPM is exposed to the risk that a counterparty will not recognize the right and to mitigate this risk, the level of risk of each of the entities with which it intends to execute a transaction is assessed beforehand.

Trade and other receivables: EPM is exposed to the risk that users of residential public utilities may default on payment for such services. Receivables from public sector debtors are classified into two major groups: those arising from arrears in payment and the other group relates to financing or payment agreements with customers as a portfolio recovery strategy or for the linking of new customers.

EPM evaluates at the end of each period the behavior and value of receivables to determine if there is objective evidence that the portfolio is impaired and to identify its possible impact on future cash flows. The criteria used to determine objective evidence of an impairment loss are:

- Evidences default in a customers' payment for two (2) or more accounts.
- It is known or there is evidence of the customer entering processes of corporate restructuring or in insolvency or liquidation.
- The rise of social turmoil, be it of public order or natural disasters, which according to experience are directly correlated with default of accounts.

In order to avoid excessive concentration of risk, EPM has developed and implemented various strategies to mitigate the risk of default in the portfolio, including:

- Persuasive collection by making phone calls and sending letters to customers with the support of specialized collection agencies.
- Segmentation of customers to identify those of greater risk, due to their value, to carry out personalized collection activities with them.
- Possibility of making payment agreements or partial payments that lead to the recovery of the exposed capital.
- Offsetting of receivables against payables for EPM with customer-suppliers.
- When the above strategies do not generate satisfactory results, coercive collection actions are taken by suspending and disconnecting the service.
- If the above strategies do not produce satisfactory results, the portfolio is collected through legal proceedings.

Similarly, we seek expansion of the product portfolio to customers in a way that facilitates debt repayment, e.g. prepaid energy and water.

As mentioned above, EPM makes payment or financing agreements, which are executed as a portfolio recovery strategy or for the acquiring of new customers. These agreements give right to fixed or determinable payments and are included in current assets, except for those with a maturity of more than 12 months from the date of generation of the balance, in which case they are classified in non-current assets.

In general terms, to guarantee debt settlement of customers, blank promissory notes with letters of instruction are constituted, and when the value of the financing exceeds pre-established amounts in the internal regulations, real or bank guarantees are requested, and in cases where the customer is a state entity, resources are pledged which EPM, by prior agreement, collects from the customer.

For credit risk management of accounts receivable in its different stages (risk cycle), methodologies, procedures, guidelines, and business rules are incorporated, complying with commercial and financial policies, in order to achieve an integral and sustainable vision of customers.

In order to leverage the stages of the credit risk cycle, there are different statistical methodologies that allow obtaining an estimate of future payment behavior of the accounts. These methodologies are described below:

- **CREDIT SCORING**

  Allows to obtain the risk profile of a customer from its payment behavior and own characteristics, which helps in the segmentation of the population, suggesting the optimal candidates for offers of assignment of basic services and/or added value.

- **APPROVAL SCORING FOR VALUE-ADDED PRODUCTS**

  Profiles customers who apply for value-added credit, assigns a level of risk to the applicants and according to established business rules contributes to making the final decision of approval or denial.

- **PORTFOLIO CLASSIFICATION MODEL**

  Assigns the probability of short-term (2 months) default of subscribed services, in order to design collection prioritization strategies.

- **MODEL FOR CALCULATING EXPECTED LOSS**

  Allows finding the probability that the subscribed services may go into default within 12 months, which is used to calculate the expected loss of the accounts.

The company considers that the value that best represents its exposure to credit risk at the end of the period, without considering any collateral taken or other credit enhancements is:

Description	2020	2019
Cash and cash equivalents	864,631	879,024
Investments in debt instruments	1,995,427	545,481
Investments in equity instruments	2,518,382	1,922,285
Receivables	(371,427)	(307,551)
Other receivables	(60,451)	(58,756)
Maximum exposure to credit risk	**4,946,562**	**2,980,483**

Amounts stated in millions of Colombian pesos

42.3 Liquidity Risk

Refers to the possibility of insufficient resources for the timely payment of operations and commitments of the entity, and thus EPM would be forced to obtain liquidity in the market or to liquidate investments in an onerous manner. It is also understood as the possibility of not finding buyers for offered bonds.

EPM has identified that the financial instruments affected by liquidity risk include:

- Cash and cash equivalents
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
- Swaps
- Trade and other debtors

To control liquidity risk, time comparisons of figures, benchmarks and liquidity levels are made over different time horizons. From this analysis, investment strategies that do not affect the liquidity of the Companies are developed, considering the cash budget and market risk analyses to assess the diversification of the sources of funds, the capacity to sell assets and the creation of contingency plans.

Generally, the main aspects considered in the analysis are:

- Liquidity of the securities: the characteristics of the issuer, the amount of the issue and the trading volume are analyzed.
- Market liquidity: the general behavior of the market is analyzed and rate forecasts are made to infer its future behavior.
- Portfolio liquidity: cash flows are coordinated in order to determine investment strategies according to future liquidity requirements, and diversification is sought to avoid concentration of securities by issuer, rate, and/or terms.

The following table shows the remaining contractual maturity analysis for non-derivative financial assets and liabilities:

	Average effective interest rate	Less than 1 year	From 1 to 2 years	From 2 to 3 years	From 3 to 4 years	More than 4 years	Total contractual obligation
2020							
Non-derivative financial liabilities with variable interest rate	4.48%	1,051,434	909,154	565,409	480,441	2,897,040	5,903,479
Non-derivative financial liabilities with fixed interest rate	6.47%	339,585	208,763	399,058	1,174,508	10,522,734	12,644,647
Non-derivative financial assets	2.77%	2,055,439	8,000		8,500		2,071,939
Non-derivative financial assets - Portfolio	6.51%	280,850	512,543	253,152	230,468	888,843	2,165,856
Total		**3,727,308**	**1,638,460**	**1,217,620**	**1,893,917**	**14,308,617**	**22,785,921**
2019							
Non-derivative financial liabilities with variable interest rate	6.55%	329,759	99,445	923,466	574,383	3,539,931	5,466,984
Non-derivative financial liabilities with fixed interest rate	6.73%	177,325	308,147	177,325	367,620	8,631,037	9,661,454
Non-derivative financial assets	4.8%	813,053	1,250	8,000		6,100	828,403
Non-derivative financial assets - Portfolio	7.62%	96,563	200,568	257,323	258,691	1,592,506	2,405,651
Total		**1,416,700**	**609,409**	**1,366,114**	**1,200,695**	**13,769,574**	**18,362,492**

Amounts stated in millions of Colombian pesos

Values included in the above tables for non-derivative financial assets and liabilities may change because of fluctuations in the variable interest rate relative to the estimated interest rate at the end of the reporting period. The Company believes that cash flows may not occur earlier than indicated above.

The following table shows the analysis of contractual maturity of remaining derivative financial liabilities:

	Less than 1 year	From 1 to 2 years	From 2 to 3 years	From 3 to 4 years	More than 4 years	Total contractual obligation
2020						
Swap contracts	157,138	61,100	90,966	91,581	766,556	1,167,440
Total	157,138	61,100	90,966	91,581	766,556	**1,167,440**
2019						
Swap contracts	(13,699)	(14,592)	(17,561)	-	-	(45,853)
Total	(13,698)	(14,592)	(17,561)	-	-	**(45,852)**

Amounts stated in millions of Colombian pesos

The main method for measuring and monitoring liquidity is cash flow forecasting which is carried out in EPM and consolidated in the cash budget. As a result, its cash position is monitored daily and projections are made on an ongoing basis in order to:

- Monitor liquidity needs related to operating and investing activities associated with the acquisition and disposal of long-term assets.
- Pay, pre-pay, refinance and/or obtain new loans, according to cash flow generation capacity in EPM.

These projections consider EPM's debt financing plans, compliance with ratios, compliance with organizational objectives and applicable regulations.

Note 43. Measurement of fair value on a recurring and non-recurring basis

The methodology established in IFRS 13 -Fair value measurement specifies a hierarchy in the assessment techniques based on whether the variables used in the determination of the fair value are observable or not. The company determines the fair value on a recurring and non-recurring basis, as well as for disclosure purposes:

- Based on prices quoted in assets or liabilities markets identical to those the company can access on the measurement date (level 1).
- Based on inputs applied on valuation methodologies commonly used by market participants, which are different from observable quoted prices for assets or liabilities, directly or indirectly (level 2).
- Based on internal valuation techniques of cash flow discounts or other valuation models, using variables estimated by the company that are non-observable for the asset or liability, in the absence of variables observed in the market (level 3).

During 2020 in EPM no transfers have been made between the fair value hierarchy levels, either for transfers in or out of the levels.

Assessment techniques and variables used in the company for measurement of fair value for recognition and disclosure:

Cash and cash equivalents: include cash and banks and highly liquid investments, easily convertible into a specified amount of cash and subject to an insignificant risk of changes in value, with a maturity of three months or less from the date of acquisition. EPM uses the market approach as a valuation technique for this item, these items are classified in Level 1 of the fair value hierarchy.

Fair value investments through profit or loss and through equity: includes investments made to optimize surplus liquidity, i.e. all those resources that are not immediately allocated to the development of the activities that constitute the corporate purpose of the companies. EPM uses the market approach as a valuation technique, these items are classified in level 1 of the fair value hierarchy.

Equity investments: corresponds to the resources placed in participative securities of national entities, represented in shares or parts of social interests. The methodologies used are: the market price for those listed on the stock exchange (level 1) and the discount cash flows for the rest (level 3).

Fiduciary rights: corresponds to the rights originated for the celebration of trust contracts. EPM uses the market approach as a valuation technique, these items are classified at level 1.

Derivative instruments - Swaps: EPM uses derivative financial instruments such as forward contracts, futures contracts, swaps and options to hedge various financial risks, primarily interest rate, foreign exchange and commodity price risks. Such derivative financial instruments are initially recognized at fair value on the date the derivative contract is entered into and are subsequently remeasured at fair value. EPM uses as a valuation technique for swaps the discounted cash flow, in an income approach. The variables used are: Interest rate swap curve for dollar-denominated rates, to discount dollar flows; and external interest rate swap curve for Colombian peso-denominated rates, to discount flows in Colombian pesos. These items are classified in level 2 of the fair value hierarchy.

Additionally, for the put option of the climate derivative, the Monte Carlo method is used as a valuation technique, which simulates the non-financial variable (rainfall measured at two meteorological stations that are located in the basins of two of the most important rivers in the EPM's area of influence: Río Abajo and Riogrande I) in a series of situations or possible scenarios for a specific event, including the limits and the present value of the flows defined in the contract. This item is classified in Level 3 of the fair value hierarchy because the variables used are no obtained from observable data in the market.

Accounts receivables: include the account receivable originated in the business combination by the acquisition of the subsidiary Empresas Públicas de Rionegro, for its valuation is considered the discounted payment flow applying the weekly deposit rates for certificates of deposits at 360 days published by the Bank of the Republic; and the account receivable associated with the supply contract for liquid fuel (ACPM).

Investment properties: Are properties (lands or buildings, considered as a whole, a part or both) that are held to earn incomes, capital appreciation, or both; instead of:

- Be used in the production or supply of goods or services, or for administrative purposes; and
- held for sale in the ordinary course of business

EPM uses two valuation techniques for these items. Within the market approach, is used the comparative or market method, which consists in deduce of the price by comparison of transactions or appraisal of similar or comparable properties the adjustments for time, conformation, and location. Within the cost approach, is used the residual method, that is applied only to buildings and is based on the determination of the construction cost, less depreciation and state of conservation. Both items are classified in level 3 of the fair value hierarchy.

Contingent considerations: originated in the business combination by the acquisition of the subsidiaries Espíritu Santo Energy S. de R.L. and Empresas Varias de Medellín S.A E.S.P. – EMVARIAS, for its valuation is considered the discounted payment flow applying the discount rates: Libor and TES, respectively. These items are classified in level 3 of the fair value hierarchy.

Other payables: corresponds to the premium payable of the climate derivative whose valuation technique is the average of the expected future flows, discounted at a risk-free rate plus a spread that contemplates the possibility of default (own credit risk). This item is

classified in Level 3 of the fair value hierarchy because the variables used are no obtained from observable data in the market.

The following tables shows for each level of the fair value hierarchy, the company's assets and liabilities measured at fair value on a recurring basis, as of 2020 and 2019:

2020	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	157,155	-	-	157,155
Total marketable or designated at fair value (See Note 18)	157,155	-	-	157,155
Fixed-income securities	1,994,631	-	-	1,994,631
Variable-income securities	119,210	-	-	119,210
Investments pledged as collateral or pledged as security	796	-	-	796
Total other investments at fair value (See Note 13)	2,114,637	-	-	2,114,637
Variable income securities other equity investments	2,511,649	-	6,733	2,518,382
Total other equity investments (See Note 13)	2,511,649	-	6,733	2,518,382
Trust rights in administration	423,102	-	-	423,102
Total fiduciary rights (See Note 13)	423,102	-	-	423,102
Swaps	-	62,374	-	62,374
Options	-	-	128,204	128,204
Total derivatives (See Note 13)	-	62,374	128,204	190,578
Other accounts receivable - Business combination			23,237	23,237
Total receivables (See Note 12)			23,237	23,237
Investment properties Urban and rural land	-	-	116,532	116,532
Investment properties Buildings and houses	-	-	35,833	35,833
Total investment properties (See Note 6)	-	-	152,365	152,365
Liabilities				
Swaps	-	416,595	-	416,595
Total derivative liabilities (See Note 23)	-	416,595	-	416,595
Provisions - business combinations	-	-	155,378	155,378
Total contingent consideration (See Note 27)	-	-	155,378	155,378
Other payables	-	-	120,428	120,428
Total Other payables (See Note 23)	-	-	120,428	120,428
Total fair value on a recurring basis	5,206,543	(354,221)	34,733	4,887,055
Amounts stated in millions of Colombian pesos	107%	-7%	1%	

2019	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	488,548	-	-	488,548
Total marketable or designated at fair value (See Note 13)	488,548	-	-	488,548
Fixed-income securities	539,511	-	-	539,511
Variable-income securities	98,348	-	-	98,348
Investments pledged as collateral or pledged as security	5,970	-	-	5,970
Total other investments at fair value (See Note 13)	643,829	-	-	643,829
Variable income securities other equity investments	1,915,552	-	6,733	1,922,285
Total other equity investments (See Note 13)	1,915,552	-	6,733	1,922,285
Trust rights in administration	404,365	-	-	404,365
Total fiduciary rights (See Note 13)	404,365	-	-	404,365
Swaps	-	45,062	-	45,062
Total derivative liabilities (See Note 13)	-	45,062	-	45,062
Investment properties Urban and rural land	-	-	110,116	110,116
Investment properties Buildings and houses	-	-	16,706	16,706
Total investment properties (See Note 6)	-	-	126,822	126,822
Liabilities				
Provisions - business combinations	-	-	133,346	133,346
Total contingent consideration (See Note 27)	-	-	133,346	133,346
Total fair value on a recurring basis	3,452,294	45,062	209	3,497,565
Amounts stated in millions of Colombian pesos	71%	1%	0%	

Recorded value and estimated fair value of the company's assets and liabilities that are not recognized at fair value in the separate statement of financial position, but require disclosure at fair value, as of 31 December 2020 and 2019 are as follows:

Description	2020			2019	
	Recorded value	Estimate fair value		Estimate fair value	
		Level 2	Total	Level 2	Total
Assets					
Public utilities accounts receivable	1,829,032	1,821,665	1,821,665	1,753,485	1,753,485
Employee loans	121,480	126,283	126,283	125,990	125,990
Associates	1,163,777	1,163,777	1,163,777	1,163,309	1,163,309
Other receivables	784,642	786,498	786,498	704,482	704,482
Total assets	3,898,931	3,898,223	3,898,223	3,747,266	3,747,266
Liabilities					
Other issued bonds and securities				9,648,197	9,648,197
Commercial bank loans	1,543,589	1,543,589	1,543,589	571,071	571,071
Multilateral bank loans	2,962,186	2,962,186	2,962,186	3,594,944	3,594,944
Development bank loans	1,534,291	1,534,291	1,534,291	985,814	985,814
Issued bonds and securities	12,606,757	13,693,376	13,693,376	392,585	392,585
Total liabilities	18,646,823	19,733,442	19,733,442	15,192,611	15,192,611
Total	(14,747,892)	(15,835,219)	(15,835,219)	(11,445,345)	(11,445,345)
Amounts stated in millions of Colombian pesos		100%		100%	

As of 31 December 2020, and 2019, there were no items in levels 1 and 3.

Note 44. Service concession arrangements

At 31 December 2020, the company manages as operator various concessions that contain provisions for the construction, operation and maintenance of facilities, as well as the provision of public services such as water supply and wastewater collection and treatment, in accordance with applicable regulations.

The remaining period of the concessions where the company acts as an operator is detailed below:

Entity/agreement	Contract No.	Signing day	Activity	Country	Concession period	Initial remaining period
Empresas públicas de Medellín - Municipio de Caldas	1401288	No date	The Municipality undertakes to put layout and facilitate the use of the networks and other infrastructure for the provision of water and sewage.	Colombia	30 years (extendable)	8 years
Empresas públicas de Medellín - Municipio de Sabaneta	1/DJ/-7885/19	03/10/1984	The Municipality undertakes to put layout and facilitate the use of the networks and other infrastructure for the provision of water and sewage.	Colombia	10 years (extendable)	4 years
Empresas públicas de Medellín - Municipio de La Estrella	1/DJ/-7835/17	10/09/1984	Execution of works and provision of water supply services drinking water and sewerage.	Colombia	10 years (extendable)	4 years
Empresas públicas de Medellín - Municipio de Envigado	1/DJ/-5941/30 1/DJ/-7982/5	03/08/1977 27/02/1985	Provision of water and sewerage and construction of works for the provision of water and sewage services	Colombia	10 years (extendable)	7 years
Empresas públicas de Medellín - Municipio de Itagüi	1/DJ/-6199/10 2/DJ/-1190/33 1/DJ/-2079/58 2801799	06/09/1978 10/10/1994 04/07/1996 02/09/1998	Construction of the aqueduct networks and sewers for the provision of service to the assigned neighborhoods. Construction of collector parallel to the La Justa stream and sewage system on 36th Street at the height of Ditaires Park. Construction of the collector parallel to the coverage of La Muñoz creek. Handing over of hydraulic structures to provide the sewage service in the municipality and provide sanitation to the Medellín River.	Colombia	30 years (extendable)	27 years
Empresas públicas de Medellín - Municipio de Bello	1/DJ/-6208/11	05/09/1978	Execution of works and provision of water and sewage services.	Colombia	10 years (extendable)	3 years
Empresas públicas de Medellín - Municipio de Copacabana	1/DJ-9994/9	31/10/1990	Execution of works for the drinking water supply, sewerage and provision of such services.	Colombia	20 years (extendable)	10 years
Empresas públicas de Medellín - Municipio de Girardota	1/JD-591/2	12/04/1993	Provision of water service and sewerage.	Colombia	20 years (extendable)	12 years
Empresas públicas de Medellín - Municipio de Barbosa	1401287	02/10/1997	The Municipality undertakes to put layout and facilitate the use of the networks and other infrastructure for the provision of water and sewerage.	Colombia	30 years (extendable)	7 years

As of the cut-off date, no income and costs incurred for construction services have been recognized in exchange for a financial asset or an intangible asset.

Service concession arrangements

The concession arrangements between EPM and the municipalities establish the conditions under which the water and sewerage networks are managed, operated, and maintained to provide drinking water and wastewater treatment services to their inhabitants, under the terms, conditions, and rates established by the Commission for the Regulation of Drinking Water and Basic Sanitation (CRA).

The user is charged via tariffs according to the intervention of replacement, expansion or interventions in the networks with the execution of the projects under construction (Construction in progress). Following the parameters and conditions established by the C.R.A (Water Regulation Commission).

The agreements indicate the following rights and obligations for EPM as an operator in the service concession arrangement:

- The right to receive from the municipality the totality of the water and sewage networks and to have exclusivity as system operator.
- Obligation to make exclusive use of the water and sewage networks for the purposes for which they are intended, maintain and return them under the use conditions in which they were received.
- Some concession agreements have the option to be renewed automatically for equal periods unless one of the parties expresses the intention not to continue.
- The concession agreements do not establish the obligation of construction of property, plant and equipment elements.

Upon termination of the concession, EPM must return the water and sewage networks without any consideration to the municipalities. No changes have occurred in the terms of the concession agreements during the period.

The intangible asset model applies to these arrangements. See Note 7 Goodwill and other intangible assets.

Note 45. Facts occurred after the period being reported

Environmental sanction of the National Environmental Licensing Authority (ANLA) to the Ituango Hydroelectric Project:

At 15 January 2021, the ANLA issued the Resolution 172 that confirms the decision adopted in the first article of the Resolution 2854 of December 30, 2019, for which it is imposed an environmental sanction of $ 5.510 and other determinations are made, in facts or omissions occurred within framework of the development of the project "Construction, filling and operation of the Pescadero - Ituango hydroelectric project". This sanction does not represent an adjustment to the figures of the financial statements as of December 31, 2020, because it was recognized for the same amount as a provision liability.

Direct repair Ríos Vivos Movement Colombia:

Through a request for direct reparation, 632 individualized persons, who belong to the Movement Ríos Vivos seeks a prior declaration of responsibility for the alleged violation of rights environmental, cultural, social and human, as well as against the impact of the solidarity economy and living conditions of the population on the occasion of the Ituango Hydroelectric project and the contingency that was presented in the same, in addition to the assumption by all the defendant entities of measures satisfaction in favor of the affected communities, all damages are recognized and paid patrimonial and extra-patrimonial caused to each of the summons (plaintiffs). The amount of the claims amount to $705,854.

After the date of presentation of the separate financial statements and before the date of authorization of their publication, no other relevant facts were presented that would imply adjustments to the figures.

EPM certification

Back to content

CERTIFICATION OF FINANCIAL STATEMENTS

Medellín, March 23, 2021

To the Board of Directors of Empresas Públicas de Medellín E.S.P.

We, the undersigned, in our capacity as the Legal Representative and Accountant of Empresas Públicas de Medellín E.S.P., hereby certify that the balances of the Separate Financial Statements of Empresas Públicas de Medellín E.S.P. at December 31, 2020 and 2019, were faithfully taken from the accounting books, which are prepared in accordance with the Accounting and Financial Reporting Standards accepted in Colombia (NCIF, for the Spanish original) and adopted by the General Accounting Office of Colombia through Resolution 037/2017 and its amendments. These accounting and financial reporting standards are based on the International Financial Reporting Standards issued by the International Accounting Standards Board (IASB), as well as interpretations issued by the Interpretations Committee, adopted in Colombia through Decree 2420/2015 and its amendments.

We certify that the assertions contained in the separate Financial Statements were verified for accuracy in relation to:

a) All economic events that have occurred during the reporting period have been properly recorded for their due recognition in the appropriate amounts and accounts, measured at fair value and adequately disclosed.

b) That economic events are classified, presented and disclosed in accordance with accounting and financial reporting standards.

c) All assets, liabilities and equity in the separate financial statements represent the existence of assets, rights and obligations and have been valued at the appropriate amounts.

d) The disclosures or accounting notes are prepared clearly and in accordance with accounting and financial reporting standards.

The separate financial statements do not contain any defects, inaccuracies or misstatements that would prevent the true financial position and financial performance of the Entity from being known.

Mónica María Ruiz Arbeláez
Acting Legal Representative

John Jaime Rodríguez Sosa
Public Accountant
Professional License No. 144842-T

KPMG S.A.S.
Calle 2 No. 20 – 50, Piso 7, Edificio Q Office
Medellín - Colombia

Teléfono 57 (4) 3556060
home.kpmg/co

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Empresas Públicas de Medellín E.S.P.:

Opinion

We have audited the separated financial statements of Empresas Públicas de Medellín E.S.P. (the Company), which comprise the separated statement of financial position as of 31 December 2020 and the separated statement of profit or loss and other comprehensive income, of changes in equity and of cash flows for the year that ended on said date and their respective notes, including a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying separated financial statements, present fairly, in all material respects, the separated financial position of the Company as at 31 December 2020, the separated financial performance of its operations and its separated cash flows for the year that ended on said date, in accordance with the Accounting and Financial Reporting Standards accepted in Colombia adopted by the Nation's General Accounting Office through resolution 037 of 2017 and resolution 056 of 2020, applied uniformly with the previous year.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing accepted in Colombia (ISA). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the separated Financial Statements section of our report. We are independent of the Company, in accordance with the Code of Ethics for Accounting Professionals issued by the International Ethics Standards Board for Accountants (IESBA) included in the Information Assurance Standards accepted in Colombia together with the ethical requirements that are relevant to our audit of the separated financial statements established in Colombia and we have fulfilled our ethical responsibilities in accordance with these requirements and the aforementioned IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of a matter

We draw attention to note 5 to the separate financial statements, which describes the events that occurred in the Ituango Hydroelectric Project and their impact on the financial statements. The root causes of the mentioned events are still being evaluated by the Company and by the relevant control and oversight bodies, therefore the final outcome cannot be determined at this time and consequently no additional effect on the Company's separate financial statements has been foreseen. Our opinion is not modified in relation to this matter.

© 2021 KPMG S.A.S., sociedad colombiana por acciones simplificada y firma miembro de la red de firmas miembro independientes de KPMG afiliadas a KPMG International Limited, una entidad inglesa privada por garantía. Todos los derechos reservados.

Back to content

KPMG

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the separated financial statements of the current period.

These matters were addressed in the context of our audit of the separated financial statements as a whole, and in forming our opinion thereon we do not provide a separated opinion on these matters.

Evaluation of Impairment of Cash Generating Unit – Electricity Generation (See notes 2.18 and 11.2 to the separated financial statements)	
Key Audit Matter	**How our audit addressed the key audit matter**
The Company's separate statement of financial position as of December 31, 2020 includes property, plant and equipment, net and intangibles for Ch$16,773,466 million associated with the cash generating unit (CGU) of Power Generation. For the evaluation of impairment, the Financial Planning and Analysis Department establishes the value in use considering the calculations generated by the HSF - Oracle application and the base information for the determination of the financial projections of the businesses is approved by the respective Vice-Presidencies and annually ratified by the Board of Directors. We consider the assessment of the impairment of the Cash Generating Unit - Power Generation as a key audit matter because it involves complex judgment elements by the Company such as: (i) the methodology used and calculations performed for the estimation of the value in use and (ii) the relevant inputs and assumptions used in the model such as: (1) the historical behavior of certain base variables for the projection; (2) the discount rates applied, and macroeconomic variables used (3) the projection period and (4) the perpetual growth gradient.	Our audit procedures to assess the impairment of the cash generating unit - Power Generation included, among others, the following: Evaluation of the design, implementation and operative effectiveness of the controls established by the Company to calculate CGU impairment. This included controls associated with the approvals of key operating assumptions included in the financial projections for the determination of value in use by the Vice President of each business and the Board of Directors. With the involvement of professionals with experience and knowledge in the evaluation of information technology, automatic controls associated with the proper administration and management of access to the HSF application were evaluated to ensure the integrity and protection of historical information and the configuration of the financial projection model. - Involvement of professionals with knowledge and experience in valuation who assisted us in: (i) the evaluation of the methodology used to estimate value in use and the development of independent recalculations, and (ii) the evaluation of the following relevant inputs and assumptions used in the model: (1)

Back to content

KPMG

	historical behavior of certain base variables for the projection; (2) discount rates and macroeconomic variables; (3) projection period; and (4) the perpetual growth gradient.
Assessment of the sufficiency of lawsuit provisions and appropriate assessment of contingent liabilities (See notes 27.1.3 and 27.2 to the separated financial statements)	
Key Audit Matter	**How our audit addressed the key audit matter**
The Company is involved in certain tax and legal proceedings. The Company records provisions for these proceedings when it is probable that an outflow of resources will be required to settle a present obligation and when the amount of the outflow can be estimated. The Company discloses a contingency when the probability of loss related to such proceedings is considered possible or when it is considered probable, but the amount of the disbursement cannot be reliably estimated. The Company's separate statement of financial position as of December 31, 2020 includes provisions for litigation of $206,558 million and the notes to the financial statements disclose contingent liabilities of $1,363,289 million. The valuation of these provisions and contingent liabilities requires the Company to make significant judgments about the probability of judgment in administrative, tax and labor proceedings, as well as the determination of the amounts of the obligations to be paid based on the claims and the related estimated dates of payment. We have considered the evaluation of the adequacy of provisions for litigation and contingencies as a key audit matter because it requires significant judgment and effort. Specifically, because of the nature of the estimates and assumptions, including judgments about the probability of loss and the amounts that would be paid in the event of unfavorable outcomes.	Our audit procedures for evaluating the adequacy of provisions for litigation and contingent liabilities included, among others, the following: - Understanding of the processes established by the Company for the estimation of provisions for litigation and determination of contingent liabilities including the evaluation of the design, implementation and effectiveness of relevant controls, such as: (i) compliance with professional profiles of lawyers, established by the entity for the management of litigation according to their complexity and specialty, (ii) evaluation by the Conciliation Committee of the probability of judgment as well as the claims of administrative, tax and labor litigation that resulted in a judgment, (iii) reconciliation of the report generated from the repository of litigation and disputes of Maya legal management against the records of the accounting application JDEdwards. - Evaluation of the competence and capacity of professionals with internal and external expertise, which determined the probability of loss and the estimated amount of disbursement in each litigation. - Confirmation from the Company's internal and external lawyers on the probability of judgment and the status of current proceedings.

Back to content

KPMG

	- Selection of a sample of the main litigations to analyze the supporting documentation with the involvement of professionals with experience and knowledge in administrative, tax and labor law, who assisted us in: • The legal analysis of the supporting documents of the lawsuits, the probability of judgment indicated by the Company and the estimated amount. • The analysis of the possibility for the Company to file an appeal against the judicial decision, according to the current situation of each of the selected cases. Evaluation of the disclosures included in the notes to the separate financial statements in accordance with the applicable financial reporting framework.

Other Matters

The separate financial statements as of and for the year ended December 31, 2019 are presented solely for comparative purposes, were audited by us and in our report dated March 26, 2020, we expressed an unqualified opinion on them and included an emphasis of matter paragraph related to the events that occurred in the Ituango Hydroelectric Project, a situation that to date remains.

Other Information

Management is responsible for the other information. The other information comprises the information included in the management report but does not include the separate financial statements and our related auditors' report.

Our opinion on the separate financial statements does not cover the other information and we do not express any form of assurance conclusion on it.

In connection with our audit of the separate financial statements, our responsibility is to read the other information and, in doing so, consider whether there is a material inconsistency

Back to content

KPMG

between that information and the separate financial statements or our knowledge obtained in the audit, or otherwise appears to be a material misstatement.

If, based on the work we have performed, we conclude that there is a material misstatement in this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibility of management and those charged with the Company's corporate governance in relation to the separate financial statements.

Management is responsible for the preparation and fair presentation of these separate financial statements in accordance with Accounting and Financial Reporting Standards accepted in Colombia as adopted by the Colombian General Accounting Office through resolution 037 of 2017 and resolution 056 of 2020. This responsibility includes: designing, implementing and maintaining such internal control as management determines is necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and establishing accounting estimates that are reasonable in the circumstances.

In preparing the separate financial statements, management is responsible for assessing the Company's ability to continue as a going concern, for disclosing, as applicable, matters related to going concern and for using the going concern basis of accounting unless management intends to liquidate the Company or cease operations, or there is no more realistic alternative than to proceed in one of these ways.

Those charged with corporate governance are responsible for overseeing the Company's financial reporting process.

Auditors' responsibilities in connection with the audit of separate financial statements.

Our objectives are to obtain reasonable assurance about whether the separate financial statements taken as a whole are free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our opinion. Reasonable assurance means a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise due to fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

As part of an audit conducted in accordance with ISAs, we exercise professional judgment and maintain professional skepticism during the audit. Also

- Identify and assess the risks of material misstatement of the separate financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our

Back to content

KPMG

opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one arising from error, because fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override or override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern assumption and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may indicate significant doubt about the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we draw attention in our report to the disclosure that describes this situation in the separate financial statements or, if such disclosure is inadequate, we modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our report. However, future events or conditions may cause the Company to cease to operate as a going concern.

- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements present the underlying transactions and events so as to achieve a fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the Group's financial statements. We are responsible for the direction, supervision and performance of the Group's audit. We remain solely responsible for our audit opinion.

We communicate to those charged with governance of the Company, among other matters, the planned scope and timing of the audit, as well as significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with confirmation that we have complied with relevant ethical independence requirements and that we have communicated with them all relationships and other matters that might reasonably be considered to bear on our independence and, where applicable, related safeguards.

Back to content

KPMG

From the matters communicated with those charged with governance, we determined the matters that were of most significance in the audit of the current period's separate financial statements and, accordingly, are the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely exceptional circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably outweigh the benefits to the public interest of such communication.

KPMG S.A.S.
March 23, 2021
Medellín

Back to content

Grupo EPM financial management

Back to content

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of December 31, 2020 and 2019

Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Assets			
Non-Current Assets			
Property, plant and equipment, net	5	37,651,696	35,605,655
Investment property	6	165,119	140,354
Goodwill	7	3,123,221	2,895,451
Other intangible assets	7	2,684,858	2,350,612
Right-of-use assets	15	571,222	609,412
Investments in associates	11	1,643,033	1,758,462
Investments in joint ventures	12	32,467	82
Deferred tax assets	41	726,806	220,026
Trade and other receivables	13	1,276,757	1,013,685
Other financial assets	14	3,441,279	2,541,567
Other assets	17	93,104	106,914
Cash and cash equivalents (restricted)	19	110,920	46,415
Total non-current assets		**51,520,482**	**47,288,635**
Current assets			
Inventories	18	477,338	391,244
Trade and other receivables	13	4,179,728	4,072,661
Assets for current income tax	41	416,267	169,185
Other financial assets	14	2,411,864	867,998
Other assets	17	785,297	438,592
Cash and cash equivalents	19	3,987,044	1,664,151
Total current assets		**12,257,538**	**7,603,831**
Total assets		**63,778,020**	**54,892,466**
Debit balances of deferred regulatory accounts	31	767	-
Deferred tax assets related to deferred regulatory account balances	31	-	7,683
Total assets and debit balances of deferred regulatory accounts		**63,778,787**	**54,900,149**
Equity			
Issued capital	20	67	67
Treasury shares		(52)	(41)
Reserves	20	2,298,987	2,337,862
Accumulated other comprehensive income	21	4,079,876	3,304,761
Retained earnings	20	16,057,923	14,518,224
Net profit for the year	20	3,584,538	2,985,182
Other components of equity		71,537	68,333
Equity attributable to owners of the company		**26,092,876**	**23,214,388**
Non-controlling interests	20	1,034,317	964,572
Total equity		**27,127,193**	**24,178,960**

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of December 31, 2020 and 2019

Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Liabilities			
Non-current liabilities			
Borrowings and loans	22	20,687,484	17,671,539
Creditors and other accounts payable	23	619,099	601,393
Other financial liabilities	24	1,320,326	916,917
Employee benefits	26	1,021,447	931,492
Income tax payable	41	33,701	33,701
Deferred tax liabilities	41	1,978,080	2,243,327
Provisions	28	592,862	491,930
Other liabilities	29	954,417	116,440
Total non-current liabilities		**27,207,416**	**23,006,739**
Current liabilities			
Borrowings and loans	22	3,900,318	2,984,466
Creditors and other accounts payable	23	3,086,015	2,534,254
Other financial liabilities	24	577,488	416,661
Employee benefits	26	284,489	247,466
Income tax payable	41	197,380	363,584
Taxes, contributions and rates	27	376,960	222,368
Provisions	28	690,892	589,977
Other liabilities	29	330,406	330,064
Total current liabilities		**9,443,948**	**7,688,840**
Total liabilities		**36,651,364**	**30,695,579**
Credit balances of deferred regulatory accounts	31	-	25,610
Deferred tax liabilities related to balances of deferred regulatory accounts	31	230	-
Total liabilities and credit balances of deferred regulatory accounts		**36,651,594**	**30,721,189**
Total liabilities and equity		**63,778,787**	**54,900,149**

The accompanying notes are an integral part of these Consolidated Financial Statements.

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

epm Group

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the years ended December 31, 2020 and 2019
Amounts stated in millions of Colombian pesos

	Notes	2020	2019
Continuing operations			
Sale of goods	32	27,928	24,222
Rendering of services	32	19,201,942	17,648,656
Leases	32	96,741	111,841
Total Revenue		**19,326,611**	**17,784,719**
Other income	33	471,794	573,303
Income for sale of assets	34	507	1,592
Total income		**19,798,912**	**18,359,614**
Costs of goods sold and services rendered	35	(13,508,628)	(11,557,807)
Administrative expenses	36	(1,772,997)	(1,596,792)
Impairment loss on accounts receivable		(295,471)	(77,801)
Other expenses	37	(92,187)	(157,467)
Financial income	38.1	157,273	370,837
Financial expenses	38.2	(1,267,632)	(1,290,282)
Net foreign exchange difference	39	(374,260)	(55,883)
Share of loss of equity accounted investees	11 and 12	(91,970)	11,793
Gain on equity investments	40	1,664,795	9,727
Income for the year before tax		**4,217,835**	**4,015,939**
Income tax	41	(499,028)	(810,199)
Profit for the year after taxes from continuing operations		**3,718,807**	**3,205,740**
Discontinued operations, net of income tax	42	-	48,245
Profit of the year before net movement in balances of deferred regulatory accounts		**3,718,807**	**3,253,985**
Net movement in balances of net regulatory accounts related to profit for the year	31	30,534	(139,997)
Net movement in deferred tax related to deferred regulatory accounts related to profit for the year	31	(8,423)	41,988
Profit for the year and net movement in deferred tax related to deferred regulatory accounts		**3,740,918**	**3,155,976**
Other comprehensive income			
Items that will not be reclassified to profit or loss:			
Remeasurement of defined benefit plans	21	(52,321)	(72,364)
Equity investments measured at fair value through equity	21	596,104	465,395
Equity accounted investees - share of OCI	11 and 21	(825)	(243)
Income tax related to components that will not be reclassified	21 and 41	14,025	149,678
		556,983	**542,466**
Items that may be reclassified subsequently to profit or loss:			
Cash flow hedges	**21**	**(27,458)**	**28,841**
Reclassified to profit or loss for the year		(402,757)	(54,338)
Effective portion of changes in fair value		375,299	83,179
Exchange differences on translation of foreign operations	21	230,765	(216,050)
Equity accounted investees - share of OCI	11 and 21	872	(55)
Income taxes related to components that can be reclassified	21 and 41	11,142	19,268
		215,321	**(167,996)**
Other comprehensive income, net of taxes		**772.304**	**374.470**
Total comprehensive income for the year		**4,513,222**	**3,530,446**
Profit for the year attributable to:			
Owners of the company		3,584,538	2,985,182
Non-controlling interest		156,380	170,794
		3,740,918	**3,155,976**
Total comprehensive income attributable to:			
Owners of the company		4,359,720	3,358,619
Non-controlling interest		153,502	171,827
		4,513,222	**3,530,446**

The accompanying notes are an integral part of these Consolidated Financial Statements.

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Years ended December 31, 2020 and 2019

Amounts stated in millions of Colombian pesos

epm Group

						Other comprehensive income								
	Issued capital	Treasury shares	Reserves	Retained earnings	Other components of equity	Equity investments	Defined benefit plans	Cash flow hedging	Conversion differences	Reclassification of properties, plant and equipment to investment property	Result of the period in other comprehensive income of associates and joint ventures business	Attributable to owners of the company	Non-controlling interests	Total
	Note 20.1		Note 20.2	Note 20.3		Note 21.3	Note 21.2	Note 21.5	Note 21.6	Note 21.1	Note 21.4		Note 20.4	
Balance at 1 January 2019	**67**	**-**	**2,560,657**	**15,650,483**	**(23,323)**	**2,168,304**	**(28,381)**	**(70,503)**	**817,051**	**11,796**	**(3,640)**	**21,082,511**	**953,707**	**22,036,218**
Profit for the period	-	-	-	2,985,182	-	-	-	-	-	-	-	2,985,182	170,794	3,155,976
Other comprehensive income for the period, net of income tax	-	-	-	-	-	587,736	(48,637)	48,116	(213,480)	-	(298)	373,437	1,033	374,470
Comprehensive income for the period	**-**	**-**	**-**	**2,985,182**	**-**	**587,736**	**(48,637)**	**48,116**	**(213,480)**	**-**	**(298)**	**3,358,619**	**171,827**	**3,530,446**
Repurchase of shares	-	(41)	-	-	-	-	-	-	-	-	-	(41)	(40)	(81)
Surpluses and dividends declared	-	-	-	(1,289,652)	-	-	-	-	-	-	-	(1,289,652)	(139,590)	(1,429,242)
Movement of reserves	-	-	(222,651)	222,651	-	-	-	-	-	-	-	-	-	-
Purchase and sale of noncontrolling interests	-	-	(144)	(40,216)	14,926	(1,090)	(107)	803	(2,806)	-	-	(28,634)	(31,561)	(60,195)
Transfers to retained earnings	-	-	-	(8,994)	-	8,477	537	-	-	-	-	20	-	20
Income tax related to transactions with owners	-	-	-	1,955	-	-	-	-	-	-	-	1,955	1,866	3,821
Equity method on variations in equity	-	-	-	(162)	3,752	-	-	-	-	-	24	3,614	-	3,614
Other movement of the period	-	-	-	(17,841)	72,978	30,978	(557)	-	-	438	-	85,996	8,363	94,359
Balance at 31 December 2019	**67**	**(41)**	**2,337,862**	**17,503,406**	**68,333**	**2,794,405**	**(77,145)**	**(21,584)**	**600,765**	**12,234**	**(3,914)**	**23,214,388**	**964,572**	**24,178,960**
Balance at 1 January 2020	**67**	**(41)**	**2,337,862**	**17,503,406**	**68,333**	**2,794,405**	**(77,145)**	**(21,584)**	**600,765**	**12,234**	**(3,914)**	**23,214,388**	**964,572**	**24,178,960**
Profit for the period	-	-	-	3,584,539	-	-	-	-	-	-	-	3,584,539	156,380	3,740,919
Other comprehensive income for the period, net of income tax	-	-	-	-	-	594,266	(33,299)	(16,316)	230,485	-	47	775,183	(2,878)	772,305
Comprehensive income for the period	**-**	**-**	**-**	**3,584,539**	**-**	**594,266**	**(33,299)**	**(16,316)**	**230,485**	**-**	**47**	**4,359,722**	**153,502**	**4,513,224**
Repurchase of shares	-	(11)	-	-	-	-	-	-	-	-	-	(11)	(10)	(21)
Surpluses and dividends declared	-	-	-	(1,488,302)	-	-	-	-	-	-	-	(1,488,302)	(103,440)	(1,591,742)
Movement of reserves	-	-	(40,418)	40,418	-	-	-	-	-	-	-	-	-	-
Purchase and sale of noncontrolling interests	-	-	1,543	432	(370)	-	-	-	31	-	-	1,636	(1,461)	175
Transfers to retained earnings	-	-	-	27	-	(19)	(8)	-	-	-	-	-	-	-
Income tax related to transactions with owners	-	-	-	(2,246)	-	-	-	-	-	-	-	(2,246)	(2,142)	(4,388)
Gain (or loss) on disposition of subsidiary	-	-	-	-	-	-	-	-	-	-	-	-	(156)	(156)
Equity method on variations in equity	-	-	-	-	3,574	-	-	-	-	-	-	3,574	-	3,574
Other movement of the period	-	-	-	4,187	-	(47)	(52)	-	6	21	-	4,115	23,452	27,567
Balance at 31 December 2020	**67**	**(52)**	**2,298,987**	**19,642,461**	**71,537**	**3,388,605**	**(110,504)**	**(37,900)**	**831,287**	**12,255**	**(3,867)**	**26,092,876**	**1,034,317**	**27,127,193**

The accompanying notes are an integral part of these Consolidated Financial Statements.

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the years ended December 31, 2020 and 2019
Amounts stated in millions of Colombian pesos

epm·Group

	Notes	2020	2019
Cash flows from operating activities:			
Profit for the year		**3,740,918**	**3,155,976**
Adjustments to reconcile the net profit for the year to the net cash flows used in operating activities:			
Depreciation and amortization of property, plant and equipment, right-of-use assets and intangible assets	35 and 36	1,265,623	1,140,099
Impairment of property, plant and equipment, right of use assets and intangible assets	8	200,267	2,254
Impairment loss on accounts receivable	13	295,471	77,801
Write down inventories, net	35	848	36
Gain / loss due to exchange difference	39	374,260	55,883
Gain / loss due to valuation of investment property	33	18,250	(51,808)
Result for valuation of financial instruments and hedge accounting	38.1 and 38.2	44,027	31,910
Result of compensation for activities associated with investment flow	33	(192)	(78,295)
Provisions, post-employment and long-term defined benefit plans	36	311,982	240,896
Provisions for tax, insurance and reinsurance obligations and financial updating	36 and 38.2	29,086	2,455
Government subsidies applied	33	(30,782)	(1,023)
Deferred income tax	41	(237,239)	(233,502)
Current income tax	41	736,268	1,043,701
Share of loss of equity-accounted investees	9 and 11	91,970	(11,793)
Interest and yield income	38.1	(77,563)	(251,812)
Interest and commission expenses	38.2	1,119,023	1,222,527
Gain / loos due to disposal of properties, plant and equipment, right-of-use assets, intangibles and investment property	32, 33 and 34	55	(1,538)
Result from withdrawal of property, plant and equipment, right of use assets, intangible assets and investments	37	14,767	99,458
Gain / loss due to disposal of financial instruments	40	-	47,534
Non-effective recoveries	33	(111,208)	(310,004)
Gain / loss from discontinued operations, net of income tax	42	-	(48,245)
Result of deferred regulatory accounts	31	(22,110)	98,009
Gain / loss from due to disposal of Investments in subsidiaries	40	192	-
Gain / loss from business combinations	40	(1,592,003)	-
Dividend income from investments	14	(72,984)	(57,262)
		6,098,926	**6,173,257**
Net changes in operating assets and liabilities:			
Change in inventories		(38,772)	18,878
Change in trade and other receivables		943,027	(217,220)
Change in other assets		(135,223)	99,965
Change in creditors and other accounts payable		374,585	(139,144)
Change in labor obligations		(1,877)	(53,052)
Change in provisions		(177,451)	(368,479)
Change in other liabilities		320,173	376,587
Cash generated from operating activities		**7,383,388**	**5,890,792**
Interest paid		(1,310,429)	(1,612,421)
Income tax paid		(1,140,994)	(804,930)
Income tax refund		46,785	1,255
Net cash provided by operating activities		**4,978,750**	**3,474,696**
Cash flows from investing activities:			
Acquisition of subsidiaries or business, net of cash acquired		554,720	(20)
Disposal of subsidiaries or business		(192)	471,808
Purchase of property, plant and equipment	5	(3,165,459)	(3,260,864)
Disposal of property, plant and equipment	5	3,048	18,589
Purchase of intangible assets	7	(278,216)	(316,068)
Disposal of intangible assets	7	671	44,096
Disposal of investment properties		507	2,165
Purchase of investments in financial assets		(2,177,248)	(452,875)
Disposal of investments in financial assets		382,341	1,074,060
Interest received		4,236	3,335
Dividends received from subsidiaries		-	(92)
Dividends received from associates and joint business	11	16,786	41,600
Other dividends received	14	72,965	56,132
Compensation received	5.1	369,700	531,607
Other cash flows from investment activities		20,350	(64,517)
Net cash flow used in investing activities		**(4,195,791)**	**(1,851,044)**
Cash from financing activities:			
Acquisition of own shares		(21)	(81)
Obtaining of borrowings and loans	22	6,424,523	9,297,603
Payments of borrowings and loans	22	(2,896,219)	(9,425,148)
Transaction costs due to issuance of debt instruments		(28,553)	(13,146)
Payments of liabilities for financial leasing		(46,525)	(40,883)
Dividends or surpluses paid to Medellin Municipality	42	(1,488,319)	(1,289,652)
Dividends or surplus paid to non-controlling interests	9	(104,256)	(103,162)
Subsidies of capital		460	154
Payments of capital of derivatives designated as cash flow hedges		19,586	156,514
Acquisition of non-controlling interests		175	(60,197)
Payment of pension bonds		(7,712)	(26,091)
Other cash from financing activities		(3,422)	43,570
Net cash flows provided / (used in) by financing activities		**1,869,717**	**(1,460,519)**
Net increase in cash and cash equivalents		**2,652,676**	**163,133**
Effects of variations in exchange rates in the cash and cash equivalents		(265,278)	(50,948)
Cash and cash equivalents at beginning of the year	19	1,710,566	1,598,381
Cash and cash equivalents at end of the year	19	**4,097,964**	**1,710,566**
Restricted resources	19	541,788	196,072

The accompanying notes are an integral part of these Consolidated Financial Statements.

Mónica María Ruiz Arbeláez
Deputy General Manager
Certification Attached

Miguel Alejandro Calderón Chatet
Executive Vice-President of Finance and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
Professional Card No. 144842-T
Certification Attached

Content

- Note 1. Reporting Entity 1166
- Note 2. Significant accounting policies 1177
- Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements 1218
- Note 4. Significant transactions and other relevant aspects during the period 1223
- Note 5. Property, plant and equipment, net 1233
- Note 6. Investment property 1242
- Note 7. Goodwill and other intangible assets 1243
- Note 8. Impairment of assets 1248
- Note 9. Investment in subsidiaries 1254
- Note 10. Business Combinations 1267
- Note 11. Investments in associates 1271
- Note 12. Investment in joint ventures 1273
- Note 13. Trade and other receivables 1275
- Note 14. Other financial assets 1279
- Note 15. Leases 1282
- Note 16. Warranties 1286
- Note 17. Other assets 1287
- Note 18. Inventories 1289
- Note 19. Cash and cash equivalents 1290
- Note 20. Equity 1297
- Note 21. Accumulated other comprehensive income 1300
- Note 22. Borrowings and loans 1304
- Note 23. Trade and other payables 1314
- Note 24. Other financial liabilities 1316
- Note 25. Derivatives and hedging 1318
- Note 26. Employee benefits 1322

- Note 27. Taxes, contributions and rates 1330
- Note 28. Provisions, contingent assets and liabilities 1331
- Note 29. Other liabilities 1364
- Note 30. Changes in liabilities due to financing activities 1367
- Note 31. Deferred regulatory accounts 1368
- Note 32. Revenue 1370
- Note 33. Other Income 1373
- Note 34. Income for sale of assets 1375
- Note 35. Costs of services rendered 1376
- Note 36. Administrative expenses 1378
- Note 37. Other Expenses 1380
- Note 38. Financial income and expenses 1381
- Note 39. Net foreign exchange difference 1383
- Note 40. Gain on equity investment 1384
- Note 41. Income tax 1385
- Note 42. Discontinued operations 1397
- Note 43. Information to be disclosed on related parties 1398
- Note 44. Capital management 1401
- Note 45. Financial risk management objectives and policies 1402
- Note 46. Measurement of fair value on a recurring and non-recurring basis 1413
- Note 47. Service concession arrangements 1419
- Note 48. Operating segments 1423
- Note 49. Events after the Reporting Period 1428

Notes to the consolidated financial statements years ended December 31, 2020 and 2019

(Amounts expressed in millions of Colombian pesos, except for the market representative exchange rate which are expressed in Colombian pesos and thousands of dollars, Euros, sterling pounds and yens)

Note 1. Reporting Entity

Empresas Públicas de Medellin E.S.P. and subsidiaries (hereinafter, "EPM Group") is the holding company of a multi-latin Enterprise group made up of 45 companies and a structured entity[1], that have presence in the provision of public utilities in Colombia, Chile, El Salvador, Guatemala, Mexico and Panama.

Empresas Públicas de Medellín E.S.P. (hereinafter EPM), holding of the EPM Group, is a municipal decentralized entity, created in Colombia through Decision 58 dated August 6, 1955 issued by the Administrative Council of Medellín, as an autonomous public institution. It was transformed into an industrial and commercial government company of municipal order through Decision 069 of December 10, 1997 of the Medellín Council. Due to its legal status, EPM is endowed with administrative and financial autonomy, and its own equity according to Article 85 of Law 489 of 1998. The share capital with which the company was constituted and currently operates, as well as its equity, is of public nature, being its only owner is the Municipality of Medellín. Its main corporate domicile is located at Carrera 58 No. 42-125 in Medellín, Colombia. It has not established a term of duration.

EPM provides domiciliary public utilities of water, sewage electricity and natural gas distribution. It can also provide the domiciliary public utility of waste management, treatment and disposal of solid waste, as well as the supplementary activities related to each and every one of the mentioned public utility services.

The Group offers its services through the following segments, the activities of which are described in Note 48. Operating segments: Electric Power Generation, Distribution and Transmission; Distribution and Marketing of Natural Gas; Water supply; Wastewater management; Solid waste management. Additionally, the Others Segment includes the participation in the telecommunications business, through the associate UNE EPM Telecomunicaciones S.A. and its subsidiaries: Edatel S.A. E.S.P, Orbitel Servicios Internacionales S.A. - OSI, Cinco Telecom Corporation - CTC and Colombia Móvil S.A .; and the associate Inversiones Telco S.A.S. and its subsidiary Emtelco S.A .; offering voice, data, Internet, professional services, data center, among others.

The consolidated financial statements of the Group corresponding to the year ended 31 December 2019, were authorized by the Board of Directors to be published on 23 March 2021.

1 Autonomous Equity Financiación Social of EPM, CHEC, EDEQ and ESSA. Under International Financial Reporting Standards -IFRS adopted in Colombia, they are considered structured entities that are part of the consolidation perimeter of the EPM Grupo's financial statements.

Legal and Regulatory Framework

The activities developed by the EPM Group, i.e. domiciliary public utilities, are regulated in Colombia, Chile, El Salvador, Guatemala, Mexico, and Panama. The most significant regulatory matters that apply are:

1. Legislation for Colombia

The rendering of public home utilities is regulated in Colombia mainly by Law 142, Public Utilities Act, and Law 143 of 1994, Electricity Act.

The functions of control, inspection and supervision of the entities that provide public home utilities are exercised by the Office of the Superintendent of Domiciliary Public Utilities (SSPD, for its Spanish initials).

EPM, because it is a Bond issuer, is subject to the control of the Financial Superintendency of Colombia under Decree 2555 of 2010 by which the regulations on the financial, insurance and stock market are collected and reissued and other provisions are issued, establishes that the SIMEV is the set of human, technical and management resources that the Financial Superintendency of Colombia will use to allow and facilitate the supply of information to the market. Among these tools, there is the National Registry of Securities and Issuers - RNVE, which aims to have a registry of the issuers of securities and the issues they carry out. EPM, when issuing bonds, is subject to the control of this Superintendency and to the regulations that for financial information purposes are requested for their issuance, especially External Circular 038 of 2015 whose reference is: Modification of the deadlines for the transmission of the Interim Quarterly and Year-End Financial Statements under IFRS adopted in Colombia, Individual or Separate and Consolidated and their report in XBRL (extensible Business Reporting Language) and unification of the instructions contained in the Circulars External 007 and 011 of 2015.

For accounting purposes, it is regulated by the standards issued by the General Accounting Office of the Nation, as described in the accounting policies section.

For managing the health service as employee benefits, under the figure of the Adapted Health Company - EAS, it is supervised by the National Superintendency of Health.

Because of being a municipal decentralized entity, EPM is subject to the political control of the Council of Medellín, to the fiscal control of the Office of the General Comptroller of Medellín, and to the disciplinary control of the Office of the General Prosecutor.

1.1 Regulatory commissions

The Law 142 of 1994 in its articles 68 and 69, delegates in the regulation commissions the presidential function of stating general policies of administration and control of efficiencies in public home utilities.

These entities are:

- The Energy and Gas Regulatory Commission (CREG, for its Spanish initials), a technical body attached to the Ministry of Mines and Energy (MME), that regulates the rates for energy sales and the aspects related to the operation of the Wholesale Energy Market (MEM, for its Spanish initials) and to the provision of electric power, natural gas and liquid fuel services.
- Regulatory Commission of Drinking Water and Sanitation (CRA, for its Spanish initials), regulates the rates of water, sewage and solid waste management, a technical body attached to the Ministry of Housing, City and Territory.

1.2 Regulation by sector

1.2.1 Activities of the water, sewage and waste management sector

Law 142 of 1994, Public Utilities Act, defined the water, sewage and waste management services:

Water: Also called drinking water domiciliary public utility. Activity consisting of the municipal distribution of water, which is fit for human consumption, including its connection and measurement. It includes supplementary activities such as water catchment and its processing, treatment, storage, conduction and transportation.

Sewage: Activity that consists of the municipal collection of waste, mainly liquid, through piping and conduits. It includes the supplementary activities of transportation, treatment, and final disposal of such waste.

Waste management: Activity that consists of the municipal collection of waste, mainly solid waste. It includes the supplementary activities of transportation, treatment, disposal, and final disposal of such waste.

For the Water and Sewage utilities, the rate framework is established in Resolutions CRA 688 of 2014 and CRA 735 of 2015 issued by the Drinking Water and Sewage Regulation Commission (CRA, for its Spanish initials). For the Waste management public utility, in resolution CRA 720 of 2015. These rules establish quality and coverage indicators, provide incentives to meet targets and define remuneration mechanisms to collateral the company's financial sufficiency.

1.2.2 Electric sector activities

Law 143 of 1994 segmented the electric power utility into four activities: generation, transmission, distribution, and commercialization, which may be developed by independent companies. The purpose of the legal framework is to supply the demand of electricity under economic and financial feasibility criteria and to tend to an efficient, secure and reliable operation of the sector.

Generation: It consists of the production of electric power from different sources (conventional or non-conventional), developing this activity either exclusively or combined with another or other activities of the electric sector, regardless of which of them is the main activity.

Transmission: The national transmission activity is the transportation of energy in the National Transmission System (hereinafter STN, for its Spanish initials). It encompasses the set of lines, with its corresponding connection equipment that operate in voltajes greater than or equal to 220 kV. The National Transmitter is the legal entity that operates and transports electric power in the STN or has incorporated a company the purpose of which is the development of said activity.

Distribution: It consists of transporting electric power through a set of lines and substations, with the associated equipment, that operate at voltages lower than 220 KV.

Commercialization: An activity that consists of the purchase of electric energy in the wholesale market and its sale to other market participants or to the final regulated and non-regulated users, developing this activity either exclusively or combined with other activities of the electric sector, regardless of which of them is the main activity.

1.2.3 Activities of the natural gas sector

Law 142 of 1994 defined the legal framework for the provision of domiciliary public utilities, field in which natural gas is defined as a public utility.

Gas: It is the set of activities targeted to the distribution of gas fuel, through pipes or another mean, from a place of collection of large volumes or from a central gas pipeline to the facilities of a final consumer, including their connection and measurement. This Law will also be applied to the supplementary activities of commercialization from the production and transportation of gas through a main gas pipeline, or through other means, from the generation site and to that where it connects to a secondary network.

2. Legislation for Chile

2.1 Sanitation service activities

The Sanitation Sector is made up by the group of entities which functions relate to the services of production and distribution of drinking water and collection and disposal of wastewater, that is, the companies in charge of providing those services and the Superintendence of Sanitation Utilities, regulatory and overseeing entity of this sector.

2.2 Regulatory framework

In the regulation scheme in effect, where the regulatory and monitoring function of the State is separated from the producing function, the Superintendence of Sanitation Utilities is created, which is the regulating and monitoring body of the sector. This body is a decentralized entity that has its legal status and own equity, subject to the supervision of the President of the Republic through the Ministry of Public Works. It performs the regulatory and monitoring functions of the activity of companies that operate in this sector.

The regulatory model emphases two crucial aspects to introduce the economic rationality in the operation of the sector: the rates and the concessions regime, both aspects are contained in the legal framework under which the operation of the sector is regulated, being function

of the Superintendence of Sanitation Utilities applying and enforcing the provisions for the respective legal bodies: Decree with Force of Law No. 70 of 1988, Rates Act and Decree with Force of Law No. 382 of 1988, Sanitation Utilities General Act.

The legal framework of the Chilean sanitation sector mainly composed of:

- Law of the Superintendence of Sanitation Utilities – Law 18.902 of 1990 (Modified by Law No. 19.549 of 1998 and Law No. 19.821 of 2002 and Law No. 20.417 of 2010): creates the Superintendence of Sanitation Utilities as a functionally decentralized service, with legal status and its own equity, subject to the supervision of the President of the Republic through the Ministry of Public Works.

  To the Superintendence of Sanitation Utilities will correspond the monitoring of the providers of sanitation utilities, of the compliance with rules related to sanitation utilities and the control of industrial liquid waste connected to the rendering of services of sanitation companies, capable of, either officially or at the request of any interested party inspecting the sanitation infrastructure works made by the providers.

- Regulations of the Sanitation Utilities General Act, Supreme Decree (D.S.) of the Ministry of Public Works (M.O. P.) No. 1199, Dec/2004 Published in the Official Diary on November 9, 2005: approves the regulations of sanitation concessions of production and distribution of drinking water and collection and disposal of wastewater and the regulations on the customer service quality to the users.
- Sanitation Utilities Rates Act: Decree with Force of Law MOP No. 70 of 1988 – Published in the Official Diary on March 30, 1988 (amended by Law No. 19,549 of 1998 and Law No. 21,075 of 2018).
- Waters Code and its modifications: the Decree with Force of Law No. 1.122 regulates the property and the right-of-use of water. The latest modifications are: Law No. 20.017 of 2005 and Law No 20.099 of 2006, Law No. 20,304 of 2008, Law 20,417 of 2010, Law No. 20,697 of 2013 and Law No. 21,064 of 2018.
- Regulation of home installations of drinking water and sewerage - S.D. MOP N ° 50 of January / 2003 (modified by D.S MOP N ° 669 of 2009).

2.3 Regulatory entities

Some of the main regulatory bodies for the sanitation sector (drinking water and sewage) in Chile are:

- Ministry of Public Works ("Ministerio de Obras Públicas – MOP"): grants the concessions and promotes the supply of water and the sanitation in rural zones through its Sanitation Programs Department. Besides to its proper functions, in respect to the sanitation sector it is charged with the administration of legislation on the subject of water resources, the assignment of water rights and the approval of the concession rights to establish, construct and exploit sanitation utilities.

- Superintendence of Sanitary Service ("Superintendencia de Servicios Sanitarios – SISS"): Chilean State entity that regulates and monitors the companies that render the drinking water supply and the collection and treatment of wastewater utilities to the urban population.
- Ministry of Health: monitors water quality in the sanitation utilities not under jurisdiction of the Superintendence (which are not public sanitation utilities) and officializes the quality standards studied under the provisions of the National Standardization Institute.
- Ministry of Economy, Development and Tourism (Ministerio de Economía, Fomento y Turismo): designs and monitors the implementation of public policies that affect the competitiveness of the country; It promotes and monitors the activities in the sectors of industry, services and commerce. Its major lines of action are related to the design and promotion of Innovation and Entrepreneurship Policies. Regarding the sanitation sector its main function is the setting of regulated prices, at the proposal from the Superintendence.
- The General Directorate of Waters (GDW): It is the State body that is in charge of managing, verifying and disseminating the country's water information, especially regarding its quantity and quality, the natural and legal persons who are authorized to use it, the existing hydraulic works and their safety; with the aim of contributing to greater market competitiveness and safeguarding legal and water certainty for the sustainable development of the country.

3. Legislation for El Salvador

A restructuring process of the electrical sector was developed in El Salvador, which materialized in a juridical and institutional framework that aims to promote the competition and necessary conditions to assure the availability of an efficient energetic supply, capable of supplying the demand under technical, social, economic, environmental and financial feasibility criteria.

In the 90's, El Salvador pushed a process of reforms in the energetic sector that consisted of the restructuring of the hydrocarbons and electricity sectors, the privatization of most government companies that provided energetic goods or services and the deregulation of the markets.

3.1 Regulatory framework

The legal framework of the Salvadorian electric sector is comprised by the General Superintendence of Electricity and Telecommunications ("Superintendencia General de Electricidad y Telecomunicaciones" -SIGET") Creation Act, issued through Legislative Decree 808 of September 12, 1996, that gave juridical life to the regulatory entity; as well as the Electricity General Act ("Ley General de Electricidad - LGE"), issued through Legislative Decree 843 of October 10, 1996, and by the Bylaws of the Electricity General Act, established through Executive Decree 70 of July 25, 1997, including its modifications.

As a result of the restructuring process of the electrical sector the Transaction Unit ("Unidad de Transacciones S.A. – UT"), that manages the Wholesale Market of Electric Energy, and the Empresa de Transmisión de El Salvador (ETESAL) were created, at the same time that the electricity distribution and thermal generation companies were privatized. Further, the hydro-electrical and geothermal generation activities were separated.

3.1.1 Regulatory entities

Some of the main regulatory entities at energetic level in El Salvador are:

- Ministry of Economy (MINEC): Central government institution which purpose is the promotion of the economic and social development through the increase of production, productivity, and the rational use of resources. Among its responsibilities it has to define the commercial policy of the country, the follow-up and promotion to the Central American economic integration, and to lead the Energy National Council (Consejo Nacional de Energía). It also contributes to the development of competition and competitiveness of productive activities, both for the domestic and external markets.
- General Superintendence of Electricity and Telecommunications ("Superintendencia General de Electricidad y Telecomunicaciones – SIGET"): It is a not-for-profit public service autonomous institution. Its autonomy includes administrative and financial matters, and it is the competent entity to apply the norms contained in international treaties on electricity and telecommunications in force and effect in El Salvador, as well as in the laws that rule the electricity and telecommunications sectors and its bylaws, in addition to knowing about the non-compliance therewith.
- Transactions Unit ("Unidad de Transacciones – UT"): Has among its functions the transparent and efficient managing of the wholesale electrical energy market and operating the transmission system, maintaining its security and quality, and providing market operators with satisfactory responses for the development of its activities. Likewise, it coordinates with the Regional Operator Entity ("Ente Operador Regional – EOR") the energy transactions that El Salvador carries out with other countries at the Central American and international levels. Finally, it determines responsibilities in case of failures in the systems.
- National Energy Council ("Consejo Nacional de Energía - CNE"): is the superior, governing and regulatory authority for energy policy, whose objectives are to draw up the National Energy Policy and short-, medium- and long-term energy planning; to foster the existence of regulatory frameworks to promote investment and development in the energy sector; to monitor the proper functioning of energy markets; to promote rational energy use; to develop and expand renewable energy resources; and to promote the integration of regional energy markets.

4. Legislation for Guatemala

The Political Constitution of the Republic of Guatemala of 1985 declared the electrification of the country as national urgency, based upon plans formulated by the State and the municipalities, in a process that could count on the interest of the private initiative.

4.1 Regulatory framework

With the Political Constitution as a legal handle, in 1996 the General Electricity Act was declared (Decree No. 93-96), through which the fundamental juridical norms to facilitate the acting of the different sector of the electrical system were established.

4.2 Regulatory entities

Some of the main energy regulatory entities in Guatemala are:

- Ministry of Energy and Mines: The Ministry of Energy and Mines is the most important Guatemalan government entity of the electric sector. It is responsible for enforcing the General Electricity Act and related regulations, as well as for coordinating policies between the National Commission of Electric Energy (CNEE) and the Manager of the Wholesale Market (AMM). This government office also has the authority to grant authorization permits for the operation of the distribution, transmission and generation companies.
- National Electrical Power Commission ("Comisión Nacional de Energía Eléctrica - CNEE"): The Guatemalan electric sector is regulated by the CNEE, a regulatory entity created pursuant to the General Electricity Act, as a technical body of the Ministry of Energy and Mines and subordinated to it. It consists of three members appointed by the President of the Republic from groups of three proposed by the Principals of universities, the Ministry of Energy and Mines and the Wholesale Market agents. The duration of each directorate is five years.
- Wholesale Market Administrator ("Administrador del Mercado Mayrista - AMM"): is the entity in charge of managing the Guatemalan wholesale market, a private entity created by the General Electricity Act, that coordinates operation of generating facilities, international interconnections, and the transmission lines that conform the national electricity system. Likewise, it is responsible for the system's safety and operation conducting an economically efficient dispatch and managing the electricity resources, in such a way that it minimizes the operating costs, including failure costs, within the restrictions imposed by the transmission system and the service quality requirements. Likewise, the AMM is in charge of the scheduling of the supply and dispatch of electricity. AMM's bylaws are subject to the CNEE's approval. If a generation, transmission or distribution company, or an electricity agent or large user does not operate their facilities in conformity with the regulations established by the AMM, the CNEE has the capacity to sanction it with penalties and, in the case of a severe violation, it may require to be disconnected from the national electricity system.

5. Legislation for Mexico

5.1 Regulatory framework for water and sanitation

In the government environment, each of the 32 federative entities has their respective water laws, with sensibly equal purposes in spite of the diverse denominations. The modifications to the government legislation associated to the provision of water and sewage utilities are mainly derived from a series of initiatives promoted by the National Water Commission ("Comisión Nacional de Aguas - CONAGUA") in the 90's.

The National Water Commission (CONAGUA) is a decentralized administrative agency of the Ministry of the Environment and Natural Resources, created in 1989, with the mission of preserving national waters and their inherent public assets for their sustainable administration and guaranteeing water security with the responsibility of government orders and society in general.

Various instances at the federal, state and municipal levels, as well as user associations, companies and institutions of the private and social sector that work together with Conagua.

A summary of the evolution from then and until the beginning of this decade that the legal state regime has experienced with respect to water and sewage is:

- Reforms in 1983 to Article 115 of the constitution, with which the municipal character of the water and sewage utilities was ratified and strengthened, which forced to channel the state authorities' role in this matter to charge them with a subsidiary and somehow regulatory role.
- Government policies established to promote the creation of decentralized bodies (creation decrees) of the Municipal Administration, with the technical capacity and with the administrative and financial autonomy necessary for the efficient provision of utilities, together with the introduction of participatory schemes for the private sector.
- Greater involvement of the state authorities in the management of national water resources, through agreements that, pursuant to the provisions of Article 116 of the constitution, can be entered into by the federation with the state governments so that the latter can undertake or exercise different tasks or attributions, of exclusive competence of the federal government. This possibility was reinforced even more with the amendments and additions to the National Water Act that entered into force and effect in 2004.

5.2 Regulatory entities

Some of the main sanitation regulatory entities in Mexico are:

- Secretariat of the Environment and Natural Resources ("Secretaría de Medio Ambiente y Recursos Naturales - SEMARNAT"): in the different environments of society and public function, it incorporates criteria and instruments that assure the optimal protection, preservation, and use of the country's natural resources, thus forming an integral and inclusive environmental policy that allows achieving sustainable development, provided that they are not expressly entrusted to another office; likewise, in matters of ecology,

environmental sanitation, water, environmental regulation of the urban development and the fishing activity, with the involvement that shall correspond to other offices and entities.

- National Water Commission ("Comisión Nacional del Agua - CONAGUA"): With the interest of the society, it manages and preserves the national water resources to achieve the sustainable use of the resource with the co-responsibility of the three orders of the government and the society in general. It is the authority with technical quality and promoter of the government orders in the integrated management of the water resource and its inherent public goods and protects the water bodies to guarantee a sustainable development and the preservation of the environment.
- Secretary of Welfare ("Secretaría del Bienestar), (Before Social Development Secretariat - SEDESOL): Defines the commitments of the management to advance in the achievement of an effective social development. Formulates and coordinates the solidary and subsidiary social policy of the federal government, targeted to the common good, and executes it in a co-responsible way with the society.

6. Legislation for Panama

The electrical sector in Panama is divided into three activity areas: generation, transmission and distribution. The country has established a regulatory structure for the electrical industry, based upon the legislation that was approved between 1996 and 1998. This framework creates an independent regulator, the Public Utilities National Authority ("Autoridad Nacional de los Servicios Públicos - ASEP"), and also creates a transparent process for setting the tariffs for energy sale to regulated clients.

6.1 Regulatory framework

The regulatory regime mainly consists of the following norms:

- Law 6 of February 3, 1997: dictates the regulatory and institutional framework for the provision of the electricity public utility. It establishes the regime to which the electrical energy distribution, generation, transmission and commercialization activities shall be subject.
- Law 57 of October 13, 2009 makes several modifications to Law 6 of 1997, among them there are: the obligation for the generating companies to participate in the energy or power purchase processes, the compulsoriness for Empresa de Transmisión Eléctrica S.A. (ETESA) for buying energy in representation of the distributing companies, and the increase in fines that the regulator may impose of up to $20 million Balboas, and at the same time establishes the right of the clients to refrain from paying for the portion they may claim and grants a 30-day term to claim before the regulator in case of not being satisfied with the answer given by the distributing company.
- Law 58 of May 30, 2011 modifies the articles related to rural electrification, among which are: the modification of the calculation of subsidy that the Rural Electrification Office ("Oficina de Electrificación Rural - OER") must pay to distributors for a 4-year period (formerly it was paid to 20 years) and the creation of a rural electrification fund for 4 years, which shall be comprised by the contributions of market agents selling electric energy and shall not exceed 1% of their net profit before taxes.

6.2 Regulatory entities

Some of the main energy regulatory entities in Panama are:

- The Energy Secretariat ("Secretaría de Energía"): its mission is to formulate, propose and promote the national energy policy with the purpose of assuring supply safety, the rational and efficient use of the resources and energy in a sustainable way, according to the National Development Plan ("Plan de Desarrollo Nacional"). Currently, it is processing before the Electrical Transmission Company ("Empresa de Transmisión Eléctrica - ETESA") the formation of an energetic grid with greater and more varied renewable and clean resources (wind, gas, among others).
- The National Authority for Public Utilities ("Autoridad Nacional de los Servicios Públicos - ASEP"): Established according to the law of the regulatory entity of public utilities of 1996. It is an autonomous Government entity responsible of regulating, controlling, and auditing the provision of the water and sewage, telecommunications, radio and television, electricity and natural gas utilities.

  On February 22, 2006, through Decree Law 10, the Public Utilities Regulatory Entity ("Ente Regulador de los Servicios Públicos – ERSP") was restructured and changed its name; for that reason, since April 2006 it is known as the ASEP, with the same responsibilities and functions of the regulatory entity but with a general manager and an executive director, each designated by the President of the Republic of Panama and ratified by the National Assembly. Likewise, it has three national directors under the authority of the general administrator: one for the electricity and water sector, one for the telecommunications sector, and one for the user service sector. The national directors are responsible for issuing resolutions related to their respective industries and the appeals thereto are solved by the general administrator as final stage of the administrative process.
- The Planning Unit of the Electric Transmission Company ("Unidad de Planificación de la Empresa de Transmisión Eléctrica - ETESA"): develops the reference expansion plans and projects the global requirements of energy and the means to satisfy those requirements, including the development of alternative sources and establishing programs to preserve and optimize the use of energy. The public utilities companies are called to prepare and present their expansion plans to ETESA.
- The National Dispatching Center ("Centro Nacional de Despacho - CND"): operated by ETESA, plans, supervises and controls the integrated operation of the National Interconnected System ("Sistema Interconectado Nacional"). Receives offers from generators who participate in the energy sale market (spot), determines the spot prices of energy, manages the transmission network, and provides the settlement values between suppliers, producers, and consumers, among others.
- The Rural Electrification Office ("Oficina de Electrificación Rural - OER"): is responsible for promoting the electrification in unserved, unprofitable and non-concessional rural areas.

Note 2. Significant accounting policies

2.1 Basis for preparation of financial statements

The EPM Annual Consolidated Financial Statements were prepared in accordance with the Accounting and Financial Reporting Standards accepted in Colombia (NCIF, for its Spanish initials) and adopted by the Nation's General Accounting Office through Resolution 037 of 2017 and Resolution 056 of 2020 (hereinafter "IFRS"). These accounting and financial reporting standards are based on the International Financial Reporting Standards (hereinafter "IFRS") issued by the International Accounting Standards Board (hereinafter, IASB), as well as the interpretations issued by the International Financial Reporting Standards Committee (hereinafter, IFRIC). These financial statements are harmonized with the generally accepted accounting principles in Colombia as set forth in the Annex to Decree 2420 of 2015 and its subsequent amendments.

The presentation of financial statements in conformity with IFRS adopted in Colombia requires making estimates and assumptions that affect the amounts reported and disclosed in the financial statements, without undermining the reliability of the financial information. Actual results may differ from said estimates. Estimates and assumptions are constantly revised. Revision of accounting estimates is recognized for the period in which the estimates are revised if the revision affects such period or in the revision period and future periods. The estimates made by the Management when applying the IFRS adopted in Colombia, that have a material effect on the financial statements, and those that imply significant judgments for the annual financial statements, are described in greater detail on Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements.

EPM and each of its subsidiaries present separate or individual financial statements, as applicable, for compliance before the controlling entities and for internal administrative follow-up purposes and provide information to the investors.

Assets and liabilities are measured at cost or amortized cost, with the exception of certain financial assets and liabilities and the investment properties that are measured at fair value. Financial assets and liabilities measured at fair value correspond to those that: are classified in the category of fair value assets and liabilities through profit, some equity investments at fair value through equity, as well as all finance derivatives, assets and liabilities recognized that are designated as hedged items in a fair value hedging, which recorded value is adjusted with the changes in fair value attributed to the risks object of the hedging.

Consolidated financial statements are presented in Colombian pesos and their figures are stated in millions of Colombian pesos.

2.2 Consolidation Principles

The consolidated financial statements include the financial statements of EPM and of its subsidiaries as of 31 December 2020 and 2019. Using the global integration method, EPM consolidates the financial results of the companies on which control is exercised, which are detailed in Note 9. Investment in subsidiaries.

Control is obtained when any of the companies of the Group controls the relevant activities of the subsidiary, generally operating and financing activities, it is exposed, or has the right, to the variable returns of the subsidiary and has the capacity to leverage its power over the subsidiary to influence its returns.

The general presumption is that a majority of voting rights results in taking control. To support this presumption, and when the Group has less than the majority of the voting or similar rights on an investee, the Group considers all the pertinent facts and circumstances to evaluate whether it has the power over an investee, including contractual agreements with other vote holders in the investee, rights arising from other contractual agreements, and voting rights of the Group as potential voting rights. If the facts and circumstances suggest that one or more of the three control elements change, the Group must reassess whether it controls the investee.

The consolidated financial statements of the Group are presented in Colombian pesos, which is the functional and presentation currency of EPM, holding of the Group. Each subsidiary of the Group determines their own functional currency and includes the items in their financial statements using that functional currency.

The information of all companies of the Group was prepared using the same Group's accounting policies, under IFRS adopted in Colombia.

For consolidation purposes, the financial statements of the subsidiaries are prepared under the Group accounting policies and are included in the consolidated financial statements from the acquisition date to the date when the Group losses control.

Intragroup assets, liabilities, equity, revenue, costs, expenses and cash flows are eliminated in the preparation of the consolidated financial statements; i.e., those related to transactions between the Group Companies, including unrealized internal profits and losses, which are eliminated in their entirety.

The consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ends when the Group loses control. Specifically, the income and expenses of a subsidiary acquired or sold during the year are included in the consolidated statement of comprehensive income from the date the Group obtains control until the date on which it ceases to control the subsidiary.

When the Group losses control over a subsidiary, the assets (including goodwill), liabilities, non-controlling interests, and other components of the net equity are derecognized; any residual participation it may retain is measured at fair value, the profit or loss that arise from this measurement are recognized through profit or loss for the period.

Non-controlling interests in the consolidated net assets of subsidiaries are presented separately from the Group's equity. The profit or loss for the period and the other comprehensive income are also attributed to the non-controlling and controlling interests.

Changes in the participation share of the Group in subsidiaries that do not result in the loss of control, are recorded as equity transactions. The recorded value of the Group's non-controlling and controlling interests are adjusted to reflect the changes in their relative participation in the subsidiaries. Any difference between the amount for which the controlling interest, the non-controlling interest, and the fair value of the consideration paid or received are adjusted, and directly recognized in net equity.

Whenever the Group losses control over a subsidiary, the profit or loss is recognized and is calculated as the difference between: the sum of the fair value of the received consideration and the fair value of any retained participation, and the previous recorded value of assets (including goodwill) and liabilities of the subsidiary and any non-controlling participation. All amounts related to the subsidiary, previously recognized through other comprehensive income are recorded as if the Group had directly disposed the assets or liabilities related to it (i.e., reclassified into profit or loss or transferred to another equity category). The fair value of the retained investment in the previous subsidiary on the date when control is lost is considered as the fair value in the initial recognition for its subsequent measurement, either as an investment made in a financial instrument or an investment made in a joint venture or in an associate.

2.3 Classification of assets and liabilities into current and non-current

An asset is classified as current asset when it is mainly held for negotiation purposes or it is expected to be realized over a term not exceeding one year, after the period being reported or it is cash and cash equivalents that is not subject to restrictions for exchange or use in the cancellation of a liability over a term not to exceed one year after the period being reported. All other assets are classified as non-current assets.

A liability is classified as current liability when it is mainly held for negotiation purposes or when it is expected to be settled over a term not exceeding one year after the period being reported, or when the Group does not have an unconditional right to postpone its settlement for at least one year after the period being reported. All other liabilities are classified as non-current liabilities.

All derivative instruments for which the hedging accounting does not apply are classified as current or non-current, or are divided into current and non-current portions, based upon assessment of facts and circumstances (i.e., the underlying contractual cash flows):

- When the Group keeps a derivative, for which the hedging accounting is not applied, during a term exceeding twelve (12) months as from the presentation date, the derivative is classified as non-current (or divided into current and non-current portions) for it to correspond with the classification of the underlying item.

- Derivative instruments that are designated as hedging instruments and that are effective, are classified coherently with the classification of the underlying hedged item. The derivative instrument is divided into a current portion and another non-current only if such allocation can be made in a reliable manner.

2.4 Cash and cash equivalents

Cash and cash equivalents in the statement of financial position and in the statement of cash flows include the money in cash and banks and the high-liquidity investments, easily convertible in a determined amount of cash and subject to a non-significant risk of changes in their value, with maturity of three months or less from their acquisition date. Callable bank overdrafts that are an integral part of the cash management of the Group, represent a cash and cash equivalents component in the statement of cash flows.

2.5 Business Combinations

Business combinations are recorded by the acquisition method. The acquisition cost is measured as the addition of the consideration transferred measured on the acquisition date at fair value and the amount of minority interest in the acquired entity. For each business combination, the Group decides whether the non-controlling interests in the acquired entity should be measured at their fair value or for the proportional part of the identifiable net assets of the acquired entity. All costs related to the acquisition are recognized as expenses when incurred and are included in administrative expenses.

Identifiable acquired assets and assumed liabilities are recognized at fair value on the acquisition date, except that:

- Deferred tax assets or liabilities and assets or liabilities related to employee benefit arrangements shall be recognized and measured in conformity with IAS 12 Income taxes adopted in Colombia and IAS 19 Employee Benefits adopted in Colombia, respectively.
- Liabilities or equity instruments related to payment arrangement based on shares of the acquired entity or payment arrangement based on the Group's shares made as replacement of the arrangements with payment based on shares of the acquired entity are measured in conformity with IFRS 2 Share-based payment at the date of acquisition.
- The assets (or group of assets for disposal) that are classified as held for sale in conformity with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations are measured in conformity with such Standard.

When EPM Group acquires a business, the financial assets acquired and liabilities assumed for the classification and appropriate designation in conformity with contractual terms, the economic circumstances, and the pertinent conditions on the acquisition date are measured. This includes the separation of implicit derivatives in contracts hosted by the acquired entity.

The Group recognizes an intangible asset acquired in a business combination, regardless of goodwill, provided that such intangible asset meets the recognition criteria, is identifiable,

or arises from contractual and legal rights; it measures the value of a reacquired right recognized as an intangible asset based on the remaining contractual term of the related contract, regardless of whether the market participants would consider potential contractual renewals to determine the fair value.

If a business combination is carried by stages, any prior participation is reevaluated as of their acquisition date at fair value and any resulting profit or loss is recognized. The accounting treatment of what is recorded in the Other comprehensive income (OCI), at the moment of the new purchase, i.e., the amounts resulting from the previous interest in the acquired entity as of the acquisition date that had been previously recognized in other comprehensive income, are reclassified into the profit or loss for the period, provided that such treatment were appropriate in case such interest were sold.

If the initial recording of a business combination is not finalized at the end of the presentation period of the financial statements when the combination takes place, the Group reports the provisional amounts of the items for which recording is incomplete. During the measurement period, the acquiring entity recognized adjustments to the provisional amounts or recognizes additional assets or liabilities necessary to reflect the new information obtained on facts and circumstances that existed on the acquisition date and, had been known, would have affected the measurement of the amounts recognized on that date.

The transferred consideration is measured at fair value, on the acquisition date, of the delivered assets, the incurred in or assumed liabilities and the equity instruments issued by the Group, including any contingent consideration, to gain control of the acquired entity.

Goodwill is measured as the excess of the consideration amount transferred, the value of any non-controlling interest, and whenever applicable, the fair value of any interest previously maintained in the acquired entity, over the net value of the assets acquired, liabilities and contingent liabilities assumed on the acquisition date. The resulting profit or loss on the measurement of the participation previously maintained is recognized in the profit or loss for the period or in the other comprehensive income. When the transferred consideration is lower than the fair value of the net assets of the acquired entity, the corresponding gain is recognized in the results for the period, on the acquisition date.

Any contingent consideration from a business combination is classified as asset, liability or equity and is recognized at fair value on the acquisition date and is included as part of the consideration transferred in a business combination. Changes to fair value after the measurement period of a contingent consideration, classified as financial asset or liability, are recognized in the profit or loss for the period, or in the case of concrete liabilities designated at fair value through changes in profit and loss, the amount of change in fair value that is attributable to changes in the credit risk of the liability are recognized in the other comprehensive income; it will not be remeasured when classified as equity and its subsequent settlement is recognized within equity. If the consideration does not classify as a financial liability it is measured in conformity with the applicable IFRS adopted in Colombia: an asset or liability is remeasured on its reporting date in conformity with IFRS 9 Financial

instruments or IAS 37 Provisions, contingent liabilities and contingent assets whenever appropriate.

The accounting policy established to record changes at fair value of the contingent consideration during the measurement period is as follows: all changes at fair value of the contingent consideration that classify as measurement period adjustments, are retrospectively adjusted, with the corresponding adjustments against goodwill. The measurement period adjustments are adjustments that arise from the additional information obtained during the "measurement period" (which may not exceed one year as from the acquisition date) on facts and circumstances that existed on the acquisition date.

Goodwill acquired in a business combination is assigned, on the acquisition date, to the Cash Generating Units (CGU) of the Group expected to benefit from the combination, regardless of whether other assets or liabilities of the acquired entity are assigned to those units. Goodwill that arises from a business acquisition is recorded at cost on the acquisition date less the accumulated impairment losses, if any.

For impairment assessment purposes, goodwill is assigned to each CGU (or groups of CGUs) of the Group that expects benefit from the synergies of that combination.

CGUs that are assigned the goodwill are subject to annual impairment assessments, or with higher frequencies if there is indication that the unit may have suffered impairments. If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is assigned first in order to reduce the carrying amount of goodwill assigned to the unit and then to the other assets of the unit, proportionately, based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is directly recognized in profits or losses. The impairment loss recognized for goodwill purposes cannot be reverted in the following period.

When goodwill is part of a CGU and a portion of the operation within that unit is sold, goodwill associated to the operation sold is included in the recorded value of the transaction when determining the gain or loss for the disposal of the operation. Derecognized goodwill is determined based on the sold portion of the operation, which is the ratio between the carrying value of the sold operation and the carrying value of the CGU.

If the initial recognition of a business combination is incomplete at the end of the accounting period when the combination takes place, the Group discloses the provisional values of the items with incomplete recording. These provisional values are adjusted during the measurement period and additional assets and liabilities are recognized, to reflect the new information obtained on facts and circumstances that existed on the date of acquisition that would have affected the values recognized on that date.

Business combinations under common control are recorded using the pooling-of-interest method as a reference. Under this method, assets and liabilities involved in the transaction are reflected at the same values used in the consolidation of the financial statements of the controlling entity of the companies under common control, any difference between the paid

amount and the recorded value of the assets acquired and transferred liabilities is recognized as an equity transaction; revenue, costs and expenses of the combined companies (after Elimination of Inter-Segment Transactions) are combined from the beginning of the period in which the combination occurs until the date the combination of entities under common control takes place.

2.6 Investments in associates and joint ventures

An associate is an entity on which the Group has significant influence over the financial and operation policy decisions, without getting to have their control or joint control.

A joint venture is an arrangement in which the Group has joint control, under which the Group has rights over the net assets of the arrangement, rather than rights over its assets and obligations for its liabilities.

On the acquisition date, the surplus of the acquisition cost over the share of the net fair value of the identifiable assets acquired, liabilities and contingent liabilities assumed of the subsidiary is recognized as goodwill. Goodwill is included in the recorded value of the investment and is neither amortized nor individually subject to value impairment testing.

Investment in associates and joint ventures is measured in the consolidated financial statements by the Equity Method, except if the investment or a portion thereof is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 Non-current assets held for sale and discontinued operations. Through this accounting methodology, the investment is initially recorded at cost and is later adjusted in terms of the changes experienced, after acquisition, by the portion of the net assets of the entity that corresponds to the investor. The profit or loss for the period for the Group includes its participation in the profit for the period of the investee and the other comprehensive income includes its participation in the other comprehensive income of the investee. When there are variations in the percentage of ownership in the subsidiary that do not imply a loss of control, the effect of these changes is recognized directly in equity. When ownership of the Group in the loss of an associate or joint venture exceeds ownership of the Group thereon (which includes any long-term ownership that, in substance, forms part of the net investment of the Group in the associate or joint venture), the Group ceases to recognise its ownership in future losses. Additional losses are recognized provided that the Group has contracted some legal or implied obligation or has made payments in the name of the associate or joint venture. When the associate or joint venture subsequently makes a profit, the company resumes recognition of its ownership therein only after its share in the aforementioned profit equals the share of unrecognized losses.

Investments in associates and joint ventures are accounted for using the equity method from the date on which the investee becomes an associate or joint venture.

All dividends received from the associate or joint venture are recognized as a reduction in the value of the investment when the right of the company to receive payment is established.

The Group periodically analyses the existence of impairment indicators and if necessary, recognizes losses for impairment in the investment of the associate or joint venture. Impairment losses are recognized through profit or loss for the period and are calculated as the difference between the recoverable value of the associate or joint venture, the latter being the higher between the value in use and its fair value less the necessary costs for its sale, and its recorded value.

When significant influence over the associate or the joint control over the joint venture is lost, the Group measures and recognizes any residual investment that may keep in it its fair value. The difference between the recorded value of the associate or joint venture and the fair value of the retained residual investment, with the value resulting from its sale, is recognized in the profit or loss for the period.

The Group discontinues the use of the Equity Method from the date on which the investment ceases to be an associate or joint venture, or the date on which the investment is classified as held for sale. Additionally, the Group records all amounts previously recognized in other comprehensive income with relation to that associate or joint venture on the same basis that would have been required if said associate or joint venture had directly sold the financial assets or liabilities. Therefore, if a profit or loss previously recognized in other comprehensive income by the associate or joint venture had been reclassified into profits or losses at the moment of the sale of the related assets or liabilities, the Group would reclassify the profit or loss from equity into profits or losses (as a reclassification adjustment) upon discontinuation of the usage of the Equity Method.

2.7 Joint operations

Is a joint arrangement whereby the parties that have joint control of the arrangement have the right to the assets and obligations related to the liabilities, related to the arrangement.

In joint operations the Group recognizes its share as follows: its assets, including its share in the assets jointly held; its liabilities, including its share in the liabilities jointly incurred in; its income from the sale of its share in the product that arises from the joint operation; its share in income from the sale of the product that is made by the joint operation; and its expenses, including it share in the jointly incurred in expenses. The Group records the assets, liabilities, income, and expenses related to its ownership in a joint operation according to the guidelines applicable in particular to the assets, liabilities, income and expenses.

2.8 Functional and foreign Currency

The financial statements of the Group are presented in Colombian pesos, the functional and presentation currency of the holding.

Transactions in foreign currency are initially recorded at the exchange rates of the functional currency in force and effect on the transaction date. Subsequently, the foreign-currency denominated monetary assets and liabilities are translated using the exchange rate of the functional currency, in force and effect as at the period's closing date, non-monetary

items that are measured at their fair value are translated using the exchange rates as of the date when their fair value is determined and the non-monetary items that are measured at historic cost are translated using the exchange rates in force and effect on the date of the original transactions.

All exchange differences are recognized in profit or loss, except for amendments arising from capitalizable interest costs and those arising from loans in foreign currency to the extent that they are considered as adjustments to interest costs.

For the presentation of the consolidated financial statements of the Group, the assets and liabilities of the businesses overseas, including goodwill and any adjustment to the fair value of the assets and liabilities that arose from the acquisition, are translated into Colombian pesos using the exchange rate in force and effect as of the closing date of the period being reported. Income, costs and expenses and cash flows are translated using the average exchange rates of the period.

Foreign exchange differences that arise from the conversion of businesses overseas are recognized in other comprehensive income, as well as the exchange differences of the long-term receivables or payables that are part of the net investment made abroad. In the disposition of foreign business, the item of other comprehensive income that relates to the foreign business is recognized through profit or loss for the period.

Adjustments corresponding to goodwill and fair value over identifiable assets acquired and liabilities assumed that are generated in the acquisition of a foreign business are considered as assets and liabilities of such transaction and are translated using the Exchange rate in force and effect at the end of each period being reported. Any foreign exchange difference that may arise shall be recognized in other comprehensive income.

Additionally, regarding the partial disposition of a subsidiary (which includes a business overseas), the entity will again attribute the proportional part of the accumulated amount of the exchange differences to the non-controlling interests, and they are not recognized in profit or loss. In any other partial disposition (i.e., partial disposition of associates of joint agreements that do not involve the loss of significant influence and joint control by the Group), the entity shall reclassify into profit or loss only the proportional part of the accumulated amount for foreign exchange differences.

2.9 Revenue

Revenue basically corresponds to the result of the Group's main activity, which is the rendering of public home utilities of electric power, natural gas, water supply and sewage, and is recognized when the service is rendered or at the time of the delivery of the goods, to the extent that the Group's performance obligations are met. When the service has been provided and not invoiced, revenue is recognized as an estimate. Revenue is measured at the value of the consideration received or receivable, excluding taxes and other obligations. Discounts, compensations for quality of service and financial components granted are recorded as adjustments to revenue. The financing component is only recognized if the contract with customers has a duration longer than one year.

The most representative revenue from the electric power business in Colombia are the following:

Reliability charge: remuneration paid to a generating agent for the availability of generation assets with the declared characteristics and parameters for the calculation of the steady power for reliability charge (ENFICC, for its Spanish initials), which guarantees compliance with the Steady Power Obligation (OEF, for its Spanish initials) assigned in auction for the assignment of steady power obligations or the mechanism replacing it.

Long-term contracts: a contract for the sale of electric energy between traders and generators which is settled in the energy exchange market, under this modality of energy contract generators and traders freely agree on quantities and prices for the purchase and sale of electric energy for periods longer than one day. For long-term power purchase contracts, with price lower than that of the market and whose intention is not to use the energy purchased in the operation but to resell it in a market to obtain profit, it is considered that it does not comply with the Exception for own use.

Secondary market of steady power or secondary market: A bilateral market in which generators negotiate among themselves a back- up contract to ensure, for a given period, partial or total compliance with the steady power obligations acquired by one of them.

Non-regulated market energy sales: Is the electric energy sold in the market to customers whose maximum demand exceeds a value in MW (megawatts) or a monthly minimum energy consumption in MWh (megawatt-hour), defined by the regulatory body, by legalized installation, from which it does not use public networks of electric energy transport and uses it in the same property or in contiguous estates. Such electricity purchases are made at freely agreed prices between buyer and seller.

Regulated market energy sales: Is the electric energy sold to customers whose monthly consumption is less than a predetermined value and is not entitled to negotiate the price paid for it, since both concepts are regulated; usually uses power for its own consumption or as an input for its manufacturing processes and not to undertake marketing activities with it.

Automatic generation regulation (AGC): is a system for the control of the secondary regulation, used to accompany the variations of load through electricity generation, to control the frequency within a range of operation and the programmed exchanges. The AGC can be programmed in centralized, decentralized or hierarchical mode.

Steady Power (or Firm Energy): is the incremental contribution of a company's generation plants to the interconnected system, which is carried out with a 95% reliability and is calculated based on a methodology approved by the commission and the operational planning models used in the national interconnected system.

Natural gas revenue comes from the distribution and sale of natural gas to the regulated and non-regulated markets.

In the water business, revenue comes from the provision of water and sewage utilities.

Each other countries where the Group renders services, including energy, have their own regulation, which is described for each country in Legal and regulatory framework of note 1.

At the time of income recognition, the Group assesses, based on specific criteria, whether it acts as a principal or as a commission agent and thus determines whether gross or net income must be recognized for marketing activities.

2.10 Contracts with Customers

When contract results can be reliably measured, the Group recognizes revenue and expenses associated to contracts with customers, measuring the advance level in the fulfilment of the performance requirements using the resource method, as a function of the ratio represented by the costs earned by the work conducted to that date and the estimated total costs up to its completion.

The incurred cost includes the costs, including borrowing costs directly related to the contract, until the work has been completed. Administrative costs are recognized through profit or loss for the period.

Incremental costs incurred by the Group to obtain or fulfill contracts with customers are recognized as an asset in the statement of financial position within the Other assets item and are amortized on a linear basis over the life of the contract, provided that the term of the contract is greater than one year. Otherwise, the Group recognizes it directly in the profit or loss for the period.

Payments received from customers before the corresponding work has been performed, are recognized as a liability in the Statement of financial position as other liabilities.

The difference between revenue recognized in the statement of income for the period and the billing is presented as asset in the statement of financial position named Trade and other receivables, or as liability named Other liabilities.

For the initial recognition of a receivable from a contract with a customer, the difference between the measurement of the receivable and the value of the corresponding revenue is presented as an expense in the statement of comprehensive income called Impairment of receivables.

2.11 Written premiums and acquisition cost

Written premiums comprise the total premiums receivable for the period of coverage. Income from written premiums is recognized proportionally, throughout the duration of the coverage; income from these premiums is reduced by cancellations and nullifications; for cancellations, it corresponds to the amount of the premium accrued up to the time of cancellation due to expiration of the payment deadline.

Income from premiums accepted in reinsurance is incurred at the time of receiving the corresponding account statements of the reinsurers.

Unearned premiums are calculated separately for each individual policy to cover the remaining part of the written premiums.

2.12 Deferred reinsurance commission Income

In the Group, deferred commissions are recorded from undertaking its reinsurance activity, where income collected from commissions is deferred to the reinsurers by the premium cessions made each month. The reinsurer pays the transferor a commission on the premiums it receives in order to offset the costs of capturing the business and maintaining the portfolio, the value of the commission is established as a percentage of the premium and will depend on the negotiation made.

2.13 Reinsurance

The Group considers reinsurance as a contractual relationship between an insurance company and a reinsurance company (reinsurer), in which the insurance company relinquishes, totally or partially, to the reinsurer, the risks assumed with its insureds.

Premiums corresponding to the ceded reinsurance are recorded according to the conditions of the reinsurance contracts and under the same criteria of the direct insurance contracts.

All receivables and payables generated in the relationship with the reinsurer are managed independently and are not subject to compensation.

2.14 Government grants

Government grants are recognized at fair value when there is reasonable certainty of the grants being collected and that all the conditions laid down shall be met. Grants that pretend to offset costs and expenses already incurred in, without subsequent related costs, are recognized through profit or loss for the period in which they become enforceable. When the grants relate to an asset, it is recorded as deferred income and is recognized through profit or loss for the period on a systematic basis throughout the estimated lifespan of the corresponding asset. The benefit of a government loan at an interest rate below market is treated as a government grant, measured as the difference between the amounts received and the fair value of the loan based upon the market interest rate.

2.15 Taxes

The fiscal structure of each country where the Group companies are located, the regulatory frameworks and the plurality of operations that the companies undertake make each enterprise a taxable entity, i.e. a payer of taxes, rates and contributions on a national and territorial basis. These are liabilities generated from the central government, the states/ departments, municipal entities and other active subjects, once the conditions foreseen in the corresponding acts and laws issued are met.

Amongst the most relevant taxes the income tax and the value-added tax are detailed:

Income Tax

- **Current:** current income tax assets and liabilities for the period are measured by the amounts that are expected to be recovered or paid to the fiscal authorities. The income tax expense is recognized through current tax according to the cleaning made between the fiscal income and the recorded profit or loss affected by the income tax rate of the current year and pursuant to the provisions of the tax rules of the country. Tax rates and rules used for computing those values are those enacted or substantially approved at the end of the period being reported, in the countries where the Group operates and generates taxable profits.

  Tax income differs from profit for the period as income and expense items imposable or deductible in other years, and items that shall not be taxable or deductible in the future.

  Current Income tax assets and liabilities are also offset if they relate to the same tax authority and if there is the intention to settle them for the net value or to realize the asset and settle the liability simultaneously.

- **Deferred:** deferred income tax is recognized using the balance sheet method calculated on the temporary differences between the fiscal bases of the assets and liabilities and their recorded values. Deferred tax liabilities are generally recognized for all imposable temporary differences, while deferred tax assets are recognized for all deductible temporary differences and for the future offsetting of fiscal credits and unused fiscal losses to the extent that it is probable the availability of future tax gains against which they can be realized. Deferred taxes are not discounted.

  Deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition of an asset or a liability in a transaction that is not a business combination and that, at the moment of the transaction, did not affected neither the book gain nor the tax income or loss; and for deferred tax liabilities, whenever it arises from the initial recognition of goodwill.

  Deferred tax liabilities related to investments in subsidiaries, associates and participation in joint ventures, are not recognized when the revision opportunity of temporary differences can be controlled, and it is probable that said differences will not be reversed in the near future. Deferred tax assets related to investments in subsidiaries, associates

and participation in joint ventures, shall be recognized only if a reversal in temporary differences for the near future is probable, and that availability of future taxable profit against which those deductible differences will be imputed is also probable.

The recorded value of deferred tax assets is reviewed in each presentation date and is reduced to the extent that enough taxable profits are available for use as a whole or in part of the deferred tax asset is no longer probable. Deferred tax assets that are not recognized are reassessed on each presentation date and are recognized to the extent that it is probable that future taxable gains profits allow their recovery.

Deferred tax assets and liabilities are measured at the fiscal rates expected to be applied in the period when the asset is realized, or the liability is settled, based on tax rates and rules that were approved on the presentation date, or which approval procedure is close to completion for such date. Measurement of deferred tax assets and liabilities will reflect the tax consequences to be derived from the way in which the entity expects, at the end of the period being reported, to recover or settle the recorded value of its assets and liabilities.

Deferred tax assets and liabilities must be presented as non-current.

Deferred tax assets and liabilities are offset if there is a legally enforceable right for it and if they are related to the same tax authority.

Deferred tax is recognized through profit or loss for the period, except that related to items recognized outside profit or loss; in the latter case it will be presented in the other comprehensive income or directly in equity.

With the purpose of measuring deferred tax assets and liabilities for investment properties measured using the fair value model, the recorded value of those properties is presumed to be fully recovered through their sale, unless that presumption is challenged. The presumption is challenged when the investment property is depreciable and is kept within a business model which object is to consume, substantially, all the economic benefits that are generated by the investment property through time, and not through sale. Management reviewed the Group's investment property portfolio and concluded that none of the Group's investment properties is kept under a business model which objective is to consume, substantially, all economic benefits generated by investment properties over time rather than through the sale. Therefore, management have determined that the presumption of "sale" established in the modifications to IAS 12 Income tax, is applicable.

Whenever current tax or deferred tax arises from the initial recording of business combination, the tax effect is considered within the recording of the business combination.

Value-Added Tax - VAT

The companies of the Group located in Colombia, which sell tangible movable goods and some real estate; sell or transfer rights on intangibles associated with industrial property; provide services in Colombia or from abroad; import goods; operate gambling services or sell tickets to gambling games, are responsible for the common regime of this tax. The tax generated is recognized as a value to be paid to the tax administration, from which the tax paid on the purchase or acquisition of inputs is discounted; but when the company generates both income excluded from VAT and income that is exempt and taxed, it must make an apportionment of the tax paid to determine what percentage of this is to be discounted.

In Colombia the provision of energy, water, sewage and domestic natural gas utilities are excluded from this tax; therefore, the VAT paid on purchases is part of the cost. Additionally, electrical energy is an excluded good. The general rate for this tax in Colombia is 19% and exists a differential rate of 5% and some goods and services exempt (0%).

In Panama the Tax on the Transfer of Material Goods and Services (ITBMS, for its Spanish initials), is generated by the transfer of movable tangible goods and the rendering of services, the leasing of movable property located in the country and the importation of merchandise from abroad. The general rate of the tax is 7%, but there are also rates of 10% and 15%.

In Guatemala, the sale of personal property, the rendering of services, imports, leasing of personal and real estate property, dation in payment of personal and real estate property, self-consumption of goods and other operations with real estate property, such as the first sale of those, generate Value Added Tax. The general rate is 12%; but it is reduced to 5% in the sales of small taxpayers, there are exempt goods with 0% rate and in the sale of used vehicles a fixed amount is charged. The tax period is monthly, and its effect is translational to the final consumer.

The value added tax in El Salvador has a general rate of 13% and there are exempted goods (0% rate); the tax is levied on the transfer of tangible personal property and the provision of services; the import of services; the import and export of tangible personal property; and the self-consumption of inventories or the transfer of tangible property for promotional purposes. However, the transfer of fixed assets that have been used for four years or more is not subject to the tax.

In Mexico, the Value Added Tax is caused in its territory by acts or activities such as sale of goods, provision of independent services, temporary use or enjoyment of goods and import of goods and services. The general rate is 16%; however, there are acts that are taxed at 0%, exempt and not subject to the tax.

Value added tax (VAT) in Chile is levied on sales and other transfer operations of tangible personal property and real estate, except land; on the rendering of services, provided or used in the country; on the import of goods; on withdrawals of inventory, contributions in kind and leasing of personal property; and on the recurrent or habitual sale of real estate, but land is exempt, so that it must be subtracted from the taxable base for VAT purposes. The general tax rate is 19%.

2.16 Assets classified as held for sale and discontinued operations

Non-current assets and groups of assets for disposition are classified as held for sale if their recorded value will be recovered through a sale transaction rather than through continuing use. These assets or groups of assets are presented separately as current assets and liabilities in the statement of financial position at the lower between the recorded value or the fair value less selling costs and are not depreciated or amortized from the date of classification.

This condition is met if the asset or group of assets is available, in its current condition, for immediate sale, the sale transaction is highly probable and is expected to be completed within one year from the date of classification.

When the Group is committed to a plan of sale that involves the sale of an investment, or a portion of an investment, in an associate or joint venture, the investment or the portion of the investment to be sold is classified as held for sale when the criteria described above are met, and the Group discontinues the use of the equity method in relation to the portion that is classified as held for sale. Any retained portion of an investment in an associate or joint venture that is not classified as held for sale continues to be accounted using the equity method. The Group discontinues the use of the equity method at the time of sale when the sale results in the Group losing significant influence over the associate or joint Venture.

After the sale is made, the Group accounts for any retained interest in the associate or joint venture in accordance with IFRS 9 Financial Instruments, unless the retained interest is still an associate or joint venture, in which case the Group uses the equity method.

Income, costs and expenses from a discontinued operation are presented separately from those from continuing operations, in a single item after income tax, in the consolidated statement of comprehensive income for the current period and the comparative period of the previous year, even when the Group retains a non-controlling interest in the company that was once a subsidiary after the sale.

2.17 Property, plant and equipment

Property, plant and equipment are measured at cost, net of accrued depreciation and accrued impairment losses, if any. The cost includes the acquisition price; the costs directly related to putting the asset at the necessary place and conditions to operate in the way foreseen by the Group, borrowing costs for projects under construction that take a substantial period to complete, if the recognition requirements are met, and the present value of the expected cost of decommissioning the asset after use, if the recognition criteria for a provision are met.

Constructions in progress are measured at cost less any impairment loss recognized and includes indispensable expenditure directly related to the construction of the asset, such as professional fees, work supervision, civil works and, in the case of those assets qualified, the borrowing costs are capitalized. Said constructions in progress are classified in the proper categories of property, plant and equipment at the time of their completion and when they

are ready to use. The depreciation of these assets starts when they are ready to use in accordance with the same basis as in the case of other elements of property, plant and equipment.

The Group capitalizes as greater value of the assets, additions or improvements made thereof, provided that any of the following conditions is met: a) They increase their lifespan, b) They increase their productive capacity and operating efficiency thereof and c) They reduce costs to the Group. All other repair and maintenance costs are recognized through the statement of comprehensive income as incurred.

Inventory of spare parts for specific projects, which are expected to have no turnover in one year and meet the criteria to be capitalized, known as replacement assets, are presented in the other property, plant and equipment. They depreciate considering the permanence time in the storage and the technical lifespan of the asset once its use begins.

Depreciation begins when the asset is available for use and is calculated in a straight-line basis throughout the estimated lifespan of the asset as follows:

Plants, pipelines and tunnels				
Civil works	50	to	100	years
Equipment	10	to	100	years
Networks, lines and cables				
Electric transmission network	30	to	40	years
Electric distribution network	30	to	40	years
Aqueduct network	40	to	80	years
Wastewater network	30	to	80	years
Gas network	60	to	80	years
Buildings	50	to	100	years
Communication and computer equipment	5	to	40	years
Machinery and equipment	7	to	40	years
Furniture, fixtures and office equipment	10	to	15	years
Land[1]	10	to	20	years

[1] Corresponds to the affiliate Emvarias that depreciates the land on which it performs the final disposal activity due to the detriment it suffers with the disposal of solid waste, environmental degradation and period of recovery that goes beyond 20 years.

Lifespans are determined considering, among others, the manufacturer's technical specifications, the knowledge of the technicians that operate and maintain the assets, the geographic location and the conditions to which it is exposed.

The Group calculates the depreciation by components, which implies depreciating individually the parts of the asset that should have different lifespans. The depreciation method used is the straight-line; the residual value calculated for the assets is not part of the depreciable amount.

A component of property, plant and equipment and any significant part initially recognized, is derecognized once disposed of or when it is not expected to obtain future economic benefits

from its use or disposition. Profit or loss at the moment of derecognizing the asset, calculated as the difference between the net value of the disposition and the recorded value of the asset, is included in the statement of comprehensive income.

Assets temporarily classified as idle or out-of-service continue to depreciate and are tested for impairment within the CGU to which they are assigned.

Depreciation methods, useful lives and residual values, are reviewed at each reporting date and adjusted if appropriate.

2.18 Leases

The Group initially applied IFRS 16 Leases from January 1, 2019 (see Note 2.32 Changes in accounting policies). According to that standard, the determination of whether an arrangement constitutes or contains a lease is based upon the essence of the arrangement at its initial date, if compliance with the agreement depends upon the use of a specific asset and if it transfers the right-of-use of said asset for a timespan in exchange for a consideration.

At the initial date of the lease contract, the Group acting as lessee recognizes an asset for right-of-use and a lease liability, except for leases with a duration of less than 12 months or those which value at new of the underlying asset is less than 15 (fifteen) Current Monthly Minimum Legal Wage (SMMLV).

The Group acting as lessor classifies the lease as operating or finance. A lease is classified as a finance lease when the risks and rewards incidental to ownership of the leased asset are substantially transferred to the lessee; otherwise, it is classified as an operating lease.

Until December 31, 2018, in accordance with IAS 17, the Group acting as lessee classified the leases as operating or financial. A lease is classified as a financial lease when the risks and benefits inherent to the ownership of the leased asset are substantially transferred to the lessee, otherwise it is classified as an operating lease.

EPM Grupo as a lessee

Right-of-use assets are recognized and presented as assets in the statement of financial position at the beginning of the lease, at cost. The corresponding liability is included in the statement of financial position as a lease liability.

Right-of-use assets are amortized over the lifespan of the asset using the straight-line method, if ownership of the underlying asset is transferred at the end of the contract or if a purchase option is exercised. If ownership of the underlying asset is not transferred at the end of the lease term or if no purchase option on the asset is exercised, the asset is depreciated only up to the end of its lifespan or the lease term, whichever comes first.

Lease payments are divided between financial expenses and debt amortization. Finance charges are recognized through profit or loss for the period unless directly attributable to

qualifying assets, in which case they are capitalized according to the Group's policy for borrowing costs. Variable lease payments, which depend on an index or rate, are included in the valuation of the lease liability. Leases with a duration of less than 12 months or those whose value at new of the underlying asset is less than 15 (fifteen) SMMLV are recognized as operating leases in the profit or loss for the period over the term of the lease.

EPM Group as a Lessor

Assets leased under finance leases are not presented as property, plant and equipment since the risks associated with the property have been transferred to the lessee, instead a receivable is recognized for an amount equal to the net investment in the lease.

When a lease contract includes land and building components together, the Group assesses the classification of each component separately as a finance or operating lease. If the lease payments cannot be allocated reliably between these two components, the entire lease is classified as a finance lease, unless it is clear that both components are operating leases, in which case the entire lease is classified as operating lease.

Income from variable leases, dependent on an index or rate, are included in the valuation of the net investment at lease.

Initial direct costs such as commissions, fees, legal, and internal costs that are incremental and directly attributable to negotiating and arranging the lease are included in the measurement of the net investment in the lease at inception and are reflected in the calculation of the implicit interest rate.

2.19 Borrowing Costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset that necessarily takes substantial time to be prepared for their destined use or sale, are capitalized as part of the cost of the respective asset until the asset is ready for their intended use. Income from the temporary investment in specific loans pending to be consumed in qualified assets is deducted from the borrowing costs that qualify for their capitalization. All other borrowing costs are recorded as expenses in the period when incurred. Borrowing costs consists of interest and other costs incurred in by the Group regarding to the loan of funds. To the extent that the funds derive from generic loans and are used to obtain a qualified asset, the value of the costs susceptible of capitalization is determined by applying a capitalization rate (weighted average cost of loans applicable to general loans outstanding during the period) to expenditure made in that asset.

Capitalization of borrowing costs begins on the date when the following conditions are met:

- Expenditure made in relation to the asset.
- Borrowing costs are incurred, and
- Necessary activities to prepare the asset for the intended use or for sale are performed.

Capitalization of borrowing costs is suspended during periods in which the development of activities of a qualifying asset for periods of more than one year is interrupted. However, the capitalization of borrowing costs over a period is not interrupted if relevant technical or administrative actions are being undertaken. Neither is capitalization of borrowing costs suspended when a temporary delay is required as part of the process of preparing an asset qualified for its use or sale.

Capitalization of borrowing costs is terminated when all activities necessary to prepare the asset for its use or sale have been substantially completed. When the asset has components that can be used separately while construction continues, the capitalization of borrowing costs on such components is stopped.

2.20 Investment property

Investment property, are lands or buildings or part of a building or both, held to obtain rentals or capital revaluations (including the investment property under construction for said purposes). Investment properties are initially measured at cost, including transaction costs. The recorded value includes the replacement or substitution cost of one part of an existing investment property at the moment when the cost is incurred in, if all criteria for recognition are met and they exclude the daily maintenance costs of the investment property.

After initial recognition, investment properties are measured at fair value reflected by market conditions on the presentation date. All profit or loss arising from changes in the fair values of the investment properties are included in the statement of comprehensive income in profit or loss when they arise.

Investment properties are derecognized, either at the moment of disposition, or when they are retired from use on a permanent basis, and no future economic benefit is expected. The difference between the net value of disposition and the recorded value of the asset is recognized in the statement of comprehensive income in profit or loss in the period when it was derecognized.

Transfers to or from investment property are conducted only when there is a change in their use. In the case of a transfer from an investment property to property, plant and equipment, the cost considered for its subsequent posting is the fair value on the date of use change. If a property, plant and equipment become an investment property, it shall be recorded at its fair value, the difference between the fair value and the recorded value shall be recorded as revaluation surplus applying the IAS 16 Property, plant and equipment.

2.21 Intangible Assets

Intangible assets acquired separately are measured initially at their cost. The cost of the intangible assets acquired in business combinations is their fair value at the acquisition date. After their initial recognition, intangible assets are recorded at cost less any accumulated amortization and any accumulated loss for impairment. Intangible assets generated internally

are capitalized provided that they meet the criteria for their recognition as asset and the generation of the asset must be classified as: research phase and development phase; if it is not possible to distinguish the research phase from the development phase, expenditure must be reflected in the statement of comprehensive income in the period in which they incurred.

Lifespans of intangible assets are determined as finite or indefinite. Intangibles assets with finite lifespans are amortized throughout their economic lifespan in a straight-line and assessed to determine if they presented any impairment, whenever there are indications that the intangible asset may have suffered such impairment. The amortization period and the amortization method for an intangible asset with a finite lifespan are reviewed at least at the end of each year. Changes in the expected lifespan or in the expected pattern of consumption of the future economic benefits of the asset are recorded if the amortization period or method changes, as applicable, and are treated as changes in accounting estimates. The amortization expense of intangible assets with finite lifespans is recognized through profit or loss in the statement of comprehensive income in the expense category consistent with the function of the intangible asset.

Intangibles assets with indefinite lifespans are not amortized, but they are subject to annual tests to determine whether they suffer any impairment, either individually or at the cash-generating unit level (CGU). Assessment of the indefinite lifespan is revised on an annual basis to determine whether such indefinite lifespan continues to be valid. If that is not the case, the change of lifespan from indefinite to finite is made prospectively.

Lifespans of intangible assets are:

Concessions and similar rights	As contract effective term
Easements	Indefinite
Capitalized development expenses	Indefinite
Software and IT applications	Indefinite/ finite 3 to 5 years
Licenses	Indefinite/ finite 3 to 5 years
Rights	As contract effective term
Other intangible assets	Indefinite/ finite 7 to 15 years

An intangible asset is derecognized upon disposition, or whenever future economic benefits are not expected from their use or disposition. Arising profits or losses are measured as the difference between the value obtained in the disposition and the recorded value of the asset, and it is recognized through profit or loss in the statement of comprehensive income.

Research and development costs

Research costs are recorded as expenses as incurred. Development outlays in an individual project are recognized as intangible assets whenever the Group can demonstrate:

- The technical feasibility of completing the intangible asset so that it is available for use or sale.
- Its intention of completing the asset and its capacity to use or sell the asset.

- How the asset will generate future economic benefits, considering, among others, the existence of a market for production that generates an intangible asset for the asset itself, or the profit of the asset for the entity.
- The availability of technical and financial resources to complete the asset and to use and sell it.
- The capacity of reliably measuring the expenditure during development.

In the statement of financial position, the development expenditure asset is recognized from the moment the element meets the aforementioned conditions for its recognition, and its cost less accrued amortization and the value impairment accrued losses are recorded.

When the development of an intangible asset related to an electricity generation project begins, costs are accumulated as constructions in progress.

Amortization of the asset starts when the development has been completed and the asset is available for use. It is depreciated throughout the period of the expected future economic benefit. During the development period the asset is subject to annual tests to determine whether it has experienced impairment of its value.

Research costs and development costs that do not qualify to capitalization are recorded as expenses through profit or loss in the statement of comprehensive income.

Goodwill

Goodwill represents the difference between the cost of a business combination and the fair value at the moment of acquisition of the assets acquired, liabilities assumed, and contingent liabilities of the acquired party.

Goodwill is not amortized, it is measured at cost less any value impairment accrued loss and is subject to annual impairment testing, or more frequently when impairment indicators exist. Impairment losses are recognized in profit or loss in the statement of comprehensive income.

For the Cash Generating Units (CGU), which have been assigned goodwill, impairment is assessed annually, which implies the calculation of the value at use of the CGUs to which it is assigned. The value at use requires determining the future cash flows that must arise from the CGUs and an appropriate discount rate to calculate the current value. When the actual future cash flows are less than expected, an impairment loss may arise.

2.22 Financial Instruments

A financial instrument is a contract that gives rise to a financial asset in one entity and simultaneously to a financial liability or equity instrument in another entity.

Financial assets and liabilities are recognized in the statement of financial position when the Group becomes a party according to the contractual conditions of the instrument.

2.22.1 Financial Assets

The Group recognizes its financial assets at fair value at the outset. Transaction costs directly attributable to the financial asset are added to or deducted from its fair value if subsequently measured at amortized cost or fair value through other comprehensive income or are recognized immediately in the statement of comprehensive income if the assets are measured at fair value through profit or loss.

For subsequent measurement, financial assets are classified at amortized cost or fair value (through other comprehensive income or through profit and loss) depending on the Group's business model for managing the financial assets and the characteristics of the instrument's contractual cash flows.

- **Financial assets at fair value through profit or loss**

  Financial assets at fair value through profit or loss are assets whose contractual cash flows are highly liquid. The Group classifies a financial asset in this category if it is acquired mainly for the purpose of being sold in the short term.

  This includes investments made to optimize surplus liquidity, i.e. all those resources that are not immediately allocated to the development of the activities that constitute the company's corporate purpose. The investment of surplus liquidity is made under the criteria of transparency, security, liquidity and profitability, under the guidelines of adequate control and under market conditions without speculative purposes (EPM General Management Decree 2015-DECGGL-2059 of February 6, 2015). Profit or losses arising from changes in fair value are included in the statement of comprehensive income under the heading of financial income or expense, in the period in which the aforementioned changes in fair value occur.

  Dividend income is recognized when the Group's right to receive payment is established.

  At the same time, the Group can irrevocably allocate a financial asset as measured at fair value through profit or loss.

- **Financial assets at fair value through other comprehensive income**

  Debt instruments are classified as assets measured at fair value through other comprehensive income if they are held under a business model whose objective is achieved by obtaining the contractual cash flows and selling the instruments and the instrument also provides, on specific dates, cash flows that correspond solely to payments of principal and interest on the outstanding principal value.

  Changes in the fair value of the investment are recorded in other comprehensive income, except for impairment losses or recoveries, interest income and foreign exchange gains and losses which are recognized in profit or loss for the period.

  The Group has made an irrevocable decision to present subsequent changes in the fair value of certain investments in equity instruments that are not held for trading in other

comprehensive income. Dividends from such investments are recognized in profit or loss when the right to receive payment is established.

On disposition of equity investments at fair value through other comprehensive income, the accumulated value of gains or losses is transferred directly to retained earnings and is not reclassified to profit or loss for the period.

- **Financial assets at amortized cost**

  A financial asset is subsequently measured at amortized cost using the effective interest rate[2] if the asset is held within a business model whose objective is to maintain it in order to obtain the contractual cash flows and contractual terms of the asset that provide, on specific dates, cash flows that are solely payments of principal and interest on the outstanding principal value.

Impairment of financial instruments

At each reporting date, the Group recognizes a correction in value for expected credit losses on financial assets measured at amortized cost or at fair value through changes in Other comprehensive income, including receivables from leases, contract assets or loan commitments and financial guarantee contracts to which the impairment requirements are applied over the lifespan of the asset.

Expected credit loss is estimated considering the probability that an impairment loss by uncollectability may or may not occur and is recognized as profit or loss in profit or loss in the Statement of comprehensive income, reducing the value of the financial asset. The Group assesses the credit risk of accounts receivable on a monthly basis at the time of presenting the reports in order to determine the value correction for expected credit loss on financial assets.

The Group assesses on a collective basis the expected losses for financial assets that are not individually relevant. When the collective assessment of expected losses is performed, receivables are gathered by similar credit risk characteristics, allowing identification of repayment capacity of the debtor, in accordance with the contractual terms of receivables.

The Group determines that a customer's credit risk increases significantly when there is any default event in the financial agreements by the counterpart, or when information, be it internal or obtained from external sources indicates that debtor's payment unlikely, without considering held securities.

Default in agreements is generally measured according to the service contracts and rules for each subsidiary own country, however, there are agreements or individual contracts that indicate default immediately when a payment or obligation is not met.

2 The effective interest rate method is a method of calculating the amortized cost of a financial asset and allocating income over the relevant period. The effective interest rate is the rate that exactly discounts future cash flows from a financial asset (including all fees, commissions and points paid or received that are an integral part of the effective interest rate, transaction costs and other premiums and discounts) over the expected life of the instrument, or if appropriate, a shorter period, to its carrying amount at initial recognition.

The Group determines that a financial asset is impaired when there is a breach of financial covenants by the counterparty, or when information, be it internal or obtained from external sources, indicates payment by the debtor is unlikely, without considering held guarantees.

Credit risk is affected when there are changes in financial assets, the Group's policy to reassess the recognition of credit losses is: whenever the counterparty defaults in a financial agreement; or the information developed internally or obtained from external sources indicates that it is unlikely that the debtor will pay its creditors, in full, without considering held guarantees. The Group derecognizes the financial asset when there is information indicating that the counterparty is in severe financial difficulties and there are no realistic prospects of recovery, for example, when the counterparty has been put into liquidation or has initiated bankruptcy proceedings or, in the case of receivables, when the amounts exceed two years past due, whichever occurs first.

Impaired financial assets may still be subject to collection execution activities under the recovery procedures of the Group, considering judicial collection when appropriate. Recoveries performed are recognized through profit for the period.

Derecognition of Financial Assets

A financial asset or part of it, is derecognized from the statement of financial position whenever it is sold, transferred, expires or the Group losses control on the contractual rights or on the cash flows of the instrument.

The Group derecognizes a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, when the counterparty has been put into liquidation or has initiated bankruptcy proceedings or, in the case of receivables, when the amounts exceed two years past due, whichever is earlier.

If the Group does not transfer nor substantially retains all risks and advantages inherent to that property and continues to retain control of the transferred asset, the Group will recognize its share in the asset and the obligation associated for the amounts that it would have to pay. If the Group substantially retains all risks and advantages inherent to the ownership of a transferred financial asset, the Group will continue to recognize the financial asset and will also recognize a loan guaranteed as a collateral for the received income.

In the total derecognition of a financial asset measured at fair value through changes in profit or loss, the difference between the recorded value of the assets and the sum of the consideration received and to be received, is recognized through profit or loss in the Statement of comprehensive income. In case of financial assets measured at fair value with change in Other comprehensive income, the difference between the recorded value of the asset and the sum of the consideration received and to be received is recognized through profit or loss in the Statement of comprehensive income and the profit or loss that would have been recognized in the Other comprehensive income will be reclassified to accumulated income.

Refinancing of loans

When the contractual cash flows of a financial asset are renegotiated or otherwise modified, and the renegotiation or modification does not result in derecognition of that financial asset in accordance with IFRS 9 adopted in Colombia, the Group recalculates the gross recorded value of the financial asset and recognizes a profit or loss due to modification in the profit or loss for the period. The gross recorded value of the financial asset is recalculated as the present value of the modified or renegotiated contractual cash flows that are discounted at the original effective interest rate of the financial asset (or effective interest rate adjusted for credit quality for financial assets with credit deterioration purchased or originated) or, when applicable, the revised effective interest rate. Any cost or commission incurred adjusts the recorded value of the modified financial asset and is depreciated over the remaining term of the latter.

2.22.2 Financial liabilities

The Group recognizes financial liabilities at their fair value at the outset. Transaction costs directly attributable to the acquisition or obtainment of the financial liability are deducted from its fair value if they are subsequently measured at amortized cost or are recognized through profit or loss if the liabilities are measured at fair value. Subsequently, financial liabilities are measured as follows:

- Financial liabilities at fair value through profit or loss, include liabilities held for trading, financial liabilities designated at fair value at the outset through profit or loss, and derivatives. Profit or loss on liabilities held for trading are recognized through profit or loss. At the outset, the Group allocated financial liabilities as at fair value through profit and loss.
- Financial liabilities at amortized cost, are measured using the effective interest rate. Profits and losses are recognized through profit and loss for the period.

Compound instruments

Financial instruments that contain both a liability and an equity component (compound financial instruments) are separately recognized and accounted for. Therefore, for the outset measurement the liability component is determined by the fair value of the future cash flows and the residual value is assigned to the equity component.

For subsequent measurement, the liability component is measured at amortized cost including the effect of depreciation costs, interests and dividends. The equity component retains the measurement of the initial recognition.

Financial guarantee contracts

The financial guarantee contracts issued by the Group are those contracts that require the making of a specific payment to reimburse the holder for the loss incurred when a specified debtor defaults their payment obligation, according to the conditions of a debt instrument. Financial guarantee contracts are initially recognized as a liability at fair value, adjusted by the

transaction costs that are directly ascribable to the issuance of the guarantee. Subsequently, the liability is measured at: (i) the amount of the adjustment in value for the expected losses and (ii) the value initially recognized less, the recognized accumulated income.

Derecognition of financial liabilities

A financial liability or part of it is derecognized from the statement of financial position when the contractual obligation has been settled or has expired.

Whenever an existing financial liability is replaced by another coming from the same lender under substantially different conditions, or if the conditions of an existing liability are substantially modified, such exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability and the difference in the respective recorded values is recognized through profit and loss.

In the event changes are not substantial the Group recalculates the gross recorded value of the financial liability and recognizes a profit or loss from changes in the profit or loss. The gross recorded value of the financial liability is recalculated as the current value of the modified or renegotiated contractual cash flows that are discounted at the original effective interest rate of the financial liability or, when applicable, the revised effective interest rate. Any cost or commission incurred adjusts the recorded value of the modified financial liability and is amortized over its remaining term.

2.22.3 Equity Instruments

An equity instrument consists of any contract showing a residual interest on an entity's assets, after deducting all its liabilities. Equity instruments issued by the Group's companies are recognized through income received, net of direct issuance costs.

Repurchase of the Group's companies own equity instruments is recognized and directly deducted in equity, which indicates that no profit or loss is recognized from the purchase, sale, issuance, or cancellation of the Group's companies own equity instruments.

2.22.4 Derivative Financial Instruments

A financial derivative is an instrument which value varies in response to changes in a variable such as an interest rate, exchange rate, the price of a financial instrument, credit rating or index. This instrument does not require an initial investment or is inferior than other financial instruments with a similar response to changes in market conditions and is generally settled at a future date.

The Group uses derivative financial instruments, like Forward contracts, Future contracts, financial barters (Swap contracts) and Option contracts to hedge several financial risks, mainly the interest rate, exchange rate and commodities price risks. Such derivative financial instruments are initially recognized at their fair values on the date when the derivative contract is entered into, and subsequently they are measured again at their fair value. Derivatives are recorded in the statement of financial position as financial assets when their fair value is positive, and as financial liabilities when their fair value is negative.

Commodity contracts that meet the definition of a derivative, but that are entered into in conformity with the expected purchase requirements of the Group, are recognized in the Statement of comprehensive income as cost of sales.

Any gain or loss that arises from the changes in derivatives' fair value is directly recognized in the Statement of comprehensive income in the section Statement of income, except for those that are under hedge accounting.

Generally, the derivatives embedded in host contracts are treated as separate derivatives whenever they meet the definition of a derivative and when their risks and characteristics are not closely related to those main contracts and the contracts are not measured at fair value with change in profit. However, derivatives embedded in contracts where the host is a financial asset in the scope of IFRS 9 are never split. Instead, the hybrid financial instrument as a whole is assessed for financial asset classification.

Hedge Accounting

At the beginning of a hedging relationship, the Group designates and formally documents the hedging relationship to which they want to apply hedging accounting, and the objective of the risk management and the strategy to carry out the hedging. The documentation includes the identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the Group shall assess the effectiveness of the changes in fair value of the hedging instrument when offsetting the exposure to changes in the fair value of the hedged item or in the cash flows, attributable to the risk hedged. Such hedges are expected to be highly efficient in achieving the offsetting of changes in the fair value or in the cash flows, and for this end they are permanently assessed throughout the information periods for which they were designated.

For hedging accounting purposes, hedges are classified and recorded as follows, once the strict criteria for their recording are complied with:

- **Fair value hedging,** when they hedge the exposure to fair value changes of assets or liabilities recognized or of non-recognized firm commitments.

  A change in the fair value of a derivative that is a hedging instrument is recognized in profit or loss in the statement of comprehensive income as finance cost or income. A change in the fair value of the item hedged attributable to the risk hedged is recorded as part of the recorded value of the hedged item and is also recognized in profit or loss in the statement of comprehensive income as finance cost or income.

  For the fair value hedging related to items recorded at amortized cost, the adjustments to the recorded value are amortized in profit or loss in the statement of comprehensive income throughout the remaining term until their maturity. Amortization of the effective interest rate may begin as soon as there is an adjustment to the recorded value of the hedged item, but it must start at the latest when the hedged item is no longer adjusted for their fair value changes ascribable to the risk being hedged. Amortization of

recorded value adjustments is based upon the effective interest rate recalculated on the amortization starting date. If the hedged item is derecognized, the non-amortized fair value is immediately recognized through profit or loss.

When a non-recognized firm commitment is designated as a hedged item, the subsequent accrued change in the fair value of the firm commitment attributable to the hedged risk shall be recognized as an asset or liability with their corresponding profit or loss recognized in the statement of comprehensive income.

- **Cash flow hedging,** when they hedge the attributed cash flow variations exposure, either to a particular risk associated to a recognized asset or liability or to a highly probable foreseen transaction, or to the exchange rate risk in a non-recognized firm commitment.

  The purpose of cash flow hedge accounting is to recognize in other comprehensive income the fair value of variations of the hedging instrument in order to apply them to the statement of comprehensive income when and at the rate that the hedged item affects them.

  The effective portion of the profit or loss for the measurement of the hedging instrument is immediately recognized in Other comprehensive income, whereas the ineffective portion is immediately recognized in profit or loss in the Statement of comprehensive income period as finance expense.

  Values recognized in the Other comprehensive income are reclassified into the profit or loss for the period when the hedged transaction affects profit or loss, as well as when the hedged financial income or financial expense is recognized, or when the foreseen transaction takes place. When the hedged item constitutes the cost of a non-financial asset or liability, the values recognized in the Other comprehensive income are reclassified at the initial recorded value of the no-financial asset or liability. If the foreseen transaction or the firm commitment is no longer expected, the accrued profit or loss previously recognized in Other comprehensive income is reclassified into the profit or loss for the period.

  If the hedging instrument expires or is sold, it is resolved, or is exercised without a replacement or successive renovation of a hedging instrument for another hedging instrument, or if its designation as hedging is revoked, any accumulated profit or loss previously recognized in other comprehensive income remains in the other comprehensive income until the foreseen operation or the firm commitment affects profit or loss.

- **Hedging of a net investment abroad,** when the instrument hedges the exposure to the variations in the translation of foreign businesses into the presentation currency of the Group associated to the exchange rate risk.

  The objective of the foreign-currency net investment hedging is to hedge the foreign exchange rate risks that a Principal or Intermediate Parent Company having businesses

abroad may have on the impact on the translation of financial statements from functional currency to presentation currency. The hedging of net investment in foreign currency is a hedging to the exposure in foreign currency, not a hedging of the fair value due to changes in the investment value.

Profit or loss of the hedging instrument related to the effective portion of the hedging are recognized through other comprehensive income, whereas any other profit or loss related to the ineffective portion is recognized through the statement of comprehensive income. For the disposition of the business abroad, the accrued value of the profits or losses recorded in the Other comprehensive income are reclassified through profit or loss for the period.

2.22.5 Off-setting of financial instruments

Financial assets and liabilities are subject to off-set in order to inform the net value in the Statement of financial position, only if (i) at the current time, there is a legally enforceable entitlement of off-set of recognized values; and (ii) there is the intention of settling them at their net value, or of simultaneously realizing the assets and cancelling the liabilities.

2.23 Inventories

Goods acquired with the intention of selling them during the ordinary course of business or of consuming them in the service rendering process are classified as inventories.

Inventories are valued at cost or net realizable value, whichever is lower. The net realizable value is the estimated sale price in the normal course of business, less the estimated finalization costs and the estimated costs necessary to sale them.

Inventories include merchandise in stock that do not require transformation, such as electricity, gas and water meters and procurement goods. They include materials such as minor spare parts and accessories for the rendering of services and the goods in transit and held by third parties.

Inventories are valued using the weighted average method and their cost includes the costs directly related to the acquisition and those incurred to give them their current conditions and location.

2.24 Impairment loss of non-financial assets

As of every presentation date, the Group assesses whether they have any indication that a tangible or intangible asset may be impaired. The Group estimates the recoverable value of the asset or Cash Generating Unit (CGU), at the moment it detects an indication of impairment, or annually (as November 30 and it is reviewed if there are relevant or significant events presented for the month of December that merit analyzing and to be included in the calculation of impairment) for goodwill and intangible assets with indefinite lifespan and those that are still being developed.

The recoverable value of an asset is the greatest value between the fair value less the costs of sale, either of an asset or a Cash- Generating Unit (CGU), and its value in use is determined for an individual asset, unless the asset does not generate cash flows that are substantially independent of those of other assets or groups of assets, in which case the asset must be grouped to a CGU. When a reasonable and consistent basis for distribution is identified, common/corporate assets are also allocated to the individual CGUs or distributed to the smallest group of CGU for which a reasonable and consistent basis for distribution can be identified. When the recorded value of an asset or a CGU exceeds its recoverable value, the asset is considered impaired and its value is reduced to its recoverable amount.

When calculating the value in use, the estimated cash flows, either for an asset or a CGU, are discounted at their current value through a discount rate before taxes that reflects the market considerations of the temporary value of money and the specific risks of the asset. An adequate assessment model is used for determining the reasonable value less the costs of sale.

Losses for impairment of continuing operations are recognized in profit or loss in those expense categories corresponding to the function of the impaired asset. Losses for impairment attributable to a CGU are assigned proportionately based on the recorded value of each asset to the non-current assets of the CGU after exhausting goodwill. The CGU is the smallest identifiable group of assets, which generates cash inflows in favor of the Group, which are largely, independent of cash flows derived from other assets or groups of assets. The Group defined CGUs considering: 1) The existence of revenue and costs for each group of assets, 2) The existence of an active market for the generation of cash flows and 3) the way in which its operations are managed and monitored. In order to assess impairment losses, the assets are grouped in the following CGU:

Subsidiary	CGU
Central Hidroeléctrica de Caldas S.A. E.S.P. (CHEC)	Generation
Electrificadora de Santander S.A. E.S.P. (ESSA)	
Empresas Públicas de Medellín E.S.P. (EPM)	
Hidroecológica del Teribe S.A. (HET)	
Central Hidroeléctrica de Caldas S.A. E.S.P. (CHEC)	Transmission
Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS)	
Electrificadora de Santander S.A. E.S.P. (ESSA)	
Empresas Públicas de Medellín E.S.P. (EPM)	
Transportista Eléctrica Centroamericana S.A. (TRELEC)	

Subsidiary	CGU
Almacenaje y Manejo de Materiales Eléctricos S.A. (AMESA)	Distribution
Caribemar de la Costa S.A.S. E.S.P. (AFINIA)	
Central Hidroeléctrica de Caldas S.A. E.S.P. (CHEC)	
Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS)	
Comercializadora Eléctrica de Guatemala S.A. (COMEGSA)	
Crediegsa S.A. (CREDIEGSA)	
Distribuidora de Electricidad del Sur (DELSUR)	
Electrificadora de Santander S.A. E.S.P. (ESSA)	
Elektra Noreste S.A. (ENSA)	
Empresa de Energía del Quindío S.A. E.S.P. (EDEQ)	
Empresa Eléctrica de Guatemala S.A. (EEGSA)	
Empresas Públicas de Medellín E.S.P. (EPM)	
Enérgica S.A. (ENERGICA)	
ENSA Servicios S.A.	
Inmobiliaria y Desarrolladora Empresarial de América S.A. (IDEAMSA)	
Empresas Públicas de Medellín E.S.P. (EPM)	Natural Gas
Aguas de Antofagasta S.A.	Water supply
Aguas de Malambo S.A. E.S.P.	
Aguas Regionales EPM S.A. E.S.P.	
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	
Empresas Públicas de Medellín E.S.P. (EPM)	
Empresas Públicas de Rionegro S.A. E.S.P. (EP RIO)	

Subsidiary	CGU
Aguas de Antofagasta S.A.	Wastewater management
Aguas de Malambo S.A. E.S.P.	
Aguas Nacionales EPM S.A. E.S.P.	
Aguas Regionales EPM S.A. E.S.P.	
Aquasol Morelia S.A. de C.V.	
Corporación de Personal Administrativo S.A. de C.V.	
Desarrollos Hidráulicos de Tampico S.A. de C.V.	
Ecoagua de Torreón S.A. de C.V.	
Ecosistema de Ciudad Lerdo S.A. de C.V.	
Ecosistemas de Celaya S.A. de C.V.	
Ecosistemas de Colima S.A. de C.V.	
Ecosistemas de Tuxtla S.A. de C.V.	
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	
Empresas Públicas de Medellín E.S.P. (EPM)	
Empresas Varias de Medellín S.A. E.S.P.	
Proyectos de Ingeniería Corporativa S.A. de C.V.	
Tecnología Intercontinental S.A. de C.V. TICSA	
Gestión de Empresas Eléctricas S.A. (GESA)	Others
Innova Tecnología y Negocios S.A. de C.V.	
Maxseguros EPM Ltd.	
Promobiliaria S.A.	

Impairment for goodwill is determined by assessing the recoverable value of each CGU (or group of CGUs) to which the goodwill relates. Impairment related to goodwill cannot be reverted in future periods.

For assets in general, excluding the goodwill, on each presentation date an assessment is conducted about whether there is any indication that the impairment losses previously recognized no longer exist or have decreased. If such indication exists, the Group makes an estimate of the asset or CGU recoverable value. An impairment loss previously recognized can only be reverted if there was a change in the assumptions used for determining the recoverable value of an asset since the last time impairment was recognized. Reversal is limited in such a way that the recorded value of the asset neither exceeds its recoverable amount, nor exceeds the recorded value that would have been determined, net of depreciation, if no impairment loss had been recognized for the asset in the previous years. Such reversal is recognized through profit or loss in the Statement of comprehensive income.

2.25 Provisions

Provisions are recorded when the Group has a current, legal or implicit obligation, as a result of a past event. It is probable that the Group has to give off resources that incorporate economic benefit to settle the obligation, and a reliable estimate can be made for the value of the obligation. In cases in which the Group expects the provision to be reimbursed as a whole or in part, the reimbursement is recognized as a separate asset, but only in the cases when such reimbursement is practically certain, and the asset value can be reliably measured. In the Group, each provision is only used for dealing with disbursement for which it was initially recognized.

Provisions are measured with the best estimate from management of expenditure necessary to settle the present obligation, at the end of the period being reported, considering the risks and the corresponding uncertainties. When a provision is measured using the estimated cash flow to settle the present obligation, its recorded value corresponds to the present value of said cash flow, using for the discount a rate calculated with reference to market yields for the bonds issued by the National Government. In Colombia, the yield of TES Bonds (public debt securities issued by the General Treasury of the Nation) at the end of the reporting period must be used.

Expense corresponding to any provision is presented in profit or loss in the Statement of comprehensive income net of all reimbursement. The increase in provision due to the time elapsed is recognized as finance expense.

Provisions for decommissioning

The Group recognizes as part of the cost of a fixed asset in particular, to the extent that there is a legal or implicit obligation of decommissioning or restoring, the estimation of the future costs in which the Group expects to incur in to perform the decommissioning or restoring and its balancing entry is recognized as a provision for decommissioning and restoring costs. The decommissioning cost is depreciated over the estimated useful life of the fixed asset.

Decommissioning or restoring costs are recognized at the present value of the expected costs of cancelling out the obligation using estimated cash flows. Cash flows are discounted at a pre-tax rate, which should be determined by reference; for subsidiaries in Colombia, for risk-free rates, the yield of TES bonds (public debt securities issued by the National Treasury) is used; for subsidiaries in Panama, market yields on bonds issued by the National Government are used and in El Salvador, yields on NOTASV25 (security title issued by the Republic of El Salvador maturing on January 2025).

Future estimated decommissioning or restoration costs are annually revised. Changes in the future estimated costs, on the estimated dates for expenditure, or on the discount rate applied are added or deducted from the asset cost, without exceeding the recorded value of the asset. Any surplus is immediately recognized through profit or loss. The change in the provision value associated to the time elapsed is recognized as financial expense in profit or loss in the Statement of comprehensive income.

Onerous Contracts

The Group recognizes as provisions the current obligations that are derived from an onerous contract, as provisions and its offsetting is in the Statement of comprehensive income in profit or loss. An onerous contract is the one in which the unavoidable costs of complying with the obligations it implies, exceed the economic benefits that are expected to receive therefrom.

Contingent Liabilities

The possible obligations that arise from past events and the existence of which shall be only confirmed by the occurrence or non- occurrence of one or more uncertain future events that are not entirely under the Group's control or the current obligations, that arise from past events, but that it is not probable, but possible, that an outflow of resources including economic benefits shall be required to settle the obligation or the amount of the obligation cannot be measured with enough reliability, are not recognized in the Statement of financial position, they are rather disclosed as contingent liabilities. Contingent liabilities generated in a business combination are recognized at fair value on the acquisition date.

Contingent Assets

Assets of a possible nature, that arise from past successes, the existence of which has to be confirmed only by the occurrence, or the non-occurrence, of one or more uncertain events in the future, that are not entirely under the Group control, are not recognized in the Statement of financial position, they are instead disclosed as contingent assets when their occurrence is probable. Whenever the contingent fact is true the asset and the income associated are recognized in the profit or loss for the period. Contingent assets acquired in a business combination are initially measured at their fair values, on the acquisition date. At the end of subsequent periods being reported, those contingent liabilities are measured at the greatest amount it would have been recognized and the amount initially recognized less the accrued depreciation recognized.

2.26 Employee Benefits

2.26.1 Post-Employment Benefits

Defined Contribution Plans

The contributions to the defined contribution plans are recognized as expenses in profit or loss in the Statement of comprehensive income at the moment when the employee has rendered the service that grants them the right to make the contributions.

Defined benefit plans

Post-employment benefit plans are those in which the Group has the legal or implicit obligation to respond for the payments of the benefits that were left to their charge.

For the defined benefit plans, the difference between the fair value of the plan assets and the present value of the plan obligation, is recognized as asset or liability in the statement of

financial position. The cost of giving benefits under the defined benefit plans is determined separately for each plan, through the actuarial assessment method of the projected credit unit, using actuarial assumptions on the date of the period being reported. Plan assets are measured at fair value, which is based upon the market price information and, in the case of quoted securities, it constitutes the published purchase price.

The actuarial profits or losses, the yield of plan assets, excluding the values included in the net interest on the net defined benefits on the liabilities (assets), and the changes in the asset ceiling effect are recognized in other comprehensive income. The actuarial profits or losses include the effects of changes in the actuarial assumptions as well as experience adjustments.

The net interest on liabilities (assets) for net defined benefits includes the interest income for the plan assets, interest cost for the obligation for defined benefits and interests for the asset ceiling effect and is recognized in profit or loss.

The current service cost, the past service cost, any settlement or reduction of the plan are immediately recognized through profit or loss in the statement of comprehensive income when they arise.

2.26.2 Short-term benefits

The Group classifies as short-term employee benefits those obligations with the employees that it expects to settle in the twelve months period following the closing of the accounting period when the obligation was generated, or the service was rendered. Some of these benefits are generated from the current labor legislation, from collective bargaining agreements, or from non-formalized practices that generate implicit obligations.

The Group recognizes the short-term benefits at the moment the employee has rendered their services, as the following:

A liability for an amount that shall be repaid to the employee, deducting the amounts already paid before, and its balancing entry as expense for the period, unless another chapter obliges or allows including the payments in the cost of an asset or inventory, for instance, if the payment corresponds to employees the services of whom are directly related to the construction of a work, it will be capitalized to that asset.

Amounts already paid before corresponding, for instance, to advanced payments of salaries, advanced allowances, among others, if they exceed the corresponding liability, the Group will have to recognize the difference as an asset in the prepaid expenses account, to the extent that the advanced payment gives place to a reduction in the payments to be made in the future or to a cash reimbursement.

According to the foregoing, the accounting recognition of short-term benefits is made upon occurrence of the transactions, regardless of when they are paid to the employee or to the third parties to which the Group has entrusted the provision of certain services.

2.26.3 Long-term benefits

The Group classifies as long-term employee benefits those obligations that it expects to settle after the twelve months following the closing of the accounting year or the period where employees provide the related services, i.e. from the thirteenth month forward; they are different from the short-term benefits, post-employment benefits, and contract termination benefits.

The Group measures long-term benefits in the same way as post-employment defined benefit plans. Although their measurement is not subject to the same uncertainty level, the same following methodology will be applied for its measurement:

- The Group should measure the surplus or deficit in a long-term employee benefit plan, using the technique applied for post- employment benefits both for estimating the obligation as well as for the plan assets.
- The Group should determine the value of net long-term employee benefits (assets or liabilities) finding the deficit or surplus of the obligation and comparing the asset ceiling.

Benefits employees receive year after year throughout their working life should not be considered "long term" if at the accounting year closing each year the Group has fully delivered them.

2.26.4 Termination Benefits

The Group recognizes as termination benefits, the considerations granted to the employees, payable as result of the decision of the company to terminate the labor contract to an employee before the normal retirement date or the decision of an employee to accept the voluntary resignation in exchange for such benefits.

2.27 Reinsurance activity reserves

Assets and liabilities under reinsurance contracts represent for the Group the best estimate of future collections and payments to be made for the risks assumed and ceded in reinsurance obligations; these are measured and recognized through technical reserves:

2.27.1 Unearned premium reserve (UPR)

Set aside for the fulfillment of future obligations derived from the assumed and ceded obligations from the current policies. They correspond to the portion of the premium that, at the date of calculation, has not yet been recognized as income or expense by the reinsurer. Its purpose is to adjust the result so that the profit is assigned to the period in which the premium was earned, regardless of when it was issued.

This reserve is calculated policy by policy, as the result of the total premium assumed between the number of days of the policy's validity, multiplied by the number of days corresponding to the time not running the risk at the date of calculation. The portion of the reserve corresponding to the reinsurer is also calculated, considering the ceded premium.

2.27.2 Certain loss reserve

This reserve is a provision of money that the Group must pay by claims already notified and pending of payment. Its purpose is to establish adequate reserves to guarantee the payment of incidents that have not been paid during the accounting period. This reserve is constituted per claim, on the date on which the insurer is aware of the occurrence of the loss and corresponds to the best technical estimate of the cost thereof. The amount of the constituted reserve is readjusted to the extent that more information is available and whether there are reports of internal or external settlers. The reserve includes the settlement expenses incurred to meet the claim, such as expenses due to attorney's fees for claims in judicial processes.

2.27.3 Incurred but not reported (IBNR) reserves

Represents an estimate of the amount of resources that the Group must allocate to meet future claim payments that have already occurred as of the date of calculation of this reserve but have not yet been notified or for which not enough information is available.

The following methodologies are used to calculate this reserve, the Bonesetter-Ferguson method and the Chain-ladder method. The Bornhuetter-Ferguson method is a standard actuarial method used to estimate final claims costs. The technique combines; (a) an initial benchmark or market estimate of final losses; and (b) an estimate of final losses based on actual claims experience to date. The former is based on a measure of exposure, such as premiums or number of policies. The latter is based on claims paid or incurred to date. The two estimates are combined using a formula that gives more weight to the estimate based on experience over time. The chain ladder method is a standard actuarial method that can be applied to premiums, claims paid, reserves for claims outstanding or claims incurred, or number of claims. The method involves analysis of historical claims development factors (the proportion of amounts accumulated in a development period to the previous development period). Based on this analysis, a development pattern is selected and then used to estimate future claims/premium development.

2.28 Liability adequacy test

Technical provisions recorded by the Group are regularly subject to proof of reasonableness to determine its sufficiency. If the result of the test shows that the provisions are insufficient, they are adjusted with a charge to profit or loss.

2.29 Service concession arrangements

The Group recognizes the service concession arrangements pursuant to the interpretation requirements of the IFRIC 12 Service Concession Arrangements.

This interpretation is applicable to those concessions where:

- The grantor controls or regulates which services the operator with the infrastructure should provide, to whom and at what price.
- The grantor controls, through ownership, the right-of-use, or otherwise, any significant residual ownership in the infrastructure at the end of the term of the arrangement.

The Group does not recognize these infrastructures as property, plant and equipment, it recognizes the consideration received in the contracts that meet the above conditions at its fair value, as an intangible asset to the extent that the Group receives an entitlement to make charges to users of the service, provided that these entitlements are conditioned to the service use level, or as a financial asset, to the extent that there is an unconditional contractual entitlement to receive cash or other financial asset, either directly from the assignor or from a third party. In cases where the Group receives payment for the construction services, partly through a financial asset and partly through an intangible asset, each component of the consideration is recorded separately.

Financial assets of service concession arrangements are recognized in the statement of financial position and subsequently are measured at amortized cost, using the effective interest rate. Assessment of impairment of these financial assets is made according to the value impairment policy of the financial assets.

Intangible assets of service concession arrangements are recognized in the Separate statement of financial position as intangible assets denominated "intangible assets for service concession agreements" and are amortized on a linear basis within the term of duration thereof.

Revenue and costs related to the operating services are recognized according to the accounting policy of revenue and the services related to construction or improvement services according to the accounting policy of construction contracts. Contractual obligations assumed by the Group for maintenance of the infrastructure during its operation, or for its return to the assignor at the end of the concession arrangement in the conditions specified therein, to the extent that it does not assume an income-generating activity, is recognized following the provisions accounting policy.

2.30 Fair Value

Fair value is the price that would be received when selling an asset or that would be paid when transferring a liability in an orderly transaction between market participants on the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique.

When estimating the fair value, the Group considers the characteristics of the asset or liability in the same way market participants will consider them when setting the value of the asset or liability on the measurement date. Fair value for measurement and disclosure purposes

in financial statements is determined on that basis, except for transactions of stock-based payments, lease transactions, and measurements that have certain similarities with fair value but that are not fair value, such as the net realizable value or the value at use. The fair value of all financial assets and liabilities is determined at the financial statements' presentation dates, for recognition and disclosure in the notes to the financial statements.

Fair value is determined:

- Based on prices quoted in assets or liabilities markets identical to those the Group can access on the measurement date (level 1).
- Based on inputs applied on valuation methodologies commonly used by market participants, which are different from observable quoted prices for assets or liabilities, directly or indirectly (level 2).
- Based on internal valuation techniques of cash flow discounts or other valuation models, using variables estimated by the Group that are non-observable for the asset or liability, in the absence of variables observed in the market (level 3).

Note 46 Measurement of fair value on a recurring and non-recurring basis provides an analysis of the fair values of financial instruments and non-financial assets and liabilities and more detail of their measurement.

2.31 Operating segments

An operating segment is a component of the Group that develops business activities from which it can obtain revenue and incur in costs and expenses, on which there is financial information and the operating results of which are revised on a regular basis by the Group's highest chief operation decision maker, which is the Management Board, to decide on the resource allocation to the segments and the Management Committee to evaluate their performance.

The financial information of operating segments is prepared under the same accounting policies used in the elaboration of these consolidated financial statements.

2.32 Cash dividends and surpluses distributed to shareholders and owner of the Group

The Group recognizes a liability to make the distributions to the owner of the Group in cash when distribution is authorized, and it is no longer at the Group's discretion. The corresponding amount is recognized directly through net equity.

2.33 Presentation Changes

At the end of the 2020 period, changes were made in the presentation of some items in the statement of comprehensive income and the statement of cash flows, for comparative

purposes 2019 is also adjusted, these changes do not affect decision-making, since they basically consist of In reclassifications between items of the same financial statement and that are intended to facilitate their reading by users, the reclassified items were the following:

Concept	Previous presentation	Current presentation	2020	2019
Statement of Comprehensive Income				
Commissions	Other income	Provision of services	6,206	33,730
Fees	Other income	Provision of services	1,386	2,253
Investment property leases	Other income	Leasing	20	16
Gain on derecognition of rights of use	Other income	Gain on sale of assets	152	16
Statement of Cash Flows				
Reversal of impairment loss on accounts receivable	Reversal of impairment loss of accounts receivable	Impairment of accounts receivable, net	(138,270)	(152,542)
Inventory write-downs, net	Other non-cash income and expenses, net	Inventory write-downs, net	848	36
Other financial expenses	Other non-cash income and expenses, net	Gain (loss) on valuation of financial instruments and hedge accounting	38,323	64,302
Administration and issuance of securities	Other non-cash income and expenses, net	Gain (loss) from valuation of financial instruments and hedge accounting	666	674
Compensation for damage to assets	Other non-cash income and expenses, net	Result from indemnification of activities associated with investment cash flows	(192)	(28,295)
Provision for insurance and reinsurance	Other non-cash income and expenses, net	Provisions for tax, insurance and reinsurance obligations and financial restatement	4,214	2,455
Other financial income	Other non-cash income and expenses, net	Interest income and yields	(9,571)	(3,756)
Yield from monetary restatement	Other non-cash income and expenses, net	Interest income and yields	(10)	(12)
Commissions	Other non-cash income and expenses, net	Interest and commission expense	10,059	7,534
Loss on derecognition of rights of use	Other non-cash income and expenses, net	Gain or loss on retirement of property, plant and equipment, right-of-use assets, intangible assets and investment property	(10)	13
Loss on retirement of property, plant and equipment	Other non-cash income and expenses, net	Gain or loss on retirement of property, plant and equipment, right-of-use assets, intangible assets and investment properties	14,908	99,445
Non-cash recoveries	Other non-cash income and expenses, net	Unrealized recoveries	(111,208)	(310,004)
Discontinued operations	Other non-cash income and expenses, net	Income (loss) from discontinued operations, net of income taxes	-	(48,245)
Loss on deferred regulatory accounts	Other non-cash income and expenses, net	Result from deferred regulatory accounts	(22,110)	98,009

Amounts stated in millions of Colombian pesos

Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements

The following are the significant judgments and assumptions, including those that involve accounting estimates that the Group management used in the application of the accounting policies under IFRS adopted in Colombia, and that have significant effect on the values recognized in the consolidated financial statements.

Estimates are based upon historic experience and as a function of the best information available on the facts analyzed by the cut-off date. These estimates are used for determining the value of the assets and liabilities in the separated financial statements, when it is not possible to obtain such value from other sources. The Group assesses its estimates on a regular basis. Actual results may differ from those estimates.

The significant estimates and judgments made by the Group are described below:

- **Assessment of impairment indicators for assets, goodwill and asset valuation for determining impairment.**

  The condition of the assets is revised on each report presentation date, in order to determine whether there are indications that any of them has suffered an impairment loss. If there is impairment loss, the recoverable amount of the asset is affected, if the estimated recoverable amount is lower, its value is reduced to its recoverable value and impairment loss is immediately recognized in profit or loss for the period.

  Assessment of impairment indicators is based on external and internal factors, and in turn on quantitative and qualitative factors. Assessment is based on financial results, on the legal, social and environmental settings, and on market conditions; significant changes in the scope or in the way in which the asset or CGU is used or expected to be used and evidence of obsolescence or physical deterioration of and asset or CGU, among others.

  Determining whether goodwill has suffered impairment implies the calculation of value at use for the CGUs to which it has been assigned. The calculation of the value at use requires that the entity determines future cash flows that should arise from CGUs and a discount rate appropriate to calculate the current value. When the actual future cash flows are lower than expected, an impairment loss may arise. (See note 8 Impairment of assets).

- **Assumptions used in the actuarial estimate of post-employment obligations with employees.**

  The assumptions used in the actuarial studies include: demographic assumptions and financial assumptions, the former refer to the characteristics of the current and past employments, and relate to the mortality rate, employee turnover rates, the latter relate

to the discount rate, the increases in future salaries, and the changes in future benefits. (See note 26 Employee benefits).

- **Lifespan and residual values of property, plant and equipment and intangibles.**

  In the assumptions used for determining the lifespans, technical aspects such as the following are considered: periodical maintenances and inspections made to the assets, failure statistics, environmental conditions and operating environment, protection systems, replacement processes, obsolescence factors, recommendations of manufacturers, climate and geographical conditions, and experience of the technicians that know the assets. Characteristics as market values, reference magazines, and historic sales data are considered for determining the residual value. (See note 5 Property, plant and equipment, net; note 7 Goodwill and other intangible assets).

- **Assumptions used for calculating the fair value of financial instruments including credit risk.**

  The Group discloses the fair value corresponding to each class of financial instrument in such a way it allows comparing it with the recorded values. Macro-economic projections calculated within every company of the Group are used. Investment portfolio is valued at market price. In its absence, a similar one is looked for in the market and if not, assumptions are used.

  - Derivatives are estimated at fair value. (See note 25 Derivatives and hedging).
  - Receivables are estimated at the market rate in force and effect for similar credits. Receivables from employees are valued as to mass debtors, except for housing loans (See note 13 Trade and other receivables).
  - For equity investments, the methodology is cash flow; it is estimated at the market price for those offered in the stock market. (See note 14 Other financial assets).

- **Likelihood of occurrence and value of contingent or uncertain-value liabilities.**

  The assumptions used for uncertain or contingent liabilities include the classification of the legal process by the "expert judgment" of the area professionals, the type of contingent liability, the possible legislative changes, and the existence of high-court rulings that applies to the concrete case, the existence of similar cases within the Group, the study and analysis of the substance of the issue, the guarantees existing at the time of the events. The Group shall disclose and not recognise in the financial statements those obligations classified as possible; obligations classified as remote are not disclosed nor recognized. (See note 28 Provisions, contingent assets and liabilities).

- **Future expenditure for asset decommissioning and retirement obligations.**

  In the assumptions used for determining future expenditure for asset decommissioning and retirement obligations, aspects such as the following were considered: estimate of future outlays in which the Group must incur for the execution of those activities associated

to asset decommissioning on which legal or implicit obligations have been identified, the initial date of decommissioning or restoration, the estimated date of finalization and the discount rates. (See note 28 Provisions, contingent assets and liabilities).

- **Determination of existence of finance or operating leases based on risk transfer and benefits of the leased assets.**

  The significant assumptions considered to determine the existence of a lease include the assessment of the conditions if the right to control the use of the asset is transmitted for a period of time in exchange for a consideration, i.e., assessment of the existence of an identified asset; the right to obtain substantially all economic benefits from the use of the asset over the period of use; the right to direct how and for what purpose the asset is used throughout the period of use; the right to operate the asset over the period's use without any changes in the operating instructions. (See note 15 Leases).

- **Recoverability of deferred tax assets.**

  Deferred tax asset has been generated by the temporary differences that generate future fiscal consequences in the financial position of the Group. These differences are essentially represented in fiscal assets that exceed the assets under IFRS adopted in Colombia, and in fiscal liabilities, lower than the liabilities under IFRS adopted in Colombia, such as it is the case of the pension liability components, the amortized cost of bonds, finance lease, and other sundry provisions and contingency provisions.

  The Group's deferred tax asset is recovered in the liquid income taxed on the current income tax generated in each company of the Group. (See note 41 Income tax).

- **Determination of whether a pool of assets qualifies as a discontinued operation.**

  Significant assumptions for a pool of assets to be classified as a discontinued operation include being a component of an entity that has been disposed, or classified as held for sale, and represents a line of business or a geographical area that is significant and can be considered separate from the rest and is part of a single coordinated plan for its sale.

  The Group classifies a non-current asset (or a disposition pool) as held for sale when its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

  To apply the above classification, the asset (or disposition pool) must be available, in its current condition, for immediate sale, subject only to the usual and customary terms for the sale of such assets (or disposition pool), and its sale must be highly probable. (See note 42 Discontinued operations).

- **Determination of Control, Significant Influence or Joint Control over an Investee.**

  Significant influence on VE Servicios de Eficiencia Energética S.A.S.

  As of December 31, 2019, the Group, through its subsidiary EPM Latam S.A., holds 2.1% of the equity instruments of VE Servicios de Eficiencia Energética S.A.S, However, due to

contractual agreements and representation on the Board of Directors of the entity with 2 of 5 members, the Group exercises significant influence over the financial and operating policy decisions of VE Servicios de Eficiencia Energética S.A.S. and, therefore, is included in the Group's consolidated financial statements as an investment in an associate measured by the equity method. (See note 11 Investments in associates).

- **Assessment of portfolio impairment**

  For calculating expected credit loss, each obligation is assigned an individual probability of non-payment that is calculated from a probability model involving sociodemographic, product and behavior variables.

  The model will be applied based on the Scorecard developed considering the information of each company of the Group. The models are defined according to the information available and the characteristics of the population groups for each one. Even though the methodology applies to all accounts with balance, some exclusions must be considered, such as: derecognized accounts; self- consumptions; contributions; public lighting and in general charges from third parties. For its calculation, it is previously defined the moment from which it is considered that an obligation was defaulted and will not be recovered.

  To calculate the credit loss of trade and other receivables (except accounts receivable among economically related parties), the following formula is used:

  PE = Exposed balance * PD * LGD

  Where, the PD component (probability of default) is derived from the result of a statistical model that provides the probability that each account will default on the following twelve months. This individual probability is located within a range found in order to attenuate fluctuations in the value of the general provision from one month to the next and stabilize its behavior, resulting in a standard PD by rank.

  The loss given the default (LGD) is defined as the economic deterioration that the entity would incur in the event of any of the situations of default. It is a percentage obtained from a table taken from the current regulations of the Superintendencia Financiera de Colombia (Superintendence of Finance of Colombia), Chapter II of External Circular 100 of 1995. (See note 13 Trade and other receivables)

- **Revenue estimates**

  The Group recognizes revenue from the sale of goods and the rendering of services to the extent that the performance requirements for the Group are met, regardless of the date on which the corresponding invoice is issued, to carry out this estimate information from contracts or agreements with customers is taken and so the value to be recognized in revenue is stablished.

  If the moment at which revenue should be recognized is uncertain, the Group determines to recognize revenue at the moment in which the performance obligation is satisfied, for

those performance obligations satisfied over time it is common to use a method of the measured resource as executed costs compared to estimated costs.

For other concepts different from the supply of public home utilities, the Group estimates and recognizes the value of revenue from sales of goods or rendering of services based on the terms or conditions of interest rate, period, etc., of each contract that causes the sale.

In the month after recording the estimated revenue, its value is adjusted by the difference between the value of the actual revenue already known against the estimated revenue. (See note 32 Revenue).

- **Operating Segments**

  The determination of the operating segments is done using information that is regularly provided to the highest decision-making authority in the Group and the segmentation of said information is identified. Once these segments have been identified, the capacity to generate income and incur costs and expenses of the identified groups is analyzed. Likewise, it is verified whether the maximum decision-making authority reviews the returns and allocates resources based on this segmentation. Finally, it is examined whether disaggregated financial information is available to support this segmentation. In addition to the above factors, the Group's approach and management are analyzed, in order to consider current possible segments that may arise in the future, according to its strategy. (See note 48 Operating segments).

Note 4. Significant transactions and other relevant aspects during the period

Significant transactions and other relevant aspects that occurred during the period, different from those of the normal business of the Group, are related with:

4.1 Expenses and others related to the contingency of the Ituango Hydroelectric Project:

- Construction and repair work to mitigate risks continues.
- The sale continues, through the auction figure, of the useless equipment derived from the contingency.
- The protocol for attention to events and crises (PADEC) continues to prevent the spread of the coronavirus (COVID-19). With about 6,000 workers in the Project facilities, there are 109 confirmed cases of COVID-19 in recent months. This data continues to demonstrate the strong adherence of employees to biosafety protocols and the effectiveness of the strategies implemented such as proximity handles, which allows timely decision-making.
- On August 10, 2020, Empresas Públicas de Medellín E.S.P. (hereinafter, EPM) requested the Office of the Attorney General of the Nation to summon the (i) Generación Ituango Consortium and also the companies that currently comprise it (Integral S.A. and Integral Ingenieria de Supervisión S.A.S.); (ii) Consorcio CCC Ituango, as well as the companies that comprise it (constituted by Construções e Comércio Camargo Corrêa S.A., Conconcreto S.A. and Coninsa - Ramón H. S.A.); (iii) Ingetec-SEDIC Consortium, and the companies that compose it (Ingetec S.A. and Sedic S.A.); (iv) Seguros Generales Suramericana SA, and (v) Chubb Seguros to a hearing for a preliminary ruling in law, in order to settle the differences that have arisen between the aforementioned, due to the events arising on April 28, 2018 in the Ituango´s hydroelectric project. Likewise, EPM filed an arbitration claim against Mapfre Seguros Generales de Colombia S.A. under the all-risk construction policy No. 2901211000362. Faced with the failure of the conciliation hearings, the claims were filed on January 12, 2021 before the Administrative Litigation Jurisdiction and the Medellín Chamber of Commerce, respectively.
- On December 23, 2020, the following bilateral modification acts (AMB) were signed until December 31, 2021 for the following contracts of the Ituango Hydroelectric Project, as follows: AMB N ° 39 Construction of the Dam, Power Plant and associated Works of the project: Consorcio CCC Ituango. (Made up of firms Camargo Corrêa Infra S.A., Constructora Conconcreto S.A. and Coninsa - Ramón H. S.A.); AMB N°12 Advice during the construction of the project, with the Generación Ituango Consortium (Made up of firms Integral Ingeniería de Supervisión S.A.S. and Integral Ingeniería de Consulta S.A.) y AMB N°6 Audit Service during the construction of the civil works and the assembly of the electromechanical equipment of the Project, contractor: Ingetec-Sedic Consortium.

Regarding the contingency, the EPM Group has recognized the next items in its consolidated financial statements as of 31 December 2020:

- Cost and progress of construction of the Ituango hydroelectric project for $11,140,307 (See note 5).
- Receivables from the insurance company Mapfre for $378,639 for impairment of civil works and total loss of machinery and equipment covered by the all-risk and construction policy and, $8,000 for non-contractual civil liability (see note 13).
- Provision for $ 45,985 for the care of those affected by Puerto Valdivia, for compensation for emergent damage, loss of earnings, and non-pecuniary damage, due to the rising waters of the Cauca River as a result of the plugging of the project on April 28, 2018. During 2020, $ 35,043 has been recognized as a provision and payments for $ 24,931 have been made (see note 28.1.6).
- Provision for $ 5,616 for the care of people who had to evacuate as a result of said event. During 2020, $ 7,323 has been recognized as a provision and payments have been made for $ 5,963 (see note 28.1.6).
- Provision for $ 88,547 for environmental and social contingency, established by the specific action plan for the recovery of the parts affected by the events of the plugging of the diversion tunnel of the Cauca river that the project had on April 28, 2018 and by the closure of gates that decreased the flow of the river downstream of the project. During 2020 $ 57,989 has been recognized as a provision and payments for $ 24,295 have been made (see note 28.1.1).
- Provision for $ 174,318 for non-compliance from July 2021 to November 2022, to the Intercolombia transporter for the months after the connection infrastructure of the Ituango project came into operation. During 2020 $ 65,687 has been recognized as a provision and no payments have been made for this concept (see note 28.1.5).
- Additionally, other expenses of $4,278 were recognized in the Statement of Comprehensive Income for the attention of the community affected by the contingency (see note 37).

4.2 Effect of the difference in exchange:

As of December 31, 2020, an accumulated expense was recognized for the net exchange difference of $ 374,260, originated by the accumulated devaluation of the Colombian peso against the US dollar of 4.74% and a closing rate of $ 3,432.50. The devaluation observed in the period January - December 2020, presented two relevant moments; the first between March and May 2020 has been generated by the high volatility in financial markets due to the economic crisis as a consequence of the COVID-19 pandemic and the uncertainty generated by the reactivation of the economy, and the price war of the oil in the first quarter of the year, leading the exchange rate to reach historical maximum levels above $ 4,100 and with a devaluation above 24%, leading at that time to an effect on exchange difference of the order of $ 1.3 trillion. The second moment comes from June where the intervention of central banks worldwide with injection of liquidity and interest rate cuts, the OPEC agreements with

cuts in oil production and better prospects for vaccination plan against COVID 19 at a global level, generated a decrease in the volatility of the exchange rate and a favorable evolution in its price, until reaching December 31 the closing rate of $ 3,432.50.

Once some stabilization of the financial markets occurred and the approval of external and internal regulations had been obtained, EPM executed hedging operations on the exchange exposure of its financial debt for an amount of US $ 1,454 million at an average exchange rate of $ 3,672. These operations neutralize the exchange risk, at the rates agreed in each transaction, from the moment of its execution until the expiration of the same (Nov-2021, Jul-2029 and Feb-2031).

In the consolidated statement of financial position, some items such as goodwill, other intangible assets, credits and loans, creditors and other accounts payable, among others, have recorded impacts due to the above effect.

4.3 COVID-19:

The sector of public services companies and therefore the companies of the EPM Group, are faced with the health emergency due to COVID-19, government measures for the management of the pandemic, the impacts of the trade war for the oil and macroeconomic changes as a result of the volatility of international financial markets, which manifests itself in a recession in the global economy and the consequent high volatility of the exchange rate. As a consequence, a risk is generated for the operation of the businesses, which has been affected by the decrease in demand and lower prices due to the displacement in the application of rate increases and normally automatic indexations of rates, due to the measures taken by the government and some decisions of the Group.

Government measures in the operation countries:

- **In Colombia**

  The Ministry of Health and Social Protection, through Resolution 385 of March 12, 2020, declared the health emergency until May 30, 2020, with the aim of preventing and controlling the spread of COVID-19 and mitigating its effects. Which was extended until August 31, 2020 by Resolution 844 of 2020, a date that will be taken as a reference for the extension of the terms of some of the provisions provided in the resolutions issued.

  The National Government decreed the State of Economic, Social and Ecological Emergency throughout the territory of the Republic, through Decree 417 of March 17, 2020, as a consequence of COVID-19, announcing some measures to mitigate the adverse effects it generates in the social and economic sector.

  On the occasion of the declaration of the State of Economic, Social and Ecological Emergency, the National Government has adopted additional measures necessary to avert the crisis and prevent the extension of its negative economic effects and the Government will have the necessary budgetary operations to carry them out.

These measures have also been aimed at the home public services sector in order to guarantee continuous provision to users and provide them with support and economic relief during the period of confinement, minimizing in turn the impact on the financial stability of the sector; within these measures we have:

- Legislative Decree 441 of March 20, 2020 of the Ministry of Housing, City and Territory (MVCT), by which the measures adopted in the sector of drinking water and basic sanitation are established to face the economic, social and ecological emergency, and to guarantee the supply of drinking water and thus allow all citizens to adopt hygiene and health measures required to slow the spread of the COVID-19 virus, including (i) reinstatement and / or immediate reconnection of the aqueduct service to the residential subscribers suspended and / or cut off, (ii) access to drinking water in health emergencies, (iii) use of the resources of the General Participation System for drinking water and basic sanitation (iv) suspension of the tariff increases of the domiciliary public services of aqueduct and sewerage.
- Legislative Decree 517 of April 04, 2020 of the Ministry of Mines and Energy (MME), through which provisions were issued on the matter of public services of electricity and fuel gas, such as: Guarantee the continuous and effective provision of public services; grant deadlines for the payment of the consumption of said services; finance the payment without any interest or financial cost being transferred to the end user for the deferral of the collection; generate incentives for timely payment; creation of the voluntary contribution, among others.
- Decree 528 of April 7, 2020 of the MVCT, which establishes measures to guarantee access to water to the population, without the economic restrictions that prevent the timely payment of the billing, justifying the non-provision of the service, for which, provisions are created that the entities that provide water Public aqueduct, sewerage and cleaning services can offer users the possibility of deferring the payment of bills caused during the economic, social and ecological emergency, under the same conditions that are designed to give liquidity to the public service providers for these purposes. Among the measures for companies that provide public water supply, sewerage and / or cleaning services, there are: (i) deferred payment of the fixed charge and unsubsidized consumption of water supply, sewerage and cleaning services, (ii) payment financing without transferring any interest or financial cost to the end user for the deferral of the collection, (iii) within the framework of commercial management they may design options or incentives in favor of their subscribers and / or users who pay the invoices on time to their charge during this period, in order to contribute to the recovery of the portfolio and guarantee its financial sustainability.

- **In Chile**

The constitutional state of emergency of catastrophe was decreed, due to public calamity for 90 days as of March 18, 2020, extended for another 90 days as of June 16, 2020, considering the following measures, among others:

- Reconnection of users to suspended or cut public services.
- Rate freeze.
- Offer of refinancing plans and interest forgiveness, so that they can opt for the vital element permanently.
- Total quarantine in cities with a high percentage of infections.
- Employment protection measures and suspension benefits (unemployment insurance).
- Adequacy of work at home and presence in the offices once a week of some workers.

Issuance of Decree No. 420 of 2020 of the Ministry of Finance, published on April 1, 2020, which establishes a series of tax measures, in order to lessen the negative effects that the COVID- disease has generated and will continue to generate. 19 to families, workers and micro, small and medium-sized companies in the country that have been affected in the normal operation of their businesses and their levels of sales, liquidity and working capital.

- **In El Salvador**

Issuance of Legislative Decrees N ° 601 and N° 618 and, Agreement of the Ministry of Economy N° 565, considering the following measures:

- Defer the payment of the invoices issued from 03/20/2020 to 06/20/2020 for the supply of electricity for the months of March, April and May 2020, to be paid in a period of up to 24 months in installments leveled from the expiration of the postponed term, for residential users with consumption below 250Kwh per month and general users with consumption below 1000 Kwh per month, in addition to the normal charge of the bills of the respective month.
- The invoices to defer their payment will not have surcharges for any concept of delay, interest or other penalty.
- Suspend the power cut off to all customers for the duration of the emergency, that is until 06/20/2020 (tentatively depending on the state of emergency).
- The regulatory body restricted the work to be carried out in the electrical networks to only the minimum necessary to maintain the service, granting mobility letters for the necessary employees and established guidelines for the reporting of operation and maintenance activities during the emergency.
- It was agreed with the entire electricity sector of the country that the energy distribution companies would only pay the generators proportionally based on the collection, that is, according to the collected part of the billing, for the months of April, May and June 2020.
- As of June 16, 2020, a process of gradual opening of the economy was established, separating it into 5 phases, with a time horizon of each of 15 days, however, due to the conditions of the contagion of COVID- 19 in the country, which is at its highest

level, the first phase is maintained and the following are subject according to the assessment made by the health authorities on the situation of the health emergency.

- **In Guatemala**
  - Issuance of Decree No. 15-2020, which establishes that people with consumption of less than 200 KWH must be given payments of up to 12 installments without interest. If the client exceeds the consumption range of 201 KWH, payments can be made at an interest rate of 8% per year.
  - Issuance of Government Agreement No. 074- Regulation of Decree No. 15-2020 that defines who applies said Decree.
- **In México**

  With the issuance of the Agreement on March 24, 2020, issued by the Ministry of Health, the Government established preventive measures for mitigation and control of health risks that the disease caused by the SARS-CoV2 virus (COVID-19) implies. and the Central Bank, through monetary and fiscal interventions to stabilize economic conditions, have made the following decisions, among others:
  - Travel bans, quarantines, social distancing, and non-essential service closures.
  - Suspension of some credit and loan maturity terms by financial entities and persons subject to the supervision of the National Banking and Securities Commission.
- **In Panamá**

  On March 13, 2020, the Cabinet Council declared a state of emergency.

  Through Law 152 of May 4, 2020, special social measures are adopted for the temporary suspension of the payment of public services and other measures in response to the State of National Emergency. This Law was regulated by Executive Decree No. 291 issued by the Ministry of Economy and Finance - MEF on May 13, 2020.

  With Resolution N ° AN 16095-ELEC of May 21, 2020, issued by the National Public Services Authority, the transitory measures that must be implemented and applied by participants of the wholesale electricity market in Panama due to the emergency are approved. national decreed for reasons of COVID-19.

Going Concern:

The EPM Group is committed to guaranteeing the continuity and provision of the service, as well as to mitigating the impacts that the crisis generates on its finances, for which it has been implementing measures that are summarized as: Review the non-mandatory investment plan and prioritize costs and expenses, without putting the operation at risk and postponing expenditures that do not generate income in the short term. Together with the above, a strategy was implemented to ensure the liquidity of the Group's companies, which involved the disbursement of loans for $ 2,453,720 and the placement of bonds in the international capital market by EPM for USD750 million equivalent to $ 2,727,496

and of the subsidiary Aguas de Antofagasta SA for CLP94,734 million equivalent to $ 445,209 (see note 22. Credits and loans), ensuring a strong cash position. Likewise, a Crisis Committee was created, working at home was adopted and teleworking has been strengthened in all the processes in which it is possible, and biosafety protocols were implemented, in order to ensure the health of employees. , contractors and suppliers of the Group.

Financial impacts:

The effects of the economic situation in general have resulted in a decrease in collection levels, with the consequent increase in the deterioration of accounts receivable from customers and the costs of financing them, in addition, demanding greater working capital. Likewise, lower income and higher expenses have been generated in the operation for the attention of COVID-19, among which stand out, lower consumption or demand of public services, costs of mandatory reconnections to clients who did not have the service and those related to the implementation of established biosafety protocols and unbilled default interest.

As of December 31, 2020, the most significant effects on the Group's consolidated interim financial statements are detailed below:

- Lower value in the collection of accounts receivable for $ 627,420 (see note 13).
- Higher expense for portfolio impairment of $ 120,882 (see note 13).
- Lower income from ordinary activities for $ 1,395,811 due to lower consumption or demand for public services, variation in invoiced rates, discounts for timely payment and decreases in other services rendered (see note 32).
- Lower costs for the provision of services, net of $ 814,212 related to lower consumption or demand for public services, saving measures, reconnections, general costs and orders and contracts (see note 35).
- Increase in administrative expenses and other ordinary expenses for $ 17,338 related to general expenses, personal services, social measures such as contributions and donations (see notes 36 and 37).
- Lower financial income of $ 11,532 related to the refinancing of accounts receivable and unbilled interest on arrears (see note 38.1).
- Higher financial expenses, net of $ 18,032 corresponding to refinancing of credits and loans, cost of financing commercial debtors and other financial expenses. (see note 38.2).

4.4 Judicial process against the Municipality of Bello:

After approximately nine (9) years of the processing of a judicial process, advanced by EPM against the Municipality of Bello, based on a lawsuit filed against the administrative act that determined the participation and liquidation of the capital gain generated by the change

of land use In the area where some of the properties owned by the Company are located, the Fourth Section of the Council of State in a decision of second instance against which no appeal proceeds, declared the nullity of the act and ordered the return in favor of EPM of the sum of $ 89,527, which must be indexed from December 29, 2009, the date on which the payment of the tax was made and until the execution of the sentence (December 10, 2020), onwards, they will pay interest.

4.5 Intervention of the wastewater treatment plants of the subsidiary Desarrollos Hidráulicos de Tampico, S.A. de C.V. - DHTAM by the Municipal Commission for Drinking Water and Sewerage of the Conurbation Zone of the Pánuco River Mouth - COMAPA:

On September 29, 2020, the Tierra Negra and Morelos wastewater treatment plants and the osmosis and microfiltration treatment plant - PTOI, were affected by the receipt of a notification of the start of the administrative cancellation procedure by COMAPA, which aims to verify the legality or illegality of various legal acts related to the bidding, failure and subscription of the Service Provision Contract (CPS) between COMAPA and DHTAM, on the other hand, the same Agency notified DHTAM of the decree of a precautionary measure and using public force carried out the dispossession of the plant facilities, the object of said precautionary measure consisted, as explained by COMAPA, in the precautionary assurance of goods, rights and possessions and the temporary consignment of the same to the Agency in order to ensure the proper continuity of operations and the effective provision of services related to trade sewage treatment.

The intervention by the authorities of the State of Tamaulipas, Mexico, is argued in irregularities in the tender of the contract dating from 1995 against the public officials who carried out the process. Derived from said act, the subsidiary Desarrollos Hidráulicos de Tampico, S.A. de C.V. has been unable to carry out its operation. Consequently, the company's management has implemented the case study and filed the corresponding legal actions, as well as:

Protection judgment 652/2020

In the initial brief of the claim, in essence, the requested office was claimed by means of which COMAPA initiated the alleged Administrative Procedure for Annulment and the precautionary assurance document by means of which COMAPA issued a precautionary attachment measure against of the PTARS; claiming the illegality of said trades by violating minimum guarantees regulated in articles 14 and 16 of the Constitution; as well as, the due foundation regarding the authority's competence and the principle of legality; the foregoing taking into consideration that the aforementioned cancellation procedure has no basis in the applicable legislation. This writing was admitted by agreement of October 26, 2020.

In the third and last extension of the claim with respect to the initial brief, the official letter without number was essentially claimed, by means of which the COMAPA board of directors issued the supposed resolution that puts an end to the administrative procedure. Through

the official letter without a number, COMAPA in essence decided to declare the nullity of all the acts supposedly "revised" in the annulment procedure and that all of DHTAM's assets now pass to the patrimony of COMAPA and the State of Tamaulipas.

The Company in front of this writing seeks to declare the nullity of the letter without number, since it constitutes an act of confiscation committed to the detriment of DHTAM and therefore, that it does not have any legal effect, it is worth mentioning that the new date for holding the constitutional hearing, which has been deferred, among other issues, due to the lack of rendering of the prior report from the authorities and due to the suspension of deadlines derived from the SARS-CoV2 health contingency (Covid-19).

The content of the resolution of said amparo by means of which the granting of said suspension measures was resolved, suggests that both the Tenth Judge and the First Collegiate Court in Civil and Administrative Matters of the Nineteenth Circuit ("Tamaulipas Collegiate Court") agree that the acts committed by COMAPA are not substantiated, therefore, they are outside the margin of the law.

In this sense, the Company's management considers that the probability that the resolution of the amparo lawsuit is favorable and, consequently, all of the acts claimed in it will be annulled, exceeds 80% according to the opinion of the Company's outside attorneys. Having said the foregoing, it is estimated that the time for the final favorable ruling in favor of DHTAM in the 652/2020 amparo trial is in the short term.

4.6 Legal proceedings of the subsidiary Ecoagua de Torreón S.A. de C.V. against the Municipal Water and Sanitation System of the City of Torreón Coahuila:

On January 8, 2020, Commercial Judge 3 of Torreón issued a ruling declaring the validity of the Arbitration Award in compliance with the protection obtained by the subsidiary Ecoagua de Torreón S.A. de C.V. Said award is declaratory and released ECOAGUA from the payment of the conventional penalty agreed in the Contract in favor of the Municipal Water and Sanitation System of the City of Torreón Coahuila -SIMAS, in relation to the following litigation:

On April 10, 2015, the subsidiary Ecoagua de Torreón S.A. de C.V. demanded from SIMAS the payment of the amount of MXN $ 160,911,393.32 (one hundred sixty million nine hundred eleven thousand three hundred ninety-three Mexican pesos 32/100 MN) for the wastewater treatment services carried out from January 1, 2010 to January 21 of October 2014 and the payment of the amount of the agreed consideration equivalent to the three rates (T1, T2 and T3xQ) from the date of the agreement of October 21, 2014 to the date of taking possession of the plant by SIMAS in April of 2015, and the payment of the T1 Rate for the term of the Contract, this is the termination of the same, in the same way the payment of default interest at a rate of 10% per year and 6% per year, as the case may be. damages and expenses and costs originated in the matter, among other benefits.

Next, it is established how the Company's Administration estimates to make effective the recovery of the ordinary commercial lawsuit file 311/2015 by the following resolutions of the Fourth Collegiate Court of the Supreme Court of Justice:

- Condemned SIMAS to pay the amount of MXN $ 160 million plus default interest at a rate of 10% per annum as of February 1, 2015.
- It ordered SIMAS to pay the T1 plus interest of 6% per year, which must be quantified in the corresponding execution incident.
- Condemned SIMAS to pay the T2 and T3XQ, generated from October 22, 2014 to April 27, 2015, plus default interest for these concepts.
- It absolved SIMAS from the payment of damages.

The collection of the liquid, expired and payable amounts will be carried out through the execution of the existing guarantee with BANOBRAS derived from an irrevocable, contingent and revolving credit line. The execution of the contingent credit line has been started with BANOBRAS, in case the institution does not recognize the enforceable right of ECOAGUA or for any reason is not willing to pay the amounts sentenced by the court, ECOAGUA must sue BANOBRAS to that he is legally obliged to comply with the contract.

Note 5. Property, plant and equipment, net

The breakdown of the recorded value for property, plant and equipment is as follows:

Property, plant and equipment	2020	2019
Cost	49,281,352	43,603,770
Accrued depreciation and impairment	(11,629,656)	(7,998,115)
Total	37,651,696	35,605,655

Amounts stated in millions of Colombian pesos

The following is the breakdown of the recorded value for temporarily idle property, plant and equipment:

Property, plant and equipment temporarily out of service	2020	2019
Networks, lines and cables	7,948	2,377
Plants, pipelines and tunnels	9,448	9,196
Land and buildings	15,617	15,231
Machinery and equipment	355	314
Communication and computer equipment	5	5
Other property, plant and equipment	825	541
Total property, plant and equipment temporarily out of service	34,199	27,663

Amounts stated in millions of Colombian pesos

The Group has property, plant and equipment withdrawn from use and that have not been classified as non-current assets held for sale, they correspond mainly to lands of the Porce IV Anorí Project for $ 9,207 because the project was not carried out and the company Riopiedras $ 1,760 land has not yet made decisions about these, which went from the Generation business to the water supply business as a business strategy to recover the mini-plant; and the Holy Spirit project sites that have not yet started. The book value of these assets is made up as follows: for 2020 the cost amounts to $ 34,199 (2019: $ 27,663).

The following is the movement of cost, depreciation and impairment of property, plant and equipment:

2020	Networks, lines and cables	Plants, pipelines and tunnels	Construction in progress[1]	Land and buildings	Machinery and equipment	Communication and computer equipment	Furniture and fixtures and office equipment	Other property, plant and equipment[2]	Total
Initial balance of cost	11,944,051	11,548,606	12,177,233	6,151,651	785,430	457,299	138,155	401,345	43,603,770
Business combination[3]	1,157,877	938,774	3,010	79,000	207,676	-	3,925	569	2,390,830
Additions[4]	48,910	87,921	3,283,330	12,330	19,873	31,740	2,010	62,732	3,548,846
Advances made to third parties (amortized)	2,063	-	11,887	-	-	-	-	-	13,951
Transfers (-/+)	939,139	362,780	(1,485,105)	31,226	70,512	13,390	8,301	(10,215)	(69,972)
Disposals (-)	(631)	(3,171)	(1)	(227)	(2,780)	(4,630)	(521)	(1,125)	(13,085)
Withdrawals (-)	(24,608)	(115,806)	(291,568)	(2,956)	(3,729)	(14,009)	(704)	(827)	(454,207)
Assets classified as held for sale - See note X	-	-	-	-	-	-	-	-	-
Effect of foreign currency translation	127,005	58,079	31,145	16,559	23,071	5,593	1,763	3,865	267,087
Effect of loss of control of subsidiary	-	-	-	-	-	-	-	-	-
Other changes	(7,080)	98,325	6,148	(37,668)	2,012	(97)	5	(67,509)	(5,863)
Cost final balance	**14,186,726**	**12,975,508**	**13,736,079**	**6,249,915**	**1,102,066**	**489,287**	**152,934**	**388,836**	**49,281,352**
Accrued depreciation and impairment									
Initial balance of accumulated depreciation and impairment losses	(3,632,741)	(2,773,850)	-	(797,216)	(313,173)	(270,668)	(67,215)	(141,253)	(7,995,115)
Depreciation for the period	(448,594)	(316,293)	-	(30,070)	(54,753)	(49,916)	(14,314)	(14,887)	(978,827)
Impairment for the period -see note 8	(20,947)	(117,235)	(1,070)	(25,015)	(21,227)	(175)	(58)	(181)	(187,114)
Business combination[3]	(1,157,966)	(938,774)	(3,010)	(79,000)	(207,676)	-	(3,925)	(569)	(2,390,920)
Impairment reversals (-)	-	-	-	-	-	-	-	-	-
Dispositions (-)	227	1,193	-	9	2,686	4,348	506	1,013	9,982
Withdrawals (-)	16,925	11,050	-	207	2,460	13,614	680	528	45,466
Transfers (-/+)	(3)	4	-	173	(88)	(5)	-	88	168
Assets classified as held for sale -See Note X	-	-	-	-	-	-	-	-	-
Effect of foreign currency translation	(46,615)	(28,909)	-	(996)	(5,792)	(4,021)	(841)	(2,376)	(89,551)
Effect of loss of control of subsidiary	-	-	-	-	-	-	-	-	-
Other changes	37	(39,527)	-	3,336	(3,621)	(246)	(113)	(610)	(40,745)
Final balance of accumulated depreciation and impairment losses	**(5,289,677)**	**(4,202,341)**	**(4,685)**	**(979,172)**	**(603,184)**	**(307,069)**	**(85,280)**	**(158,247)**	**(11,629,656)**
Total net ending balance property, plant and equipment	**8,897,048**	**8,773,167**	**13,731,394**	**5,270,743**	**498,883**	**182,217**	**67,655**	**230,589**	**37,651,696**
Advances to third parties									
Initial balance	1,437	-	34,922	-	-	-	-	498	36,857
Movement (+)	(28)	-	(32,528)	-	-	-	-	-	(32,556)
Movement (-)	2,091	-	44,410	-	-	-	-	-	46,501
Difference in Foreign exchange translation adjustment	(114)	-	999	-	-	-	-	-	885
Final balance	**3,386**	-	**47,809**	-	-	-	-	**498**	**51,692**

Amounts stated in millions of Colombian pesos

2019	Networks, lines and cables	Plants, pipelines and tunnels	Construction in progress[1]	Land and buildings	Machinery and equipment	Communication and computer equipment	Furniture and fixtures and office equipment	Other property, plant and equipment[2]	Total
Initial balance of cost	11.001.434	11.719.710	11.398.786	6.226.917	803.664	436.703	131.663	401.657	42.120.535
Business combination[3]	-	-	-	-	-	-	-	-	-
Additions[4]	41.666	42.666	3.440.154	14.722	20.567	45.121	2.160	46.972	3.654.027
Advances made to third parties (amortized)	592	-	(17.417)	-	-	-	-	(1.864)	(18.720)
Transfers (-/+)	835.602	408.160	(1.636.803)	208.666	40.044	9.588	2.983	(14.853)	(146.621)
Disposals (-)	(9.961)	(4.276)	(6.450)	(1.281)	(1.030)	(5.859)	(133)	(3.091)	(32.079)
Withdrawals (-)	(11.250)	(112.133)	(909.800)	(4.453)	(9.213)	(21.999)	(281)	(21.109)	(1.090.338)
Restatement due to policy change[5]	346	-	2.229	(204.286)	91	46	18	68	(201.527)
Effect of foreign currency translation	36.702	41.534	5.143	3.606	(795)	94	60	(1.155)	85.188
Effect of loss of control of subsidiary	-	(613.662)	(34.205)	(45.762)	(327)	(34)	-	-	(693.990)
Other changes	49.110	66.607	(64.404)	(46.480)	(67.532)	(6.354)	1.685	(5.337)	(72.704)
Cost final balance	**11.944.051**	**11.548.606**	**12.177.233**	**6.151.651**	**785.430**	**457.299**	**138.155**	**401.345**	**43.603.770**
Accrued depreciation and impairment									
Initial balance of accumulated depreciation and impairment losses	(3.216.290)	(2.859.219)	(1.039)	(824.201)	(295.444)	(252.556)	(53.790)	(129.397)	(7.631.935)
Depreciation for the period	(401.843)	(251.275)	-	(78.785)	(45.831)	(46.222)	(13.360)	(16.630)	(893.945)
Impairment for the period -See note 8	-	(1.386)	-	(784)	(39)	(5)	(9)	(20)	(2.243)
Business combination[3]	-	-	-	-	-	-	-	-	-
Impairment reversals (-)	-	-	-	-	-	-	-	-	-
Dispositions (-)	3.807	2.711	-	255	712	5.191	57	2.297	15.029
Withdrawals (-)	7.848	55.216	-	1.232	6.175	18.806	262	1.999	91.538
Transfers (-/+)	1	(0)	-	(11)	10	162	116	-	279
Restatement due to policy change[5]	(34)	-	-	77.001	(15)	(7)	(13)	(28)	76.904
Effect of foreign currency translation	(14.616)	(22.836)	(48)	(1.298)	1.230	64	117	293	(36.986)
Effect of loss of control of subsidiary	-	359.575	1.086	25.399	167	29	-	17	386.274
Other changes	(11.615)	(16.635)	-	3.970	17.863	3.871	(596)	115	(3.029)
Final balance of accumulated depreciation and impairment losses	**(3.632.741)**	**(2.773.850)**	**-**	**(797.216)**	**(315.173)**	**(270.668)**	**(67.215)**	**(141.253)**	**(7.998.115)**
Total net ending balance property, plant and equipment	**8.311.311**	**8.774.756**	**12.177.233**	**5.354.434**	**470.257**	**186.631**	**70.940**	**260.092**	**35.605.655**
Advances to third parties									
Initial balance	859	-	52.458	-	-	-	-	2.302	55.619
Movement (+)	477	-	38.809	-	-	-	-	7.014	46.301
Movement (-)	25	-	(56.227)	-	-	-	-	(8.819)	(65.020)
Difference in Foreign exchange translation adjustment	76	-	(119)	-	-	-	-	-	(43)
Final balance	**1.437**	**-**	**34.922**	**-**	**-**	**-**	**-**	**498**	**36.857**

Amounts stated in millions of Colombian pesos

[1] Includes capitalization of borrowing costs for $367,802 (2019: $381,123), the weighted average rate, used to determine the amount of borrowing costs in pesos was 7.62% en pesos (2019: 8.28%) and 4,195% in USA dollars (2019: 5.19%). Additionally, it includes right-of-use assets associated with constructions in progress amounting to $2,261.

The following are the main projects under construction:

Project	2020	2019
Ituango Hydroelectric Central[1.1]	11,140,307	9,961,227
Other projects	1,288,802	958,595
Construction, expansion and maintenance of substations, networks, lines and cables DECA and subsidiaries	564,723	497,566
Replacement and Expansion Substations, networks, lines and loss control ESSA	349,313	339,088
Substations, lines, network growth and technology replacement ENSA	179,481	229,828
Expansion of STN, STR, networks, lines and loss control CENS	90,261	93,083
Substations, networks, lines and loss control CHEC	34,707	34,960
Construction of water treatment plants and WWTP, water supply and sewerage networks Aguas Regionales	29,689	21,640
Distribution networks, quality compensation FISDL-SIGET and others Delsur	20,469	17,491
Expansion and replacement of substations, networks, lines and cables EDEQ	8,363	9,234
EMVARIAS Projects -Vaso Altair (phase 3), leachate treatment plant and others	19,448	6,987
Hidrosur Projects	4,430	3,678
Aguas de Malambo - Water and sewage networks projects	990	2,995
Aguas de Oriente Projects	409	858
Water treatment plants Ticsa Group	2	2
Total	**13,731,394**	**12,177,233**

Amounts stated in millions of Colombian pesos

[1.1] As of 31 December 2020, the Ituango hydroelectric project presented a physical progress of 80,62% (31 December 2019: 76.7%), the physical progress presented as of the date of the period on which the separated financial statements are reported, corresponds to the version of the contingency, stabilization and commissioning schedule of the project approved in April 2020.

It is estimated that the commissioning of the first two power generation units will be able to enter in 2022. However, this start-up date is very dynamic, due to the changes that occur in the technical variables, the evolution and efficiency of the measures implemented to address the contingency and the effects that the COVID-19 pandemic may cause. in the project.

As a result of the contingency that occurred on April 28, 2018, caused by a geological event that occluded the Cauca River auxiliary diversion gallery (ADG), which generated an unscheduled damming, it was necessary to execute additional activities not contemplated in the schedule. Due to the above, a new schedule was made which includes recovery activities and longer terms. This schedule is susceptible to changes and/or modifications, since the actual state of the underground works is not yet known, and it has not yet been possible to inspect it directly.

As a consequence of the above, EPM has prioritized its decisions to protect firstly the communities and the environment and secondly the project infrastructure. Therefore, on May 7, 2018, the decision was made to evacuate the dammed water through the powerhouse of the future power generation plant so that it would be channeled back into

the Cauca River, and thus return to its traditional flow and the water level of the dam would drop. On January 16 and February 5, 2019, the water intake gates #2 and #1, respectively, were closed, thus suspending the flow of water through the powerhouse, which allowed the inspection of the main cavern where the powerhouse is located, the transformer areas and beacon 1. With this, the cleaning and water pumping activities began in order to determine the severity of the works, the condition of the powerhouse and the work that must be done for its recovery. Consequently, at the date of the financial statements, although it is true that a large part of the project's works have been explored, some directly and others indirectly, for example through drilling and geophysical tests, as with the southern area of the cave complex, it is not yet possible to have a precise estimate of the total and exact value of the damages associated with the civil works; However, as of December 31, 2020 equipment and civil works have been written off for a value of $1,273,777; additionally, the project has been tested for impairment, considering the provisions of IAS 36 and no impairment has been evidenced.

The Company continues in the process of quantifying the damages, the replacement of equipment and the repairs of the project as it progresses in its diagnosis, design and contracting, which is permanently informed within the adjustment process. Regarding the compensation of the damages occurred, the Mapfre insurer has made the following disbursements for material damage in civil works and equipment as follows: on December 4, 2019 $ 525,438 (USD 150 million) and on September 15, 2020 $ 369,700 (USD 100 million).

On May 29, 2019, the closure of one of the two gates of the Auxiliary Deviation Gallery (GAD) was completed, in a new milestone in the project's risk mitigation work. With the closure of the first gate, on the left, the work of nearly three months was completed. After closure of the left GAD gate, the next work will focus on the closure of the right gate to complete the full closure. Subsequently, a 22-meter plug will be built downstream of the tailgate chamber in the axis of the dam.

In July 2019, dam construction was completed, which translates into risk reduction for downstream populations. During September, the dam wall was built on reinforced earth between units 2 and 3 and the material filling in 3A, in units 1 and 2 of the powerhouse cavern; also, heavy equipment was brought into the powerhouse to clean and remove materials from the assembly room to the south sector of the powerhouse, the rehabilitation of the access tunnel to the powerhouse was completed and the road between the north portal of the road tunnel and the road leading to Puerto Valdivia, up to km 13+610, began to be levelled.

On November 8, 2019, urban planning work was completed and the road over the top of the project's dam was handed over to the community of the municipality of Ituango, so that its inhabitants can have continuous mobility to and from their town.

On December 18, 2019, the second gate of the Auxiliary Deviation Gallery (GAD) was closed. The pre-positioning of the GAD, with its two gates duly closed, reduces risks for communities downstream of the works and means the continuation of the project's recovery process.

On January 12, 2020, the concrete pouring began in the cavity that originated from the contingency between pressure wells 1 and 2, advancing to elevation 272 and drilling for the micropiles began, deepening below the sill of the right diversion tunnel, in addition to the installation of pipe for grouting these micropiles.

In February 2020, the sale process began, through the auction figure, of the scrap of the 19 power transformers of the project, which were under water during the flooding of the powerhouse, which produced their total deterioration.

On February 19, 2020, EPM recommended to the Unified Command Post, National PMU No. 146, to start works in the powerhouse to avoid deterioration of the works and risk to the communities, in addition, a report was presented on the progress that have been achieved in the Ituango hydroelectric project, since July of last year to date.

In March 2020, the ANLA reiterated to EPM the provisions of Resolution 0820 of 2018, indicating that EPM could continue with the engineering works and works that must be executed, to guarantee the integrality of the project and prevent and mitigate the risks associated with the contingency presented. With this, it will be possible to carry out the works that allow to dissipate in an optimal way, through the turbines that will be housed in the power house, the energy of the water contained in the reservoir.

Additionally, the protocol for attention to events and crises (PADEC) was activated to prevent the spread of the coronavirus (COVID-19). Consequently, 1,170 workers from the Ituango hydroelectric project went to rest to comply with the mandatory quarantine in their places of origin.

In April 2020, a new version of the schedule was made (April 2020), which includes the additional work requirements that result as the different work fronts are inspected, to guarantee the stability of the project. In this version, all the information provided by the equipment manufacturers was included, as well as the plans of the main works contractor, CCCI.

EPM announced that as of June 30, 2020, 601 positive cases for coronavirus COVID 19 had been presented, of which 243 people recovered. It is expected that, by the end of next July, around 450 people will remain in the project facilities, to guarantee the minimum operational required in works and facilities, in order to maintain stable conditions of the works.

During the period, the works on the following work fronts were inactive, due to the withdrawal of personnel from the main works Contractor, to comply with protocols as a result of the pandemic generated by COVID-19: slope of the upper part of the plaza de gates (Romerito), upper part of the 500 kV substation, the upper south gallery and concrete in the plaza 435, substitute road on the left bank between km 0 + 900 to km 1 + 190, construction of filters and ditches on the shoulder downstream of the dam.

As of July 4, 2020, activities are suspended on all work fronts in response to the protocols for the management of the pandemic generated by COVID-19. On July 15, the withdrawal of all personnel ended, in order to comply with the COVID 19 protocol of all activities that seek to overcome the risks to downstream populations. Subsequently, 3,500 officials from all the companies involved in the development of the project joined the project with the use of technology for greater control of the virus. Now, workers organize themselves using smart cells (bubbles) or narrow circles of behavior to take care of each other and establish safe and responsible contacts for the protection of the group. Additionally, each worker must use a smart handle, with Bluetooth wireless technology, with which those who were in close contact will be identified in a timely manner, in the event that if a member of a cell manifests symptoms associated with the coronavirus, they will be identified for control and tracing. The re-entry of the workers was carried out in a controlled manner during the last days of July and the first days of August by groups of approximately 400 people, who were integrated in accordance with compliance with the biosafety protocol established for both entry, permanence and departure from the facilities.

On August 12, 2020, the Ituango hydroelectric project reported zero positive cases for COVID-19, a total of 903 people were recovered and one deceased.

In August 2020, the CCCI Consortium restarted its activities, reported that it has 2,342 collaborators on site, activities have resumed in the power house, beacon 1, suction tunnels 1 and 2, the removal of transformers from the cavern , the lower conduit, the slope of the upper part of the gate square (Romerito), the 500 kV Substation, the gate shafts, the intermediate discharge, the pre-plug 2 of the right diversion tunnel and the GAD by-pass.

As of September 2020, the emptying of section 1 to the complete section of the regrowth in plug 12, intermediate discharge, was completed. The removal of the metal platform installed above the assembly room, to carry out the treatments. The removal of the full of 3A material and the wall on reinforced earth on units 3 and 4 was completed. The removal of the transformers by the company LITO S.A.S was completed; Dynamic load test is performed on the 25-ton overhead crane.

As of October 2020, the removal of the metal platform from the powerhouse assembly room, the concrete pouring of sections 2-3 into the cavity under the suction tube of unit 1, and the removal of the wall were completed. in ramada land and in the fill on units 5 and 6 of the powerhouse

As of November 2020, the Assembly of the provisional 25 t overhead crane was completed by EPM personnel, the cutting and removal of the armor from the suction tunnel of unit 1, the Construction of the aeration gallery to beacon 2, the demolition of the walls of the generator enclosure of unit No.3, the treatments in cavity 2 of beacon 1, towards the discharge tunnel 2, the demolition of the portico of beacon 1 and the downstream gable treatments, the lifting with scanner in the lower pipes 1 to 4 and pressure wells 1 and 2 in charge of personnel of the company ARG.

On December 23, 2020, the following bilateral modification acts (AMB) were signed until December 31, 2021 for the following contracts of the Ituango Hydroelectric Project, as follows: AMB No. 39 Construction of the Dam, Power Plant and associated Works of the Project: CCC Ituango Consortium. (Formed by the firms Camargo Corrêa Infra S.A., Constructora Conconcreto S.A. and Coninsa - Ramón H. S.A.); AMB N° 12 Advice during the construction of the project, with the Generación Ituango Consortium (Made up of the firms Integral Ingeniería de Supervisión SAS and Integral Ingeniería de Consulta SA) and AMB N ° 6 Audit Service during the construction of the civil works and the assembly of the equipment electromechanical of the Project, contractor: Ingetec-Sedic Consortium.

As of December 2020, the first ferrules for the assembly of the suction tube of unit No.1 were entered into the power house, which are part of the replacement equipment affected during the 2018 contingency, and during the period the treatments in the gables of units 1 and 2 of the power house, treatments in the gables of beacon 1, the concrete for the extension of the floor cladding of gallery 285, the emptying of the wall upstream of unit 1, up to the elevation 217,45 and concrete lining of the upper conduction tunnel No.4.

The protocol for attention to events and crises (PADEC) continues to prevent the spread of the coronavirus (COVID-19). With about 6,000 workers in the Project facilities, there are 109 confirmed cases of COVID-19 in recent months. This data continues to demonstrate the strong adherence of employees to biosafety protocols and the effectiveness of the strategies implemented such as proximity handles, which allows timely decision-making.

(2) Includes equipment and vehicles from the automotive fleet, medical and scientific equipment, properties, plant and equipment in assembly, properties, plant and equipment in transit and replacement assets, transportation, traction and lifting equipment, dining room, kitchen, pantry and hotel equipment.

(3) Intangible assets acquired through business combinations as of December 31, 2020 are detailed in note 10. Business combinations.

(4) It includes purchases, capitalizable disbursements that meet the recognition criteria, goods received from third parties and the costs for dismantling and removing elements of property, plant and equipment. At the end of December 2020 and December 2019, no government subsidies were received.

(5) Corresponds to property, plant and equipment that as of January 1, 2019 under IFRS 16, was recognized as rights of use.

Additions to property, plant and equipment of $3,548,846 (2019: $3,654,027) are taken as effective items, plus the movement of advances of $13,952 (2019: -$18,720), less the capitalized interest of -$380,316 (2019: $421,543), and environmental and decommissioning provisions of -16,830 (2019: $47,100).

At the closing of the period, all assets associated with the Cash Generating Units (CGU), which have intangible assets with an indefinite useful life, were tested for impairment, resulting in

impairment of certain components this implied its recognition in the financial statements (See note 8. Impairment of assets).

As of December 31, 2020, there are restrictions on the realization of property, plant and equipment, associated with some equipment of the vehicle fleet for a net book value of $2 (2019 $2). These restrictions are given for theft and have been affected as a collateral for the fulfillment of obligations.

The most significant commitments for the acquisition of property, plant and equipment of the Group at the cut-off date amount to $2,997,193 (2019: 2,487,972).

The following is the historical cost of the fully depreciated property, plant and equipment that continue in operation as at 31 December 2020 and 2019:

Group	2020	2019
Networks, lines and cables	9,964	10,738
Plants, ducts and tunnels	15,525	17,103
Buildings	1,437	1,655
Machinery and equipment	17,048	13,662
Communication and computer equipment	57,835	57,438
Other property, plant and equipment	13,992	8,991
Total	115,802	109,587

Amounts stated in millions of Colombian pesos

Note 6. Investment property

The fair value of investment property is based on an appraisal made by experts with recognized professional capacity and recent experience in the category of real estate investments subject to assessment; this value has been determined by Valores Ingeniería Inmobiliaria S.A.S y TecniTasa Colombia this activity takes place at least once a year. To determine the fair value of investment property, the comparative or market method is used, which consists of deducting the price by comparing transactions, supply and demand and valuations of similar or comparable properties, previous time adjustments, conformation and location; the residual method, which applies only to buildings and is based on the determination of the updated cost of the construction less the depreciation for age and state of conservation; and the rent method, which is used to determine the possible value of a good according to its capacity to generate income, taking into account the probable monthly rental fee that tenants would be willing to pay in the lease market. See Note 46. Fair value measurement on a recurring and non-recurring basis:

Investment property	2020	2019
Initial balance	140,354	91,382
Net income or loss due to fair value adjustment[1]	(18,124)	51,517
Dispositions (-)	(507)	-
Effect of conversion of foreign exchange	704	115
Transfers[2] (-/+)	42,692	(2,660)
Final balance	165,119	140,354

Amounts stated in millions of Colombian pesos

[1] See detail in Note 33. Other Income and Note 37. Other Expenses.

[2] Includes transfers to property, plant and equipment from investment properties.

As of December 31, 2020, Lease income from investment property for the period amounted $500 (2019: $694), and the Direct expenses of the period related to investment property was $77 (2019: $74).

As of December 31, 2020 there are restrictions on the property located in the Mamatoco sector of the municipality of Santa Marta, a direct reparation process is currently being carried out against said municipality, due to the omission of the municipal administration generated a process of massive invasion of the property, which makes its recovery difficult through police protection processes; fair value is $ 1,392 (2019: $ 1,392).

Note 7. Goodwill and other intangible assets

The breakdown of the recorded value for intangible assets is as follows:

Intangibles	2020	2019
Cost		
Goodwill	3,329,793	3,102,023
Concessions and franchises	2,884,529	2,395,253
Rights	25,072	23,049
Licenses	161,888	140,714
Software	473,141	409,232
Easements	215,490	199,999
Disbursements Development Phases	43,992	34,070
Intangibles related to customers	477,552	420,771
Other intangibles	20,257	16,692
Impairment of value		
Goodwill	(206,572)	(206,572)
Accrued amortization and impairment		
Concessions and franchises	(1,074,436)	(859,119)
Rights	(3,289)	(2,477)
Licenses	(89,358)	(76,791)
Software	(254,196)	(205,462)
Easements	(9,108)	(4,976)
Intangibles related to customers	(160,880)	(117,227)
Other intangibles	(25,796)	(23,116)
Total	5,808,079	5,246,063

Amounts stated in millions of Colombian pesos

The movement of cost, amortization and impairment of intangible assets is detailed below:

2020	Goodwill	Concessions and similar rights	Capitalized development expenditures	Software and computer software	Licenses	Rights	Other intangible assets (1)	Total
Initial balance cost	3,102,023	2,395,253	34,070	409,232	140,714	23,049	637,463	6,741,803
Business combinations(2)	-	-	-	33	-	-	3,869	3,903
Additions(3)	-	222,884	11,192	30,442	11,714	-	1,983	278,216
Transfers (-/+)	-	21,052	(1,270)	27,746	8,386	(1)	12,495	68,408
Disposals (-)	(0)	(25)	-	(6)	(194)	(91)	-	(316)
Retirements (-)	-	(1)	-	(1,866)	(715)	-	(1,593)	(4,174)
Effect of foreign currency translation	227,770	247,082	-	7,558	1,901	1,610	58,660	544,582
Other changes	-	(1,515)	-	-	81	-	726	(708)
Final balance cost	**3,329,793**	**2,884,729**	**43,992**	**473,141**	**161,887**	**24,567**	**713,603**	**7,631,713**
Initial balance accumulated amortization and impairment	(206,572)	(859,119)	-	(205,463)	(76,791)	(2,477)	(145,319)	(1,495,740)
Depreciation for the period(4)	-	(129,227)	-	(47,908)	(12,311)	(469)	(33,336)	(223,251)
Capitalized depreciation	-	(1,786)	-	-	-	2	1,786	2
Impairment for the period (Note 8)	-	(8,830)	-	-	(1)	(308)	(55)	(9,194)
Business combinations(2)	-	-	-	(33)	-	-	(3,869)	(3,903)
Provisions (-)	-	6	-	6	194	89	(651)	(355)
Retirements (-)	-	0	-	1,813	691	-	1,593	4,098
Effect of foreign currency translation	-	(75,003)	-	(2,565)	(1,072)	5	(16,825)	(95,460)
Other changes	-	(478)	-	(45)	(69)	(131)	893	170
Final balance accumulated amortization and impairment	**(206,572)**	**(1,074,436)**	**-**	**(254,196)**	**(89,358)**	**(3,289)**	**(195,783)**	**(1,823,634)**
Final balance of intangible assets, net	**3,123,221**	**1,810,293**	**43,992**	**218,945**	**72,529**	**21,278**	**517,820**	**5,808,079**

Advances to third parties								
Initial balance		200						200
Movement (+)		-						-
Movement (-)		-						-
Final balance		**200**						**200**

Amounts stated in millions of Colombian pesos

2019	Goodwill	Concessions and similar rights	Capitalized development expenditures	Software and computer software	Licenses	Rights	Other intangible assets (1)	Total
Initial balance cost	3,325,834	2,274,306	40,076	329,598	142,853	12,203	707,313	6,832,183
Additions(3)	-	263,482	9,991	19,159	11,094	12,106	838	316,670
Advances to third parties	-	(602)	-	-	-	-	-	(602)
Transfers (-/+)	-	84,259	-	47,958	7,436	-	3,360	143,013
Disposals (-)	-	(44,092)	-	-	(360)	(90)	-	(44,542)
Retirements (-)	-	-	-	(1,469)	(2,067)	-	-	(3,536)
Effect of loss of control in subsidiary	(13,538)	-	(16,835)	-	(5,038)	-	(32,622)	(68,033)
Other changes	(80,248)	(5,639)	97	13,470	(13,303)	-	(204)	(85,827)
Effect of foreign currency translation	(130,025)	(176,461)	741	516	99	(1,170)	(41,222)	(347,522)
Final balance cost	**3,102,023**	**2,395,253**	**34,070**	**409,232**	**140,714**	**23,049**	**637,463**	**6,741,804**
Initial balance accumulated amortization and impairment	(293,567)	(807,989)	(6,674)	(151,016)	(80,243)	(2,056)	(142,412)	(1,483,957)
Depreciation for the period(4)	-	(101,900)	1	(41,835)	(14,558)	(382)	(32,543)	(191,217)
Capitalized depreciation		(1,770)					1,769	(1)
Disposals (-)	-	(3)	-	1	359	90	-	447
Transfers (-/+)	-	-	-	-	4	-	-	4
Retirements (-)	-	-	-	1,332	1,547	-	-	2,879
Effect of loss of control in subsidiary	12,519	-	7,001	-	1,996	-	16,830	38,346
Effect of foreign currency translation	(4,419)	52,924	(328)	(483)	255	(3)	10,767	58,711
Other changes	78,895	(381)	-	(13,462)	13,849	(124)	270	79,047
Final balance accumulated amortization and impairment	**(206,572)**	**(859,119)**	**-**	**(205,463)**	**(76,791)**	**(2,477)**	**(145,319)**	**(1,495,741)**
Final balance of intangible assets, net	**2,895,451**	**1,536,134**	**34,070**	**203,769**	**63,923**	**20,572**	**492,144**	**5,246,063**
Advances to third parties								
Initial balance		856						856
Advances movement +		200						200
Advances movement -		(803)						(803)
Business combination								-
Effect of foreign currency translation		(53)						(53)
Final balance		**200**						**200**

Amounts stated in millions of Colombian pesos

(1) Includes easements, intangible assets related to customers and other intangibles corresponding to premiums at gas service stations.

(2) Intangible assets acquired through business combinations as of December 31, 2020 are detailed in note 10. Business combinations.

(3) Includes purchases, capitalizable expenditure that meets the recognition criteria and concessions. In 2020, purchases associated with capitalized development expenditure were earmarked for IT projects: Digital transformation, Sentinel project, Treasury project.

(4) See note 35 Costs of services rendered and note 36 Administrative expenses.

At the end of the periods, impairment testing was performed on assets for those intangibles with an indefinite lifespan. The breakdown of recognized impairment in the statement of comprehensive income is in Note 8. Impairment of assets.

Depreciation of intangibles is recognized as costs and expenses through profit or loss in the Statement of comprehensive income, in the item Costs of services rendered and administrative expenses.

The historical cost recorded at the cut-off date and the remaining amortization period for significant assets is:

Significant intangible assets	Lifetime	Remaining amortization period	2020	2019
Goodwill	Indefinite		3,123,221	2,895,451
Chile Concession	Defined	13	1,242,627	922,785
Ituango Generation Central Project	Indefinite		177,666	177,666
Espíritu Santo	Indefinite		82,980	82,980
Corridor 53 line easements	Indefinite		63,040	63,040
Distribution Network Bello Circuit	Defined	8	59,657	54,558
Loca and Ilato Secondary Network	Defined	4	42,685	41,957
Elektra Noreste S.A. - Commercial Management System and ERP SAP and Other Software	Defined	9	61,086	59,375
Deca- Smart Metering System and Customer Service System	Defined	4	23,794	20,632
Distribución Eléctrica Delsur - Business Management System SAP	Defined	4	12,764	12,818

Amounts stated in millions of Colombian pesos

The following intangible assets have an indefinite lifespan: goodwill and easements, the latter are agreed in perpetuity. By definition, an easement is the real, perpetual or temporary right over another's property, under which it can be used, or exercise certain disposition rights, or prevent the owner from exercising some of their property rights (Art.2970 Civil Code). In EPM, easements are not treated individually, since they are constituted for public utility projects, where the general interest prevails over the individual, considering that the objective is to improve the quality of life of the community; the aforementioned projects do not have a definite temporality, that is why they are constituted in perpetuity supported in their use. However, there are some easements with a definite useful life, because they are tied to the lifespan of the main asset required by the easement.

Intangible assets with indefinite useful lives	2020	2019
Goodwill		
Aguas de Antofagasta	1,662,625	1,464,940
Empresa Eléctrica de Guatemala S.A.	994,110	966,326
Ituango Generation Central Project	177,667	177,667
Elektra Noreste S.A.	121,749	119,447
Espíritu Santo	82,981	82,981
Empresas Varias de Medellín S.A. E.S.P.	78,642	78,642
Empresa de Energía del Quindío S.A. E.S.P.	5,135	5,135
Surtigás Necoclí	303	303
Central Hidroeléctrica de Caldas S.A. E.S.P.	10	10
Subtotal goodwill	**3,123,221**	**2,895,451**
Other intangible assets		
Easements	205,060	195,023
Subtotal other intangible assets	**205,060**	**195,023**
Total intangible assets with indefinite useful life	**3,328,281**	**3,090,474**

Amounts stated in millions of Colombian pesos

The variation with respect to 2019 is mainly due to the increase in exchange rates that generates a higher value of commercial loans from international subsidiaries.

Note 8. Impairment of assets

8.1 Impairment of investments in associates and joint ventures

At the date of presentation of the financial statements no impairment losses were recognized in the Statement of comprehensive income, related to investments in subsidiaries, associates and joint Ventures.

8.2 Impairment of cash generating units (CGU)

The recorded value of goodwill and intangible assets with indefinite lifespans associated with each CGU are broken down below:

Cash Generating Unit	Book value		Impairment losses (reversal)	
	2020	2019	2020	2019
Energy Generation Segment				
Goodwill	260,647	260,647	-	-
Easements	794	892	55	-
Rights	-	-	308	-
Licenses	-	-	1	-
Land	-	-	4,328	104
Buildings	-	-	21,287	680
Plants, ducts and tunnels	-	-	65,434	1,386
Networks, lines and cables	-	-	1,053	-
Machinery and equipment	-	-	14,425	39
Furniture, fixtures and office equipment	-	-	16	9
Communication and computer equipment	-	-	175	5
Transportation, traction and lifting equipment	-	-	163	9
Replacement assets	-	-	18	11
Rights of use Transportation, traction and lifting equipment	-	-	-	11
Energy Generation	**261,441**	**261,539**	**107,263**	**2,254**
Energy Transmission Segment				
Easements	128,590	127,094	-	-
Energy Transmission	**128,590**	**127,094**	-	-
Energy Distribution Segment				
Goodwill	1,121,004	1,090,919	-	-
Easements	65,922	56,182	-	-
Construction in progress	-	-	1,676	-
Plants, pipelines and tunnels	-	-	51,802	-
Networks, lines and cables	-	-	19,893	-
Machinery and equipment	-	-	6,802	-
Furniture, fixtures and office equipment	-	-	42	-
Rights of use Buildings	-	-	3,959	-
Distribution Energy	**1,186,926**	**1,147,101**	**84,174**	**-**
Gas segment				
Goodwill	303	303	-	-
Easements	3,692	3,692	-	-
Gas	**3,995**	**3,995**	-	-
Water Supply Segment				
Goodwill	1,512,989	1,333,095	-	-
Easements	5,055	4,951	-	-
Water Provision	**1,518,044**	**1,338,046**	-	-
Wastewater Management Segment				
Goodwill	149,636	131,845	-	-
Easements	1,426	1,362	-	-
Concessions and franchises			8,830	-
Wastewater Management	**151,062**	**133,207**	**8,830**	**-**
Solid Waste Management Segment				
Goodwill	78,642	78,642	-	-
Solid Waste Management	**78,642**	**78,642**	**-**	**-**
Total	**3,328,700**	**3,089,624**	**200,267**	**2,254**

Amounts stated in millions of Colombian pesos

Goodwill is allocated mainly to the segments or CGUs listed below:

Cash Generating Unit	2020	2019	Generated as a result of
Power Generation EPM	260,647	260,647	Liquidation of the subsidiary EPM Ituango S.A. E.S.P. and Espíritu Santo whose assets were transferred to EPM.
Energy Distribution EDEQ	5,135	5,135	Business combination in the acquisition made by EPM Inversiones.
Energy Distribution CHEC	10	10	Business combination in the acquisition carried out by EPM Inversiones
Energy Distribution EEGSA	994,111	966,327	Business combination in the acquisition of Grupo Deca II made by EPM Inversiones
Energy Distribution ENSA	121,749	119,447	Business combination in the acquisition of the PDG Group by EPM
Gas EPM	303	303	Business combination with Surtidora de Gas del Caribe S.A. E.S.P. carried out by EPM
Water Supply Adasa	1,631,651	1,433,966	Business combination in the acquisition of Aguas de Antofagasta by Inversiones Hanover.
Wastewater Management Adasa	30,974	30,974	Business combination in the acquisition of Aguas de Antofagasta carried out by Inversiones Hanover
Solid Waste Management Envarias	78,642	78,642	Business combination in the acquisition carried out by EPM
Total	**3,123,222**	**2,895,451**	

Amounts stated in millions of Colombian pesos

The intangible Easements is mainly assigned to the segments or CGUs detailed below:

Cash Generating Unit	2020	2019
Power Generation EPM	444	444
CHEC Power Generation	98	177
Hydro-ecológica del Teribe Power Generation	252	271
Power Transmission EPM	128,555	127,059
Energy Transmission ESSA	35	35
Energy Distribution EPM	29,473	29,433
Energy Distribution EDEQ	256	256
Energy Distribution CHEC	7,437	7,022
Energy Distribution CENS	9,263	5,337
Energy Distribution ESSA	12,168	7,178
Energy Distribution EEGSA	659	393
Energy Distribution ENSA	6,666	6,364
Natural Gas EPM	3,692	3,692
Water Supply Adasa	270	238
Water Supply EPM	4,785	4,713
Wastewater Management EPM	656	593
Wastewater Management Aguas Nacionales	597	597
Wastewater Management Aguas de Malambo	172	172
Total	**205,478**	**194,174**

Amounts stated in millions of Colombian pesos

Impairment of assets and intangibles - CGU Generation CHEC

CHEC calculated the impairment of its assets on the basis of IAS 36, seeking to ensure that the value of the assets recognized as cut- off at 31 December 2020 reflects their recoverable value through use or sale.

Value in use: estimates of the future cash flows the company expects to obtain on the assets were made; considering the expectations on possible changes in value, in addition it was

based on the most recent financial projections, the cash flow was calculated at 20 years with continuity value given the useful life of the assets. The discount rate used for the valuation reflects the capital structure of the company, which considers the return that the owner would require from this type of investment.

Based on this, the value of the assets' impairment as of 31 December 2020 amounts to $48,550 and results from:

Value in use:	$204,807	Colombian pesos
CGU Recorded Value:	$253,357	Colombian pesos
Value of Impairment:	$248,550	Colombian pesos

The key assumptions used by the group in determining the value in use / fair value less costs to sell are as follows:

Concept	Key assumption
Net Income from Commercial Operations - INOC (Revenues less costs)	Decrease in Net Operating Income from Commercial Operations - INOC as a result of lower energy prices. Significant reduction in energy prices due to the decrease in demand growth due to the long-term Covid Impact and the entry of abundant non-conventional renewable energy generation capacity, mainly solar and small hydroelectric plants.
Costs and expenses	There is an increase in costs and general expenses as a result, mainly due to the value of insurance.

Impairment of assets and intangibles - UGE Wastewater Management of Lerdo City

In Lerdo City, the impairment of its assets was calculated based on IAS 36, seeking to ensure that the value of the assets that are accounted for as of December 31, 2020 reflects their recoverable value through their use or sale.

Use value: For which the estimation of future cash flows that the company expects to obtain on the assets was made; Considering the expectations about possible variations in the value, it was also based on the most recent financial projections, the cash flow was calculated until 2029, the year in which the operating contract ends. The discount rate used for the valuation considers the return that the owner would demand from this type of investment.

Based on this, and in the analysis of the fixed assets susceptible of allocation of impairment, the value of the assets' impairment as of 31 December 2020 amounts to $50,836,895 Mexican pesos and results from:

Value in use:	$118,179,164	Mexican pesos
CGU Recorded Value:	$240,026,751	Mexican pesos
Comparison value:	$121,847,586	Mexican pesos
Value of Impairment (1):	$50,836,895	Mexican pesos
Impairment cost conversion rate	173.6	COP / MXP

(1) It corresponds to the maximum impairment that was possible to assign to the assets of the CGU according to IAS 36.

The key assumptions used by the Group in the determination of the value in use/fair value less selling costs are as follows:

Concept	Key assumption
Revenues	Revenues come from the operation of the Lerdo Wastewater Treatment Plant, treating ultrafiltration and reverse osmosis water sent to the Gómez Palacios and Guadalupe Victoria Combined Cycle Thermoelectric Power Plants at the demand of the Federal Electricity Commission (CFE), projected until the expiration of the contract and based on historical consumption. Water delivered to the CFE 64 LPS out of an installed capacity of 200 LPS. There was a reduction of approximately 60% of the Guadalupe Victoria Thermoelectric Power Plant's tariff.
Costs and expenses	The costs and expenses were estimated in compliance with the maintenance of the plant, main inputs such as electricity, chemicals and personnel. Expenses are contemplated.
	additional expenses for legal fees related to lawsuits filed by the company are contemplated.
Investment	No additional investments other than infrastructure maintenance are estimated.

Impairment of assets and intangibles - CGU Generation HET

In HET, the impairment of its assets was calculated based on IAS 36, seeking to ensure that the value of the assets that are accounted for as of December 31, 2020 reflects their recoverable value through their use or sale.

Use value: For which he estimated the future cash flows that the company expects to obtain on the assets; Considering the expectations about possible variations in the value, it was also based on the most recent financial projections, the cash flow was calculated until the year 2063, the final year of the concession and without continuity value. The discount rate used for the valuation reflects the capital structure of the company, which considers the return that the owner would demand from this type of investment.

Based on this, the value of the assets' impairment as of 31 December 2020 amounts to $15,314,743, and results from:

Value in use:	$125,260,709	American dollars
CGU Recorded Value:	$140,575,452	American dollars
Comparison value:	$15,314,743	American dollars
Impairment cost conversion rate	3,833.78	COP/USD

The key assumptions used by the Group in the determination of the value in use/fair value less selling costs are as follows:

Concept	Key assumption
Revenues	There is a significant reduction in marginal energy costs with respect to the previous projection, due to the decrease in demand growth due to the long-term Covid impact and the entry of abundant non-conventional renewable generation capacity, mainly solar and small hydroelectric plants. In 2030, the entry into operation of the Changuinola II hydro and its mini hydro plant is reflected.
Costs and expenses	Costs and expenses are estimated according to the plant's requirements.
Investment	It considers the replacement and acquisition of equipment for the generation plant and the replacement of vehicles.

Impairment of assets and intangibles - CGU Distribution CaribeMar (Afinia)

Value in use: It is based on the most recent financial projections, estimating the cash flows that are expected to be obtained in the market operation with the assets available for a period of 20 years plus continuity value. The company uses this period of time for financial projections, taking into account that it includes the stabilization of the company's flows in the sector in which it operates. It is understood that cash flow stabilized in the year in which there were no atypical growth in income, costs and expenses, and that no significant business investments were being made. In general, public services businesses are intensive in capital investments and their payback period tends to 20 years, therefore the financial evaluation of investments in the public services sector should consider a longer period of 5 years, as established in IAS 36, where the real income of the project and therefore the recovery of the investment can be observed.

The discount rate used for the valuation reflects the capital structure of the company and the return that the owner would demand from this type of investment, taking into account: the risk-free rate, the corresponding economic sector, the market, the country where the investment is located, the risk of the asset not considered in the flow and the debt.

Based on this, the value of the assets' impairment as of 31 December 2020 amounts to $84,174 and results from:

Value in use:	$-1,239,203	Colombian pesos
CGU Recorded Value:	$-202,045	Colombian pesos
Comparison value:	$-1,037,158	Colombian pesos
Value of Impairment[1]	$84,174	Colombian pesos

[1] It corresponds to the maximum impairment that was possible to assign to the assets of the CGU according to IAS 36.

The key assumptions used by the company in the determination of the value in use/fair value less selling costs are as follows:

Concept	Key assumption
Revenues	Tariff projections were made based on the current regulatory framework applicable to the CaribeMar market. For customers with historical series, a trend growth applicable to the area was estimated. Regarding demand, the growth of the main variables took into account the application of the loss plan, customer normalization campaigns and the collection evolution plan.
OPEX	The projection of costs and expenses took into account the current conditions of the CaribeMar market and the efforts required to develop the different commercial and operational strategies approved by management, the evolution of investment and population growth. These costs evolve in real terms, as indicated above, and in nominal terms due to inflation.
CAPEX	The CAPEX projection took into account the current conditions of the CaribeMar market and its infrastructure, as well as what is required to meet regulatory obligations, signed management obligations, strategies defined by management and population growth. These investments grow in real terms, as indicated above, and in nominal terms due to inflation.

The value in use and the recorded value of the CGU at the end of 2020 that have intangible assets with indefinite lifespans is detailed below:

Cash Generating Unit	Functional currency	Value in use	Carrying value
Water Supply EPM	Colombian Pesos	3,860,233	2,761,331
Wastewater Management EPM	Colombian Pesos	1,874,895	1,239,062
Power Generation EPM	Colombian Pesos	23,716,701	16,773,466
Energy Transmission EPM	Colombian Pesos	1,135,573	790,875
Energy Distribution EPM	Colombian Pesos	6,316,929	4,393,121
Natural Gas EPM	Colombian Pesos	1,593,116	826,863
Energy Distribution CENS	Colombian Pesos	1,354,796	972,994
Power Generation CHEC	Colombian Pesos	204,807	204,579
Energy Distribution CHEC	Colombian Pesos	652,286	573,415
Energy Distribution EDEQ	Colombian Pesos	370,663	211,248
Energy Transmission ESSA	Colombian Pesos	206,117	66,871
Energy Distribution ESSA	Colombian Pesos	1,876,266	1,492,223
Energy Distribution EEGSA	Quetzales	5,527	4,537
Energy Distribution ENSA	U.S. Dollars	752	491
Wastewater Management National Waters	Colombian Pesos	3,162,950	1,657,177
Solid Waste Management Emvarias	Colombian Pesos	379,261	199,174
Energy Distribution Afinia	Colombian Pesos	-	872,869
Water Supply Adasa	Chilean Pesos	720,059	665,092
Wastewater Management Adasa	Chilean Pesos	71,215	63,244
Wastewater Management Aguas de Malambo	Colombian Pesos	23,334	16,395
Hidroecológica del Teribe Power Generation	U.S. Dollars	125	125

Amounts stated in millions of Colombian pesos

Note 9. Investment in subsidiaries

The breakdown of the subsidiaries of the Group at the date of the reporting period is the following:

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Empresa de Energía del Quindío S.A. E.S.P. (EDEQ)		Colombia	Provides public utilities of electric energy, purchase, sale and distribution of electric energy.	92,85%	92,85%	7,15%	7,15%	22/12/88
Central Hidroeléctrica de Caldas S.A. E.S.P. (CHEC)		Colombia	Provides public energy services, operating electric energy generating plants, transmission and sub-transmission lines and distribution networks, as well as marketing, import, distribution and sale of electric energy.	80,10%	80,10%	19,90%	19,90%	9/09/50
Electrificadora de Santander S.A. E.S.P. (ESSA)		Colombia	Provides public utilities of electric energy, buying, selling, marketing and distribution of electric energy.	74,05%	74,05%	25,95%	25,95%	16/09/50
Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS)		Colombia	Provides public utilities of electric energy, purchase, export, import, distribution and sale of electric energy, construction and operation of generating plants, substations, transmission lines and distribution networks.	91,52%	91,52%	8,48%	8,48%	16/10/52
Caribemar de la Costa S.A.S. E.S.P. (AFINIA)	(1)	Colombia	Provides public services of distribution and commercialization of electric energy, as well as the performance of all related activities, works, services and products.	100,00%	-	-	-	1/10/20
Elektra Noreste S.A. (ENSA)		Panamá	Acquires energy, transports, distributes to customers, transforms voltage, installs, operates and maintains public lighting, authorized to generate energy up to a limit of 15% of the maximum demand in the concession area.	51,16%	51,16%	48,84%	48,84%	19/01/98
Hidroecológica del Teribe S.A. (HET)		Panamá	Finances the construction of the Bonyic hydroelectric project required to meet the growing energy demand of the Isthmus of Panama.	99,68%	99,68%	0,32%	0,32%	11/11/94

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Empresa Eléctrica de Guatemala S.A. (EEGSA)		Guatemala	Provides electric power distribution services.	80,90%	80,90%	19,10%	19,10%	5/10/39
Gestión de Empresas Eléctricas S.A. (GESA)		Guatemala	Provides advisory and consulting services to electric power distribution, generation and transportation companies.	100,00%	100,00%	-	-	17/12/04
Almacenaje y Manejo de Materiales Eléctricos S.A. (AMESA)		Guatemala	Provides outsourcing services in the area of materials management.	99,94%	99,94%	0,06%	0,06%	23/03/00
Comercializadora Eléctrica de Guatemala S.A. (COMEGSA)		Guatemala	Provides electric energy commercialization services.	80,52%	80,52%	19,48%	19,48%	5/11/98
Transportista Eléctrica Centroamericana S.A. (TRELEC)		Guatemala	Provides electric power transmission services.	80,90%	80,90%	19,10%	19,10%	6/10/99
Enérgica S.A. (ENERGICA)		Guatemala	Provides construction and maintenance services for projects and goods of the electric sector.	78,19%	78,19%	21,81%	21,81%	31/08/99
Crediegsa S.A. (CREDIEGSA)		Guatemala	Provides personnel hiring services and other administrative services.	80,90%	80,90%	19,10%	19,10%	1/12/92
Distribuidora de Electricidad del Sur (DELSUR)		El Salvador	Transformation, distribution and commercialization of electricity that supplies energy to the central-south zone of El Salvador in Central America.	86,41%	86,41%	13,59%	13,59%	16/11/95
Innova Tecnología y Negocios S.A. de C.V.		El Salvador	Provision of specialized services in electrical engineering and sale of household appliances to Delsur's electricity users.	86,41%	86,41%	13,59%	13,59%	19/10/10
Aguas Nacionales EPM S.A. E.S.P.	(2)	Colombia	Provides domiciliary public utilities of water, sewage and sanitation, waste treatment and utilization, complementary activities and engineering services related to these utilities.	99,99%	99,99%	0,01%	0,01%	29/11/02

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Aguas Regionales EPM S.A. E.S.P.	(3)	Colombia	To guarantee the rendering of domiciliary public utilities of water, sewage and sanitation and to compensate for the backlog of infrastructure of these services in the partner municipalities.	74,57%	69,76%	25,43%	30,24%	18/01/06
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.		Colombia	Provides domiciliary public utilities of water and sewage, as well as other complementary activities related to each of these public utilities.	56,02%	56,02%	43,98%	43,98%	22/11/99
Aguas de Malambo S.A. E.S.P.		Colombia	Dedicated to guarantee the provision of domiciliary public utilities of water, sewage and sanitation in the jurisdiction of the Municipality of Malambo, Department of Atlántico.	98,52%	98,52%	1,48%	1,48%	20/11/10
Ecosistemas de Colima S.A. de C.V.		México	Dedicated to elaborate the executive project for the wastewater treatment plant, its construction, equipment and operation, conservation and maintenance, stabilization of sludge in the municipalities of the State of Colima.	100,00%	100,00%	-	-	14/02/06
Ecosistemas de Tuxtla S.A. de C.V.		México	Dedicated to the construction, equipment, start-up, operation and maintenance of a wastewater treatment system with the modality of total private recoverable investment. To develop drinking water projects and water treatment plants.	100,00%	100,00%	-	-	17/11/06
Ecosistema de Ciudad Lerdo S.A. de C.V.		México	Subsidiary dedicated to the construction, equipping, start-up, operation and maintenance for 20 years of a wastewater treatment system in Ciudad Lerdo Durango, under the total private recoverable investment modality.	100,00%	100,00%	-	-	24/04/07

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Aquasol Morelia S.A. de C.V.		México	Subsidiary engaged in the construction of a wastewater treatment plant, as well as the equipping and start-up of said plant located in the town of Atapaneo in the municipality of Morelia Michoacán.	100,00%	100,00%	-	-	13/11/03
Ecosistemas de Celaya S.A. de C.V.		México	Dedicated to the preparation of the executive project for the wastewater treatment plant, as well as the treatment, transportation and final disposal of solid waste and sludge at the plant in the city of Celaya, state of Guanajuato.	100,00%	100,00%	-	-	5/12/08
Desarrollos Hidráulicos de Tampico S.A. de C.V.		México	Dedicated to the construction, equipment, expansion, improvement, conservation, maintenance and operation of water supply systems and sewage services, collection, drainage and wastewater treatment works.	100,00%	100,00%	-	-	25/08/95
Ecoagua de Torreón S.A. de C.V.		México	Dedicated to providing wastewater treatment operation services from any source, whether municipal or domestic, as well as the activity related to wastewater treatment.	100,00%	100,00%	-	-	25/10/99
Proyectos de Ingeniería Corporativa S.A. de C.V.		México	Rendering of design, general engineering or construction services, professional and technical services to operate, administer, direct and in general carry out all activities necessary for the development of activities of any commercial, industrial or service company, as an individual or legal entity.	100,00%	100,00%	-	-	1/08/08
Corporación de Personal Administrativo S.A. de C.V.		México	Rendering of professional services tending to operate, administer, direct and in general carry out all the activities that are necessary for the development of activities of any commercial, industrial or service company as an individual or legal entity, as well as the administration, selection, hiring and exchange of personnel that perform functions within the facilities of the requesting companies.	100,00%	100,00%	-	-	1/08/08

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Aguas de Antofagasta S.A.		Chile	Construction and operation of public utilities for the production and distribution of drinking water and the collection and disposal of sewage through the operation of the sanitary concessions of Empresa de Servicios Sanitarios de Antofagasta S.A. (currently Econssa Chile S.A.). (currently Econssa Chile S.A.), and the performance of other services related to such activities, all in the manner and under the conditions established in decrees with Force of Law numbers 382 and 70, both of 1998, of the Ministry of Public Works, and other pertinent regulations. For this purpose, on December 29, 2003, Aguas de Antofagasta S.A. entered into an agreement with Empresa de Servicios Sanitarios de Antofagasta S.A. (currently Empresa Concesionaria de Antofagasta S.A.). (currently Empresa Concesionaria de Servicios Sanitarios S.A. - Econssa S.A.) the "Contract for the transfer of the right to operate sanitary concessions", for a total term of 30 years from the date of its execution.	100,00%	100,00%	-	-	28/11/03
Empresas Varias de Medellín S.A. E.S.P.		Colombia	Subsidiary dedicated to the provision of public sanitation services within the framework of the integral management of solid waste.	99,93%	99,93%	0,07%	0,07%	11/01/64
EPM Inversiones S.A.		Colombia	Dedicated to the investment of capital in national or foreign companies organized as public utilities.	99,99%	99,99%	0,01%	0,01%	25/08/03
Maxseguros EPM Ltd.		Bermuda	Negotiation, contracting and management of reinsurance for the policies that cover the equity.	100,00%	100,00%	-	-	23/04/08
Panamá Distribution Group S.A. - PDG		Panamá	Equity investment in companies.	100,00%	100,00%	-	-	30/10/98
Distribución Eléctrica Centroamericana DOS S.A. - DECA II		Guatemala	It makes equity investments in companies engaged in the distribution and commercialization of electric power and the provision of telecommunications services.	100,00%	100,00%	-	-	12/03/99

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Inmobiliaria y Desarrolladora Empresarial de América S.A. (IDEAMSA)		Guatemala	Subsidiary engaged in real estate investments.	80,90%	80,90%	19,10%	19,10%	15/06/06
Promobiliaria S.A.		Panamá	Purchase, sell, build, modify, manage, lease and in general enter into any contract for the disposition, improvement, use and usufruct of real estate not necessary for the operation of property owned by the companies that make up the EPM Group.	100,00%	100,00%	-	-	8/09/15
EPM Latam S.A.		Panamá	Make capital investments in companies.	100,00%	100,00%	-	-	17/05/07
EPM Capital México S.A. de C.V.		México	Develops infrastructure projects related to energy, lighting, gas, telecommunications, sanitation, water treatment plants, sewerage, wastewater treatment, buildings, as well as their operation, studies and services.	100,00%	100,00%	-	-	4/05/12
EPM Chile S.A.		Chile	Develops projects related to energy, lighting, gas, telecommunications, sanitation, drinking water treatment plants, sewage and wastewater treatment, as well as providing such services and participating in all types of public and private bids and auctions.	100,00%	100,00%	-	-	22/02/13
Inversiones y Proyectos Hidrosur SpA	(4)	Chile	Participate in all types of tenders, bids, auctions, whether public and/or private, in the purchase of shares in domestic or foreign companies. Enter into strategic alliances, joint ventures and enter into business collaboration agreements to participate in bids, obtain concessions and/or authorizations. To provide all types of consulting and services directly or indirectly related to the activities carried out and in which the company is involved.	100,00%	100,00%	-	-	16/12/14

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
Tecnología Intercontinental S.A. de C.V. TICSA		México	Dedicated to the study, development, promotion and execution of industrial projects, design, manufacture, assembly and assembly of machinery, development of technology, including commercialization, commercial representation and trade in general.	100,00%	100,00%	-	-	28/07/80
EV Alianza Energética S.A.	(5)	Panamá	Provision of energy efficiency services and all related services, such as environmental services, marketing and financing of efficiency projects, as well as the provision of energy and technological solutions, production, transformation, purchase, sale and supply of energy, gas and related products such as biogas; consulting services, studies, reports and projects related to the above operations and services, as well as those related to the environment and energy saving.	-	51,00%	-	49,00%	22/01/16
Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO	(6)	Colombia	Rendering of domiciliary public utilities, including water and sewage services, as well as complementary and related activities; specifically the administration, operation, maintenance and investments of the water and sewage systems of the Municipality of Rionegro, the execution of programs and projects on the environment and renewable and non-renewable natural resources; promoting their sustainable development. In addition, the company will provide maintenance services for the public lighting network in the municipality of Rionegro.	-	100,00%	-	-	9/12/96
ENSA Servicios S.A.		Panamá	Render technical, commercial and any other complementary services to the rendering of electricity services, without limiting other analogous, related and/or compatible services that constitute an added value to the described activities.	51,16%	51,16%	48,84%	48,84%	29/11/17

Name of subsidiary		Location (country)	Main Activity	Percentage of participation and voting rights		Percentage of participation of non-controlling interest		Date of establishment
				2020	2019	2020	2019	
FID 20431 SOMOS EPM (antes Patrimonio Autónomo Financiación Social)	(7)	Colombia	To manage the resources and payments of the social financing program created to facilitate users the purchase of household appliances, gas appliances and products related to information technology.	100,00%	100,00%	-	-	14/04/08
FID 20432 SOMOS CHEC	(7)	Colombia	Manage the resources and payments of the social financing program created to facilitate the purchase of household appliances, gas appliances and IT-related products for users.	80,10%	-	-	-	10/11/20
FID 20433 SOMOS EDEQ	(7)	Colombia	Manage the resources and payments of the social financing program created to facilitate the purchase of home appliances, gas appliances and IT-related products.	92,85%	-	-	-	10/11/20
FID 20434 SOMOS ESSA	(7)	Colombia	Manage the resources and payments of the social financing program created to facilitate the purchase of home appliances, gas appliances and products related to information technology.	74,05%	-	-	-	10/11/20

[1] Subsidiary acquired by Grupo EPM through a share purchase and sale transaction completed on October 1, 2020 (see note 10. Business combinations).

[2] On November 23, 2020, EPM capitalized Aguas Nacionales EPM S.A. E.S.P. for $ 113,397.

[3] In December 2020, EPM capitalized Aguas Regionales EPM S.A. E.S.P. for $ 13,587, said capitalization was made in two rounds with payments made on December 28, 2020 for $ 10,087 and on January 6, 2021 for $ 3,500, in accordance with the terms of the share subscription regulations.

[4] On December 16, 2020, EPM Chile S.A. capitalized Inversiones y Proyectos Hidrosur SpA. for USD $ 15,500,000.

[5] On December 3, 2020, through public deed No. 5255 of the Fifth Notary of the Circuit of Panama, the liquidation of the subsidiary EV Alianza Energética SA was formalized, which was registered in the Public Registry of Panama on 29 December 2020. with the N ° 319156/2020.

[6] On 30 December 2019, in accordance with public deed No. 4641 of the Second Notary Office of Rionegro - Antioquia, registered at the Cámara de Comercio de Oriente Antioqueño Chamber of Commerce on 31 December 2019, the approval of the merger by absorption by which

EPM absorbs Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO was protocolized. Based on the merger commitment, it was established that, for accounting purposes, the final operation is perfected based on the figures shown in the accounts of the two companies, as of the last day of the month in which the respective deed is executed, i.e. 31 December 2019. Consequently, the operations of Empresas Públicas de Rionegro S.A.S. E.S.P. - EP RIO. (absorbed company) are carried out by EPM (absorbing company) from 1 January 2020

[7] Autonomous patrimony (structured entity) managed under a commercial trust contract N ° FID 4-2-2043 We are Grupo EPM Loyalty and Relationship Program, signed with the Fiduciaria de Occidente S.A. on November 10, 2020.

The financial information of the Group's subsidiaries that have significant non-controlling interests as of the date of the reporting period is as follows:

December 31, 2020	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Ordinary income	Profit for the period continuing operations	Other comprehensive income	Total comprehensive income	Cash flows
Elektra Noreste S.A. (ENSA)	734,507	2,054,912	1,233,157	868,808	2,065,381	74,526	23,961	98,487	167,217
Empresa Eléctrica do Guatemala S.A. (EEGSA)	641,214	1,669,023	392,165	893,334	2,239,651	147,559	30,549	178,108	17,434
Electrificadora de Santander S.A. E.S.P. (ESSA)	334,859	1,689,133	516,361	826,830	1,268,295	138,137	(3,613)	134,524	135,679
Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS)	286,548	1,024,373	243,313	720,700	856,035	67,938	(11,193)	56,745	133,248
Distribuidora Eléctrica del Sur S.A. de C.V. (DELSUR)	168,047	383,982	257,570	158,237	919,556	37,491	(10,386)	27,105	24,372
Central Hidroeléctrica de Caldas S.A. E.S.P. (CHEC)	273,766	926,944	341,473	379,975	831,760	77,062	(1,447)	75,615	51,239
Comercializadora Eléctrica de Guatemala S.A. (COMEGSA)	99,584	1,226	21,656	7,026	302,022	11,572	3,955	15,527	7,170
Empresa de Energía del Quindío S.A. E.S.P. (EDEQ)	98,934	226,510	78,958	80,686	258,644	27,739	221	27,960	44,323
Transportista Eléctrica Centroamericana S.A. (TRELEC)	93,135	1,013,495	567,834	3,135	153,268	76,455	11,313	87,768	595
Aguas Regionales EPM S.A. E.S.P.	55,267	175,462	38,346	66,890	60,355	9,294	-	9,294	31,136
Other participations[7]	517,828	4,124,039	352,603	516,599	691,509	392,715	28,962	421,677	278,030

Amounts stated in millions of Colombian pesos

2019	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Ordinary income	Profit for the period continuing operations	Other comprehensive income	Total comprehensive income	Cash flows
Elektra Noreste S.A. (ENSA)	659,340	1,960,812	1,138,014	889,124	2,417,021	107,816	6,352	114,168	69,466
Empresa Eléctrica de Guatemala S.A. (EEGSA)	549,658	1,611,453	395,863	835,322	2,060,200	100,390	32,968	133,358	18,644
Electrificadora de Santander S.A. E.S.P. (ESSA)	321,713	1,538,805	335,156	830,394	1,193,536	148,340	24,105	172,445	133,987
Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS)	229,499	964,992	231,573	672,756	777,880	65,033	(4,330)	60,703	47,534
Distribuidora Eléctrica del Sur S.A. de C.V. (DELSUR)	172,535	385,611	236,994	178,658	1,040,346	44,112	(4,424)	39,688	23,028
Central Hidroeléctrica de Caldas S.A. E.S.P. (CHEC)	244,733	944,416	261,482	383,707	766,819	123,470	(1,045)	122,425	19,874
Comercializadora Eléctrica de Guatemala S.A. (COMEGSA)	95,011	1,262	25,132	1,122	329,092	12,695	539	13,234	3,479
Empresa de Energía del Quindío S.A. E.S.P. (EDEQ)	77,132	211,633	43,155	71,474	245,074	35,822	(525)	35,297	19,782
Transportista Eléctrica Centroamericana S.A. (TRELEC)	114,663	897,312	580,416	(24,302)	108,379	45,789	2,633	48,422	3,362
Aguas Regionales EPM S.A. E.S.P.	25,534	143,830	34,000	32,754	56,210	9,932	-	9,932	10,469
Other participations[1]	499,893	3,957,809	387,610	486,967	722,615	517,524	7,972	525,496	230,789

Amounts stated in millions of Colombian pesos

[1] Corresponds to investments in subsidiaries where the non-controlling interest is not significant in terms of equity participation and/or the amount of financial figures of each entity, and includes the following subsidiaries: Hidroecológica del Teribe S.A., Enérgica S.A., Credieegsa S.A., Aguas Nacionales EPM S.A. E.S.P., Empresa de Aguas del Oriente Antioqueño S.A. E.S.P., Aguas de Malambo S.A. E.S.P., Empresas Varias de Medellín S.A. E.S.P., EPM Inversiones S.A., Inmobiliaria y Desarrolladora Empresarial de América S.A., Innova Tecnología y Negocios S.A. de C.V. and Almacenaje y Manejo de Materiales Eléctricos S.A.

Profit or loss for the period, the dividends paid, and the assets allocated to non-controlling interests at the date of the reporting period are as follows:

Non-controlling interests	December 31, 2020			
	Equity	Profit or loss for the period	Other comprehensive income	Dividends paid
Elektra Noreste S.A. (ENSA)	335,392	36,396	(44)	-
Electrificadora de Santander S.A. E.S.P. (ESSA)	176,689	35,851	(938)	38,543
Empresa Electrica de Guatemala S.A. (EEGSA)	195,704	28,181	(775)	13,814
Central Hidroelectrica de Caldas S.A. E.S.P. (CHEC)	95,369	15,335	(288)	27,921
Transportista Electrica Centroamericana S.A. (TRELEC)	102,300	14,601	-	1,315
Centrales Electricas del Norte de Santander S.A. E.S.P. (E.S.P.)	29,421	5,762	(949)	-
Distribuidora de Electricidad del Sur S.A. de C.V. (DELSUR)	18,488	5,002	(179)	9,073
Aguas Regionales EPM S.A. E.S.P.	31,918	2,364	-	-
Comercializadora Electrica de Guatemala S.A. (COMEGSA)	13,775	2,210	-	2,628
Empresa de Energia del Quindio S.A. E.S.P. (EDEQ)	11,847	1,982	16	2,593
Other non-controlled interests (1)	23,242	8,695	1	8,369

Amounts stated in millions of Colombian pesos

Non-controlling interests	2019			
	Equity	Profit or loss for the period	Other comprehensive income	Dividends paid
Elektra Noreste S.A. (ENSA)	289,364	52,704	(431)	10
Electrificadora de Santander S.A. E.S.P. (ESSA)	180,326	38,551	6,256	35,048
Empresa Electrica de Guatemala S.A. (EEGSA)	177,597	19,172	(1,435)	16,008
Central Hidroelectrica de Caldas S.A. E.S.P. (CHEC)	108,243	24,569	(208)	28,450
Transportista Electrica Centroamericana S.A. (TRELEC)	87,060	8,745	-	8,137
Centrales Electricas del Norte de Santander S.A. E.S.P.	24,609	5,515	(367)	-
Distribuidora de Electricidad del Sur S.A. de C.V. (DELSUR)	19,319	5,973	(164)	7,853
Aguas Regionales S.A. E.S.P.	31,029	3,003	-	-
Comercializadora Electrica de Guatemala S.A. (COMEGSA)	13,372	2,424	-	777
Empresa de Energia del Quindio S.A. E.S.P. (EDEQ)	12,442	2,560	(38)	2,188
Other non-controlled interests (1)	21,039	7,547	(4)	4,691

Amounts stated in millions of Colombian pesos

(1) Corresponds to investments in subsidiaries where the non-controlling interest is not significant and includes the following companies: Inmobiliaria y Desarrolladora Empresarial de América S.A., Enérgica S.A., Aguas de Malambo S.A. E.S.P., Empresa de Aguas del Oriente Antioqueño S.A. E.S.P., Hidroecológica del Teribe S.A., Crediegsa S.A., Aguas Nacionales EPM S.A. E.S.P., Empresas Varias de Medellín S.A. E.S.P. and Almacenaje y Manejo de Materiales Eléctricos S.A.

9.1 Significant restrictions

As of 31 December 2020, and 2019, the Group does not have any significant restriction to access or use the assets, settle Group liabilities, nor do the non-controlling interests have protective rights that could restrict the Group's ability to access or use the assets and settle

liabilities of the subsidiaries or restrict dividends and other capital distributions. Except for what is indicated in Note 4.5 in relation to the subsidiary Desarrollos Hidráulicos de Tampico, S.A. de C.V.

9.2 Consolidated structured entities

As of December 31, 2020, and 2019, the Group has the following consolidated structured entities:

Entity structured	2020			
	Interest in the entity	Total assets	Total liabilities	Net income for the period
FID 20431 SOMOS EPM (formerly Patrimonio Autónomo Financiación Social)	100%	191,467	13,239	19,776
FID 20432 WE ARE CHEC	80.10%	20,861	809	1,416
FID 20433 WE ARE EDEQ	92.85%	1,762	42	18
FID 20434 WE ARE ESSA	74.05%	567	25	(25)

Amounts stated in millions of Colombian pesos

Entity structured	2019			
	Interest in the entity	Total assets	Total liabilities	Net income for the period
FID 20431 SOMOS EPM (formerly Patrimonio Autónomo Financiación Social)	100%	167,272	17,998	21,376

Amounts stated in millions of Colombian pesos

The Group has no obligation to provide financial support to the above structured entities.

9.3 Loss of Control of Subsidiaries

On 27 November 2019, the EPM Group, through its subsidiary EPM Chile S.A., disposed of its investments in:

- Parque Eólico Los Cururos SpA. which carries out electricity generation activities through all types of fuels and renewable energies such as wind, photovoltaic and biomass, transmission, purchase, sale and marketing of electricity and,
- EPM Transmisión Chile S.A., which carries out activities of operation, development of electrical systems for the transport, transmission and transformation of electrical energy, either within the country or abroad, and the acquisition of these. It also markets the transmission capacity of lines and the transformation capacity of substations and associated equipment so that generating plants, both domestic and foreign, can transmit the electricity they produce to their consumption centers.

The effect of the transaction on the profit or loss for the period is as follows:

Value of consideration transferred	495,402
Value of the net assets of the subsidiary	(474,313)
Cost of sale	(4,813)
Reclassification of component of other comprehensive income from conversion of financial statements	8,222
Realization of capitalized interest	27,148
Loss on valuation of previously held equity interests	(3,401)
Profit on disposal of subsidiaries (ver nota 42)	**48,245**

Amounts stated in millions of Colombian pesos

The net effect at the date of the transaction in the consolidated statement of cash flows represents a decrease corresponding to cash and cash equivalents held in subsidiaries of $6,915.

Note 10. Business Combinations

The detail of the business combination carried out by Grupo EPM as of the reporting periods is as follows:

Year	Entity	Activity	Date of transaction	Acquired interest
2020	Caribemar de la Costa S.A.S. E.S.P. (AFINIA)	To provide public electric power distribution and commercialization services, as well as the performance of all related activities, works, services and products.	1/10/2020	100%

As a result of the execution of a Share Acquisition Agreement with Electrificadora del Caribe S.A. E.S.P., Once the conditions established therein were verified, the EPM Group obtained, on October 1, 2020, the date from which it began operations, control of CaribeMar de la Costa S.A.S. E.S.P. ("CaribeMar" or the "Company" under the Afinia brand) through the acquisition of 100% of its shares and therefore of the voting rights through Empresas Públicas de Medellín E.S.P (85%) and EPM Latam S.A. (15%).

The identifiable assets and liabilities acquired on the date of acquisition of CaribeMar include inputs, production processes and an organized work team. The EPM Group has determined that, together, the inputs and processes acquired contribute significantly to the ability to generate income from ordinary activities. The EPM Group has concluded that the acquired group is a business.

CaribeMar is a simplified joint stock company, a mixed public services company, incorporated on April 20, 2020, domiciled in the municipality of Cartagena, Department of Bolívar, Republic of Colombia, and with commercial registration No. 09-442118-12 of the Cartagena Chamber of Commerce. Its main corporate purpose is the provision of public electricity distribution and marketing services, as well as the performance of all related activities, works, services and products.

The Group acquired control of said company mainly due to the following factors:

- Growth opportunity that allows reaching the Atlantic Coast market and providing its service to more than 1.5 million clients located in the departments of Bolívar, Córdoba, Sucre, Cesar and 11 municipalities of Magdalena.
- CaribeMar represents approximately 12% of the national electricity market share, which allows the Group to increase its market share in the electricity distribution and commercialization business in Colombia, going from 23% to approximately 35% (maximum regulatory limit permitted).
- Add to the quality of life of the inhabitants of the Atlantic Coast in the area served by CaribeMar, by providing an electric power service with continuity, quality and coverage.
- Possibility of extending its quality services to a population of approximately 19 million people, of which approximately 6 million are in the region served by CaribeMar.

- Take advantage of economies of scale given the size of the CaribeMar market.
- Possibility of expanding the portfolio of services in other businesses of interest to the EPM Group.

The detail of the fair value of the net assets received as of October 1, 2020, and the result from business combination is as follows:

Concept	Fair value
Deferred tax assets	498,587
Equity investments	32,355
Other current assets	188,131
Accounts receivable(1)	1,443,741
Inventories	48,040
Cash and cash equivalents	681,407
Identifiable assets	**2,892,261**
Liabilities assumed and consideration transferred	**1,300,258**
Result from business combination(2)	**1,592,003**
Acquisition costs(3)	**7,443**

Amounts stated in millions of Colombian pesos

At the control date, CaribeMar's property, plant and equipment, and intangibles were impaired to adjust their value to their recoverable amount. The value in use was considered, technically justified, which reflects the reality of the market and the contractual conditions.

[1] The fair and gross value of the contractual amounts receivable and their composition at the control date is as follows:

Concept	Fair value	Contractual amounts receivable
Trade and other receivables	1,443,741	2,779,225
Identifiable assets	**1,443,741**	**2,779,225**

Amounts stated in millions of Colombian pesos

At the control date, there were $ 1,335,484 corresponding to the contractual cash flows that are not expected to be collected.

[2] The result of the business combination is generated by an acquisition price associated with the mandatory commitments assumed by the EPM Group in the acquisition contract. These commitments do not meet the criteria for their accounting recognition on the control date and date of the Consolidated Statement of Financial Position (See

Commitments section of this note). The result of the business combination is presented in the Consolidated Statement of Comprehensive Income in the effect line for participation in equity investments.

As a result of the aforementioned strategic considerations and the fact that EPM accumulates years of knowledge, experience and operational capabilities, the result was a business projection with an improved operational and financial expectation compared to that of the asset. Given the difficulties of the market and the contractual conditions defined by the seller, which include, among others, the execution of an investment plan and the signing of a management plan with the Superintendency of Residential Public Services to improve the indicators, a company was acquired with net assets and working capital that represent resources destined for the operation of the company, necessary to cover the deficits in the provision of the service with the quality and continuity required, that managed by a suitable operator and incorporated in a financial valuation part of the cash flows of this asset, which, adjusted to the real potential for generating value in that market and the associated risk, reflect the amount of the consideration transferred.

According to the tax regulations in Colombia, the result of the business combination is not considered taxable in income tax. From the date of the transaction to the closing of the accounting period, the result of the business combination has not recorded changes in value.

[3] Acquisition costs of $ 7,443 were recognized, which correspond mainly to technical, financial and legal advice recorded as expenses and included in the line of commissions, fees and services in the result of the period.

The income from ordinary activities and the result of CaribeMar included in the consolidated financial statements are:

Concept	2020
From acquisition date to reporting period	
Income from ordinary activities	753,802
Loss	(74,944)
From the beginning of the annual reporting period through the reporting period(1)	
Revenue from ordinary activities	753,802
Loss	(74,944)

Amounts stated in millions of Colombian pesos

[1] Revenue from ordinary activities and loss from the beginning of the period and from the acquisition date to the reporting period are the same because the company started operations on October 1, 2020.

As of December 31, 2020, in accounting for the business combination the following amounts are provisional:

- Equity investments that represent CaribeMar's participation in the company Centro de Servicios Compartidos S.A.S. and whose fair value will be determined once the activities related to the physical inspection and valuation of property, plant and equipment, and intangible assets are completed.

Commitments

The acquisition of CaribeMar constitutes significant obligations for the EPM Group. As part of these obligations, the EPM Group expressly and irrevocably undertakes to execute, together with CaribeMar, a Minimum Investment Plan in infrastructure[1] and in losses[2], that contemplate a five-year global amount between 2021 and 2025 summarized as follows:

Investment plan	Amount[(3)]
In infrastructure	2,009,957
In losses	988,737
Other investments	166,549
Total	**3,165,243**

Amounts stated in millions of Colombian pesos

[1] Infrastructure investment plan: investment plan in electrical assets, which includes assets for use from the loss plan and special construction units.

[2] Loss investment plan: set of non-use assets oriented to the management or execution of the loss plan, as described in Resolution 015 of 2018 of the Colombian Energy and Gas Regulatory Commission (CREG).

[3] Amounts denominated in millions of constant pesos at the beginning of 2020.

In the event that CaribeMar is obliged to make investments (including associated costs) in infrastructure in the distribution network under any court ruling or transactions that resolve assumed litigious liabilities, these amounts will be considered for the purposes of complying with the investment plan of Grupo EPM.

It is estimated that the regulatory investment plan, with the tariff charges, will be approved to be implemented in April 2021, so the committed amounts could vary.

The Share Acquisition Agreement limits the EPM Group to dispose of its participation for a period of three years, when such disposal implies loss of control of CaribeMar, either through the transfer of the shares, a merger, a spin-off or in the event of the early liquidation of the company.

Note 11. Investments in associates

The breakdown of Investment in associates of the Group as at the date of the reporting period is:

Name of associate	Location (country)	Main activity	Percentage of participation and voting rights		Date of establishment
			2020	2019	
Hidroeléctrica Ituango S.A. E.S.P.	Colombia	Promotion, design, construction, operation, maintenance and commercialization of energy at national and international level of the Pescadero	46.45%	46.45%	8/06/1998
Hidroeléctrica del Río Aures S.A. E.S.P.	Colombia	Generation and commercialization of electric energy through a hydroelectric power plant, located in the jurisdiction of the municipalities of Abejorral and	32.99%	32.99%	14/05/1997
UNE EPM Telecomunicaciones S.A.	Colombia	Provision of telecommunication services, information and communication technologies, information services and complementary activities.	50.00%	50.00%	23/06/2006
Inversiones Telco S.A.S.	Colombia	Invest in companies whose corporate purpose is based on the provision of business process outsourcing (BPO) services for companies, especially but not	50.00%	50.00%	5/11/2013
VE Servicios de Eficiencia Energética S.A.S. [1]	Colombia	To carry out all activities, works and services related to the installation, operation and energy production of each of the energy efficiency projects developed by EV Alianza Energética S.A., such as the provision of energy and technological solutions, production, transformation, purchase, sale and supply	2.1%	2.1%	21/02/2017

[1] At 31 December 2020, the Group continues to have significant influence on the financial policy and operating decisions of this company (see note 3).

The value of investments in associates at the date of the reporting period is as follows:

Associate	2020				2019		
	Value of investment				Value of investment		
	Cost	Equity method	Dividends	Total	Cost	Equity method	Total
Inversiones Telco S.A.S.	2,342,488	(780,910)	(12,547)	1,549,031	2,342,488	(682,523)	1,659,965
Inversiones Telco S.A.S.	55,224	27,093	(14,508)	67,809	55,224	17,238	72,462
Hidroeléctrica Ituango S.A. E.S.P.	34,313	(10,841)	-	23,472	34,313	(11,134)	23,179
Hidroeléctrica del Río Aures S.A. E.S.P.	2,478	159	-	2,637	2,478	294	2,772
VE Servicios de Eficiencia Energética S.A.S.	88	(4)	-	84	83	1	84
Total investments in associates	**2,434,591**	**(764,503)**	**(27,055)**	**1,643,033**	**2,434,586**	**(676,124)**	**1,758,462**

Amounts stated in millions of Colombian pesos

The breakdown of the equity method recognized in profit or loss for the period and in other comprehensive income for the period is as follows:

Associate	2020			2019		
	Period share method		Total	Period share method		Total
	Result for the period	Otro resultado integral		Result for the period	Otro resultado integral	
UNE EPM Telecomunicaciones S.A.	(101,941)	-	(101,941)	7,186	(300)	6,886
Inversiones Telco S.A.S.	9,783	-	9,783	4,782	-	4,782
Hidroeléctrica Ituango S.A. E.S.P.	293	-	293	-	-	-
Hidroeléctrica del Río Aures S.A. E.S.P.	(135)	-	(135)	(179)	-	(179)
VE Servicios de Eficiencia Energética S.A.S.	-	-	-	4	2	6
Total	**(92,000)**	**-**	**(92,000)**	**11,793**	**(298)**	**11,495**

Amounts stated in millions of Colombian pesos

The financial information of the Group's significant associates at the date of the reporting period is as follows. All associates are accounted for using the equity method in the consolidated financial statements:

2020	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Ordinary income	Result for the period	Other comprehensive income	Total comprehensive income	Dividends received
						Continuing operations			
UNE EPM Telecomunicaciones S.A.	1,873,321	7,455,526	2,624,214	5,759,047	4,843,434	(212,543)	104	(212,439)	12,547
Inversiones Telco S.A.S.	163,965	125,474	88,519	55,996	428,756	9,420	-	9,420	-
Hidroeléctrica Ituango S.A. E.S.P.	18,338	109,916	824	76,824	694	254	-	254	-
VE Servicios de Eficiencia Energética S.A.S.	2,861	7,424	6,280	-	1,763	195		195	-
Hidroeléctrica del Río Aures S.A. E.S.P.	1,272	13,684	6,742	-	-	(409)	-	(409)	-

Amounts stated in millions of Colombian pesos

2019	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Ordinary income	Result for the period	Other comprehensive income	Total comprehensive income	Dividends received
						Continuing operations			
UNE EPM Telecomunicaciones S.A.	1,776,297	6,163,823	1,874,908	4,287,990	4,927,143	519	(147)	372	38,483
Inversiones Telco S.A.S.	163,965	125,474	88,519	55,996	428,756	9,420	-	9,420	3,103
Hidroeléctrica Ituango S.A. E.S.P.	5,209	111,606	924	65,987	-	-	-	-	-
VE Servicios de Eficiencia Energética S.A.S.	2,861	7,424	6,280	-	1,763	195	-	195	-
Hidroeléctrica del Río Aures S.A. E.S.P.	2,388	12,967	6,652	-	-	(276)	168	(108)	-

Amounts stated in millions of Colombian pesos

The financial information of these companies, the basis for applying the equity method, is prepared under IFRS and adjusted to the Group's accounting policies.

Significant restrictions

As at 31 December 2020 and 2019, the Group has no significant restrictions on investments in associates relating to the transfer of funds to the Group in the form of cash dividends, or repayment of loans or advances made by the Group, except in the case of UNE EPM Telecomunicaciones S.A. in which at least fifty percent (50%) of the net profit for the period must be distributed as a dividend after appropriation and/or legal, statutory and occasional reserves, provided that the level of consolidated financial debt does not exceed twice the EBITDA for the same period.

Note 12. Investment in joint ventures

The breakdown of joint ventures of the Group at the reporting date is as follows:

Name of joint venture	Main activity	Actividad principal	Percentage of ownership and voting rights		Date of creation
			2020	2019	
Parques del Río S.A.S. [1]	Colombia	Construction, operation and maintenance of the Parques del Río Medellín project, as well as acting as the project's urban manager.	33%	33%	26/11/2015
Centro de Servicios Compartidos SAS [2]	Colombia	General technology services, technology infrastructure services, specialized business technology services and other specialized services.	50%	-	05/08/2020

[1] Joint venture constituted on November 26, 2015, with the participation of the Municipality of Medellín, Intervial Colombia S.A.S., Empresa de Transporte Masivo del Valle de Aburrá Ltda. (Metro) and EPM. The strategic support of EPM's participation in this company is based on the following aspects:

- Apply EPM expertise to large-scale infrastructure developments.
- EPM is entitled to participate by the territorial ordinance plan.

[2] Joint business established on August 5, 2020, in which CaribeSol de la Costa S.A.S. E.S.P. and Caribemar de la Costa S.A.S. E.S.P., whose objective is the provision of technological services to both companies.

The value of investments in joint Ventures at the reporting date was:

Joint venture	2020			2019		
	Investment value			Investment value		
	Cost	Equity method	Total	Cost	Equity method	Total
Parques del Río S.A.S.	99	(46)	53	99	(17)	82
Centro de Servicios Compartidos SAS	32,355	59	32,414	-	-	-
Total	**32,454**	**12**	**32,467**	**99**	**(17)**	**82**

Amounts stated in millions of Colombian pesos

The financial information of the Group's significant joint ventures at the date of the reporting period is as follows. All joint ventures are accounted for using the equity method in the consolidated financial statements:

2020	Current assets	Current liabilities	Result for the period Continuing operations	Total comprehensive income	Dividends received
Parques del Río S.A.S.	161	1	(29)	-	-
Centro de Servicios Compartidos SAS	47,351	7,344	117	-	-

Amounts stated in millions of Colombian pesos

2019	Current assets	Current liabilities	Result for the period Continuing operations	Total comprehensive income	Dividends received
Parques del Río S.A.S.	254	6	-	-	-

Amounts stated in millions of Colombian pesos

As of December 31, 2019, Parques del Rio S.A.S. entity is in a pre-operational stage and has no operating income.

The financial information of the companies, which is the basis for applying the equity method, is prepared under IFRS and adjusted to the Group's accounting policies.

Significant restrictions

At 31 December 2020 and 2019, the Group has no significant restrictions on investments in joint ventures relating to the transfer of funds to the Group in the form of cash dividends, or repayment of loans or advances made by the Group.

Note 13. Trade and other receivables

The breakdown of trade and other receivables of the Group as of the dates of the periods being reported is as follows:

Trade and other receivables	2020	2019
Non-current		
Trade and other receivables Non-current	801,952	405,894
Impairment utilities	(401,236)	(129,544)
Employee loans(1)	122,345	118,360
Dividends and participations receivable	17	-
Impairment of loans to employees	(10)	(2)
Utility management contracts	536,651	546,117
Severance payments	110,865	-
Other services	125	1,021
Other receivables	131,254	90,812
Impairment of other loans	(25,207)	(18,973)
Total non-current	**1,276,757**	**1,013,685**
Current		
Utility accounts receivable	4,912,954	3,380,165
Impairment utilities	(1,731,674)	(401,684)
Employee loans(1)	46,157	46,976
Dividends and participations receivable	10,269	-
Impairment of loans to employees	(58)	(291)
Other contracts with customers	598	2,001
Contracts for the management of public services	76,174	77,021
Severance payments(2)	317,648	466,037
Other services	228,455	244,316
Other receivables	567,275	454,070
Impairment of other loans	(248,070)	(195,949)
Total current	**4,179,728**	**4,072,661**
Total	**5,456,485**	**5,086,346**

Amounts stated in millions of Colombian pesos

(1) The increase in the portfolio of public service debtors is mainly explained as a consequence of the measures taken to mitigate the economic and social effects generated by the COVID-19 pandemic. These measures were aimed at granting deadlines for the payment of services, avoiding the suspension and cut of supply and gave the opportunity to defer the debt. Finally, a lower collection was evidenced, distributed as follows: $ 546,260 non-payment financing, $ 31,196 frozen financing installments, $ 30,311 preload for life program, $ 18,032 discount for timely payment and other relief plans $ 1,621.

(2) Receivables from Mapfre insurance company for $378,639 in respect of civil works and total loss of machinery and equipment covered by the all-risk and construction policy and $8,000 in respect of non-contractual civil liability for the Ituango´s proyect. $ 110,865 is recorded in the non-current portion and $ 275,774 in the current portion.

(3) The increase is mainly explained by the dividends decreed by Inversiones Telco.

Long-term accounts receivable are measured at amortized cost under the effective interest rate method and short-term accounts receivable are presented in their nominal amount, except for accounts receivable in EPM Matrix of: Biomax for $ 20,643 associated with the firm supply contract for liquid fuel (ACPM) for the Termoeléctrica La Sierra and Termodorada plants, which are measured at fair value.

Impairment of portfolio

The Group measures the value correction for expected losses during the lifespan of the asset using the simplified approach, which consists in taking the present value of credit loss arising from all possible default events at any time during the lifetime of the operation.

This alternative is taken given that the volume of customers is very high and the measurement and control of the risk by stages can lead to errors and to an underassessment of impairment.

The expected loss model corresponds to a forecasting tool that projects the probability of portfolio default (in the next twelve months. Each obligation is assigned an individual probability of default calculated from a probability model that involves sociodemographic, product and behavioral variables.

At the cut-off date, the ageing analysis of receivables at the end of the reporting period that are impaired is:

	2020		2019	
	Gross recorded book value	Value expected credit losses during the life time	Gross recorded book value	Value expected credit losses during the life time
Public utilities debtors				
Not Past Due	3,138,585	(319,713)	2,801,324	(128,856)
Less than 30 days	655,728	(152,435)	482,585	(22,265)
30-60 days	309,655	(218,347)	85,575	(10,631)
61-90 days	273,336	(220,920)	38,994	(7,417)
91-120 days	254,570	(233,428)	12,447	(5,765)
121-180 days	282,619	(241,995)	25,134	(12,015)
181-360 days	300,173	(275,905)	67,612	(51,225)
Greater than 360 days	500,240	(470,166)	272,388	(293,053)
Total public utility debtors	**5,714,907**	**(2,132,910)**	**3,786,059**	**(531,228)**
Other debtors				
Not Past Due	1,177,998	(20,816)	1,141,173	(96,378)
Less than 30 days	71,718	(5,288)	90,926	(6,782)
30-60 days	10,770	(2,324)	13,088	(1,983)
61-90 days	8,202	(1,882)	6,756	(1,564)
91-120 days	6,142	(2,103)	85,116	(64,395)
121-180 days	8,659	(4,009)	6,886	(3,020)
181-360 days	90,760	(17,732)	72,256	(14,302)
Greater than 360 days	773,582	(219,191)	630,529	(26,792)
Total other debtors	**2,147,833**	**(273,345)**	**2,046,730**	**(215,215)**
Total debtors	**7,862,739**	**(2,406,255)**	**5,832,789**	**(746,443)**

Amounts stated in millions of Colombian pesos

The variation in the expected credit losses of Grupo EPM amounts to $ 1,665,853, explained by the following reasons: a) Due to the inclusion of the impairment of the portfolio corresponding to the new subsidiary Caribe Mar de la Costa S.A.S E.S.P. which was $ 1,464,233. b) The increase in the impairment of the subsidiary ESSA, as a consequence of the adjustment in the model used to calculate the impairment of the portfolio. As of December 31, 2020, it is estimated that due to the health emergency caused by COVID-19, the deterioration of the accounts receivable of the EPM group has increased by $ 120,882.

The reconciliation of the expected credit losses of the portfolio is as follows:

Asset life expected credit losses	2020	2019
Value correction at the beginning of the period	(746,443)	(675,021)
Changes in impairment of accounts receivable held at the beginning of the period	(492,335)	-
Financial assets that have been derecognized during the period	5,488	20,281
New financial assets originated or purchased	(264,129)	(408,944)
Cancellations	372,121	362,458
Changes in risk models/parameters	88,872	43,992
Business combinations(1)	(1,335,484)	-
Differences in exchange rates and other movements	(34,345)	(89,209)
Final balance	**(2,406,255)**	**(746,443)**

Amounts stated in millions of Colombian pesos

Portfolio reconciliation is as follows:

Portfolio balance	2020	2019
Initial balance of financial assets	5,832,789	4,889,239
New financial assets originated or purchased	26,163,115	33,184,954
Write-offs of financial assets	(26,941,894)	(31,991,406)
Financial assets that have been derecognized	(9,216)	(20,281)
Changes due to modifications that did not result in derecognition	-	32,187
Business combinations(1)	2,779,225	-
Valuation at amortized cost	(18,697)	-
Other changes	57,417	(261,904)
Final balance	**7,862,739**	**5,832,789**

Amounts stated in millions of Colombian pesos

(1) Corresponds to the entry of the new subsidiary Caribe Mar de la Costa S.A.S E.S.P.

The Group derecognizes, against the impairment of recognized value in a corrective account the values of impaired financial assets when:

- Recorded receivable do not present any certain rights, assets or obligations for the entity.
- Rights or obligations lack documents and suitable support to advance the relevant procedures for their collection or payment.
- It is not possible to collect the right or obligation, due to coercive or judicial jurisdiction.
- It is not possible to legally charge any natural or legal entity for the value of the portfolio.
- When the cost-benefit relationship has been evaluated and established, it is more expensive to advance the collection process than the value of the obligation.

Bodies responsible for derecognizing

Within the framework of group governance, approval bodies have been defined for the derecognition of assets from the financial statements, in order to maintain control over the assets to be written-off.

Note 14. Other financial assets

The breakdown of other financial assets at the closing of the period is as follows:

Other financial assets	2020	2019
Non-current		
Derivatives designated as hedging instruments under hedge accounting		
Swap contracts	46,279	34,422
Total derivatives designated as hedging instruments under hedge accounting	**46,279**	**34,422**
Financial assets measured at fair value through profit or loss for the period		
Fixed-income securities(1)	177,513	2,406
Variable income securities	79,928	59,005
Pledged investments	25,765	47,830
Trust rights	449,679	431,973
Total financial assets measured at fair value through profit or loss for the period	**732,885**	**541,214**
Financial assets designated at fair value with changes through other comprehensive income		
Equity instruments (2))	2,559,131	1,963,081
Total financial assets designated at fair value with changes through other comprehensive income	**2,559,131**	**1,963,081**
Financial assets measured at amortized cost		
Fixed income securities	1,640	1,619
Total financial assets measured at amortized cost	**1,640**	**1,619**
Financial leases	101,344	1,231
Total other non-current financial assets	**3,441,279**	**2,541,567**
Current		
Derivatives designated as hedging instruments under hedge accounting		
Swap contracts	16,105	11,727
Total derivatives designated as hedging instruments under hedge accounting	**16,105**	**11,727**
Financial assets measured at fair value through profit or loss for the period		
Derivatives not under hedge accounting(3)	128,204	-
Fixed-income securities(1)	2,068,299	811,865
Pledged investments	9,383	5,970
Total financial assets measured at fair value through profit or loss for the period	**2,205,886**	**817,835**
Financial assets measured at amortized cost		
Fixed income securities	185,605	34,261
Pledged investments	126	126
Total financial assets measured at amortized cost	**185,731**	**34,387**
Finance leases	4,142	4,049
Total other current assets	**2,411,864**	**867,998**
Total other assets	**5,853,143**	**3,409,565**

Amounts stated in millions of Colombian pesos

(1) Increase explained in temporary investments in dollars whose market value at the end of December amounted to USD573 million equivalent to $ 1,967,739, the sources of these resources were mainly debt operations.

(2) Increase in the valuation of the shares of Interconexión Eléctrica S.A. E.S.P which is explained by the behavior of the market.

(3) Corresponds to the climatic derivative contracted to cover the existing risk of dry seasons that imply a decrease in hydraulic generation and a rise in energy prices on the stock market. This financial instrument aims to provide protection to EPM parent company

when events materialize that may prevent the fulfillment of contractual commitments that imply buying energy on the stock market at market prices that may be unfavorable. With the climate derivative, part of this impact is transferred to the market, which would reduce the effect on the Group's financial results.

Financial assets at fair value through profit or loss are assets whose contractual cash flows are highly liquid. The Group classifies a financial asset in this category if it is acquired mainly for the purpose of being sold in the short term.

Investments made to optimize liquidity surpluses are included, that is, all those resources that are not immediately used for the development of the activities that constitute the company's corporate purpose. The investment of excess liquidity is made under the criteria of transparency, security, liquidity and profitability, under the guidelines of adequate control and under market conditions without speculative intent.

Conventional purchases and sales of financial assets are accounted for by applying the trade date.

14.1 Other financial assets measured at fair value with changes in other comprehensive income

Equity investments designated at fair value through other comprehensive income:

The breakdown of equity investments designated at fair value through other comprehensive income is:

Equity investment	2020	2019
Interconexión Eléctrica S.A. E.S.P.(1)	2,511,518	1,915,398
Promioriente S.A. E.S.P.	39,541	39,566
Reforestadora Industrial de Antioquia S.A.	4,947	4,947
Electrificadora del Caribe S.A. E.S.P.	1,385	1,385
Gensa S.A. E.S.P.	594	594
Others(2)	1,146	1,191
Total	2,559,131	1,963,081
Accumulated losses during the period(3)	-	(47,620)
Dividends recognized during the period related to investments that remain recognized at the end of the period(4)	72,984	57,262
Dividends recognized during the period	72,984	9,642

Amounts stated in millions of Colombian pesos

(1) As of 31 December 2020, the market price of Interconexión Eléctrica S.A. E.S.P. closed at $25,700 Colombian pesos (2019: $19,600 Colombian pesos) per share.

(2) Includes investments in: Gestión Energética S.A., Unidad de Transacciones S.A. de C.V., Terminal de Transporte de Bucaramanga S.A., Sin Escombros S.A.S., Duke Energy Guatemala y Cia. S.A., Organización Terpel S.A., Concentra Inteligencia en Energía S.A.S,

Banco Davivienda S.A., Emgesa S.A. E.S.P., Hotel Turismo Juana Naranjo, Compañía de Alumbrado Eléctrico de San Salvador S.A., Fosfonorte S.A., Central de Abastos de Cúcuta, Acerías Paz del Río S.A., Cenfer S.A.

(3) Corresponds to loss generated in July 2019 on the sale of 14,881,134 ISA shares, arising from the difference between the sale price and the valuation of the share on the day of the transaction, ($15,700 pesos/share - $18,900 pesos/share = $-3,200 Colombian pesos/share).

(4) Dividends have been received in 2020 for $ 72,965 (2019: $ 56,132).

Equity investments indicated in the table above are not held for trading purposes but are rather held for strategic medium- and long- term purposes. The Group Management believes that the classification for these strategic investments provides more reliable financial information, reflecting changes in their fair value immediately in the results of the period.

14.2 Reclassifications of financial assets

The Group has not made changes to the business model for the management and administration of financial assets, therefore no financial assets have been reclassified.

Note 15. Leases

15.1. Finance lease as a lessor

The most significant finance lease agreements are: the facilities for the offices of the Grupo Tecnología Intercontinental, S.A.P. de C.V. TICSA company. The lease period of the office is 7 years, with an option to renew the lease after that date. The lease payments are modified each year based on inflation. For certain leases, the Company has restrictions on entering into sublease agreements.

At the cut-off date, future minimum payments and net investment in finance leases are distributed as follows:

Finance lease	2020	2019	
	Gross Investment	Gross Investment	Net Investment
Year one	2,124	2,031	-
Year two	466	1,231	-
More than five years	-	2,018	2,018
Total leases	2,590	5,280	2,018
Present value of minimum lease payments to be received	2,590	5,280	2,018

Amounts stated in millions of Colombian pesos

The Group, as the lessor, does not have any contracts that take the legal form of a lease and which do not in essence constitute a lease.

15.2. Asset-originating lease for right-of-use as a lessee

At the cut-off date, the recorded value of assets for right-of-use is as follows (excluding assets with right-of-use associated with construction in progress, which are included in note 5 Property, plant and equipment):

2020	Right to use land	Right to use buildings	Right to use networks, lines and cables	Right to use machinery and equipment	Right of use of furniture, fixtures and office equipment	Right to use communication and computing equipment	Right to use transport, traction and elevation equipment	TOTAL
Initial balance of cost	12,172	504,267	103,507	22,944	1,063	10,251	87,407	741,611
Additions	624	27,605	800	3,309	-	935	101	33,074
Business combinations(1)	-	6,314	-	-	-	-	3,637	9,951
Dispositions	-	-	-	-	-	(219)	-	(219)
Other changes	(927)	(7,365)	-	-	-	(2)	-	(8,294)
Withdrawals (-)	(6)	(1,480)	-	(893)	-	-	-	(2,379)
Transfers	-	399	-	-	-	-	-	399
Effect of foreign currency translation	9	680	1,272	-	15	105	(7)	2,074
Final balance of cost	11,877	530,420	105,579	27,060	1,078	11,070	91,138	778,222
Accumulated amortization and impairment								
Accumulated amortization and impairment beginning balance	(604)	(93,705)	(5,737)	(6,544)	(212)	(2,824)	(22,573)	(132,199)
Business combination(1)	-	(6,268)	-	-	-	-	(3,637)	(9,905)
Disposals	-	-	-	-	-	219	-	219
Other changes	114	121	-	(1)	1	1	(73)	213
Dispositions (-)	4	2,046	-	-	-	-	-	2,050
Effect of foreign currency translation	1	44	58	-	4	15	1	125
Amortization for the period	(730)	(23,237)	(6,369)	(6,235)	(161)	(1,348)	(25,492)	(63,544)
Impairment for the period	-	(3,959)	-	-	-	-	-	(3,959)
Ending balance accumulated amortization and impairment	(1,185)	(124,958)	(12,048)	(12,780)	(368)	(3,937)	(51,724)	(207,000)
Total ending balance net right-of-use assets	10,692	405,462	93,531	14,280	710	7,133	39,414	571,222

Amounts stated in millions of Colombian pesos

(1) Corresponds to the business combination with Caribemar de la Costa S.A.S. E.S.P. (Afinia).

2019	Right to use land	Right to use buildings	Right to use networks, lines and cables	Right to use machinery and equipment	Right of use of furniture, fixtures and office equipment	Right to use communication and computing equipment	Right to use transport, traction and elevation equipment	TOTAL
Initial balance of cost	-	-	-	-	-	-	-	-
Addition	1,728	8,637	38	70	666	188	1,172	12,719
Re-statement due to change in policy	12,285	500,616	105,132	26,811	432	7,472	86,774	738,522
Withdrawals (-)	-	(1,964)	(809)	-	(16)	-	(59)	(1,948)
Dispositions	-	-	-	-	-	(4)	-	(4)
Transfers	-	17	-	-	-	-	-	17
Effect of loss of control in subsidiary	(6,862)	-	-	-	-	-	-	(6,862)
Effect of foreign currency translation	307	321	223	-	3	21	25	904
Other changes	(896)	(4,262)	(1,081)	2,063	-	2,388	(7)	(1,803)
Final balance of cost	12,172	504,267	103,507	22,944	1,063	10,251	87,407	741,611
Accumulated amortization and impairment								
Initial balance of accumulated amortization and impairment losses	-	-	-	-	-	-	-	-
Amortization for the period	(665)	(19,422)	(5,750)	(5,386)	(111)	(1,390)	(22,574)	(54,937)
Deterioration for the period	-	-	-	-	-	-	(11)	(11)
Restatement due to change in policy	-	(77,013)	-	-	-	-	-	(77,013)
Withdrawals (-)	-	170	13	-	17	-	21	223
Effect of foreign currency translation	1	(311)	5	-	(1)	-	(1)	(307)
Other changes	-	2,871	(2)	(1,164)	(117)	(1,734)	(8)	(154)
Ending balance of accumulated amortization and impairment losses	(604)	(93,705)	(5,737)	(6,544)	(212)	(2,824)	(22,573)	(132,199)
Total ending balance of net right-of-use assets	11,568	410,562	97,770	16,400	851	7,427	64,834	609,412

Amounts stated in millions of Colombian pesos

The most significant finance lease agreement is:

Contrato arrendamiento Edificio Empresas Públicas de Medellín (Empresas Públicas de Medellín Building lease contract) CT- 085 of 12 February 2002, held between EPM (THE COMPANIES) and the MUNICIPALITY OF MEDELLIN (MUNICIPALITY), the MUNICIPALITY agrees to lease to THE COMPANIES, and the latter agree to receive on the same basis, the use and enjoyment of the real estate owned by them called "Edificio Empresas Públicas de Medellín", with all its constructions and improvements.

The term of the contract is 50 years from 21 December 2001, date on which the MUNICIPALITY OF MEDELLIN became the owner of the property.

Contract lease payments are adjusted each year by a percentage equal to the national Consumer Price Index certified by DANE for the immediately preceding year.

Lease liabilities are included in Other financial liabilities in the statement of financial position.

Interest on lease liability amounts to $222,721.

Total cash outflows from leases during the period are $180,082.

At the cut-off date, future minimum payments and the present value of the minimum lease liability payments are distributed as follows:

Finance Lease	2020		2019	
	Minimum payments	Present value of minimum payments	Minimum payments	Present value of minimum payments
One year	86,402	86,196	77,713	72,654
More than one year and up to five years	293,513	237,695	305,746	243,814
More than five years	1,246,138	363,777	1,257,692	366,291
Total leases	**1,626,053**	**687,668**	**1,641,151**	**682,760**
Less - value of unearned interest	(938,385)	-	(958,391)	-
Present value of minimum lease payments	687,668	687,668	682,760	682,760

Amounts stated in millions of Colombian pesos

15.3 Operating lease as lessee

The most significant operating lease agreements are for the electrical infrastructure for the installation of networks by telecommunications operators. The contingent payments of these leases are determined based on the updating of the producer price index (PPI) and consumer price index (CPI) variables as well as the updating of the lease payments. Leases agreements provide for an option to be renewed by mutual agreement between the parties and do not provide for a purchase option.

The value of operating lease income is:

Operating lease	2020	2019
Year one	81,836	85,401
Year two	17,081	93,893
Year three	15,560	16,447
Year four	12,637	5,696
Year five	12,943	4,873
More than five years	28,889	30,340
Total leases	**168,946**	**236,650**

Amounts stated in millions of Colombian pesos

The Group, as a lessor, does not have contracts that take the legal form of a lease and that in essence do not constitute one.

15.4 Leases that do not generate assets by right-of-use as a lessee

Under IFRS 16, the most significant operating lease agreements are in EPM for spaces for the installation and operation of antennas in weather stations, shift management system, user printing infrastructure, among others, with no restrictions. The contingent payments of these leases are determined based on the consumer price index (CPI) as well as the updating of the lease payments and these contracts can be renewed.

At the cut-off date, future commitments for short-time lease are $17,602 (2019: $8,233).

Lease payments recognized as expense for the period are $23,454 (2019: $25,893).

The Group, as the lessee, does not have contracts that take the legal form of a lease and that in essence do not constitute one.

Note 16. Warranties

The Group has granted the following financial assets as collateral:

- Letters of credit, performance bonds and other securities for $245,952 (2019: 233,327) granted by the subsidiary ENSA to guarantee: fulfillment of the obligations for the concession contract with the National Authority of Public Utilities of Panama (Autoridad Nacional de los Servicios Públicos de Panamá); for electricity purchase contracts to generating and transmission companies.
- Deposits to Fixed Term Certificate (CDT) which recorded value is $ 133 (2019: $ 133). The conditions for the use of the collateral are to cover contingencies for lawsuits against the Municipality of Bucaramanga by the subsidiary ESSA S.A. This collateral is constituted and granted to Seguros del Estado.
- Premium withheld for $33,341 (2019: $19,454) to the subsidiary Maxseguros by the ceding insurance company, complying with Colombian regulations.
- The Group has received as a collateral from the subsidiary Maxseguros the premium withheld to reinsurance companies for $12,440 (2019: $8,253).

The Group has not withheld collaterals as of 31 December 2020 and 2019, authorizing it to sell or pledge them without a default by the owner of the collateral.

Note 17. Other assets

The breakdown of other assets at the end of the periods being reported is as follows:

Description	2020	2019
Non-current		
Employee benefits (1)	53,361	53,387
Deferred loss on leaseback transaction	20,933	21,608
Advances to suppliers (2)	9,085	18,962
Advance payments made (3)	8,240	11,491
Goods received as dation in payment	1,485	1,466
Total other non-current assets	**93,104**	**106,914**
Current		
Advances to suppliers (2)	364,285	64,581
Reinsurance activities (4)	250,671	209,229
Payments made in respect of prepayments (3)	103,766	94,298
Sales tax	62,211	64,759
Other tax credit balances	2,184	2,928
Advance payment of industry and commerce tax	1,297	1,951
Industry and commerce tax withheld	426	438
Advance payment of special contribution	282	282
Other advances or balances in favor for taxes and	172	126
Sales tax advance	3	-
Total other current assets	**785,297**	**438,592**
Total other assets	**878,401**	**545,506**

Amounts stated in millions of Colombian pesos

(1) Corresponds to Loans to employees at below-market rates for $53,361 (2019: $53,387).

(2) The non-current portion corresponds to resources given for management for $9,088 (2019: $18,996) and Other advance payments for -$3 (2019: -$34).

The current portion includes Other advance payments for $336,893 (2019: $59,157); resources given for management for $26,935 (2019: $4,537); advance payments on covenants and agreements and advance payments for travel expenses for $458 (2019: $887).

(3) The non-current portion includes insurance for $1,384 (2019: $3,284) mainly corresponding to the all-risk policies of the Ituango Hydroelectric Project, effective until March 2021, which are being amortized; premium on legal stability contracts for $6,465 (2019: $7,357); maintenance for $318 (2019: $763); leases for $73 (2019: $87).

The current portion includes insurance for $81,995 (2019: $74,906), comprised primarily of the all-risk policies for the Ituango Hydroelectric Project; printed matter, publications, fees,

goods and services paid in advance for $15,283 (2019: $14,264); leases and maintenance for $6,488 (2019: $5,128).

(4) Corresponds to the technical reserves to be covered by reinsurers, which detail is as follows:

Description	2020	2019
Reserves for losses receivable	112,047	91,231
Unreported reserves for recoverable losses	61,592	62,918
Deferred premium - reinsurance portion	43,691	35,626
Retained earnings	33,341	19,454
Total	**250,671**	**209,229**

Amounts stated in millions of Colombian pesos

Note 18. Inventories

Inventories at the end of the period were represented as follows:

Inventories	2020	2019
Service materials (1)	409,904	334,283
Goods in stock (2)	59,980	54,374
Goods in transit	7,454	2,587
Total inventories at the lower of cost or net realizable value	477,338	391,244

Amounts stated in millions of Colombian pesos

(1) Includes materials for the rendering of services held by third parties, which are those delivered to contractors that perform activities related to the rendering of services

(2) Includes goods in stock that do not require transformation, such as electricity, gas and water meters, and supply goods, as well as those held by third parties.

Inventories were recognized for $240,190 (2019: $254,822) as the cost for the rendering of service or cost of goods sold. The inventory decline recognized as an expense during the period amounted to $1,193 (2019: $36). The Group has not generated losses in value when comparing the net realizable value with the average cost of inventories. Write-down reversals amounted to $ 657.

As at 31 December 2020, the Group did not have any inventories committed to liability collateral.

Note 19. Cash and cash equivalents

The composition of cash and cash equivalents at the end of the period is as follows:

Cash and cash equivalents	2020	2019
Cash on hand and at banks	2,931,676	884,703
Other cash equivalents (1)	1,166,288	825,863
Total cash and cash equivalents presented in the statement of financial position	**4,097,964**	**1,710,566**
Total cash and cash equivalents presented in the statement of cash flows	**4,097,964**	**1,710,566**
Restricted cash(2)	**541,788**	**196,072**

Amounts stated in millions of Colombian pesos

(1) Includes restricted funds $541,788 (2019: $196,072) and cash equivalents $624,501 (2019: $629,791).

(2) Of this $110,920 (2019: $46,415) corresponds to non-current restricted cash.

Cash investments mature within three months from their date of acquisition and bear market interest rates for this type of investment.

The Group has restrictions on cash and cash equivalents as detailed below: As of 31 December 2020, the fair value of restricted cash equivalents is $541,788 (2019: $196,072).

Fund or EPM agreement	Destination	2020	2019
Sintraemdes Housing Fund	Contribute to the acquisition of housing and the improvement of the same, of the employees who are beneficiaries of the conventional agreement subscribed between EPM and the unions.	28,506	19,199
Sinpro Housing Fund	Contribute to the acquisition of housing and the improvement of the same, of the employees who are beneficiaries of the conventional agreement subscribed between EPM and the unions.	27,943	21,318
Premium Rent Corpb. 6972005469	To attend possible contingencies subsequent to the acquisition of EPRIO by EPM.	8,797	-
Ituango escrow account	Deposit the resources (approximately $6,000,000,000,000) that EPM must contribute, in order to back up the issuance of a bank guarantee for the Ituango Project.	6,666	-
Ministry of Mines and Energy - Fondo Especial Cuota Fomento (Special Development Quota Fund)	Co-financing agreement for the construction, distribution infrastructure and connection to lower income users in the municipalities of Amagá, Santafé de Antioquia, Sopetrán, San Jerónimo and Ciudad Bolívar. Compressed Natural Gas and connection to users in Don Matías, Entrerríos, San Pedro, Santa Rosa and Yarumal. Agreement No. 106: construction of connection infrastructure for users in Valle de Aburrá, La Ceja, La Unión and El Retiro. Agreement 179: includes the municipality of Sonsón.	5,771	5,635

Fund or EPM agreement	Destination	2020	2019
Agreement signed between the Metropolitan Area of the Aburra Valley and Empresas Públicas de Medellín E.S.P., Execution Act N°4 of the framework agreement No. CT 2015-000783 of 2015.	Support the construction of the south interceptor of the Aburra River - Medellín.	2,654	10,760
Contract No. CT-2019-001105	Contract for the supply of energy and electric power for the non-regulated market and backup of contracts of the energy distributor and marketer S.A. E.S.P. DICEL S.A. E.S.P.	2,478	2,000
Sinpro Education Fund	Promote the welfare of servers to meet the needs of payment of tuition, textbooks and equipment required to advance their own studies and those of the family group.	2,389	2,392
Fund Adapted Health Entity and Fosyga Fund	Mechanism of control and follow-up of the collection of contributions of the Contributive Regime of the General System of Social Security in Health.	2,283	152
Sintraemdes Education Fund	Promote the welfare of employees to meet the needs for payment of tuition, textbooks and supplies required for their own and their family group's studies.	2,172	2,274
We are points agreement	Provision of services for the operation of the key capabilities associated with the Points element of the Large Scale Loyalty Program for the EPM Group.	1,775	1,727
Sintraemdes Calamity Fund	Promote the welfare of its employees to meet their urgent and unforeseen needs or those of their primary family group.	1,587	1,674
Sinpro Calamity Fund	Promote the welfare of its employees to meet their urgent and unforeseen needs or those of their primary family group.	1,397	1,448
Interadministrative Contract Number Pc-2017-001532 De 2017,	Construction and supervision of water and sewage network connections in the neighborhoods of Pepe Sierra I, Barrios de Jesús, el Progreso and la Cañada del Niño.	611	1,438
Agreement 5 Indigenous Schools 2019-20	Co-finance the development of indigenous educational centers within the framework of the villages program, to improve the quality of life of the indigenous communities in the department of Antioquia.	413	995
Motorcycle Repair Fund	Promote the welfare of official workers who work in the regional market and use their own motorcycles to carry out their work.	396	426
IDB Credit 2120	Disbursement for the construction of the Bello wastewater treatment plant (PTAR).	351	334
Interadministrative Agreement CT -2017-001388 (4600007009)	Agreement for the construction of 7 indigenous schools in 5 municipalities.	292	293
Villages Program	Take advantage of the wood that completes its maturation cycle in the forests planted by EPM around its reservoirs, to build social housing in the municipalities of Antioquia outside the Aburrá Valley and deliver them to low-income families, preferably in a situation of forced or voluntary displacement.	217	731
Municipality of Medellín - Aguas	Integral management of water for human consumption of the inhabitants of the municipality of Medellín.	205	509
Agreements with municipalities for public lighting and sanitation fees.	Agreement to manage the resources of the territorial entities for the payment to the municipalities with agreements for the collection of public lighting and sanitation fees; these resources are exempt from 4x1000.	202	51

Fund or EPM agreement	Destination	2020	2019
Deposits Law 820	Guarantee required by the lessor from the tenant for the payment of public utilities. According to Article 15 of Law 820 of 2003 and Regulatory Decree 3130 of 2003.	75	68
Administration of resources for the construction of infrastructure in wood for Envarias at the La Pradera sanitary landfill.	Administration of resources for the construction of infrastructure in wood for Envarias at the La Pradera sanitary landfill.	64	114
Municipality of Medellin - Land	Acquisition of land identified and characterized within the protection zones of hydrographic basins supplying water systems in the municipality of Medellin.	63	61
Espiritu Santo	EPM - Liquidation Espiritu Santo	63	62
Judicial or administrative proceedings	Accounting for seizure due to judicial or administrative processes	45	-
IDEA Agreement 4600003283	Join efforts for the construction of gas home connections in the different sub-regions of the Department of Antioquia under the "Gas without Borders" program.	1	1
Contribution from the Municipalities of Pueblorrico and Ciudad Bolivar.	Agreement for the construction of 7 Rural Indigenous schools.	1	1
Municipality of Medellin - Morada	Construction, repair and replacement of aqueduct and sewerage networks and paving in the municipality of Medellin of the roads affected by these works in the Moravia neighborhood.	-	3
International energy transactions	Guarantee corresponding to the "compensation" that must be made between the invoice of stock exchange transactions and the anticipated payments, seeking that the real payment to XM is carried out.	-	5,274
Department of Antioquia. Agreement for construction of El Aro road - Municipality of Ituango.	Manage the resources provided by the Government of Antioquia to co-finance the construction of the El Aro Road - Puerto Valdivia Road Connection - Dam Site - Municipality of Ituango.	-	2,721
Cuenca Verde	To administer the resources allocated for the fulfillment of the objectives of the Corporación Cuenca Verde.	-	2,167
Municipality of Guatapé and Comare	Join efforts to improve the technical, economic and social conditions for the execution of phase 1 of the project to improve the environmental and landscape infrastructure of the Malecón San Juan del Puerto, for the development of sustainable tourism in the Municipality of Guatapé.	-	448
Guatapé Autonomous Corporation	Join efforts to improve the technical, economic and social conditions for the execution of phase 1 of the project to improve the environmental and landscape infrastructure of the Malecón San Juan del Puerto, for the development of sustainable tourism in the Municipality of Guatapé.	-	311
Bogota Bolivar Gallery	Adapt carrera 51 (Bolivar) between calles 44 (San Juan) and 57 (La Paz) and convert this road segment into what will be called La Galería Bolívar.	-	15
IDEA agreement 4600003912	Inter-administrative agreement to join efforts for the design and construction of electric power generation and distribution systems in rural areas in the Department of Antioquia.	-	2
Ministry of Mines and Energy	Contributions from the Ministry of Mines and Energy in accordance with the provisions of FAER contract GGC 430 of 2015 for rural electrification works in the Municipality of Ituango.	-	1
Total restricted resources EPM		97,417	84,565

Amounts stated in millions of Colombian pesos

CENS Fund or agreement	Destination	2020	2019
BBVA -Minminas 756 and Others	Execution of rural electrification works with several municipalities of Convención.	32,815	15,258
Custody account BBVA XM Bank Guarantees	Performance guarantee and TIES to cover energy purchase projects.	2,063	1,470
Revolving Housing Fund	Housing loans for CENS S.A. employees.	1,502	1,132
Government-Davivienda Agreement and Others	Join technical, administrative and financial efforts for several agreements.	547	579
AOM Contract	Administration, operation, maintenance and replacement of the rural electrification assets built with the resources of the project "rural electrification program in the Catatumbo area and Ocaña province, stage 1, Norte de Santander".	65	65
Total restricted resources CENS		**36,992**	**18,504**

Amounts stated in millions of Colombian pesos

Aguas Nacionales Fund or agreement	Destination	2020	2019
ITAU savings account 153148929	Ministry project	12,553	18,973
Current account Bancolombia 536423 and Others	Atrato Water	626	417
FL ITAU 859085270 y FL ITAU 859085263	Project Interventory	550	-
Total restricted resources Aguas Nacionales		**13,729**	**19,390**

Amounts stated in millions of Colombian pesos

Fund or agreement Empresas varias	Destination	2020	2019
Order FID 919301039524 - Pradera y Others	Resources destined for Pradera's payments	16,622	14,196
FL ITAU 859060217 Renting hours	Delegated administration agreement with the Municipality of Medellín, for the maintenance of green areas of the institutions of the Municipality and its 5 districts.	404	-
FL BBVA 423 Pruning-Felling Agreement	Agreement with INDER for the washing of bridges and roofs of the stadium.	32	32
Agreement 18-897796-47 EDU	Delegated administration agreement with the Municipality of Medellín for the cutting of green areas and pruning and felling of trees.	24	23
FL Occidente INDER	Delegated administration agreement with the Municipality of Medellín for green area mowing services.	3	3
Order 919301039523 - Pradera	Resources destined for Pradera payments		2
Total restricted resources Empresas varias		**17,085**	**14,257**

Amounts stated in millions of Colombian pesos

Fund or agreement Grupo Ticsa Mexico	Destination	2020	2019
Banco del Bajio/Multiva Trust Fund	Ecosistemas de Tuxtla S.A. de C.V.	3,983	4,847
Trust Banco Nacional de Obras y S	Aquasol Morelia S.A. de C.V.	3,844	3,493
Banco del Bajio Trust 15892649	Ecosistemas de Colima S.A. de C.V.	3,181	4,954
Trust Banco Nacional de Obras y S	Ecosistemas de Celaya S.A. de C.V.	779	365
Banco del Bajio Trust 15892649	Ecosistemas de Celaya S.A. de C.V.	738	930
Banco del Bajio Trust 15892649	Aquasol Morelia S.A. de C.V.	770	1,646
Total restricted funds Grupo Ticsa Mexico		**13,295**	**16,235**

Amounts stated in millions of Colombian pesos

Fund or agreement ESSA	Destination	2020	2019
BBVA guarantees 0408	XM Bank Account	2,454	3,221
Agreement Line 115 Puerto Wilches	Rural electrification agreement for the Puerto Wilches - Barrancabermeja line.	874	856
Government - ESSA Phase V Agreement	Government rural electrification agreement	449	448
San Gil Public Lighting Agreement	San Gil public lighting agreement	448	333
Public Hearings Resources Agreement	Agreement signed with the Mayor's Office of Bucaramanga	1	1
FAER Agreement GGC 411 and Others	Rural electrification agreement signed with the Ministry of Mines and Energy	-	3,239
Total restricted resources ESSA		**4,226**	**8,098**

Amounts stated in millions of Colombian pesos

Fund or agreement Aguas Regionales	Destination	2020	2019
Execution Act No.1 Framework Agreement CT_2019_001417	Preparation of a feasibility study for new water catchment sources for drinking water supply in the central area of the Urabá region.	5,115	5,000
Sinbracsmdes housing fund agreement	Housing loans to employees who meet the requirements.	67	88
Total restricted resources Aguas Regionales		**5,182**	**5,088**

Amounts stated in millions of Colombian pesos

Fund or EDEQ agreement	Destination	2020	2019
FL Davivienda Housing Fund 136270148986	Resources destined to improve the quality of life of workers through the granting of loans for the purchase and improvement of housing.	2,473	2,582
FL Fiducredicorp Fondo de Vivienda 919301005560 FL Fiducredicorp Fondo de Vivienda 919301005560	Resources destined to provide workers and their families with access to higher education, health, welfare and recreation.	256	240
FL Fiduciaria Occidente 1101031000001	Resources destined for events caused by serious and unforeseen situations affecting the worker or his family.	12	4
FL Davivienda Collective Portfolio 608136200000618	Resources destined to facilitate loans to workers to acquire and replace motorcycles for the performance of their work.	7	16
Total restricted resources EDEQ		2,748	2,842

Amounts stated in millions of Colombian pesos

CHEC fund or agreement	Destination	2020	2019
XM Custodial Management Account	Fund created to attend the guarantees for the operations of energy transactions in the stock exchange managed and controlled by the market administrator XM.	839	352
Special fund CONFA	Special fund created to attend social and cultural extension programs for CHEC's employees; through a delegated administration contract with the company CONFA.	185	200
Special housing fund	Fund created to provide housing loans to CHEC employees, according to the procedure and conditions established in the Collective Labor Agreement in force - CCTV, signed between the company's union Sintraelecol and CHEC.	54	501
Special land fund	Fund created for the administration of forest conservation lands in the company's hydrographic basins; through a delegated administration contract.	44	65
Fund for design, execution and verification of ap	Design, execution and verification of learning solutions through the application of pedagogical methodologies, signed with contractor ADYLOG SAS (Administration and Logistics SAS).	40	-
Special funds Social Financing Plan - PFS	Fund created to attend the micro-credits made to users of the company's market, charged through the energy bill; these credits have more favorable rates and conditions than those offered by the market. This program was created by the company's Board of Directors.	10	10
Special fund for publicity	Fund created to cover advertising campaigns through contracts with advertising agencies, CJ Martins, Rowell digital agency and Macann.	7	-
Building maintenance fund	Fund created to provide maintenance services for CHEC buildings, through a delegated administration contract.	-	150
Environmental management administration fund	Fund to execute environmental management plans for the area of influence of CHEC generation plants.	-	100

CHEC fund or agreement	Destination	2020	2019
Generation plant maintenance fund	Fund created to attend the civil maintenance of the minor generation plants CHEC, through a delegated administration contract.	-	16
Special fund apprenticeship agreement	Fund created to attend the programs of the annual training agenda for CHEC employees; through a delegated administration contract.	-	7
Total restricted resources CHEC		**1,229**	**1,399**

Amounts stated in millions of Colombian pesos

HIDROE fund or agreement	Destination	2020	2019
Etesa Contract	Non-Regulated Market Contract Guarantee Deposit - MNR or Large Clients	474	337
ETESA Contract	CDT for Energy Contract with regulatory entities (ETESA)	299	297
Administration Contracts (Indemnification of employees)	Employee Severance Fund Deposits	34	22
Services Contract	Guarantee deposit Services Contract	10	10
Total restricted resources HIDROE		**817**	**665**

Amounts stated in millions of Colombian pesos

Fund or agreement EPM CHILE S.A.	Destination	2020	2019
AES GENER S.A. - Guarantee of USD 5,000,000	AES GENER S.A. - Guarantee of USD 5,000,000 - Possible Contingencies	-	16,293
Total restricted resources EPM CHILE S.A.		-	**16,293**

Amounts stated in millions of Colombian pesos

Fund or agreement EMPRIO	Destination	2020	2019
Guarantee for works in the Historic Center	Guarantee deposit on purchase EPRIO Municipality of Rionegro	-	8,736
Total restricted resources EMPRIO		-	**8,736**

Amounts stated in millions of Colombian pesos

Fund or agreement CARIBEMAR	Destination	2020	2019
Prone	Electricity network standardization program	299,242	-
CONPES 150040000135 and Others	Expansion of infrastructure	46,804	-
FAER GGC 562 and Others	Energizing interconnected rural areas	3,022	-
Total restricted resources CARIBEMAR		**349,068**	-

Amounts stated in millions of Colombian pesos

Total restricted resources EPM Group	**541,788**	**196,072**

Amounts stated in millions of Colombian pesos

Note 20. Equity

20.1 Issued capital

The Group does not have its Capital divided in Shares.

Capital	2020	2019
Beginning balance	67	67
Increase (Decrease in capital)	-	-
Total	**67**	**67**

Amounts stated in millions of Colombian pesos

20.2 Reserves

Of the items that conform equity, the reserves at the cut-off date were constituted by:

Reserves	2020	2019
Legal reserves (1)		
Initial balance	1,501,063	1,656,754
Establishment	78,559	101,167
Release	(125,120)	(256,714)
Other movement	179	(144)
Final balance statutory reserves	**1,454,681**	**1,501,063**
Statutory reserves		
Initial balance	33,996	25,408
Establishment	662	9,967
Release	(2,774)	(4,598)
Other movement	988	3,219
Final balance statutory reserves	**32,872**	**33,996**
Occasional reserves		
Initial balance	577,529	598,394
Establishment	-	4,071
Release	-	(21,717)
Other movement	(1,077)	(3,219)
Final balance Occasional reserves	**576,452**	**577,529**
Other reserves		
Initial balance	225,274	280,102
Establishment	8,252	6,165
Release	3	(61,034)
Other movement	1,453	41
Final balance other reserves	**234,982**	**225,274**
Total reserves	**2,298,987**	**2,337,862**

Amounts stated in millions of Colombian pesos

The nature and purpose of the Group's equity reserve are described:

- **Legal Reserves:** In compliance with Colombian tax provisions contained in Article 130 (70% reserve for excess tax depreciation over accounting depreciation) of the Tax Code and Decree 2336 of 1995 (for profits incorporated into results in the application of the equity method applied under local regulations), EPM Group companies operating in Colombia have constituted legal reserves.

  For subsidiaries in El Salvador, the legal reserve is established in accordance with the current Commercial Code. Companies must establish a legal reserve of 7% of net profits annually, with a minimum limit of one fifth of their capital stock. In addition, in accordance with the Income Tax Law, when the legal reserve is decreased for any circumstance, such as capitalization, application to prior years' losses or distribution, it will constitute taxable income for the company for the amount that was deducted for income tax purposes in tax years prior to the decrease, and will be liquidated separately from ordinary income, at the rate of 25%. For such purposes, the company will keep a record of the constitution of the legal reserve and of the amount deducted for the determination of the net or taxable income in each year or period of taxation.

  For Guatemalan subsidiaries, according to the Code of Commerce, all corporations must annually appropriate at least 5% of their net profits to constitute the legal reserve, which cannot be distributed until liquidation of the company. However, this reserve may be capitalized when it is equal to or greater than 15% of the paid-in capital at the close of the immediately preceding fiscal year, without limitation to continuing to reserve the 5% mentioned.

  For subsidiaries in other countries where the EPM Group operates, no legal reserves have been established by law.

  (m) The Board of Directors of EPM at its meetings on 26 March 2020 and 26 March 2019, approved:

  - Release reserves of $95,521 (2019: $256,216) gathered in prior periods by authorization of the Board of Directors.

- **Occasional Reserves:** in compliance with article 211 of the Tax Statute, and the companies of the EPM Group operating in Colombia have constituted the required reserves in order to enjoy the special tax treatment and obtain a rationalization in the payment of income and complementary taxes.
- **Other reserves:** includes statutory reserves for repurchase of shares and share certificates, equity funds and others, which at 31 December record the net balance corresponding to the releases made by the subsidiaries in those reserves that have already met the requirements for release.

20.3. Retained earnings

The movements of retained earnings during the period was:

Accumulated results	2020	2019
Initial balance	17,503,406	15,650,483
Movement in reserves	40,418	222,651
Surplus or dividends declared	(1,488,302)	(1,289,652)
Transfer of other comprehensive income	27	(8,993)
Equity method for changes in shareholders' equity	-	(162)
Purchases and sales to non-controlling interests	433	(40,216)
Income tax related to transactions with owners	(2,246)	1,955
Other changes during the period	4,187	(17,842)
Total accumulated income before net income (loss) for the period	**16,057,923**	**14,518,224**
Net profit or loss for the period controlling interest	**3,584,538**	**2,985,182**
Total accumulated income (loss)	**19,642,461**	**17,503,406**

Amounts stated in millions of Colombian pesos

Surplus paid during the year were $1,488,319 (2019: $1,289,652), where $811,810 (2019: $703,447) were ordinary and $676,509 (2019: $586,205) were extraordinary.

20.4. Non-controlling interests

The movement of the non-controlling interests at the cut-off date is:

Non-controlling interests	2020	2019
Initial Balance	964,572	953,707
Surplus or dividends decreed	(103,440)	(139,590)
Repurchase of shares	(10)	(40)
Equity in income for the period	156,380	170,794
Share in other comprehensive income	(2,878)	1,033
Purchases and sales to non-controlling interests	(1,461)	(31,561)
Income tax related to transactions with owners	(2,142)	1,866
Effect of disposal of subsidiary	(156)	-
Other movement during the period	23,452	8,363
Total accumulated income (loss)	**1,034,317**	**964,572**

Amounts stated in millions of Colombian pesos

Note 21. Accumulated other comprehensive income

The breakdown of each component of the other comprehensive income for the consolidated statement of financial position and the corresponding tax effect is as follows:

Accumulated other comprehensive income	2020			2019		
	Gross	Tax effect	Net	Gross	Tax effect	Net
Reclassifications of property, plant and equipment to investment property	13,439	(1,184)	12,255	13,438	(1,204)	12,234
Re-measurements of defined benefit plans	(163,586)	53,081	(110,505)	(115,483)	38,338	(77,145)
Equity investments measured at fair value through shareholders' equity	3,392,529	(3,925)	3,388,604	2,796,497	(2,092)	2,794,405
Participation in other comprehensive income of associates and joint ventures	(3,868)	-	(3,868)	(3,914)	-	(3,914)
Cash flow hedges	(19,037)	(18,862)	(37,899)	8,421	(30,005)	(21,584)
Translation of financial statements of foreign operations	831,289	-	831,289	600,765	-	600,765
Total	**4,050,766**	**29,110**	**4,079,876**	**3,299,724**	**5,037**	**3,304,761**

Amounts stated in millions of Colombian pesos

A reconciliation of the opening and closing balances at the cut-off date is presented below for each component of comprehensive income:

21.1 Component reclassification of property, plant and equipment to investment property

The component of reclassification of property, plant and equipment to investment property of other comprehensive income corresponds to transfers from property, plant and equipment to investment property, which are measured at fair value. changes in fair value do not reclassify to profit or loss for the period.

Reclassification of property, plant and equipment to investment properties	2020	2019
Beginning balance	12,234	11,796
Other changes	21	438
Total	**12,255**	**12,234**

Amounts stated in millions of Colombian pesos

21.2. Component remeasurements of defined benefit plans

The component of remeasurements of defined benefit plans represents the accrued value of actuarial profits or losses, the return on plan assets and changes in the effect of the asset ceiling, excluding the values included in the net interest on the liability (asset) of net defined benefits. The net value of the remeasurements is transferred to retained earnings and does not reclassify to profit or loss for the period.

Component of new measurements for defined benefit plans	2020	2019
Initial balance	(77,145)	(28,381)
Profit or loss for the period from remeasurement of defined benefit	(48,103)	(67,674)
Associated income tax (or equivalent)	14,804	19,038
Accumulated results transferred to accumulated results for the period	(8)	507
Associated income tax (or equivalent)	-	29
Purchases and sales to non-controlling interests	-	(108)
Other changes	(52)	(556)
Total	**(110,504)**	**(77,145)**

Amounts stated in millions of Colombian pesos

21.3. Component equity investments measured at fair value through equity

The component of other comprehensive income from equity investments measured at fair value through equity represents the accumulated value of the profits or losses from the assessment at fair value less the values transferred to retained profit when these investments have been sold. Changes in fair value do not reclassify to the result of the period.

Equity investments measured at fair value through shareholders' equity	2020	2019
Initial Balance	2,794,405	2,168,304
Net earnings due to changes in the fair value of equity investments	596,103	458,002
Associated income tax (or equivalent)	(1,837)	129,733
Accumulated gains (losses) transferred to retained earnings / accumulated losses for the period	(19)	8,477
Purchases and sales to non-controlling interests	-	(1,090)
Other changes	(47)	30,979
Total	**3,388,605**	**2,794,405**

Amounts stated in millions of Colombian pesos

21.4. Participation in other comprehensive income of associates and joint ventures

The component of other comprehensive income from participation in other comprehensive income of associates and joint ventures represents the accumulated value of applying the equity method to profits and losses of other comprehensive income of associates and joint ventures. The accrued value of the profits or losses will be reclassified to the profit or loss for the period or to the accrued profit or loss, depending on the items that originated the equity method, when these investments have been sold.

Share in other comprehensive income of associates and joint ventures	2020	2019
Initial balance	(3,914)	(3,640)
New measurements of defined benefit plans	(824)	(241)
Results from translation of foreign operations	323	(89)
Hedging transactions	548	-
Associated income tax (or equivalent)	-	33
Equity method for changes in shareholders' equity		23
Total	**(3,867)**	**(3,914)**

Amounts stated in millions of Colombian pesos

21.5. Component: cash flow hedges

The component of other comprehensive income from cash flow hedges represents the accumulated value of the effective portion of the gains or losses that arise from changes in the fair value of hedged items in a cash flow hedge. The accumulated value of the profits or losses will reclassify to profit or loss for the period only when the hedged transaction affects the profit or loss for the period or the highly probable transaction is not expected to occur, or is included, as part of its recorded value, in a heading non-financial item.

Cash flow hedges	2020	2019
Initial Balance	(21,584)	(70,503)
Profit or loss from changes in fair value of hedging instruments	(402,758)	(54,327)
Associated income taxes (or equivalent)	123,004	35,234
Accumulated gains (losses) from changes in fair value of hedging instruments reclassified to income for the period	375,300	83,179
Associated income taxes (or equivalent)	(111,862)	(15,970)
Purchases and sales to non-controlling interests	-	803
Total	**(37,900)**	**(21,584)**

Amounts stated in millions of Colombian pesos

21.6. Component: Profit or loss for translation of foreign operations

The translation differences component represents the cumulative value of the exchange differences arising from the translation into the Group's presentation currency of profit and loss and net assets of foreign operations, as well as profit or loss on hedging instruments that are designated as a hedge of a net investment in a foreign operation. The accumulated translation differences are reclassified to the results of the period, partially or totally, when the foreign operation is disposed of:

Result from translation of foreign operations	2020	2019
Initial balance	600,765	817,051
Net foreign exchange differences from translation of foreign operations	230,485	(213,480)
Purchases and sales to non-controlling interests	31	(2,806)
Other changes	6	-
Total	831,287	600,765

Amounts stated in millions of Colombian pesos

Note 22. Borrowings and loans

The following is the breakdown of the recorded value of loans and borrowings measured at amortized cost:

Loans and receivables	2020	2019
Non-current		
Commercial bank loans	4,043,713	3,774,443
Other bonds and securities issued	-	9,151,073
Multilateral bank loans	2,765,208	3,326,049
Development bank loans	884,315	822,669
Bonds and securities issued	12,994,248	597,305
Total non-current	**20,687,484**	**17,671,539**
Current		
Commercial bank loans	1,963,067	1,542,949
Multilateral bank loans	196,978	268,895
Other bonds and securities issued	-	497,125
Bonds and securities issued	697,440	462,901
Development bank loans	705,333	212,596
Other loans	337,500	-
Total current	**3,900,318**	**2,984,466**
Total loans and credits	**24,587,802**	**20,656,005**

Amounts stated in millions of Colombian pesos

The total increase in credits and loans is explained by new loans acquired with Commercial Banking and short-term credits as part of the strategy implemented to ensure the liquidity of the Group's companies and thus mitigate the impacts of the Covid-19 pandemic; additional issues were made in the following group companies:

- **EPM:** placement of bonds in the international capital market; Global Bonds 2020 and Global Bonds 1287- 2020 reopening for USD750 million equivalent to $ 2,727,496.
- **Aguas de Antofagasta:** The subsidiary carries out two issues of series "A" and "C" bond lines for CLP94,734 million equivalent to $ 445,209.

The breakdown of loans and borrowings is as follows:

Company	Entity or Loan	Original Currency	Initial Date	Years	Nominal Interest Rate	December 31, 2020				December 31, 2019			
						IRR	Nominal Value	Amortized Cost Value	Total Amount	IRR	Nominal Value	Amortized Cost Value	Total Amount
AGUAS DE ANTOFAGASTA	Banco BICE-BCI	CLP	1/01/2018	-	-	0.00%	22	-	22	0.00%	14	-	14
AGUAS DE ANTOFAGASTA	Banco del Estado	CLP	14/01/2015	10.00	UF + 2.9%	1.51%	117,230	1,626	118,866	1.51%	121,157	1,691	122,848
AGUAS DE ANTOFAGASTA	Banco del Estado	CLP	18/10/2018	5.00	TAB + 0.65%	1.42%	446,877	(114,847)	332,031	1.42%	393,744	12,663	406,404
AGUAS DE ANTOFAGASTA	Scotiabank	CLP	18/10/2018	5.00	TAB + 0.65%	1.50%	872,111	(223,993)	648,118	1.50%	768,418	24,868	793,286
AGUAS DE ANTOFAGASTA	Bonos	CLP	18/12/2020	5.00	UF + 0.995%	0.26%	150,052	(53)	149,999	0.00%	-	-	-
AGUAS DE ANTOFAGASTA	Bonos	CLP	18/12/2020	15.00	UF + 1.439%	2.61%	387,617	89	387,705	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	1/06/2018	7.00	IBR + 3%	4.27%	9,911	149	10,060	7.54%	11,476	74	11,551
AGUAS REGIONALES	Banco Bogotá	COP	28/10/2015	10.00	DTF T.A. + 2.6%	4.71%	425	2	427	7.21%	510	7	517
AGUAS REGIONALES	Helm Bank S.A.	COP	16/03/2012	12.00	DTF T.A. + -1%	0.47%	2,679	20	2,699	2.61%	3,504	61	3,565
AGUAS REGIONALES	Banco Bilbao Vizcaya Argentaria	COP	28/05/2014	10.00	DTF T.A. + -0.7%	0.58%	438	2	440	3.24%	363	8	371
AGUAS REGIONALES	Banco Bilbao Vizcaya Argentaria	COP	19/12/2014	10.00	DTF T.A. + -0.7%	1.15%	689	1	689	3.50%	861	6	866
AGUAS REGIONALES	Banco Davivienda S.A.	COP	19/02/2015	10.00	IPC + 4.8%	5.86%	18,750	437	19,187	8.60%	20,000	205	20,205
AGUAS REGIONALES	Banco Popular	COP	21/01/2020	10.00	IBR 1M + 2.9%	4.44%	6,000	118	6,118	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	18/05/2020	10.00	IBR 1M + 2.9%	4.41%	3,500	35	3,535	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	22/04/2020	10.00	IBR 1M + 2.9%	4.42%	1,900	19	1,919	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	22/05/2020	10.00	IBR 1M + 2.9%	4.69%	1,150	5	1,155	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	5/06/2020	1.00	IBR 6M + 2.15%	2.91%	5,897	15	5,912	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	19/06/2020	10.00	IBR 1M + 2.9%	4.69%	1,350	1	1,351	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	21/07/2020	10.00	IBR 1M + 2.9%	4.69%	2,100	18	2,118	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	19/08/2020	10.00	IBR 1M + 2.9%	4.68%	2,050	10	2,060	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	21/09/2020	10.00	IBR 1M + 2.9%	4.68%	2,800	2	2,802	0.00%	-	-	-
AGUAS REGIONALES	Banco Popular	COP	26/10/2020	10.00	IBR 1M + 2.9%	4.67%	13,650	115	13,765	0.00%	-	-	-
AGUAS REGIONALES	Financiera de Desarrollo Territorial S.A	COP	21/12/2020	3.00	0%	0.00%	2,512	-	2,512	0.00%	-	-	-
CENS	Banco de Bogotá	COP	15/05/2014	7.00	IBR + 1.88%	4.80%	1,000	1	1,001	6.35%	3,000	18	3,018
CENS	Banco de Bogotá	COP	18/12/2015	7.00	IBR + 1.88%	3.80%	4,000	(0)	4,000	5.78%	6,000	47	6,047
CENS	Banco de Bogotá	COP	16/02/2018	10.00	IBR + 2.98%	5.64%	111,989	1,226	113,215	7.30%	129,218	2,402	132,620
CENS	Banco Popular	COP	15/05/2017	10.00	IBR + 3.35%	5.27%	10,258	44	10,322	7.64%	34,913	375	35,288
CENS	Banco Popular	COP	26/05/2017	10.00	IBR + 3.35%	5.27%	6,939	6	6,944	7.63%	8,006	71	8,078
CENS	Banco Popular	COP	23/06/2017	10.00	IBR + 3.35%	5.29%	5,285	(21)	5,265	7.62%	6,098	21	6,120
CENS	Banco Popular	COP	29/06/2017	10.00	IBR + 3.35%	5.28%	8,257	(36)	8,221	7.60%	9,527	27	9,554
CENS	Banco Popular	COP	18/07/2017	10.00	IBR + 3.35%	5.27%	13,082	268	13,350	7.58%	14,951	547	15,498
CENS	Banco Popular	COP	27/07/2017	10.00	IBR + 3.35%	5.36%	5,688	95	5,782	7.66%	6,500	210	6,710
CENS	Banco Popular	COP	23/08/2017	10.00	IBR + 3.35%	5.48%	5,250	46	5,296	7.76%	6,000	143	6,143
CENS	Banco Popular	COP	15/09/2017	12.00	IBR + 3.35%	5.45%	5,637	33	5,669	7.67%	6,442	142	6,584
CENS	Banco Popular	COP	19/09/2017	10.00	IBR + -1.8%	2.79%	5,331	146	5,477	2.99%	5,923	119	6,042
CENS	Banco Popular	COP	19/09/2017	10.00	IBR + 3.075%	4.90%	10,365	126	10,492	7.11%	11,846	346	12,192
CENS	Banco Popular	COP	17/11/2017	12.00	IBR + 3.35%	5.24%	8,452	22	8,474	7.61%	9,659	120	9,765
CENS	Banco Popular	COP	17/11/2017	10.00	IBR + -1.8%	2.56%	3,669	86	3,756	2.78%	4,077	49	4,126
CENS	Banco Popular	COP	17/11/2017	10.00	IBR + 3.075%	4.75%	7,135	61	7,196	7.11%	8,154	147	8,301
CENS	Banco Popular	COP	18/12/2017	10.00	IBR + 3.35%	5.22%	17,500	(22)	17,478	7.56%	20,000	129	20,129
CENS	Banco Popular	COP	18/01/2018	9.00	IBR + 3.35%	5.24%	34,688	736	35,423	7.56%	37,000	1,392	38,392
CENS	Banco Davivienda S.A.	COP	29/11/2018	10.00	IPC + 4.3%	6.87%	6,000	(6)	5,994	8.28%	6,000	49	6,049
CENS	Banco Davivienda S.A.	COP	19/12/2018	10.00	IPC + 4.3%	6.87%	15,000	(83)	14,917	8.37%	15,000	4	15,004
CENS	Banco Davivienda S.A.	COP	2/01/2019	10.00	IPC + 4.3%	5.97%	20,000	568	20,568	8.35%	20,000	739	20,739
CENS	Banco Davivienda S.A.	COP	18/01/2019	10.00	IPC + 4.3%	5.99%	14,000	352	14,352	8.33%	14,000	476	14,476
CENS	Banco de Bogotá	COP	1/02/2019	1.00	IBR + 1.9%	0.00%	-	-	-	5.86%	7,000	175	7,175
CENS	Banco Davivienda S.A.	COP	14/06/2019	12.00	IBR + 1.15%	5.20%	20,000	167	20,167	5.34%	20,000	35	20,035
CENS	Banco Davivienda S.A.	COP	27/06/2019	12.00	IBR + 1.15%	5.18%	5,713	43	5,756	5.34%	5,713	(1)	5,712

Company	Entity or Loan	Original Currency	Initial Date	Years	Nominal Interest Rate	December 31, 2020				December 31, 2019			
						IRR	Nominal Value	Amortized Cost Value	Total Amount	IRR	Nominal Value	Amortized Cost Value	Total Amount
CENS	Banco Davivienda S.A.	COP	28/06/2019	12.00	IBR + 3.47%	5.41%	4,287	(31)	4,256	7.81%	4,287	3	4,290
CENS	Banco de Occidente	COP	16/12/2019	7.00	IBR S.V. + 2.75%	4.76%	35,000	(152)	34,848	0.00%	35,000	58	35,058
CENS	Banco de Occidente	COP	16/01/2020	7.00	IBR S.V. + 2.75%	4.71%	20,000	311	20,311	0.00%	-	-	-
CENS	Scotiabank	COP	28/01/2020	1.00	IBR S.V. + 1.2%	3.25%	5,000	69	5,069	0.00%	-	-	-
CENS	Scotiabank	COP	27/03/2020	1.00	IBR S.V. + 1.2%	3.03%	12,500	96	12,596	0.00%	-	-	-
CENS	Banco Bilbao Vizcaya Argentaria	COP	28/07/2020	7.00	IBR S.V. + 2.5%	4.78%	5,000	100	5,100	0.00%	-	-	-
CENS	Banco Bilbao Vizcaya Argentaria	COP	28/09/2020	7.00	IBR S.V. + 2.5%	4.66%	12,500	147	12,647	0.00%	-	-	-
CENS	Banco Davivienda S.A.	COP	30/11/2020	3.00	IBR + 2.1%	3.87%	15,000	48	15,048	0.00%	-	-	-
CENS	Financiera de Desarrollo Territorial S.A.	COP	24/12/2020	3.00	0%	0.00%	15,696	(0)	15,696	0.00%	-	-	-
CHEC	Banco Bilbao Vizcaya Argentaria	COP	22/08/2014	10.00	IPC + 3.5%	4.99%	31,406	212	31,618	7.20%	39,781	529	40,310
CHEC	Banco Corpbanca	COP	22/08/2014	10.00	IPC + 3.5%	2.14%	23,906	163	24,069	7.20%	30,281	405	30,687
CHEC	Bancolombia	COP	9/02/2018	8.00	IBR + 1.25%	4.29%	42,656	225	42,881	6.78%	50,781	743	51,524
CHEC	Banco Davivienda S.A.	COP	27/12/2018	12.00	IBR + 0.388%	4.99%	43,000	32	43,032	4.59%	43,000	159	43,159
CHEC	Banco Davivienda S.A.	COP	27/12/2018	12.00	IBR + 0.388%	3.28%	4,475	(9)	4,466	4.59%	4,475	3	4,478
CHEC	Banco Popular	COP	24/04/2019	1.00	IBR + 1.65%	0.00%	-	-	-	5.97%	70,000	79	70,079
CHEC	Banco Davivienda S.A.	COP	28/11/2019	12.00	IBR + 0.388%	2.18%	1,814	(5)	1,809	4.59%	1,814	2	1,816
CHEC	Bancolombia	COP	13/03/2020	1.00	IBR + 0.86%	2.62%	53,000	68	53,068	0.00%	-	-	-
CHEC	Banco Popular	COP	20/04/2020	1.00	IBR + 2.15%	3.89%	-	304	304	0.00%	-	-	-
CHEC	Bancolombia	COP	12/05/2020	1.00	IBR + 0.86%	2.62%	87,000	304	87,304	0.00%	-	-	-
CHEC	Banco Bilbao Vizcaya Argentaria	COP	29/12/2020	10.00	IBR + 3.432%	5.38%	30,000	8	30,008	0.00%	-	-	-
CHEC	Financiera de Desarrollo Territorial S.A.	COP	30/12/2020	3.00	0%	0.00%	3,644	(0)	3,644	0.00%	-	-	-
DEL SUR	Banco Davivienda	USD	26/08/2013	10.00	LIBOR 3M + 3.7%	4.07%	40,761	145	40,906	1.62%	42,109	231	42,339
DEL SUR	Banco Davivienda	USD	7/10/2015	10.00	LIBOR 3M + 4.2%	4.59%	36,041	298	36,340	1.62%	39,326	475	39,801
DEL SUR	Bonos	USD	16/08/2016	10.00	LIBOR 6M + 3%	0.00%	-	-	-	1.52%	68,820	413	69,233
DEL SUR	Banco Davivienda	USD	26/08/2020	1.00	LIBOR 3M + 4%	4.56%	72,083	138	72,221	0.00%	-	-	-
DEL SUR	Bancolombia	USD	4/09/2020	2.00	5.25%	5.49%	8,741	16	8,757	0.00%	-	-	-
EDEQ	Banco AV Villas	COP	23/06/2016	7.00	IBR + 3.1%	4.87%	1,499	2	1,501	7.01%	2,099	17	2,116
EDEQ	Banco AV Villas	COP	15/09/2017	7.00	IBR + 3.1%	5.22%	4,560	(17)	4,483	7.47%	5,700	13	5,713
EDEQ	Banco AV Villas	COP	22/02/2019	3.75	DTF T.A. + 2.3%	4.55%	2,943	6	2,950	6.88%	4,415	35	4,450
EDEQ	Banco de Occidente	COP	29/11/2019	7.00	IBR + 2.75%	4.71%	10,000	(1)	9,999	7.16%	10,000	61	10,061
EDEQ	Banco AV Villas	COP	5/11/2019	6.50	IBR + 2.3%	4.21%	10,083	23	10,106	6.59%	11,000	108	11,108
EDEQ	Banco de Bogotá	COP	29/05/2020	7.00	IBR + 2.18%	3.95%	10,000	19	10,019	0.00%	-	-	-
EDEQ	Banco de Bogotá	COP	19/08/2020	7.00	IBR + 2.18%	3.94%	10,000	39	10,039	0.00%	-	-	-
EDEQ	Banco AV Villas	COP	28/08/2020	8.90	IBR + 2%	3.88%	20,000	66	20,066	0.00%	-	-	-
ENSA	Bonos	USD	10/07/2006	15.00	7.6%	8.16%	343,250	11,426	354,676	8.16%	327,714	9,676	337,390
ENSA	Bonos	USD	13/12/2012	15.00	4.73%	3.46%	274,600	(2,949)	272,551	3.46%	262,171	(2,256)	259,915
ENSA	Scotiabank	USD	3/10/2018	5.00	4.25%	4.25%	343,250	916	344,166	4.25%	327,714	804	328,518
ENSA	Bladex	USD	2/12/2019	0.08	0.4%	0.00%	-	-	-	2.11%	32,771	35	32,787
ENSA	Banco Davivienda	USD	11/12/2019	0.25	0.3%	0.00%	-	-	-	2.19%	32,771	40	32,811
ENSA	Banco Davivienda	USD	12/12/2019	0.25	0.3%	0.00%	-	-	-	2.19%	16,386	19	16,405
EP RIO	Banco de Bogotá	COP	15/06/2016	10.00	DTF T.A. + 5%	0.00%	-	-	-	10.26%	2,031	(8)	2,023
EP RIO	Banco de Bogotá	COP	19/10/2015	10.00	DTF T.A. + 5%	0.00%	-	-	-	10.11%	2,188	(2)	2,185
EP RIO	Banco de Bogotá	COP	28/02/2016	10.00	DTF T.A. + 5%	0.00%	-	-	-	10.08%	3,292	(10)	3,282
EP RIO	Banco de Bogotá	COP	27/07/2016	10.00	DTF T.A. + 5%	0.00%	-	-	-	10.18%	771	(5)	766
EPM	1261 BONOS IPC III TRAMO	COP	21/04/2009	15.00	IPC + 6.24%	7.66%	198,400	3,729	202,129	10.24%	198,400	4,321	202,721
EPM	1264 BONOS IPC IV TRAM 2	COP	14/12/2010	12.00	IPC + 4.25	5.56%	119,900	715	120,615	8.18%	113,900	513	120,413
EPM	1265 BONOS IPC IV TRAM 3	COP	14/12/2010	20.00	IPC + 4.94%	6.47%	267,400	1,291	268,691	8.99%	267,400	634	268,034
EPM	1268 BONOS IPC V TRAMO II	COP	4/12/2013	10.00	IPC + 4.52%	6.26%	96,210	(31)	96,179	8.88%	96,210	(206)	96,004
EPM	1269 BONOS IPC V TRAM III	COP	4/12/2013	20.00	IPC + 5.03%	6.72%	229,190	(1,399)	227,791	9.24%	229,190	(1,560)	227,630
EPM	1278 BONOS IPC VI TRAMO I	COP	29/07/2014	6.00	IPC + 3.57%	0.00%	-	-	-	7.98%	125,000	1,289	126,289
EPM	1271 BONOS IPC VI TRAMO II	COP	29/07/2014	12.00	IPC + 4.17%	5.68%	125,000	277	125,277	8.39%	125,000	409	125,409

Company	Entity or Loan	Original Currency	Initial Date	Years	Nominal Interest Rate	December 31, 2020				December 31, 2019			
						IRR	Nominal Value	Amortized Cost Value	Total Amount	IRR	Nominal Value	Amortized Cost Value	Total Amount
EPM	1272 BONOS IPC VI TRAM III	COP	29/07/2014	20.00	IPC + 4.5%	6.17%	250,000	(205)	249,795	8.68%	250,000	219	250,219
EPM	1274 BONOS IPC V TRAM IV	COP	26/02/2015	10.00	IPC + 3.65%	6.11%	130,000	458	130,458	8.64%	130,000	369	130,369
EPM	1275 BONOS IPC VII TRAMO I	COP	26/03/2015	5.00	IPC + 2.72%	0.00%	-	-	-	6.81%	120,000	217	120,217
EPM	1276 BONOS IPC VII TRAMO II	COP	26/03/2015	12.00	IPC + 3.92%	5.43%	120,000	425	120,425	7.94%	120,000	132	120,132
EPM	1277 BONOS IPC VII TRAM III	COP	26/03/2015	20.00	IPC + 4.43%	5.94%	260,000	1,500	261,500	8.43%	260,000	888	260,888
EPM	1565 BID-1664-1	COP	9/12/2005	20.00	7.8%	8.68%	237,308	2,415	239,723	9.14%	284,769	8,938	288,707
EPM	1220 BID 2120	USD	25/03/2009	25.00	LIBOR + 0%	0.00%	-	-	-	2.83%	353,055	(5,661)	347,394
EPM	2021 BID 2120-1	COP	25/03/2009	25.00	6.272%	8.32%	190,295	(1,454)	188,841	7.49%	190,295	(2,750)	187,545
EPM	2179 Bank of Tokyo-MITSUB	USD	29/09/2008	15.00	LIBOR + 0.95%	1.18%	171,584	3,225	174,809	1.34%	218,441	9,037	227,478
EPM	1266 GLOBAL 2021 COP	COP	21/01/2011	10.00	8.375%	14.08%	130,822	9,484	140,306	14.08%	130,822	2,998	133,820
EPM	1272 GLOBAL 2024 COP	COP	3/09/2014	10.00	7.625%	7.73%	965,745	18,867	984,612	7.74%	965,745	17,919	983,664
EPM	5765 Banco Agrario	COP	26/05/2014	16.00	IPC + 4.7%	4.55%	110,200	(1,944)	108,256	8.94%	115,000	(802)	115,198
EPM	1013 AFD	USD	16/08/2012	14.00	4.211%	4.49%	677,165	11,580	688,745	4.47%	738,875	12,333	751,208
EPM	2022 BID 2120-2	COP	25/03/2009	25.00	7.5%	8.96%	338,019	(68)	337,951	8.23%	888,057	(679)	887,379
EPM	2016 BNDES	USD	26/04/2016	23.50	4.867%	5.36%	166,345	(4,892)	161,454	5.42%	156,247	(4,303)	151,944
EPM	1278 Global 2027 COP	COP	31/10/2017	10.00	8.375%	8.45%	4,165,519	51,489	4,217,008	8.45%	6,580,000	28,768	6,558,768
EPM	2023 BID 2120-3	COP	25/03/2009	25.00	6.265%	7.47%	168,285	873	169,158	6.71%	180,750	825	181,576
EPM	1015 CAF	USD	3/10/2016	18.00	LIBOR + 3.1%	3.58%	686,500	(2,407)	684,093	5.26%	655,428	3,432	658,860
EPM	1230 IDB INVEST tramo 12 años	USD	29/12/2017	12.00	Libor 6M + 2.75%	4.01%	1,287,188	(54,183)	1,233,005	5.66%	1,228,928	(44,316)	1,184,612
EPM	1231 IDB INVEST tramo 8 años	USD	29/12/2017	8.00	Libor 6M + 2.125%	3.79%	257,438	(9,679)	247,759	5.26%	245,786	(8,528)	237,258
EPM	1018 Bancolombia	COP	22/11/2018	5.00	IBR S.V. + 3.5%	3.99%	450,000	4,962	454,962	7.12%	450,000	9,404	459,404
EPM	1017 HSBC	USD	26/11/2018	5.00	Libor 6M + 2.75%	2.68%	858,125	1,536	859,661	0.00%	-	(3,472)	(3,472)
EPM	1023 1023 Bonos USD	USD	11/07/2019	10.00	4.25%	4.39%	3,432,500	43,268	3,475,768	4.39%	3,277,180	59,066	3,336,206
EPM	Banco Popular	COP	5/05/2020	1.00	IBR 6M + 2.1%	3.81%	120,000	710	120,710	0.00%	-	-	-
EPM	Banco Interamericano de Desarrollo	COP	17/06/2020	14.00	5%	5.88%	365,802	5,630	370,933	0.00%	-	-	-
EPM	Bonos USD 2030	USD	15/07/2020	11.00	4.375%	4.69%	1,973,688	12,516	1,986,204	0.00%	-	-	-
ESSA	Banco de Bogotá	COP	26/02/2013	7.00	IBR + 1.88%	0.00%	-	-	-	5.89%	5,500	35	5,535
ESSA	Banco de Bogotá	COP	11/04/2013	7.00	IBR + 1.88%	0.00%	-	-	-	5.89%	3,050	50	3,100
ESSA	Banco de Bogotá	COP	26/05/2013	7.00	IBR + 1.88%	0.00%	-	-	-	5.76%	700	6	706
ESSA	Banco de Bogotá	COP	16/04/2014	7.00	IBR + 1.88%	4.05%	2,700	19	2,719	5.92%	5,400	89	5,489
ESSA	Banco de Bogotá	COP	16/04/2014	7.00	IBR + 1.88%	4.09%	1,500	9	1,509	5.97%	3,000	41	3,041
ESSA	Banco de Bogotá	COP	30/04/2015	7.00	IBR + 1.88%	3.96%	4,550	15	4,565	6.15%	6,500	66	6,566
ESSA	Banco de Bogotá	COP	27/01/2016	7.00	IBR + 1.88%	3.98%	7,500	18	7,518	6.23%	9,750	92	9,842
ESSA	Banco de Bogotá	COP	16/02/2016	7.00	IBR + 1.88%	4.01%	6,500	(0)	6,500	6.27%	8,450	49	8,499
ESSA	Banco de Bogotá	COP	28/03/2016	7.00	IBR + 1.88%	3.88%	3,500	(10)	3,490	6.16%	4,550	1	4,551
ESSA	Banco de Bogotá	COP	14/04/2016	7.00	IBR + 1.88%	3.99%	4,675	15	4,690	6.27%	5,950	65	6,015
ESSA	Banco de Bogotá	COP	1/07/2016	12.00	IBR + 3.15%	5.11%	16,000	99	16,099	7.57%	17,500	285	17,785
ESSA	Banco de Bogotá	COP	19/08/2016	12.00	IBR + 3.15%	5.18%	6,400	(0)	6,400	7.53%	7,000	67	7,067
ESSA	Banco de Bogotá	COP	13/10/2016	12.00	IBR + 3.15%	5.13%	7,425	28	7,453	7.57%	8,100	101	8,201
ESSA	Banco de Bogotá	COP	11/11/2016	12.00	IBR + 3.15%	5.19%	28,875	(71)	28,804	7.66%	31,500	129	31,629
ESSA	Banco de Bogotá	COP	5/12/2016	12.00	IBR + 3.15%	5.18%	6,600	(34)	6,566	7.59%	7,200	9	7,209
ESSA	Banco de Bogotá	COP	14/12/2016	12.00	IBR + 3.15%	5.14%	12,375	(76)	12,299	7.57%	13,500	4	13,504
ESSA	Banco de Bogotá	COP	11/01/2017	12.00	IBR + 3.15%	5.11%	12,744	56	12,800	7.57%	13,869	181	14,051
ESSA	Banco de Bogotá	COP	16/01/2017	12.00	IBR + 3.15%	5.10%	8,494	34	8,528	7.56%	9,244	115	9,360
ESSA	Banco de Bogotá	COP	15/05/2017	12.00	IBR + 3.15%	5.12%	8,750	(7)	8,743	7.57%	9,500	57	9,557
ESSA	Banco Bilbao Vizcaya Argentaria	COP	14/06/2017	12.00	IBR + 3.56%	5.64%	8,500	(40)	8,460	8.08%	9,500	20	9,520
ESSA	Banco Bilbao Vizcaya Argentaria	COP	29/06/2017	12.00	IBR + 3.56%	5.47%	6,800	(7)	6,793	7.93%	7,600	31	7,631
ESSA	Banco Bilbao Vizcaya Argentaria	COP	13/07/2017	12.00	IBR + 3.56%	5.58%	8,750	57	8,807	8.06%	9,750	154	9,904
ESSA	Banco Bilbao Vizcaya Argentaria	COP	28/09/2017	12.00	IBR + 3.56%	5.59%	13,125	(72)	13,053	8.07%	14,625	(10)	14,615
ESSA	Banco Bilbao Vizcaya Argentaria	COP	12/10/2017	12.00	IBR + 3.56%	5.56%	4,500	32	4,532	8.05%	5,000	82	5,082
ESSA	Banco Bilbao Vizcaya Argentaria	COP	30/10/2017	12.00	IBR + 3.56%	5.56%	4,500	20	4,520	8.05%	5,000	62	5,062

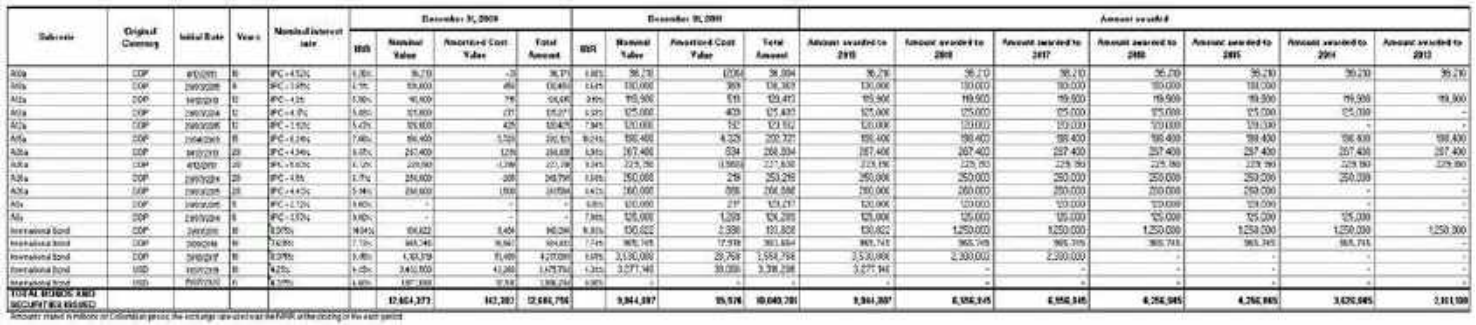
Company	Entity or Loan	Original Currency	Initial Date	Years	Nominal Interest Rate	December 31, 2020				December 31, 2019			
						IRR	Nominal Value	Amortized Cost Value	Total Amount	IRR	Nominal Value	Amortized Cost Value	Total Amount
ESSA	Banco Bilbao Vizcaya Argentaria	COP	30/10/2017	12.00	IBR + 3.56%	5.56%	4,500	20	4,520	8.05%	5,000	62	5,062
ESSA	Banco Bilbao Vizcaya Argentaria	COP	29/11/2017	12.00	IBR + 3.56%	5.66%	6,300	(10)	6,290	8.08%	7,000	26	7,026
ESSA	Banco Bilbao Vizcaya Argentaria	COP	11/12/2017	12.00	IBR + 3.56%	5.66%	3,600	(11)	3,589	8.04%	4,000	16	4,016
ESSA	Banco Bilbao Vizcaya Argentaria	COP	14/12/2017	12.00	IBR + 3.56%	5.66%	12,600	(46)	12,554	8.04%	14,000	46	14,046
ESSA	Banco Bilbao Vizcaya Argentaria	COP	26/12/2017	12.00	IBR + 3.56%	5.64%	81,000	(563)	80,437	8.11%	90,000	(378)	89,622
ESSA	Banco de Bogotá	COP	26/12/2017	12.00	IBR + 3.15%	4.92%	9,250	9	9,259	7.56%	10,000	(21)	9,979
ESSA	Banco Bilbao Vizcaya Argentaria	COP	29/10/2018	12.00	IBR + 2.91%	4.86%	40,000	61	40,061	7.35%	40,000	449	40,449
ESSA	Banco Bilbao Vizcaya Argentaria	COP	28/11/2018	12.00	IBR + 2.91%	4.85%	6,000	(11)	5,989	7.24%	6,000	50	6,050
ESSA	Banco Bilbao Vizcaya Argentaria	COP	26/12/2018	12.00	IBR + 2.91%	4.85%	54,000	(308)	53,692	7.53%	54,000	70	54,070
ESSA	Banco Popular	COP	28/12/2018	12.00	IBR + 2.91%	4.79%	106,000	(646)	105,354	7.22%	106,000	68	106,068
ESSA	Banco Popular	COP	27/12/2019	12.00	IBR + 2.91%	4.77%	94,000	(573)	93,427	7.22%	94,000	72	94,072
ESSA	Banco de Occidente	COP	28/07/2020	1.00	IBR + 2.7%	4.61%	30,000	602	30,602	0.00%	-	-	-
ESSA	Banco de Occidente	COP	5/08/2020	1.00	IBR + 2.7%	4.56%	30,000	561	30,561	0.00%	-	-	-
ESSA	Banco Davivienda	COP	4/09/2020	3.00	IBR + 2.1%	3.89%	15,000	33	15,033	0.00%	-	-	-
ESSA	Banco Davivienda	COP	4/09/2020	1.00	IBR + 2.1%	3.96%	20,000	57	20,057	0.00%	-	-	-
ESSA	Banco de Bogotá	COP	28/09/2020	1.00	IBR + 2.98%	4.78%	20,000	241	20,241	0.00%	-	-	-
ESSA	Banco de Bogotá	COP	29/10/2020	1.00	IBR + 2,1%	3.85%	15,000	96	15,096	0.00%	-	-	-
ESSA	Banco de Bogotá	COP	30/10/2020	1.00	IBR + 2.98%	4.75%	15,000	117	15,117	0.00%	-	-	-
ESSA	Banco Bilbao Vizcaya Argentaria	COP	28/12/2020	1.00	0.03	3.26%	30,000	8	30,008	0.00%	-	-	-
ESSA	Banco Bilbao Vizcaya Argentaria	COP	30/12/2020	1.00	0.03	3.26%	20,000	2	20,002	0.00%	-	-	-
ESSA	Comisiones	COP	31/07/2020	1.00	LIBOR + 0%	0.00%	-	(107)	(107)	0.00%	-	-	-
GRUPO DECA	Banco Industrial	GTQ	20/12/2018	10.00	TAPP + 6.8%	5.88%	114,948	(341)	114,607	6.11%	111,100	7	111,106
GRUPO DECA	Banco América Central	GTQ	21/12/2018	10.00	TAPP + -6.81%	5.87%	67,383	(221)	67,162	6.11%	65,127	(10)	65,118
GRUPO DECA	Banco Agromercantil	GTQ	24/01/2019	10.00	TAPP + -6.87%	5.81%	140,933	868	141,741	6.05%	136,214	1,286	137,500
GRUPO DECA	Banco América Central	USD	21/12/2018	10.00	LIBOR 90 + 2.26387%	3.06%	102,975	(2,324)	100,652	4.58%	98,315	(380)	97,934
GRUPO DECA	Banco Internacional	USD	19/12/2018	10.00	TAPP + -1.25%	5.68%	17,163	(8)	17,155	5.37%	16,386	63	16,449
GRUPO DECA	Banco Agromercantil	USD	24/01/2019	10.00	LIBOR 90 + 3.05%	3.85%	20,595	(309)	20,286	5.39%	19,663	179	19,842
GRUPO DECA	Banco Industrial	USD	15/12/2017	1.00	TAPP + -1.5%	0.00%	44,041	-	44,041	0.00%	32,772	-	32,772
GRUPO DECA	Banco Industrial	GTQ	20/12/2018	10.00	TAPP + -6.8%	6.00%	147,098	-	147,098	6.11%	142,173	5	142,178
GRUPO DECA	Banco América Central	GTQ	26/12/2018	10.00	TAPP + -6.81%	5.99%	67,824	-	67,824	6.11%	65,553	(10)	65,543
GRUPO DECA	Banco Agromercantil	GTQ	25/01/2019	10.00	TAPP + -6.87%	5.93%	140,933	1,320	142,252	6.05%	136,214	1,298	137,512
GRUPO DECA	Banco América Central	USD	26/12/2018	10.00	LIBOR 90 + 2.26387%	3.17%	34,325	-	34,325	4.58%	32,772	(125)	32,647
GRUPO DECA	Banco Internacional	USD	19/12/2018	10.00	TAPP + -1.25%	5.12%	17,163	-	17,163	5.37%	16,386	63	16,449
GRUPO DECA	Mercom Bank LTD	USD	25/01/2019	10.00	LIBOR 90 + 3.05%	3.95%	20,595	115	20,710	5.37%	19,663	188	19,851
GRUPO DECA	Bancolombia Panamá	USD	25/01/2019	10.00	LIBOR 90 + 3.05%	3.96%	82,380	459	82,840	5.38%	78,652	733	79,385
GRUPO DECA	Bancolombia Panamá	USD	16/07/2019	1.00	LIBOR 30 + 2.07%	2.31%	34,325	-	34,325	4.37%	32,772	-	32,772
GRUPO DECA	Banco Industrial	GTQ	25/04/2019	5.00	TAPP + -6.25%	6.49%	274,818	(552)	274,267	6.67%	332,022	(72)	331,951
TICSA	Banco Santander	MXN	14/06/2016	7.00	TIE + 2.15%	7.01%	22,259	240	22,499	12.47%	30,929	329	31,258
TICSA	Banco Santander	MXN	14/06/2016	10.00	TIE + 2.15%	7.77%	44,368	266	44,634	12.57%	50,600	45	50,645
TICSA	Banco Santander	MXN	14/06/2016	14.00	TIE + 2.15%	7.79%	17,673	226	17,899	13.33%	18,931	116	19,047
TICSA	Interacciones	MXN	1/08/2007	15.00	TIE - 3%	7.58%	13,185	937	14,122	7.54%	17,694	1,687	19,381
TICSA	Banco del Bajío	MXN	21/07/2003	15.00	TIE + 2.75%	8.47%	57,860	1,716	59,575	8.57%	94,417	15	94,432
TICSA	Banco Santander	MXN	25/05/2018	1.00	TIE - 3%	7.49%	5,113	-	5,113	11.51%	4,323	-	4,323
TICSA	Bank of America	MXN	4/12/2018	1.00	TIE + 2.25%	6.74%	7,393	-	7,393	10.76%	14,700	(117)	14,583
TICSA	Banco Davivienda	COP	17/02/2020	1.00	EA + 0%	7.50%	382	-	382	0.00%	-	-	-
TICSA	Banco Davivienda	COP	12/03/2020	1.00	EA + 0%	7.60%	493	-	493	0.00%	-	-	-
TICSA	Banco Davivienda	COP	2/04/2020	1.00	EA + 0%	8.00%	663	-	663	0.00%	-	-	-
TICSA	Banorte	MXN	14/05/2020	1.00	TIE + 3.7%	8.25%	718	-	718	0.00%	-	-	-
TICSA	Banco Davivienda	COP	17/06/2020	1.00	EA + 0%	7.60%	749	-	749	0.00%	-	-	-
Total							24,806,577	(218,775)	24,587,802		20,324,224	131,781	20,456,005

Amounts stated in millions of Colombian pesos

Interest paid on loans as at 31 December 2020 was $1,258,089 (2019: $1,517,994).

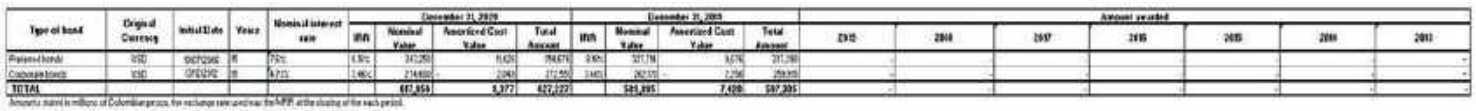
The net exchange difference at 31 December 2020 assumed associated with debt was $24,286 (2019: $-103,866).

Information on bonds and securities issued is:

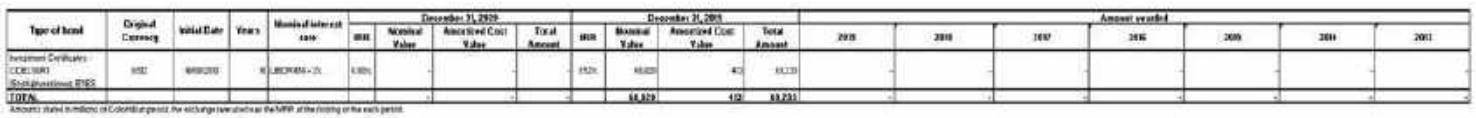


The breakdown of international bonds issued by the Group is as follows:

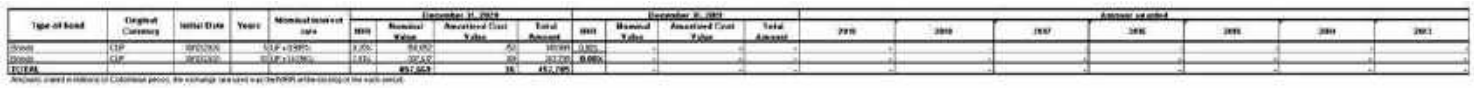
ENSA:



Delsur:



Aguas de Antofagasta:



In 2020, EPM Group had the following significant changes related to loans and borrowings:

New loans

January

- Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS): Banco de Occidente for COP 20,000 and Scotiabank for COP 10,000.
- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 6,000.

February

- Tecnología Intercontinental S.A (TICSA): Banco Davivienda for COP 1,375.

March

- EPM Matriz: BNDES disbursement for USD 0,17 million.
- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 2,500.
- Central Hidroeléctrica de Caldas (CHEC): Bancolombia for COP 53,000.
- Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS): Scotiabank for COP 25,000.
- Tecnología Intercontinental S.A (TICSA): Banco Davivienda for COP 1,500.
- Empresa de distribución de energía del noreste de Panamá S.A. (Ensa): Davivienda for USD 15 million, Citibank for USD 12 million y Banesco for USD 30 million.

April

- EPM Holding company: International syndicate of HSBC and other banks: disbursement for USD 250 million.
- Tecnología Intercontinental S.A (TICSA): Banco Davivienda for COP 1,666.
- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 1,900.

May

- EPM Holding company: local credit to Banco Popular for COP 120,000.
- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 1,150.
- Central Hidroeléctrica de Caldas (CHEC): Bancolombia for COP 87,000.
- Empresa de Energía del Quindío S.A. E.S.P. (EDEQ): Bancolombia for COP 20,000 and Banco de Bogotá for COP 10,000.
- Tecnología Intercontinental S.A (TICSA): Banorte for MXN 12 million.
- Grupo Deca: Banco Industrial S.A for GTQ 200 million.

June

- Tecnología Intercontinental S.A (TICSA): Banco Davivienda for COP 1,500.
- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 7,247.

July

- EPM Holding company: Banco BNP Paribas as the leading loan agent for USD 200 million, international bond issuance 144A/Regs for USD575 million and reopening of global bonds peso maturity 2027 for COP 635,519.
- Electrificadora de Santander (ESSA): Banco de Occidente for COP 30,000.
- Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS): Banco BBVA COP 5,000.
- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 2,100.

August

- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 2,050.
- Electrificadora de Santander (ESSA): Banco de Occidente for COP 30,000.
- Empresa de Energía del Quindío S.A. E.S.P. (EDEQ): Banco AV Villas for COP 20,000 and Banco de Bogotá for COP 10,000.
- Del Sur: Banco Davivienda for USD 21 million.

September

- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 2,800.
- Del Sur: Banco Davivienda for USD 2.9 million.
- Electrificadora de Santander (ESSA): Banco Davivienda for COP 35,000 and Banco de Bogotá for COP 20,000.
- Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS): Banco BBVA COP 12,500.

October

- Aguas Regionales EPM S.A. E.S.P.: Banco Popular for COP 13,650.
- Electrificadora de Santander (ESSA): Banco de Bogotá for COP 30,000.

November

- Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS): Banco Davivienda COP 15,000.

December

- Aguas Regionales EPM S.A. E.S.P.: Financiera de Desarrollo Territorial S.A for COP 2,512.
- Electrificadora de Santander (ESSA): Banco BBVA for COP 50,000.
- Central Hidroeléctrica de Caldas (CHEC): Banco BBVA for COP 30,000 and Financiera de Desarrollo Territorial S.A for COP 3,644.
- Centrales Eléctricas del Norte de Santander S.A. E.S.P. (CENS): Financiera de Desarrollo Territorial S.A for COP 15,696.
- Aguas de Antofagasta (ADASA): Bonos for CLP 94,734 million.

- **Covenant Debt / EBITDA**

The EPM Group has different financial commitments (covenant), established in the loan contracts signed with the French Development Agency - AFD, Inter-American Development Bank, CAF- Development Bank of Latin America, National Bank for Economic and Social Development - BNDES , HSBC, Bancolombia, IDB Invest and Guarantee of Japan Bank for International Cooperation - JBIC. These contracts include some of the following covenants: Debt / EBITDA LTM, Net Debt / EBITDA LTM, EBITDA / Financial expenses, EBITDA / Net financial expenses, and Long Term Debt / Equity. The contracts with Bancolombia and HSBC present a clause that indicates that the measurement of compliance with the stipulated covenant will only be activated in the event that the company loses the investment grade level in the international scale ratings granted by any of the rating agencies that they evaluate the company.

Covenant	Credit Type	December 31, 2020	December 31, 2019	Limit
DEBT / EBITDA LTM	JBIC - AFD	4.37	3.49	3.50
Financial Liabilities		25,150	20,988	
EBITDA last twelve months		5,760	6,011	

Contractually, one of the management schemes to avoid non-compliance with this type of commitment is the issuance of waivers by creditors.

It is worth mentioning that the fact that EPM Group exceeds the agreed Debt/EBITDA covenant does not generate a direct activation of default declaration by the banks nor of advance payment, as exercising or not such declaration is a contractual action at the banks' discretion, additional to having remedial periods agreed in the contracts to attend an eventual default.

The EPM Group must report compliance with the Long-Term Financial Debt / EBITDA indicator as follows: to the Japan Bank for International Cooperation -JBIC- quarterly and to the French Development Agency -AFD- semi-annually.

Grupo EPM obtained the waiver required for the JBIC loan with the December 2020 cutoff; Regarding the AFD loan, there is a verbal agreement to contractually modify the covenant to Net Debt / Ebitda <=4 times, therefore a process of renegotiation of the clauses of the Covenant began through an Amendment to the contract. This management is advanced to date in accordance with the requirements of current regulations and is in the approval stage at the Ministry of Finance and Public Credit.

Contract management IDB Invest

On December 29, 2017, EPM and IDB Invest signed a credit agreement, which to date presents a bank balance to equity of USD $ 450 million.

After signing, the parties agreed on the condition of signing an amendment to the credit agreement, with the aim of incorporating a series of technical, environmental and institutional commitments.

In this sense, IDB Invest granted EPM at the end of December 2020 and February 22, 2021, waivers for not having signed the amendment.

To date, the Amendment clause is in an advanced stage of negotiating its clause between EPM and IDB Invest, and then go on to its external approval process, in accordance with Colombian regulations on public debt.

Default events

During the reporting period, the EPM Group has not defaulted on any principal or interest payment of its loans.

Note 23. Trade and other payables

Trade and other payables are measured at amortized cost and consist of:

Trade and other accounts payable	2020	2019
Non-current		
Creditors	116,814	130,662
Acquisition of goods and services	71,234	83,030
Deposits received as collateral(1)	313,309	278,706
Advances payments and advances received	80,216	92,476
Resources received from administration	14,965	10,177
Construction contracts	22,561	6,342
Total trade and other non-current accounts payable	**619,099**	**601,393**
Current		
Creditors	665,731	734,205
Acquisition of goods and services (2)	2,308,554	1,685,076
Allocated subsidies	25,051	18,261
Deposits received in collateral	36,818	22,456
Advances received	10,624	15,419
Resources received for management	22,141	33,562
Other accounts payable	357	693
Construction contracts	14,629	22,472
Fees and commissions payable	2,110	2,110
Total trade and other current accounts payable	**3,086,015**	**2,534,254**
Total trade and other accounts payable	**3,705,114**	**3,135,647**

Amounts stated in millions of Colombian pesos

(1) In Guatemala, the Electricity General Act establishes that all new users must provide the distributor with a payment collateral. This collateral may be provided in monetary form or by means of a bond and will be calculated for each user category as the amount equivalent to two average monthly invoices from a typical user in the same category. EEGSA collects such collaterals from its customers and records the amounts received as "Consumer Deposits". In accordance with the provisions of the Electricity General Act, Decree No. 93-96 of 15 November 1996, article 94, as from that date until 10 March 2007, deposits received from customers bore real interest of 5% per annum. As from 11 March 2007, deposits received must be returned by adding to the capital the monthly weighted average lending rate of the banking system. It also establishes that, upon termination of the contract, the distributor must make a settlement that includes the initial amount of the collateral plus the total accrued and capitalized interest each year less any outstanding debt and costs incurred by the user.

As from 31 December 2006, EEGSA records a provision for the amount of interest arising from the payment collaterals.

Deposits received from consumers, plus accrued interest and less any outstanding debt for past services, are refundable to users when they cease to use the electric power service provided by EEGSA. In 2019 these deposits have been classified as non-current

liabilities because the company does not expect to make significant payments in the next year, according to estimates and recurrence of customer withdrawals, in addition to the premise of going concern.

As at 31 December 2019, the amount of consumer deposits was $299,169 (2019: $274,834).

[2] Increase explained by the acquisition of the subsidiary Caribemar de la Costa S.A.S. E.S.P., for $ 363,377.

The term for payment to suppliers is generally 30 calendar days, with exceptions that are documented in the processes and determined by the type of obligation and contract, among others.

Default events

During the accounting period, the Group has not defaulted on the payment of principal or interest on creditors and other accounts payable.

Note 24. Other financial liabilities

The other financial liabilities consist of:

Other financial liabilities	2020	2019
Non-current		
Financial leases	639,114	645,576
Financial liabilities measured at fair value through profit or loss for the period(1)	79,411	-
Pension bonds(2)	251,866	271,341
Derivatives that are not under hedge accounting	-	-
Derivatives for cash flow hedging purposes(3) (see note 25)	349,935	-
Derivatives for hedging purposes at fair value (see note X)	-	-
Total other non-current financial liabilities	**1,320,326**	**916,917**
Current		
Financial leases	48,553	37,184
Financial liabilities measured at fair value through profit or loss for the period(1)	41,018	-
Pension bonds(2)	418,720	379,477
Derivatives that are not under hedge accounting	-	-
Derivatives for cash flow hedging purposes(3) (see note 25)	69,197	-
Derivatives for hedging purposes at fair value (see note X)	-	-
Total other current financial liabilities	**577,488**	**416,661**
Total other financial liabilities	**1,897,814**	**1,333,578**

Amounts stated in millions of Colombian pesos

(1) Corresponds to the premium payable of the climatic derivative contracted to have coverage in dry seasons.

(2) Variation was generated by the amortized cost and the payments made during the period.

(3) In EPM, the finalization of the authorization process on the part of the Ministry of Finance and Public Credit of the exchange risk coverage of the international Bond issue carried out in 2019 was presented, additionally the authorization of exchange coverage of the issuance of dollar bond issued in July 2020, and the HSBC international syndicated loan, complying with the requirements of the applicable regulations. By having these authorizations, the company had the possibility of developing its market risk management plan and carried out hedging operations for US $1,350 billion in the 2020 term.

Conventional purchases and sales of financial liabilities are accounted for by applying the trading date.

24.1 Financial liabilities designated at fair value through profit or loss

Financial liability for premiums payable for the climate derivative, which has been contracted to cover dry seasons that imply a decrease in hydroelectric generation and a rise in energy prices on the stock market. It is measured at fair value through profit or loss, in order to achieve the asymmetry or "match" the financial asset (derivative / option, valued at fair value through profit or loss) with the financial liability (premiums payable).

Its valuation technique is the average of the expected future flows, discounted at a risk-free rate plus a spread that contemplates the possibility of default (own credit risk).

24.2 Financial liabilities designated at fair value through profit or loss, with the effects of the change in the credit risk of the liability recognized in profit or loss

Concept	2020	2019
Gain (loss) for the period from changes in fair value attributable to changes in credit risk recognized in profit or loss for the period	2,057	-
Difference between the carrying value and the value payable at settlement:	(2,626)	-
Carrying value of liability(ies)	120,429	-
Carrying value of liability(ies): Carrying value of liability(ies)	123,055	-

Amounts stated in millions of Colombian pesos

The Group has determined that presenting the effects of changes in the credit risk of a liability in other comprehensive income would create or increase an accounting asymmetry in profit or loss, this asymmetry is generated given that EPM's rating is BBB and the NewRe is AA. It should be clarified that this liability comes from a contract that is linked to an option-type derivative instrument, which represents an asset for EPM. The derivative instrument (asset) is valued at fair value (including credit risk) with changes in results since it is not designated in hedge accounting.

Default events

During the accounting period, the EPM Group has not defaulted on the payment of principal and interest on its loans.

Note 25. Derivatives and hedging

The group has cash flow hedges that consists of hedging the variation in future cash flows attributable to certain risks, such as interest rates and exchange rates that may impact results, whose fair values at the end of the reporting period amount to an obligation of $ 356,758 (2019: $ 46,148 Right). The risks that have been covered in these operations are:

Hedge Classification	Description	Hedged risk	Tranche	Hedged item	Carrying value of hedged item	Carrying value of hedging instrument	Changes in the fair value of the hedging instrument in the period	Changes in the fair value of the hedged item in the period	Ineffectiveness of the hedge recognized in profit or loss for the period	Effectiveness of the hedge recognized in the other comprehensive income	Reclassification of other comprehensive income to profit or loss for the period1
Cash flow hedging											
Swaps	Cross Currency Swap	USD/COP exchange rate and Libor/fixed interest rate of debt service	Part of the AFD, HSBC and international bond loans	Credit in Dollars	7,010,378	(354,221)	(399,283)	6,259,170	N.A	(399,283)	(356,858)
Swaps TICSA	Interest rate swaps	TIIE interest rate	Santander credit	Credit in MXN	85,032	(2,537)	(3,622)	N.A	N.A	(2,537)	N.A

Amounts stated in millions of Colombian pesos

[1] Reclassification of other comprehensive income to profit or loss for the period, for swap instruments, affected the interest item, difference in exchange, difference in interest and capital of the right. Additionally, $4,333 were capitalized as borrowing costs mainly to the Ituango Project.

The exchange risk hedging operations are part of the public debt operations regulated in Decree 1068 of 2015, therefore, they require the general approval of the operation via resolution and additional official approval of each of the confirmation letters of the financial entities that possibly have participation in the respective specific operations. This approval process, for the entities that govern the issue in the country, can only be started once the respective resources have been disbursed. During the period in which the approval process is carried out, there is a stage in which the company presents exposure to exchange risk without having the possibility of executing this type of exchange hedging operations.

During 2020, the finalization of the authorization process on the part of the Ministry of Finance and Public Credit of the exchange risk coverage of the international Bond issuance carried out in 2019 was presented, additionally the authorization of exchange coverage of the bond issuance was presented in dollars issued in July 2020, and the HSBC international syndicated loan, in compliance with the requirements of the applicable regulations. By having these authorizations, the company had the possibility of developing its market risk management plan and carried out hedging operations for US $ 1.35 billion in the 2020 term.

Conversion of dollar-denominated loans to pesos

- **EPM Holding company:** Some of the IDB loans have the possibility of currency conversion, which allows the conversion of

the balance in dollars to Colombian pesos, eliminating the exchange risk of the exposed balance. EPM made the following conversion in 2020:

On June 17, EPM applied a currency conversion to the IDB 2120 loan for USD104 million.

Hedging cash Flow

The characteristics of the main cash flow hedging instruments that are under hedge accounting are the following:

EPM

Characteristics					
Hedged Underlying	**AFD Loan**	**AFD Loan**	**AFD Loan**	**AFD Loan**	**AFD Loan**
Closing date	3-feb-17	6-feb-17	10-feb-17	24-mar-17	30-mar-17
Derivative Type	CCS	CCS	CCS	CCS	CCS
counterpart	BNP Paribas	BNP Paribas	BNP Paribas	CITI BANK	CITI BANK
Nominal (USD)	64,750,000	17,381,250	85,312,500	13,164,375	85,312,500
Spot exchange rate	2,850	2,855	2,850	2,899	2,878
Expiration date	31-jul-22	31-jul-22	31-jul-22	31-jul-22	31-jul-22

* CCS : Cross Currency Swap

Characteristics					
Hedged Underlying	HSBC Loan	HSBC Loan	HSBC Loan	HSBC Loan	Bons 2029
Closing date	3-jun-20	18-jun-20	19-jun-20	23-jun-20	8-jun-20
Derivative Type	CCS	CCS	CCS	CCS	CCS
counterpart	JP Morgan	JP MORGAN	Goldman Sachs	Goldman Sachs	BNP PARIBAS
Nominal (USD)	50,000,000	100,000,000	50,000,000	50,000,000	100,000,000
Spot exchange rate	3,587	3,756	3,738	3,709	3,597
Expiration date	26-nov-21	26-nov-21	26-nov-21	26-nov-21	18-jul-29

* CCS : Cross Currency Swap

Characteristics					
Hedged Underlying	Bons 2029	Bons 2029	Bons 2029	Bons 2029	Bons 2029
Closing date	7-jul-20	10-jul-20	15-jul-20	15-jul-20	9-nov-20
Derivative Type	CCS	CCS	CCS	CCS	CCS
counterpart	JP Morgan	JP Morgan	Scotia Bank	Goldman Sachs	Goldman Sachs.
Nominal (USD)	50,000,000	100,000,000	100,000,000	100,000,000	125,000,000
Spot exchange rate	3,627	3,617	3,606	3,608	3,657
Expiration date	18-jul-29	18-jul-29	18-jul-29	18-jul-29	18-jul-29

* CCS : Cross Currency Swap

Characteristics					
Hedged Underlying	Bons 2029	Bons 2031	Bons 2031	Bons 2031	Bons 2031
Closing date	12-nov-20	11-sep-20	16-sep-20	22-oct-20	23-oct-20
Derivative Type	CCS	CCS	CCS	CCS	CCS
counterpart	BBVA	JP Morgan	JP Morgan	Mitsui Banking Corporation,	JP Morgan
Nominal (USD)	125,000,000	100,000,000	100,000,000	100,000,000	100,000,000
Spot exchange rate	3,642	3,709	3,708	3,774	3,774
Expiration date	18-jul-29	15-feb-31	15-feb-31	15-feb-31	15-feb-31

* CCS : Cross Currency Swap

Ticsa

Characteristics	COLIMA	CELAYA	MORELIA
Hedged Underlying	Santander Loan	Santander Loan	Santander Loan
Tranche No	1	1	1
Closing Date	31-dic-19	31-dic-19	31-dic-19
Derivative Type	swap	swap	swap
Counterparty	Santander	Santander	Santander
Nominal (MXN)	282,750,000	95,250,000	246,300,000
Spot exchange rate	N.A	N.A	N.A
Liability (MXN)	377,000,000	127,000,000	328,400,000
EPM pays	6.1259%	6.40%	5.84%
EPM receives	TIIE+Spread Variable	TIIE+Spread Variable	TIIE+Spread Variable
Expiration date	12-feb-24	10-dic-26	10-ene-22
Initial exchange	No	No	No
Final exchange	No	No	No
Modality	Non Delivery	Non Delivery	Non Delivery

Embedded derivatives

The Group has not entered into any contracts containing embedded derivatives.

Note 26. Employee benefits

The item of employee benefits recognized at the reporting date have the following composition:

Employee benefits	2020	2019
Non-current		
Post-employment benefits	914,292	834,447
Long-term benefits	107,059	96,973
Termination benefits	91	63
Other benefits	5	9
Total non-current employee benefits	**1,021,447**	**931,492**
Current		
Short-term benefits	194,061	147,438
Post-employment benefits	90,428	100,028
Termination benefits	-	-
Total current employee benefits	**284,489**	**247,466**
Total	**1,305,936**	**1,178,958**

Amounts stated in millions of Colombian pesos

26.1. Post-employment benefits

Comprises of the defined benefit plans and the defined contribution plans detailed below:

26.1.1. Defined benefit plans

Defined benefit plans	Pensions[1]		Retroactive severances[2]		Public utilities subsidies[3]		Educational assistance plan[4]		Other defined benefit plans		Total	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Current value of liabilities due to defined benefit												
Initial balance	1,048,517	992,082	135,816	133,109	38,847	37,916	1,386	1,289	28,693	25,617	1,253,159	1,187,006
Present service cost	3,674	2,598	4,309	4,283	192	-	-	-	3,057	2,493	11,232	9,374
Profit (or loss) due to interests cost	66,487	67,328	7,550	7,878	2,529	2,596	71	74	59	26	76,696	77,902
New measurements	-	-	-	-	-	195	-	-	-	1,720	-	1,595
Actuarial profits or loss due to changes in:												
assumptions for experience	3,758	28,738	496	8,314	5,063	41	(71)	130	93	-	9,253	37,396
Demographic assumptions	1,873	(130)	3	-	128	-	-	-	-	-	2,004	(130)
Financial assumptions	17,933	26,456	6,040	3,899	9,519	1,017	38	57	1,874	-	47,401	31,381
Post service cost	-	-	-	-	17	-	-	-	(8)	-	17	-
Settlement gain or (loss)	-	-	-	-	-	-	-	-	-	(8)	-	(8)
Effect in foreign exchange translation	3,597	(2,603)	-	-	31	3	-	-	1,234	146	4,862	(2,503)
Contributions made to the plan	-	28,171	-	-	-	-	-	-	2	-	2	28,171
Contributions made to the plan - by participants	-	-	-	-	-	-	-	-	-	-	-	-
Payments made by the plan	(89,786)	(94,314)	(20,155)	(18,610)	(3,256)	(2,922)	(164)	(197)	(2,990)	(3,506)	(116,351)	(119,589)
Business combinations	-	-	11,376	-	-	-	-	-	-	-	11,376	-
Disposition	-	-	-	(1)	-	-	-	-	-	-	-	(1)
Other changes	844	239	-	-	-	-	-	-	1,058	2,206	1,602	2,445
Present value of liabilities as of 31 December	1,076,594	1,048,516	145,435	135,886	45,070	38,846	1,155	1,286	32,960	28,694	1,301,213	1,253,159
Fair value of plan assets												
Initial balance	318,681	314,838	-	-	-	-	-	-	-	-	318,681	314,838
Contributions made to the plan	8,416	47,422	-	-	-	-	-	-	-	-	8,416	47,422
Payments made by the plan	(57,859)	(62,161)	-	-	-	-	-	-	-	-	(57,859)	(62,161)
Interest income	19,728	22,208	-	-	-	-	-	-	-	-	19,728	22,208
Actuarial profit or loss:												
Expected plan yield (excluding interest income)	5,917	(2,886)	-	-	-	-	-	-	-	-	5,917	(2,886)
Effect of foreign exchange translation	1,119	(866)	-	-	-	-	-	-	-	-	1,119	(866)
Other changes	469	331	-	-	-	-	-	-	-	-	469	331
Fair value of plan assets as of December 31	296,493	318,684	-	-	-	-	-	-	-	-	296,493	318,684
Surplus or (deficit) of the defined benefit plan	(280,101)	(729,832)	(145,435)	(135,886)	(45,070)	(38,846)	(1,155)	(1,286)	(32,960)	(28,694)	(1,004,720)	(934,475)
Net asset or (liability) of the defined benefit plan	(280,101)	(729,832)	(145,435)	(135,886)	(45,070)	(38,846)	(1,155)	(1,286)	(32,960)	(28,694)	(1,004,720)	(934,475)
Total defined benefits	(280,101)	(729,832)	(145,435)	(135,886)	(45,070)	(38,846)	(1,155)	(1,286)	(32,960)	(28,694)	(1,004,720)	(934,475)

Amounts stated in millions of Colombian pesos

(1) Includes pension plans of the EPM Group companies in accordance with the regulations of each country. Also, contributions to social security and funeral assistance.

(2) Includes retroactive severance plans, which consist of a recognition of an average monthly salary multiplied by the years of service, payable through advances and at the time of contract termination. The source of the plan is the "Sixth Law of 1945, by which some provisions are issued on labor conventions, professional associations, collective conflicts and special labor jurisdiction" and the National Decree 1160 of 1989, which partially regulates Law 71 of 1988, which issues rules on pensions and other provisions.

(3) The benefit for public utilities subsidies is a plan consisting on a total or partial discount on the monthly value to be paid of the public utility of energy, and in some cases in the service of water and telephone, in the following companies of the Group: Central Hidroeléctrica de Caldas S.A. E.S.P, Centrales Eléctricas del Norte de Santander S.A. E.S.P., Electrificadora de Santander S.A. E.S.P. and Elektra Noreste S.A. At Electrificadora de Santander S.A. E.S.P., the benefit is granted to former employees whose service at the date of retirement was at least 15 years. The benefit for public utilities is covered by the collective labour agreements in force in these companies.

(4) Corresponds to the educational assistance that by law is granted to the children of retirees who are economically dependent on it, up to the age of 25.

No risks have been identified for the EPM Group coming from the post-employment benefit plans, nor any amendments, reductions or settlements that impact the present value of the liability.

The weighted average duration, in years, of the defined benefit plan obligations at the cut-off date is as follows:

Benefit	2020		2019	
	from	to	from	to
Pension	9	12	8	12
Retroactive severances	4	6	5	7
Public utilities assistance	9	12	9	12
Education	4	4	5	8
Other defined benefit plans	1	1	2	6

The Group has no restrictions on the current realization of the defined benefit plan surplus.

The Group did not make any contributions to defined benefits during the period.

The composition of the fair value of plan assets is as follows:

Assets that support the plan	2020		2019	
	Participation %	Fair value	Participation %	Fair value
Cash and cash equivalents	**4.87%**	**14,449**	**2.47%**	**7,870**
Equity instruments				
Government sector	8.43%	24,982	6.38%	20,326
Total equity instruments	**8.43%**	**24,982**	**6.38%**	**20,326**
Debt instruments				
AAA	66.90%	198,362	72.32%	230,470
AA	2.22%	6,585	5.31%	16,910
BB and less	0.59%	1,749	0.54%	1,715
Without rating	10.92%	32,381	11.14%	35,514
investment funds[1]	2.79%	8,272	1.85%	5,880
Total debt instruments	**86.70%**	**257,062**	**91.15%**	**290,489**
Total assets that support the plan	**100%**	**296,493**	**100%**	**318,684**

Amounts stated in millions of Colombian pesos

[1] Includes from EPM a conservative profile mutual fund, with immediate availability of resources called Rental Liquida (liquid rent), managed by Fiduciaria Davivienda, with a balance of $3,671 (2019: $1,576) and an Exchange Trade Fund (ETF), which follows the behavior of Colcap, with a balance of $4,602 (2019: $4,304).

The main actuarial assumptions used to determine the obligations under the defined benefit plans are as follows:

Assumptions	Colombia				Panamá			
	2020		2019		2020		2019	
	From	To	From	To	From	To	From	To
Discount rate (%)	6.10%	2.70%	6.00%	7.20%	2.44%	2.44%	3.31%	3.31%
Yearly salary increase rate (%)	4.60%	4.60%	4.60%	5.50%	3.20%	3.20%	5.00%	5.00%
Real rate of return on plan assets	6.96%	6.96%	4.83%	4.83%	5.00%	5.00%	5.25%	5.25%
Future yearly Pension increase rate	3.50%	3.50%	3.25%	3.50%	-	-	-	-
Yearly inflation rate (%)	3.50%	3.50%	3.25%	3.50%	0.20%	0.20%	0.20%	0.20%
Mortality rate tables	Valid Rentiers 2008 Table				Republic of Panama Urban Population Mortality Table 2010-2015			

Assumptions	Guatemala				México			
	2020		2019		2020		2019	
	From	To	From	To	From	To	From	To
Discount rate (%)	4.90%	4.90%	5.80%	5.80%	6.70%	6.70%	7.60%	7.60%
Yearly salary increase rate (%)	4.50%	4.50%	4.50%	4.50%	5.58%	5.58%	5.58%	5.58%
Future yearly Pension increase rate	-	-	-	-	-	-	-	-
Yearly inflation rate (%)	4.00%	4.00%	4.00%	4.00%	3.50%	3.50%	4.00%	4.00%
Mortality rate tables	RP-2000 Table							

Assumptions	El Salvador				Chile			
	2020		2019		2020		2019	
	From	To	From	To	From	To	From	To
Discount rate (%)	2.31%	2.31%	3.49%	3.49%	0.21%	0.21%	0.66%	0.66%
Yearly salary increase rate (%)	1.71%	1.71%	1.50%	1.50%	0.63%	0.63%	0.63%	0.63%
Future yearly Pension increase rate	-	-	-	-	-	-	-	-
Yearly inflation rate (%)	0.70%	0.70%	1.00%	1.00%	2.88%	2.88%	2.43%	2.43%
Mortality rate tables	CSO-80 Table				CB H 2014 and RV M 2014 Tables			

The following table shows the effect of a variation for more than 1% and less than 1% in salary increase, discount rate and an increase in benefit over the obligation for post-employment defined benefit plans:

Assumptions	Increase in discount rate by +1%	Decrease in Discount rate by -1%	salary increase Rise By +1%	Salary increase Decline By -1%	Benefit increase Rise by +1%	Benefit increase Decline by -1%
Pensions	823,860	994,285	-	-	111,359	111,359
Retroactive severances	138,996	152,404	58,633	47,152	22,119	22,119
Public utilities	40,053	49,409	-	-	27,648	27,648
Other post-employment benefits	107,833	133,364	-	-	1,235	1,235
Total post-employment benefits	**1,110,742**	**1,329,462**	**58,633**	**47,152**	**162,361**	**162,361**

Amounts stated in millions of Colombian pesos

The methods and assumptions used to prepare the sensitivity analysis for the present value of defined Benefit Obligations (DBO) were made using the same methodology that for actuarial calculation as of December 31, 2020 and 2019: Projected Unit of Credit (PUC) Method. Sensitivity does not present neither limitations nor changes in the methods or assumptions used to prepare the current period analysis.

Pension liabilities calculation according to current fiscal requirements in Colombia.

Resolution 037 of 2017 issued by the General Accountancy of the Nation established the obligation to disclose the calculation of pension liabilities in accordance with the parameters established in Decree 1625 of 2016 and Decree 1833 for pension commutations; therefore, the figures presented below do not correspond to the requirements of IFRS adopted in Colombia.

Pension liabilities

The actuarial calculation of pensions was prepared with the following technical bases:

Actuarial assumptions - Pension obligation	2020	2019
Real technical interest rate	4.80%	4.80%
Salary increase rate	3.64%	3.91%
Pension increase rate	3.64%	3.91%
mortality rate table	Valid rentiers 2008 table	

The following table is the calculation of Pension Liabilities with the previous parameters:

Description	2020		2019	
	Number of People	Amount of the obligation	Number of People	Amount of the obligation
Personnel pensioned entirety by the companies of the EPM Group	1,255	322,862	1,443	351,149
Personnel pensioned with amounts shared with Colpensiones (state pension system)	1,875	269,148	1,989	298,745
Personnel benefit shared with Colpensiones	885	111,439	865	103,616
Personnel pensioned with amounts shared with other institutions	431	44,925	397	41,086
Total	**4,446**	**748,374**	**4,694**	**794,596**

Amounts stated in millions of Colombian pesos

Below are Pension Bonds related to Pension Obligations:

Description	2020		2019	
	Number of People	Amount of the reserve	Number of People	Amount of the reserve
Retirement payment type A modality 1	243	2,832	246	2,707
Retirement payment type A modality 2	4,394	199,493	4,531	195,937
Retirement payment type B	3,516	405,193	3,618	397,976
Retirement payment type T	5	280	5	277
Other - Contributions Law 549	174	5,349	178	5,175
Total	**8,332**	**613,147**	**8,578**	**602,072**

Amounts stated in millions of Colombian pesos

Following, the differences between the pension liabilities calculated under IFRS adopted in Colombia and the fiscal pension liabilities are shown:

Description	2020	2019
Pension liabilities under IFRS	910,235	737,837
Fiscal pension liabilities	1,290,086	1,133,103
Difference	**(379,850)**	**(395,266)**

Amounts stated in millions of Colombian pesos

Pension commutation liabilities

The actuarial calculation of pension commutation was prepared with the following technical basis:

Actuarial assumptions - Pension commutation	2020	2019
Real technical interest rate	4.80%	4.80%
Salary increase rate	3.64%	3.91%
Pension increase rate	3.64%	3.91%
Mortality rate table	Valid rentiers 2008 table	

The following table is the calculation of the pension commutation with the previous parameters:

Description	2020		2019	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by EPM Group companies.	86	21,911	92	25,716
Personnel pensioned with amount shared with Colpensiones	355	47,998	346	44,513
Personnel benefit shared with Colpensiones	42	4,284	37	3,167
Personnel pensioned with amounts shared with other entities	21	2,510	31	3,693
Total	**504**	**76,703**	**506**	**77,089**

Amounts stated in millions of Colombian pesos

Below are the pension bonuses related to pension commutation liabilities:

Description	2020		2019	
	Number of people	amount of the reserve	Number of people	amount of the reserve
Retirement payment type A modality 1	12	39	12	38
Retirement payment type A modality 2	255	11,309	255	10,803
Retirement payment type B	206	20,667	219	21,928
Retirement payment type T	3	22	3	84
Other - Contributions Law 549	1	41	3	115
Total	**477**	**32,073**	**492**	**32,967**

Amounts stated in millions of Colombian pesos

Differences between pension commutation liability as calculated under IFRS adopted in Colombia, and the tax pension commutation liability are shown below:

Description	2020	2019
Pension commutation liabilities under IFRS	93,034	90,694
Fiscal pension commutation liability	108,777	110,055
Difference	**(15,743)**	**(19,361)**

Amounts stated in millions of Colombian pesos

26.1.2. Defined contribution plans

The Group made contributions to defined contribution plans recognized in the results of the period as an expense of $27,640 (2019: $26,161), as a cost of $54,641 (2019: $50,289) for a total of $82,281 (2019: $76,450).

26.2. Long-term employee benefits

Long-term benefits	seniority premium[1]	
	2020	2019
Current value of liabilities due to other long-term benefits		
Initial balance	96,973	90,671
Present service cost	8,746	7,982
profit (or expenses) due to the iterests	5,915	5,843
Actuarial profit or loss due to changes in:		
assumptions by experience	3,430	2,794
Demographic assumptions	605	41
Financial assumptions	3,967	2,105
Past service cost	135	-
Effect in foreign exchange translation	47	5
Payments made by the plan	(13,744)	(12,468)
Business combinations	985	-
Present value of liabilities at 31 December	**107,059**	**96,973**

[1] Granted on the basis of the employee's years of service, is recognized and paid in accordance with the terms established in the collective labour agreements in force in each company or the labor regulations of the country.

The Group has not identified any risks generated by the long-term benefit plans, nor any modifications, reductions or settlements that impact the present value of the obligation.

The weighted average duration in years, of the obligations for long-term benefit plans at the report date, is as follows:

Benefit	2020		2019	
	From	To	From	To
Seniority premium	7	7	6.6	7.1
Other long-term benefits	6	6	6.6	6.6

The Group does not expect to make contributions to the plan for the next year period.

The main actuarial assumptions used to determine the obligations for long-term employee benefit plans are the following:

Assumptions	Colombia		Guatemala	
	2020	2019	2020	2019
Discount rate (%)	5.80%	6.40%	5.00%	5.90%
Yearly salary increase rate (%)	4.85%	4.85%	4.50%	4.50%
Yearly inflation rate (%)	3.50%	3.50%	4.00%	4.00%
Mortality rate tables	Valid rentiers 2008 table		RP-2000 table	

The following table shows the effect of a variation of plus 1% and less 1% in the Salary Increase, in the discount rate and in the increase in the benefit over the obligation for long-term benefit plans:

Assumptions	Increase in discount rate by +1%	Decrease in discount rate by -1%	Salary increase by +1%	Salary decrease by -1%	Benefit increase Rise by +1%	Benefit increase Decline by -1%
Seniority premium	96,074	100,985	100,011	95,970	-	-
Other long-term benefits	2,669	3,054	3,042	2,676	-	-
Total long-term benefits	98,743	112,040	112,053	98,646	-	-

Amounts stated in millions of Colombian pesos

The methods and assumptions used to prepare the sensitivity analysis for the present value of defined benefit obligations (DBO) were made using the same methodology that for actuarial calculation as of 31 December 2019: Projected Unit of Credit (PUC). The sensitivity does not present neither limitations nor changes in the methods or assumptions used to prepare the current period analysis.

26.3. Short-term employee benefits

The composition of the short-term benefits is as follows:

Short-term benefits	2020	2019
Payroll payable	8,814	389
Severances	55,782	48,963
Interest on severances	6,759	6,739
Vacation	37,839	30,300
Vacation bonus	51,425	39,223
Service bonus	640	549
Holidays (Christmas) bonus	254	249
Bonuses	11,231	10,760
Other bonuses, salaries and legal benefits	21,317	10,266
Total short-term benefits	**194,061**	**147,438**

Amounts stated in millions of Colombian pesos

Note 27. Taxes, contributions and rates

The detail of taxes, contributions and rates, other than income tax, is as follows:

Taxes, contributions and rates	2020	2019
Withholding tax on income and stamp duty	136,344	106,121
Value added tax (VAT)	47,739	43,872
Industry and commerce tax	44,776	38,105
Rates	29,320	16,167
Contributions	105,654	11,521
Taxes, contributions and rates abroad	4,416	2,706
Customs duty and surcharges	2,940	1,432
Royalties and monetary compensations	667	1,411
Other national taxes	917	730
Other municipal taxes	1,320	123
Valuation tax	-	97
Unified property tax	78	78
National consumption tax	6	5
Audit and auditing fee	2,782	-
Penalties	1	-
Total Taxes, contributions and rates	**376,960**	**222,368**

Amounts stated in millions of Colombian pesos

Note 28. Provisions, contingent assets and liabilities

28.1. Provisions

The reconciliation of provisions is as follows:

Description	Decommissioning and restoring [1]	Onerous contracts [2]	Lawsuits [3]	Contingent consideration on business combinations [4]	Warranties [5]	Other provisions [6]	Total
Initial balance	173,117	32,246	275,820	134,848	108,630	157,250	1,081,907
Additions	119	-	46,295	-	-	86,936	133,350
Uses (-)	(27,451)	(28,630)	(11,451)	(1,495)	-	(77,516)	(156,543)
Unused amounts, reversals (-)	(10,304)		(24,840)	(46)	-	(11,401)	(46,591)
Effect due to changes in estimates	58,781	5,945	3,957	18,196	60,100	67,029	214,008
Adjustment for changes in estimates			922				922
Capitalized decommissioning	16,830						16,830
Exchange rate difference	-	-	187	3,178	-	-	3,765
Financial restatement	7,884	439	7,889	704	5,588	3,169	24,673
Effect in foreign exchange translation	224	-	2,277	-	-	9,732	12,233
Final balance	218,800	-	300,056	155,378	174,318	435,202	1,283,754
Non-current	150,219	-	84,933	147,789	90,787	119,134	592,862
Current	68,581	-	215,123	7,589	83,531	316,068	690,892
Total	218,800	-	300,056	155,378	174,318	435,202	1,283,754

Amounts stated in millions of Colombian pesos

As at 31 December 2020, the significant behavior of the Group's provisions is:

[1] Increase of $ 45,684 mainly originated by (i) the increase in the provision of the environmental and social recovery plan for the Ituango Hydroelectric project by $ 33,693; (ii) initial recognition in the amount of $ 1,774 of the environmental provisions of the Belén Ínsula projects for $ 1,372 and Línea Gamarra for $ 402 in the subsidiary CENS; increase in the valuation of the provision in the solid waste disposal activity of Emvarias for $ 2,299 and (iv) the incorporation of the provision for a value of $ 90, corresponding to dismantling costs, related to the removal of transformers containing PCBs (polychlorinated biphenyls) from the subsidiary CaribeMar de la Costa S.A.S. E.S.P. -Afinia-.

[2] Decrease of $ 32,246 originated by the completion of the provision of the fuel supply and transportation contract signed between EPM and TGI-Transportadora de Gas Internacional S.A. E.S.P.

[3] Increase of $ 27,153 where the incorporation of the litigation of CaribeMar de la Costa S.A.S. E.S.P. -Afinia- for a value of $ 2,769 where there is a movement of $ 922 corresponding to the business combination, as a result of the contribution in kind made by Electrificadora del Caribe S.A. E.S.P. on September 25, 2020, based on the Framework Agreement for Contribution in Kind entered into on the same date between Electrificadora del Caribe S.A. E.S.P. and Afinia.

[4] Increase of $ 20,537 due to the adjustment in the valuation of the contingent consideration with Espíritu Santo Energy S. de R.L., whose TRM with which the liability was valued amounted to $ 3,432.50.

[5] Increase of $ 65,688 originated by updating the provision corresponding to the obligation based on CREG Resolution 046, to recognize the transporter Interconectado Eléctrica S.A E.S.P -ISA-, the income that it expects to receive from the commissioning of the transmission line, for a value of USD 3.5 million for each month of delay in the entry into operation of the Ituango Hydroelectric project. The periods that are estimated to be recognized by the transmitter, comprise from July 2021 to November 2022.

[6] Increase for $ 77,903 mainly originated by (i) the update of the provision for those affected -indemnified from the Ituango hydroelectric project in $ 35,043, which included lines associated with the construction of community infrastructure - Puerto Valdivia community center, Marco A. Rojo Puerto Valdivia School, construction and adaptation of connectivity to the township of Puerto Valdivia, among others; (ii) increase of the TRM to 3,432.50 in the insurance and reinsurance provisions of the subsidiary Maxseguros for a value of $ 39,087; (iii) Increase in the provision of the technical health reserve in EPM, in the amount of $ 3,430 caused by the non-cancellation of medical orders issued and not used or invoiced by the entities providing the service during the pandemic period.

28.1.1 Decommissioning or restoring

The Group is obliged to incur costs for decommissioning or restoring its facilities and assets, in the following events:

- Recall of transformers containing PCBs (Polychlorinated Biphenyls). The Group has committed to the decommissioning of these assets from 2014 to 2026, covered by Resolution 222 of 15 December 2011 of the Ministry of Environment and Sustainable Development and the Stockholm Convention of 22 May 2008. Applies in Colombia, Panama and El Salvador. The provision is recognized at the present value of the expected costs to settle the obligation using estimated cash flows. The main assumptions considered in the calculation of the provision are estimated costs, CPI and fixed rate TES. As at 31 December 2020, the national subsidiaries that contribute to this item are ESSA with $986, CENS with $402, EPM with $310, EDEC with $227 and CHEC with $231 and the international subsidiaries that contribute are ENSA with $638 and DELSUR with $4,329.
- Solid waste management utility in Colombia, for the disposal of solid waste by the subsidiary EMVARIAS requires land on which cells or vessels are built for the deposit of solid waste, a landfill, being necessary to restore it through a series of activities aimed at making its closure, decommissioning and post-closure. The obligation begins from the moment the landfill is in optimal conditions for the final disposal activity and goes until the environmental regulatory body, by means of a resolution, decrees the completion of the closure, decommissioning and post-closure stage. This obligation is defined in the RAS 2000 (Technical Regulations on Drinking Water and Basic Sanitation), which establishes the basic criteria and minimum environmental requirements that solid waste management systems must meet in order to mitigate and minimize the impacts of design, construction, commissioning, operation, maintenance, decommissioning, completion, and closure activities. As at 31 December 2020, this item ended at $22,925.

- Dismantling of the Jepírachi Wind Farm located in the department of La Guajira, in the towns of Cabo de la Vela and Puerto Bolívar in Colombia, which through CREG resolution 136 of 2020, published in the Official Gazette of July 15, 2020, The restart of operations is allowed until 2023, which led to the activation of the provision for $ 9,640 million, for a final balance as of December 31, 2020 of $ 18,352.
- In EPM, provision for environmental impact in the construction of infrastructure projects: this arises as a legal obligation derived from the granting of the environmental license to compensate for the loss of biodiversity during the construction phase, as well as compensation for the subtraction of reserve areas, affectation of prohibited species and forest use; obligations that are formalized through resolutions of the ANLA (National Environmental Licensing Authority), CAR - Regional Autonomous Corporation and / or MADS - Ministry of Environment and Sustainable Development. The execution of the biotic environmental compensations of the project extends beyond the time in which the asset begins to operate technically, being necessary to implement the figure of the provision with the intention that these expenditures remain as greater value of the construction in course. The Group has committed to compensate the loss of biodiversity, subtraction and closures from 2016 to 2019 according to the resolutions: Res. 1313/2013 ANLA, Res. 519/2014 ANLA, Res LA. 0882/04/08/2014 ANLA, Res. 1166/2013 MADS, Res. 1852/2013 CAR, Res. 2135/2014 CAR, Resolution 1189/22/07/2104 MADS, Res. 1120907/17-03-2015 CORNARE, Res. 141011206/16-10-2014 CORANTIOQUIA, Res LA. EIA1-9872 21/04/2014 CVS, among others. The provision is recognized for the present value of the expected costs to settle the obligation using estimated cash flows. The main assumptions considered in the calculation of the provision are estimated costs, CPI and TES fixed rate. As of December 31, 2020, the main subsidiaries contributing to this concept are EPM with $10,866, ESSA with $4,717 and CENS with $1,713.
- Environmental compensation and compulsory investment of 1%: Law 99 of 1993, established the mandatory nature of environmental licensing for the development of any activity that could cause serious damage to renewable natural resources or the environment, or introduce considerable or noticeable modifications to the landscape and depending on the type of activity, the size and location of the project, and assigned the powers in relation to environmental licensing to the National Environmental Licensing Authority, the Regional Autonomous Corporations, or the metropolitan areas.

  Article 321 of Law 1955 of 2019 indicates that all holders of an environmental license who have investments pending as of 25 May 2019 may benefit from the percentage increase in the value of the liquidation basis of the compulsory investment of not less than 1%, according to the year of commencement of activities authorized in the environmental license and defined the requirements and procedures to update pending investments and benefit from new terms of execution subject to the approval of the ANLA.

As of 31 December 2020, the EPM Group has obligations of this type amounting to $64,468 related to the use of water taken directly from natural sources in the current projects in Hidroituango, Porce II, Porce III and La Sierra. In accordance with the law, the executed values

of 1% are Porce II for $4,4907, Porce III for $10,394, La Sierra for $509 and Hidroituango for $48,658.

Additionally, as of 30 December 2020, EPM includes a provision of $186,579 for environmental contingencies, established by the specific action plan for the recovery of the parties affected by the events of the occluding of the Cauca River diversion tunnel at the Hidroituango project on 28 April 2018; by the closing of floodgates in 2019 that reduced the flow of the river downstream of the project; and by the events that may arise from the pending technical milestones to be reached, typical of the contingency, as well as from the execution of the project itself. During 2020, $ 57,989 has been recognized between estimated expense and interest and payments have been made for a value of $ 24,295. The balance of the provision as of December 31, 2020 amounts to $ 88,547.

The specific action plan for recovery should consider three framework programs:

a. Recovery of affected bogs

b. Recovery of affected fish fauna

c. Re-establishment of the aquatic habitats located in the affected area

These three programs correspond to the environmental component as a response to the identifying of the caused damage, as well as the discretionary actions. Also included are social programs, economic activities, infrastructure, and risk management, among others.

The different actions are to be developed between the municipalities of Valdivia to Nechí, however, if they are identified in the municipalities that are part of La Mojana, will also be the subject of intervention.

28.1.2 Onerous Contracts

As of December 31, 2020, the provision for the fuel supply and transportation contract signed between EPM and TGI-Transportadora de Gas Internacional S.A. is terminated. E.S.P.

28.1.3 Lawsuits

This provision covers the estimated probable losses related to labour, administrative, civil and tax lawsuits arising in the operations of the companies of the Group. The main assumptions considered for calculating the provision are: Average CPI to actual data in previous years and projected data in future years, fixed rate TES in Colombian pesos to discount, estimated value to be paid, and the estimated payment date for those lawsuits rated as probable. As of today, no future events have been foreseen that may affect the calculation of the provision.

In order to minimize the uncertainty that may arise regarding estimated dates of payment and values to be paid in a lawsuit rated as probable, the companies of the Group that operate in Colombia uses business rules based on statistic studies to obtain the average length of processes per action as well as case law to estimate the maximum amounts the law defines for the value of the extra-economic or intangible claims when they exceed their amount, as described below:

Average duration of processes per action

Administrative and tax processes

Type of legal action or procedure	Average length (in years)
Abbreviated	4
petition for compliance	4
Group Action	6
Representative actions	4
conciliation (pre-trial)	2
Partie civile proceedings	4
Contractual (Breach of contract)	13
Survey and demarcation	5
Executive	5
Singular executive	3
Expropriation	4
Comprehensive reparation incident (criminal)	2
Imposition of easement	4
Nullification of administrative acts	5
Nullification and reestablishment of rights	10
Nullification and reestablishment of labour rights	11
Ordinary	7
Ordinary of Membership	5
Accusatorial Criminal (Law 906 of 2004)	4
Division's lawsuits	4
Protection of consumer rights	6
Police Grievances	3
Right to Reclaim	7
Direct compensation	12
Oral	5

Labor processes

Type of legal action or procedure	Average length (in years)
Labor solidarity	3.5
Pension	3.5
Extra Hours	3.5
Job Reinstatement	4
Salary Scale Equalization	3.5
Unfair Dismissal Compensation	3.5
Reassessment of Social Benefits	3.5
Compensation work accident	4
Refund of Health-Pension Contributions	4

Application of case law

Typology: the values of claims for compensation of extra-patrimonial damages will be recorded according to the following typology:

- Non-material damage.
- Damage to health (physiological or biological damage), from a physical or psychophysical injury.
- Damage to relationship life.
- Damage to constitutional and conventional property.

The values of other extra-matrimonial claims not recognized by the jurisprudence will not be recorded, unless it can be inferred from the claim that, despite its name, it corresponds to one of the accepted typologies. Nor shall claims for extra-patrimonial compensation for damage to property be recorded.

Quantification: The amounts of extra-patrimonial damage claims will be recorded uniformly as follows, regardless of its typology:

Direct victim Compensation	100 Monthly Minimum Legal Wage Enforced (MMLWE)
Indirect victim compensation	50 Monthly Minimum Legal Wage Enforced (MMLWE)

- **For subsidiaries in Chile:** With regard to the probable payment date of the trials, the type of process and the previous cases are taken into consideration. In this sense, the labor process, being oral and only two hearings, has a maximum duration of six months, except in specific cases where there are problems in notifying the lawsuit. In civil processes since are lengthy processes and the instances available may take at least two years, the estimated time for the lawsuits currently being processed by the subsidiary Aguas de Antofagasta S.A., considering their state of progress, should be until 2019.

  Amounts: to determine the amount of the judgments, first the amount of the claim by the plaintiff is considered, for applying case law in that regard is unfeasible, the amounts will vary depending on the Court and the cause to ask.

  Additionally, in civil trials, the amounts of the indemnities will depend on the court that dictates it, given that Chile possesses no case-law-system. What a civil judge cannot do and less the appellate and supreme court, is to confer figures greater than plaintiffs' demands.

- **For subsidiaries in Panama:** regarding the estimated date of payment, each case is evaluated in a particular way with external legal advisors, for which the average duration of similar processes is taken into consideration.

  Amounts: estimated amounts to pay for a lawsuit is determined based on the amount of the plaintiff claim and an analysis of the specific condition that motivates the claim in order to determine the recognition of a possible loss. For this we use the appreciation

of external legal advisors of each company and in certain cases with the support of insurance advisors in case of requiring an actuarial valuation.

- **For subsidiaries in El Salvador:** the estimated date of payment for administrative or judicial proceedings is assessed based on the average length for the resolution of similar processes, obtained from statistical data over the 20 years of operation of the subsidiaries.

  Amounts: estimate amounts of lawsuits are determined based on the amount of the initial claim filed against the company.

The following are the recognized litigation:

Company	Third party (plaintiff)	Complaint	Amount
EPM	Oscar Elías Arboleda Lopera	It includes 173 plaintiffs who worked for EADE, and state that in the dissolution and liquidation of said company there was an employer substitution with EPM, which obligates it to all labor claims.	105,258
	Consorcio Dragados Porce II	To pay the plaintiffs, among others, the sums of money resulting from the return of all the compensation illegally deducted by EPM in the hiring process No. CD002376.	28,696
	Various labor	149 processes with an average of $117 and an amount of less than $1,074.	17,480
	Departamento del Valle del Cauca	By way of reestablishment of rights, the Department of Valle del Cauca is ordered to return the amounts withheld in respect of Stamps for Pro-Public University Hospitals and Pro-Universities of Valle del Cauca with the respective interest.	8,092
	Municipio de Yumbo (Valle)	Industry and commerce and its complementary signs and boards and public lighting.	5,156
	Various administratives	21 processes with an average of $233 and an amount of less than $916.	4,885
	Consorcio Dragados Porce II	That EPM be ordered to recognize and pay the amount of damages caused to the good name of the companies that constituted the Dragados Conconcreto Porce II Consortium.	4,276
	John Walter Jaramillo	Declare the nullity of the dismissal, with their respective salaries and their increases, social benefits until he/she is effectively reinstated.	4,266
	Oliver Antonio Aguirre Soto	Request for reinstatement, salaries and social benefits	3,283
	Several prosecutors	9 processes with an average of $290 and an amount of less than $5,156.	2,610
	Unión Temporal Energía Solar S.A. y Estructuras Arbi Ltda.	Declare that the bid submitted by the plaintiffs to bid No. ES-2043- GI summoned by EPM, was legally apt to be taken into account at the time of awarding the respective contract of bid No. ES-2043- GI.	2,050
	General Fire Control Ltda.	To declare the nullity of the Communications subscribed by EPM, whereby the fines imposed, as of 07/04/2011 at USD 153,957.00, at 03/09/2009 for non-compliance in the delivery term, for US$263,368.60, based on numeral 5.13 Conditions of the Contracting Process No. 029158, and on the occasion of the execution of Contract No. 29990329557, are updated.	2,033

Company	Third party (plaintiff)	Complaint	Amount
EPM	Construcciones Pico y Pala Ltda.	That resolutions 95070 of 04/05/1999, issued by EPM, whereby it unilaterally liquidated contract 1/DJ-682/15 executed between EPM and Consorcio Trainco S.A. and 113701 of 03/15/2000, also issued by EPM, whereby it negatively resolved the appeal for reconsideration filed against resolution 95070 of 04/05/1999, are null and void.	1,886
	Humberto Hernando Gómez Franco	To declare EPM administratively and patrimonially liable for the injuries suffered by Mr. Humberto Hernando Gómez Franco, when he was electrocuted by high voltage cables owned by the defendant entity, on 10/23/2013, in the La Playa farm owned by Mr. Antonio Lopera, located in the La Virgen sector, in the Hoyorrico Village, jurisdiction of the Municipality of Santa Rosa de Osos.	1,864
	General Fire Control Ltda.	That EPM be ordered to pay the material damages, consequential damages and loss of profits that were caused, with the non-recognition and payment of the claimed concepts in accordance with what is proven in the process, amount that must be updated in its value in accordance with the provisions of article 178 of the C.C.A. That EPM be ordered to pay the costs. That the judgment that puts an end to the process shall be complied with in accordance with the terms of Articles 176 and 177 of the C.C.A	1,783
	Francisco Javier Muñoz Usman	Decree the nullity of the conciliation agreement signed due to a defect in consent and consequently order the reestablishment of the employment contract, the reinstatement, the payment of all salaries and benefits foregone, as well as the payment of social security contributions from the time of dismissal until the plaintiff is effectively reinstated.	1,702
	Carlos Olimpo Cardona	That the plaintiffs be reinstated in the same position or trade or another of equal or higher category that they had been performing, and that consequently, as compensation, all salaries and legal social benefits foregone should be paid, in addition to all contributions made to the Integral Social Security System.	1,330
	Seguros del Estado S.A.	That in the event that the Policy has been enforced, EPM be ordered to reimburse the insurer the amount paid for the indemnity, duly updated. USD285,000	1,305
	Accesorios y Sistemas S.A.	To declare the nullity of resolution 3077 of 11/12/200, issued by the General Manager of EPM, by means of which it was resolved to declare the realization of the risk of quality and correct operation of the vehicles object of contract 090321557.	1,268
	Carga de Saldos PPA de EP Rio	EP Rio PPA Balance Charge	1,195
	Consultel Ltda.	To declare EPM responsible for the breach of Contract No: 299901-26731, whose object is "Construction of internal and external gas networks and connection of clients to EPM's natural gas distribution system in the Aburrá Valley and its related works and activities".	1,164
	Trainco S.A.	Declare the nullity of resolutions 161052 of 05/03/2001, issued by EPM, whereby it unilaterally liquidated contract 2101870 executed between EPM and Trainco S.A. and 178702 of 07/06/2001.	1,108

Company	Third party (plaintiff)	Complaint	Amount
	Didier De Jesús Restrepo Montoya	The plaintiffs claim payment of moral damages allegedly caused by the eviction of their homes installed on a property owned by EPM for the construction of the Porce III Hydroelectric Project, which were subject to eviction ordered by the Mayor's Office of the Municipality of Anorí.	1,081
	Omar Augusto Lugo Hoyos	Decree the nullity of the conciliation agreement signed due to a defect in consent and consequently order the reestablishment of the employment contract, the reinstatement, the payment of all salaries and benefits foregone, as well as the payment of social security contributions from the time of dismissal until the plaintiff is effectively reinstated.	1,075
	General Fire Control Ltda.	EPM is ordered to refund the amounts withheld due to the imposition of fines for not complying with the technical specifications and guaranteed characteristics, plus the default interest caused from the date of the withholding and until the date of the actual refund based on item 5.13 Deductions for noncompliance (fines), of the bidding conditions of the contracting process No. 029158, and due to the execution of contract No. 29990329557.	916
	Consorcio Dragados Porce II	Record difference in exchange Account 271005 Litigation N° 14000857, 14000832 and 14000893.	796
Total EPM			**206,558**
EEGSAG	Tax Administration	Tax adjustment litigation	24,660
Total EEGSAG			**24,660**
CHEC	Claudia Viviana Morales and others	Material and moral damages	6,334
	Leidy Marcela Jiménez Jaramillo and others	Loss of profits/Material and moral damages	5,258
	José Hernando Anturi Noriega and others	Permanent per diems - social security contributions	3,856
	Cartones y Papeles del Risaralda S.A.	Reparation and payment of material damages	2,138
	José Aldover Cardona Sánchez and others	Reinstatement, compensation for unfair dismissal, reinstatement of social benefits and moratorium penalties.	1,126
	Ingeniería y Desarrollo Ltda and others	Emerging Damage	716
	Zoe Ospina De Gómez and others	Pension Substitution	681
	José William Castañeda Zuluaga and others	Termination of Contract Without Just Cause - Reinstatement	621
	Hernando De Jesús Ocampo Jiménez	Contract reality	489

Company	Third party (plaintiff)	Complaint	Amount
CHEC	Alba Lucía Saldarriaga Toro	Material damage	409
	María Noralba Flórez Arias	I pay 100% pension allowance	363
	Amparo Lozano Sanz and others	Pension reimbursement, salary readjustment and Social Benefits	141
	German Duque Quintero and others	Recognition 100% Allowance 14	103
	Francisco Fernando Sánchez Hincapié	Material damages/ Moral damages	36
	Angelmira Garcés Candamil	Compensation for property damage	27
	Hernán De Jesús Marín Salgado	Pension part quota	6
Total CHEC			**22,304**
CENS	Other labor proceedings, with a value of less than $250 million	Other labor proceedings (27) with an amount of less than $250 million.	2,492
	Elsa Reyes De Buitrago	Indexation of the first pension allowance, in their condition as pensioners and/or pension substitutes to all the plaintiffs and to cancel the interest at the maximum legal rate contemplated in Article 141 of Law 100 of 1993.	2,423
	William Alexis Ramírez	Cesar in the collection of public lighting from the municipality of Cúcuta, reimbursement of the balances for public lighting to the municipality, payment of contractual and extracontractual damages. Claim: $928,023,004.78 Incentive: 15% of the amount recovered by the Municipality.	1,168
	Jesús Efraín Ibarra Ochoa	Declare the pension compatibility between the retirement pension recognized by CENS and the old age pension recognized by the ISS, now Colpensiones	1,121
	Carmen Alicia Rodríguez	Indexation of the first pension allowance, in their condition of pensioners and/or pension substitutes, to all the plaintiffs and to pay the interest at the maximum legal rate contemplated in Article 141 of Law 100 of 1993	949
	Hayber Humberto Bermúdez Peñaloza	Moral damages for the injured party, his son, parents and siblings.	857
	José Francisco Arango Bautista	Material damages/moral damages/damage to life in relationship.	790
	Carlos Omar Rincón Carrillo	The claim is for the recognition and payment of the transportation allowance deducted by the contractor, expenses incurred for the maintenance of work tools, social benefits, vacations, and moratorium indemnities for the payment of the liquidation upon termination of the labor contract, together with the costs of the proceeding.	698

Company	Third party (plaintiff)	Complaint	Amount
CENS	Ermelina Pérez De Rivera	To declare that CENS has the obligation to continue paying the totality of the health contributions and to continue paying 12% of the pension allowance; as well as to reimburse the contributions not paid since the date of the compatibility of the pension, indexing them, plus moratory interest.	696
	Yesid Jaimes	Pension readjustment according to art. 1 of Law 71 of 1988 and not to those established in art. 14 of Law 100 of 1993, retroactive payment of the sums not paid, the respective indexation and interest for late payment according to art. 141 of Law 100 of 1993.	556
	Carmen Rosa Galvis Urbina	To declare CENS and engineering and services temporary union extra contractually liable for the damages caused to the plaintiff due to the death of Freddy Diaz. /Moral damages/consolidated and future material damages.	494
	Alexander Pineda Riobo	Claim for transportation allowance for workers of a contractor company and non payment of severance pay and non payment of social benefits. $374,619,803.	401
	Bersaline Ortiz Llánez	It requires compensation for the loss of the possibility of performing virtual activities, which, although they do not produce patrimonial yield, make existence pleasant. To determine these values of Physiological Damage, the jurisprudence of the Council of State is used, therefore, it was appraised in 100SMLMV, for each one of the members of the family (wife and daughter). As a consequence of the above, payment must be made for the pain, grief, suffering and sadness produced by the action that gave rise to the liability, appraised at 100 SMLMV.	345
	Ana Victoria Rivera Mantilla	Refund 12% of pensioners' health contributions /According to the claim, it is higher than 50 legal minimum monthly salaries for each of the plaintiffs //The provision corresponds to the following value: According to the claim, it is higher than $312,496,800.	332
	Mercedes Quintero Muñoz	Recognize and pay the differences deriving from the mathematical operation to obtain the indexation of the first pension payment, and order CENS to pay interest at the maximum legal rate.	246
	Other administrative proceedings (1) with an amount of less than $250 million.	Other administrative proceedings (1) with an amount of less than $250 million.	173
	Other civil proceedings (1) with an amount of less than $250 million.	Other civil proceedings (1) with an amount of less than $250 million.	132
Total CENS			**13,873**

Company	Third party (plaintiff)	Complaint	Amount
Aguas de Antofagasta S.A.	Sanctioning file SISS N°s 4311-4527-4601-4635-4661-4704_2020 and SISS N°4400-2018.	150; 500; 300; 200; 420; 400 and 50 UTA	6,025
	Gobernación Marítima	40,000 and 43,000 gold pesos. 12.050/201 Y 272	3,174
	C-993-2018 Servicios Tirreno de Aguas Antofagasta	M$100.000.	524
	O-340-2020 Fuentes/Ezentis	M$50.000.	244
	O-5919-2020 Límari / Ezentis Chile S.A.	M$45.000.	220
	C-4568-2016 Constructora e Inmobiliaria CRC Ltda. con Econssa Chile S.A.	M$40.000.	195
	O-1138-2020 Balcázar/ Full Glass	M$30.000.	145
	O-1392-2019 Vanegas con Ayprev SPA.	M$15.000.	73
	O-142-2019 Rivera con Omar muñoz y ADASA.	M$11.000.	54
	T-61-2020 Pacuri con Consultora ambiental y servicios varios LTDA.	M$10.000.	48
	O-183-2020 Ramírez / Ayprev SPA	M$6.000.	29
	FO-0203-299 Dirección General de Aguas	100 UTM	25
	O-528-2020 Saavedra / Plásticos Ceanol	M$4.000.	19
	O-1351-2019 Araya con Ezentis	M$1.000.	5
Total Aguas de Antofagasta S.A.			**10,780**

Company	Third party (plaintiff)	Complaint	Amount
ESSA	Carolina Herrera De Ortiz and others	Other proceedings for amounts less than $294.	2,518
	Johana Andrea Granados Olarte	Requests the payment of $30,000,000 for lost profits. They request the payment of $300,000,000 for moral and material damages.	498
	Gloria Edilse Gámez	Declare ESSA administratively liable for the death of Omar Méndez Lozano and order it to pay moral and material damages.	456
	Gerardo Vargas Barón	Claim for disability pension of common origin.	450
	Osmel Rodríguez	Claim for industrial accident.	418
	Mary Consuelo Abaunza Salazar	The Electrificadora de Santander SA ESP is ordered to respond patrimonially by solidarity with the contractor Javier Sánchez Gómez to the payment of the patrimonial and extra-patrimonial damages owed due to the death of the worker Arley David Ospina Abaunza who lost his life in a work accident.	416
	Martha Cecilia Rodríguez Ardila	The plaintiffs request that ESSA be declared responsible for the totality of the damages caused to the plaintiffs, due to the events in which Mr. Hugo Feliz Duarte Rojas was killed. 1,000 grams of gold, in events occurring on January 9, 1991	386
	Diana Rocio Rivera Galeano and others	Declare that the work accident in which Mr. Juan Alberto Granados Ramírez lost his life occurred due to sufficiently proven fault of the employer. Declare that Electrificadora de Santander SAS ESP is jointly and severally liable with the employer for the amount of the indemnity to which the entitled successors, such as his daughter and his surviving permanent partner, are entitled.	372
	Ana Aydee Prada Ochoa	Payment of compensation for the death of Mr. Alirio Silva Pimiento in a work accident in the Municipality of San Joaquín, due to voltage discharge.	339
	Ana Mides Díaz Palacio	That the defendants Poring and ESSA be jointly and severally condemned to recognize and pay for total and ordinary compensation for the material damages corresponding to consolidated and future loss of profits, for objective and subjective moral damages and damages to the relationship and life claimed in the present lawsuit due to the labor accident in which the worker Pedro Nel Díaz Díaz lost his life.	336
	Gabriel Antonio Villegas Murcia	Declare that between Gabriel Antonio Villegas Murcia and Furel S.A. there was an individual employment contract for an indefinite term, verbally, within the time period from November 5, 2011 to July 15, 2014. Second: Declare that Mr. Gabriel Antonio Villegas Murcia suffered an accident at work on November 29, 2011, while performing his duties as a motorcycle lineman, in the execution of activities for the defendant.	312
Total ESSA			**6,501**

Company	Third party (plaintiff)	Complaint	Amount
Aguas Nacionales	Wilber Leibin Castillo Borja and others	Declare the company's liability for the death of the plaintiff's wife, allegedly caused by a traffic accident in a rainwater collection grate.	2,992
	Jesús Enrique Acevedo Ruíz	Call in guarantee: Reality contract. Payment of salaries and legal and extralegal social security and social security benefits, legal and moratorium indemnities, monetary correction, extra and ultra petita condemnation and payment of procedural costs	1,471
	Alberto Guerrero Castro	Reimbursement of salaries, benefits and social security, moratorium indemnification	513
	Fray Noe Betancurt Taborda	Solidarity, reinstatement for labor stability reinforced by health, indemnity law 361 of 1997 and moratorium indemnity, payment of social benefits.	157
	Ideraldo Ortiz Galván	That the employer Consorcio Aguas de Aburrá HHA identified with NIT N. 900.511.276-3 and the other co-defendants jointly and severally, jointly or separately, be ordered to reinstate my attorney-in-fact, Mr. Ideraldo Ortíz Galván, to the position of equal or better conditions than the one he held at the time of termination of the employment relationship.	87
	Natalia López Montoya	The existence of the labor relationship, payment of salaries, social benefits, indemnity, moratorium sanction of article 65 CST be declared.	22
Total Aguas Nacionales			**5,242**
Caribe Mar	Boris Fadul Rosa and others	Action for reinstatement	2,333
	José del Carmen Rincón Pérez and others	Indemnification for Atep	126
	Carmen Inés Yánez Ortiz	Nullity of affiliation Pension System	125
	Hermes Ballesteros Pupo	Job relocation	123
	Norma Quiroz Torres and others	Reliquidation of benefits	41
	July César Vergara Contreras	Invalidity of 2006 agreement: salary increase	10
	Gloria Muñoz Escorcia	Triple disability payment Bolivar	8
	July César Vergara Contreras	Ineffectiveness of disciplinary sanction	3
Total Caribe Mar			**2,769**
Delsur	Various clients	Refund of late payment interest charged in emergency Covid	953
	SIGET	Claim for tax misclassification	593
	Proyecto la Trinidad, Ltda. de C.V and others	Claim for damaged appliances	298
	Various employees	Claim for labor benefits	138

Company	Third party (plaintiff)	Complaint	Amount
Delsur	Alcaldía Municipal de San Salvador and others	Pole installation tax claims	54
Total Delsur			**2,036**
Elektra Noreste S.A.	Arístides Contreras and others	Civil Process - La Toscana residents	1,012
	ASEP	Civil lawsuit against Res.12581	515
	Oswall Dall Amico and others VS M&D y ENSA	Suit against ENSA for solidarity for the payment of acquired rights	479
Total Elektra Noreste S.A.			**2,006**
Emvarias	Erney Enoc Bran García and others	Contract reality different from that of contractors	615
	Liz Norma Bedoya Molina and others	Request for conventional retirement pension and salary equalization.	523
	Luz Marleny Rojo Zapata and others	Retirement pension, survivor's pension, penalty and pension bond.	351
	Luz Fabiola Arboleda and others	Compensation readjustment (pension bond and substitute pension)	58
	Norma Lucía Agudelo Sánchez and others	Pension Substitution	54
	Jesús Antonio Murillo	Substitute indemnity or refund of balances	52
	Álvaro Antonio Sánchez Álvarez	Labor Solidarity (Coomultreevv)	26
	Manuel Alejandro Agudelo Aracely	Direct reparation for traffic accident	10
	Angela María Barrera Robledo	Ineffectiveness of affiliation	8
Total Emvarias			**1,697**
EDEQ	Wilson Grisales Henao and others	Declaration of employer's fault in the work accident suffered by Mr. Wilson Grisales Henao, when he was performing electrical work at the La Montaña farm, Pekin, municipality of Quimbaya, in charge of EDEQ's contractor, Ingelel S.A.S.	1,589
Total EDEQ			**1,589**
AGURAB	HLB FAST&ABS Auditores LTDA.	That Regional de Occidente S.A. E.S.P. be declared liable for the pecuniary damage caused to the plaintiff due to the omission in the payment of the services rendered until September 2010 / That the payment of default interest be ordered.	41
Total AGURAB			**41**
Total recognized lawsuits			**300,056**
- Amounts stated in millions of Colombian pesos -			

28.1.4 Contingent consideration - on business combination

Corresponds to contingent considerations related to the acquisition of the subsidiaries Espiritu Santo Energy S. de R.L. and Empresas Varias de Medellín S.A. E.S.P. – EMVARIAS. The balance as of 31 December 2020 amounted to $141,590 and $13,788, respectively, for a total provision in the Group of $155,378.

The main assumptions considered in the calculation of the contingent consideration related to the acquisition of Espiritu Santo are: the estimated date of occurrence of the milestones associated with the contingent payment, the associated probability of occurrence and additionally, the discount of the payment flows was considered by applying a discount rate (LIBOR rate) in accordance with the risk of the liability. To date, no future events that could affect the calculation of the provision have been evidenced.

The main assumption used in the future events of the contingent consideration related to the acquisition of EMVARIAS are: ongoing lawsuits against EMVARIAS at the date of the transaction, definition of the year of materialization of each lawsuit, definition of the related amount to each of the disputes, estimate of future contingent outlays related to the estimated lawsuits for each year and discount rate (TES fixed rate) to discount future contingent expense flows. To date, there have been no future events that could affect the calculation of the provision.

28.1.5 Warranties

In December 2018, the Group at the head of EPM created a provision for warranties with an amount of $107,797 (approximately USD 3.5 million per month) which covers the breach incurred from July 2021 to November 2022, to the Intercolombia transporter for the months after the connection infrastructure of the Ituango project came into operation. During 2020, $ 65,687 has been recognized between estimated expense and interest and no payments have been made for this concept. The balance of the provision as of December 31, 2020 amounts to $ 174,318.

28.1.6 Other provisions

The Group's subsidiaries that contribute to other provisions are:

EPM in Colombia: includes the detail of the following provisions: a) for events focused on the quality of life of employees and their families, such as: employer policy, multiplier points, Somos program, technical reserve and provision for high cost and catastrophic illness; b) provisions regarding environmental sanctioning procedures and sanctions imposed by the competent authorities; c) provisions related to the contingency of the Hidroituango project.

The main assumptions considered for the calculation of each type of provisions are:

Employer policy: Awarded to EPM workers as an extralegal benefit. An aggregate deductible was contracted from July 1, 2019 to July 31, 2020, for $ 4,000. The main assumptions considered in the calculation for each type of provision are fixed rate TES discount rate, estimated value to be paid and estimated date of payment. To date, no future events that

could affect the calculation of the provision have been evidenced. The balance of the provision as of December 31, 2020 amounts to $7,551.

Somos Program: works under the point accumulation modality. According to the behavior of the statistics the points are counted with a probability of 80% of redemption. The balance of the provision as of 31 December 2020 amounts to $101.

Technical reserve: The basis for calculating the reserve is that corresponding to all service authorizations issued and which on the cut-off date have not been redeemed, except those corresponding to authorizations with more than twelve months of issue or those which, at least four months after they have been issued, are known not to have been used. The balance of the provision as of 31 December 2020 amounts to $10,942.

High cost and catastrophic illness: The basis for calculating this provision is that corresponding to the analysis of the entire population of members and beneficiaries of the Adapted Health Entity (EAS) of EPM, who suffer from any of the authorized pathologies. The balance of the provision as of 31 December 2020 amounts to $16,072.

For the other provisions described, the main assumptions considered in the measurement are estimated life expectancy, estimated payment date, estimated payment value, discount rate calculated with reference to market yields of bonds issued by the National Government.

Environmental sanctioning procedure: Corresponds to sanctions imposed on EPM for not implementing environmental management measures for the execution of works or executing them without the respective authorization or modification of the environmental license. As of 31 December 2020, there is a balance of $5,815 for four fines imposed by the ANLA and one by Corantioquia. From the ANLA, the first for having obstructed the course of the "Quebrada Tenche" water source by filling it with stone material; the second for building or modifying a tunnel without prior authorization and disposing of excess material on the road to San Andrés de Cuerquia; The third related to the adaptation of the slopes on which the geomembrane was installed and the waterproofing of the soil surrounding the solid waste disposal cell in the "BOLIVIA" landfill; and the fourth for having initiated activities related to the construction of the Auxiliary Deviation System (SAD) and its associated infrastructure within the Ituango Project without having previously processed and obtained the modification of the environmental license. For its part, Corantioquia declared EPM environmental liable for carrying out intervention in natural forests in March 2014 in Village (Vereda) las Palmas in the municipality of Envigado without having applied The balance as of 31 December 2020 is $5,815 and payments of $ 5,249 have been made to the National Environmental Fund - FONAM-.

Sanctions:

As of December 31, 2020, the Group has a balance of $ 3,902 for penalties imposed by the Superintendency of Residential Public Services - SSPD-, for exceeding the limits of the Quarterly Grouped Discontinuity Index (ITAD), with respect to the historical average and above the band of indifference. This indicator measures the amount of energy not served. The national companies that contribute to the balance of this provision are: EPM with $ 1,216,

EDEQ with $ 1,141, CENS with $ 1,106, and ESSA with $ 439. The CHEC subsidiary made the payment of said sanction to the SSPD, in December 2020, for a value of $ 1,105.

Ituango contingency::

- In EPM, provision for $111,980 for the Contingency of the Hidroituango Project that caused the rising of the waters of the Cauca River as a consequence of the occluding of the waters that the project had on 12 May 2018. This provision covers the attention of the affected people of Puerto Valdivia, for the compensation of emergent damage, lost profits and moral damage and repair to community infrastructure. Likewise, in 2019, the recognition of the effects of economic activities was added to said provision. During 2020, $ 35,043 has been recognized between estimated expense and interest and payments have been made in the amount of $ 24,931. As of 31 December 2020, the balance of the provision amounts to $45,985.
- In EPM, provision for $ 62,345 for the care of evacuees, the maintenance of shelters and the payment of economic support, a situation generated by the declaration of the red alert for the evacuation of the populations located downstream of the dam and that It was caused by the clogging of the Auxiliary Deviation Gallery - GAD on April 28, 2018, which consequently caused the contingency of the Ituango Hydroelectric Project. During 2020, $ 7,323 has been recognized between estimated expense and interest and payments have been made in the amount of $ 5,963. As of December 31, 2020, the balance of the provision amounts to $ 5,616.

Aguas Nacionales in Medellín - Colombia: includes provision for disputes brought by the HHA consortium of a contractual, non-judicial nature. The HHA Consortium is responsible for the construction of the Wastewater Treatment Plant in Bello and the points under discussion relate to time, design engineering and financial issues. The main assumptions considered in the calculation for each type of provision are the same as those applied to lawsuits provision. The balance of the provision as of 31 December 2020 amounts to $8,906.

CENS - Norte de Santander - Colombia: includes provision for expected losses on construction contracts. The balance of the provision as of 31 December 2020 amounts to $23.

ADASA in Chile: includes the provision related to the return of the working capital existing at the end of the concession term of the Sanitary Concession Transfer Agreement, signed between the Company and Econssa Chile S.A. The balance of the provision as of 31 December 2020 amounts to $33,484.

ENSA in Panama: includes the provision related to compensation to customers for non-compliance with service quality standards, which are regulated by the National Public Services Authority of Panama (ASEP). The balance of the provision at 31 December 2020 amounts to $40,155.

TICSA in Mexico: includes provisions related to: contractual obligations, electricity expenses and other expenses related to plant construction projects. The balance of the provision as of 31 December 2020 amounts to $8,122.

DELSUR in El Salvador: includes provision related to customer claims for improper collections, voltage variations, damage to electrical appliances, among others. The balance of the provision as of 31 December 2020 amounts to $1,535.

28.1.7 Estimated payments

The estimate of the dates on which the Group may have to disburse payments related to contingent liabilities included in the consolidated statement of financial position at the cut-off date, is the following:

Estimated payments	Decommissioning or environmental restoration	Lawsuits	Business combination	Warranties	Other provisions	Total
To One year	70,666	211,473	7,589	83,531	144,324	517,583
To Two-year	60,934	16,229	4	90,787	45,980	213,934
To Three years	26,151	5,487	143	-	16,269	48,050
To four or more years	67,657	46,888	147,642	-	128,761	390,948
Total	225,408	280,077	155,378	174,318	335,334	1,170,515

Amounts stated in millions of Colombian pesos

28.2. Insurance technical reserves

The technical reserves associated with insurance contract obligations are as follows:

Insurance technical reserves	December 2020	December 2019
Loss reserves payable	118,748	93,613
Reserve for unreported incurred losses	71,782	68,729
Unearned premium reserve	50,647	39,748
Total	241,177	202,090

Amounts stated in millions of Colombian pesos

Movement in insurance technical reserves was as follows:

December 2020	Initial balance	Adjustments in technical reserves	Final balance
Loss reserves payable	93,613	25,135	118,748
Reserve for unreported incurred losses	68,729	3,053	71,782
Unearned premium reserve	39,748	10,899	50,647
Total	202,090	39,087	241,177

Amounts stated in millions of Colombian pesos

December 2019	Initial balance	Adjustments in technical reserves	Final balance
Loss reserves payable	129,491	(35,878)	93,613
Reserve for unreported incurred losses	49,804	18,925	68,729
Unearned premium reserve	39,912	(164)	39,748
Total	**219,207**	**(17,117)**	**202,090**

Amounts stated in millions of Colombian pesos

28.3. Contingent assets, liabilities and others (controversies)

The composition of contingent assets, liabilities and others, which are not recognized in the financial statements, are as follows:

Type of contingency	Contingent liabilities	Contingent assets
Litigation	1,614,826	56,569
Warranties	245,952	133
Other	437,009	-
Total	**2,297,787**	**56,702**

Amounts stated in millions of Colombian pesos

The Group has disputes or proceedings currently pending before courts, administrative bodies and arbitrators.

The main pending lawsuits and judicial and extrajudicial disputes to which the Group is party as of the court date as well as controversies, are indicated below.

28.3.1 Contingent liabilities

Company	Third party (plaintiff)	Complaint	Amount
EPM	ISAGEN S.A. E.S.P.	Condemn EPM to indemnify ISAGEN for the damages it suffered as a consequence of the fire and the consequent unavailability of the Guatapé Power Plant.	330,964
	Misc. Administrative	319 Litigations under $10,112 with an average of $927.	295,792
	Galadier Diaz Rivera	It is declared to the Consorcio Hidroeléctrica Hidroituango S.A. E.S.P, Nation - Ministry of Environment and Sustainable Development, Nation - Special Administrative Unit "National Authority of Environmental Licenses - ANLA", Nation - Ministry of Mines and Energy, Nation - Mining and Energy Planning Unit, CorpoUrabá, Corantioquia, Ingetec S.A.S, SEDIC S.A., Construcciones e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Coninsa Ramón H. S.A., Department of Antioquia - EPM and Mayor of Antioquia, Construciones e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Coninsa Ramón H. S.A - Department of Antioquia - EPM and the Mayor's Office of Medellín, jointly and severally and administratively liable for the totality of the pecuniary and non-pecuniary damages caused to the plaintiffs, due to the overflowing of the Cauca River that originated in the Ituango Hydroelectric Project. The defendant entities to the payment of S $87,780,300 for each of the plaintiffs for moral damages.	172,884
	Elis María Ramos	It is declared to the Consorcio Hidroeléctrica Hidroituango S.A. E.S.P, Nation - Ministry of Environment and Sustainable Development, Nation - Special Administrative Unit "National Authority of Environmental Licenses - ANLA", Nation - Ministry of Mines and Energy, Nation - Mining and Energy Planning Unit, CorpoUrabá, Corantioquia, Ingetec S.A.S, Sedic S.A., Construciones e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Coninsa Ramón H. S.A. - Department of Antioquia - EPM and Mayor of Antioquia, Construciones e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Coninsa Ramón H. S.A - Department of Antioquia - EPM and the Mayor's Office of Medellín, jointly and severally and administratively liable for the totality of the pecuniary and non-pecuniary damages caused to the plaintiffs, due to the overflowing of the Cauca River that originated in the Ituango Hydroelectric Project. The defendant entities to the payment of $87,780,300 for each of the plaintiffs for moral damages.	154,686
	Elsa María Sajayo Carvajal	It is declared to the Consorcio Hidroeléctrica Hidroituango S.A. E.S.P, Nation - Ministry of Environment and Sustainable Development, Nation - Special Administrative Unit "National Authority of Environmental Licenses - ANLA", Nation - Ministry of Mines and Energy, Nation - Mining and Energy Planning Unit, CorpoUrabá, Corantioquia, Ingetec S.A.S, Sedic S.A., Construcoes e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Coninsa Ramón H. S.A. - Department of Antioquia - EPM and Alcaldora de Antioquia, Construcoes e Comercio Camargo Correa S.A., Constructora Conconcreto S.A., Coninsa Ramón H. S.A - Department of Antioquia - EPM and the Mayor's Office of Medellín, jointly and severally and administratively liable for the totality of the pecuniary and non-pecuniary damages caused to the plaintiffs, due to the overflowing of the Cauca River that originated in the Ituango Hydroelectric Project. The defendant entities to the payment of $87,780,300 for each of the plaintiffs for moral damages.	109,190

Company	Third party (plaintiff)	Complaint	Amount
EPM	Barrio Villa Esperanza	Immaterial damage in the amount of 100 SMLMV for each of the members of the group, that is, for one thousand two hundred and ninety-six (1296) persons, which in total is equivalent to One hundred and thirteen thousand seven hundred and sixty-three million one hundred and thirty-nine thousand two hundred pesos ($113,763,139,200). Material damage by way of consequential damage for the destruction of each one of the houses, calculated in an individual value per house of five million pesos ($5,000,000), which in total amounts to 377, for a total of one thousand eight hundred eighty-five million pesos ($1,885,000,000).	106,452
	Aura De Jesús Salazar Mazo	They request 100 SMLMV for damage to the mining activity; and for moral damages, which they appraise at an equivalent of 200 SMLMV for each of the persons in the group, approximately 113.	40,817
	Aura De Jesús Salazar Mazo	Collective right approximately 113 people each claiming $1,133,400 for Consolidated Loss of Profit and $78,753,854 for Future Loss of Profit, for destroying, interrupting and cutting the ancestral bridle paths that lead from the Alto Chiri trail in the municipality of Briceño to the Valle de Toledo township.	32,024
	Obras Civiles E Inmobiliarias S.A - Oceisa	Declare that EPM's failure to comply with the main obligation to deliver studies and designs prevented OCEISA from executing the contract and that it is not contractually liable for those portions of the work that could not be executed by third parties due to events beyond the control of the parties that prevented the normal execution of the contract.	18,801
	Luis Fernando Anchico Indaburo	Declare EPM administratively liable as the cause of the antijuridical damage for having destroyed the fishery resource of the Montecristo marsh complex, which is due to the construction of the IHP (Ituango Hydroelectric Project) and request the recognition and payment of a minimum wage for each family nucleus from February 2019 until the judgment is rendered, this is called by the plaintiffs as consolidated loss of profits.	16,051
	Luis Fernando Anchico Indaburo	To declare EPM administratively liable, as the cause of the antijuridical damage by having destroyed the fishery resource of the Montecristo marsh complex, which is due to the construction of the IHP (Ituango Hydroelectric Project); that a minimum wage be recognized and paid for each family nucleus from February 2019 until the judgment is rendered and the recognition of a future loss of earnings that goes from the time of the judgment until the probable period of life of each one of the plaintiffs.	16,045
	Misc. Labor	162 Litigation under $1,290 with an average of $94.	15,190
	Temporary Union Nueva Esperanza	Declare that EPM breached and unbalanced the contract CT-2013-000641 whose purpose was the execution of the construction and electromechanical assembly works of the transmission lines at 230KV Guavio - Nueva Esperanza and associated reconfigurations paraíso - Nueva Esperanza - Circo and paraíso - Nueva Esperanza - San Mateo.	12,947
	Maikol Arenales Chaves	Declare the defendants administratively liable as the cause of the antijuridical damage caused by the destruction of the fishery resource of the Ciénagas de Montecristo complex, which is due to the construction of the IHP.	11,980
	Maikol Arenales Chaves	Declare the defendants administratively liable as the cause of the antijuridical damage caused by the destruction of the fishery resource of the Ciénagas de Montecristo complex, which is due to the construction of the IHP.	11,980

Company	Third party (plaintiff)	Complaint	Amount
EPM	Javier Maure Rojas	Declare EPM administratively liable as the cause of the antijuridical damage for having destroyed the fishery resource of the Montecristo marsh complex, which is due to the construction of the IHP (Ituango Hydroelectric Project) and request the recognition and payment of a minimum wage for each family nucleus from February 2019 until the judgment is rendered, this is called by the plaintiffs as consolidated loss of profits.	10,113
	Moraine Olave De Larios	Relatives of former Integral worker who died in Ituango, claim for full compensation for moral damages caused. Solidarity.	5,763
	Rosa Disney Quintero Flórez	The families of some deceased former workers of the contractor Consorcio Redes de Iguaná, formed by the companies Sanear S.A. and Paecia S.A.S., were sued. Also, Seguros del Estado S.A., Sociedad Estudios Técnico S.A.S. and Seguros Generales Suramericana S.A. were sued.	1,290
	Ciudadela Comercial Unicentro Medellín PH	Declare the nullity of the administrative act issued by EPM with file number 20190130037817 of 2019-02-27. Order the reestablishment of the plaintiff's rights by ceasing the collection of the electric energy tax contemplated by Law 142 of 1994, Law 143 of 1994 and Law 223 of 1995; and, make the refund of what was paid for said concept from January 1, 2017 and until the date of judicial notification that puts an end to the process.	320
Total EPM			**1,363,289**
Aguas Nacionales	CICE Consortium	Recognition of cost overruns related to damages, clogging, lower yields and overconsumption of TBM tools. Recognition for longer stay on site due to the presence of unforeseeable physical conditions and several cost overrun claims.	62,185
	Darly Bibiany Cabezas and others	Other Litigation under $295.	1,551
	Seguros Comerciales Bolívar S.A.	Monetary recognition for damages caused to one of the Insurer's clients due to a downpour in March 2006 that caused flooding.	643
	Compañía Colombiana de Consultores S.A.S.	It requests a declaration that Aguas Nacionales S.A. ESP was in breach of contract No. 2014-90000-00147 and consequently that it be liquidated in court, that it be declared liable for the damages suffered by the plaintiff Colombiana de Consultores S.A.S., and that it be ordered to pay.	608
	Rosalba Valoyes Palomeque	That based on Article 90 of the Constitution, the municipality of Quibdó, Aguas Nacionales Epm S.A. ESP, Ingecor S.A.S. be declared administratively and jointly and severally liable for all damages caused by the injuries to Mrs. Rosalba Valoy Palomeque.	590
Total Aguas Nacionales			**65,577**
CHEC	Honorio Herrera López and others	Property, moral and material damages in the execution of a contract, imposition of an electric power easement and due to an electric accident.	26,843
	Municipio De Salamina	Energy foregone from generation and commercialization	6,275
	William Agudelo Valencia and others	Conventional retirement	3,943

Company	Third party (plaintiff)	Complaint	Amount
CHEC	Mauricio Vélez Giraldo and others	Material damages	3,207
	Reinel Rivera Toro and others	Direct compensation for material and moral damages	2,371
	José Gustavo Morales Guarín	Compensation for injured party	1,573
	Positiva Compañía De Seguros S.A.	Return of mathematical capital reserve	1,218
	Suministros Y Proyectos Tecnológicos Eléctricos Sypelc	Restitution of cost overruns and discounts not authorized in contract	699
	Jhon Jairo Lozada Garcés and others	Pension Reliquidation	564
	César Norbey Duque Cárdenas	Contract reality	357
	Mario Romero Londoño	Employer's fault in work accident	201
	Jairo Antonio Amariles Marulanda	Public Excuses and Indemnity Payment	144
Total CHEC			**47,395**
ESSA	Agustín Rangel Bermúdez and others	Proceedings for amounts less than $500,000,000.	10,340
	Omaira Alvarado Bautista and others	Proceedings for amounts less than $983,000,000.	9,408
	Tomón Ltda	It is requested to declare the existence of a Strategic Alliance contract between ESSA and the Temporary Union San Gil Iluminado.	9,295
	APH Servicios Eléctricos S.A. Tomón-Ltda., Kesman Overseas Limited., Inversiones El Prado	It is requested to declare the existence of a Strategic Alliance contract between ESSA and the Temporary Union San Gil Iluminado.	5,987
	Carlos Gerardo Hernández Flórez	To declare the Department of Santander, the Municipality of Betulia and Electrificadora de Santander S.A. ESP as administratively liable jointly and severally or individually as the case may be for the material and moral damages caused to Mr. Carlos Gerardo Hernández Flórez for failure or lack of service of the administration for the events that occurred on January 7, 2015 that caused the fire in the municipality of Betulia Santander and affected his property called Finca Vistahermosa.	5,539

Company	Third party (plaintiff)	Complaint	Amount
ESSA	Gerrsson Enmanuel Duarte Pabón	Declare ESSA liable for the damages caused to Gerson Duarte and his family (4 persons), for the damages derived from the inadequate location of energy networks that caused the electrocution of the plaintiff on July 30, 2011, when he was working in the property located at 10th Street and 14th Street no. 10-37, San Antonio neighborhood of Piedecuesta. That ESSA be condemned for the material and moral damages derived from the described fact, which in the plaintiff's opinion are equivalent to the sum of $2,128,885,110.	2,861
	Promotora Agrotropical Colombiana SAS	Declare the non-compliance of the commercial offer No. ON-013-2008 dated October 3, 2008. To order ESSA to pay $886,313,271.31 in damages.	1,213
	Gabriel Méndez Jaimes	ESSA be declared administratively liable for the damages caused to the Claimant.	1,045
	Blanca Sepúlveda Oviedo	Moral damages. Loss of profits. Damage to health.	1,022
Total ESSA			**46,710**
Emvarias	Jac Vainillal and Others	Direct Repair of Sanitary Landfill Compensation for Community Action Boards; Oml 191 Collector Car Injures Crew Member; Personal Injury in Traffic Accident; Injuries from Falling Tree.	14,386
	Martin Emilio Carvajal Henao	Class Action Due to Closure of Pradera Bellavista Road and Mismanagement of Pradera Landfill (Service Failure).	13,002
	La Cejita Community Action Board	Declarations	9,599
	Alex Estíbel Arango Aguiar and Others	Reality Contract and Direct Reparation	5,496
	Jesús Gregorio Valencia Valencia and Others	Other litigation for amounts less than $994	2,290
	William Alberto Giraldo Ocampo	Declaring the Existence of a Reality Contract	1,663
Total Emvarias			**46,436**
CENS	Luvier Sánchez Sánchez and Others	Other litigation under $991.	9,785
	Mariana Bautista Ortiz	That Nación CENS S.A. E.S.P. be declared civilly, administratively, patrimonially and extracontractually liable for the damages caused to the plaintiffs due to the death of Mr. Ramón Alipio Alvárez Páez(q.e.p.d.) which occurred on April 26, 2016, in the village of Miraflores, Puerto León sector of the township of Banco de Arena, Municipality of Zulia, Department of N. de S, as a consequence of an electric shock produced by a high voltage cable. Moral and material damages are requested for the plaintiffs.	2,534
	María Riquilda Poveda Murillo	Declare that the Nation, the MinMinas, the SSPD, EPM, CENS and the municipality of Cúcuta must pay for the damages caused by the injuries suffered by the minor Alirio Ignacio Poveda Murillo.	2,381

Company	Third party (plaintiff)	Complaint	Amount
CENS	Orlando Emiro Contreras Velasco	Declare that the plaintiffs have the right throughout their pension life to have their pension readjusted in accordance with the parameters indicated in article 1 of Law 71 of 1988 and not those established in article 14 of Law 100 of 1993, order CENS to pay the plaintiffs retroactively the sums not paid and that are liquidated by applying the higher increase; likewise, each unpaid amount must be duly indexed. Order the recognition and payment of interest for late payment as provided for in Article 141 of Law 100 of 1993.	2,155
	Paht Construcciones S.A.S.	To order the liquidation of Contract CT-2015-000070, executed between the parties, where CENS S.A E.S.P, must readjust the contractual equity in favor of Paht Construcciones S.A.S., with the application of the theory of unforeseeability, as well as the amounts for the concept of complement of the payment of act No. 6 for works executed, recognized and not paid.	1,773
	Geomara Carreño	For moral damages the sum of 1300 smlmv. Damage to life in relation. Material damages. Loss of profits.	1,515
	Nubia Boada Dueñas	The lawsuit requests the continuity in the payment of 12% of the pension allowance, the reinstatement of the contributions deducted from the time of the compatibility of the pension duly indexed and the payment of moratorium interest of article 141 of law 100 of 1990, plus the costs of the process.	1,491
	Eleida Carrascal Velásquez	To obtain the recognition and payment by CENS and the Department of Norte de Santander, in favor of the plaintiff, the value of the material damages (consequential damages, loss of profits and moral or immaterial damages) caused to her due to the total destruction of the business establishment called Ferretería y Materiales Diego Alejandro, in events that occurred on February 5, 2015, which caused detriment to her patrimony and patrimonial income, not only for the loss of income, but also with the cost generated by the recovery of the house where she lived.	1,180
Total CENS			**22,814**
EDEQ	Danielly Arcila de Gil and others	Declare the defendants administratively, extracontractually, jointly and severally and patrimonially liable for the injuries suffered by Mrs. Danielly Arcila de Gil, which are a consequence of the fall suffered by an iron coupling that is part of the cover of the junction box, which is made of concrete and belongs to the Municipality of Armenia, Empresas Públicas de Armenia E.S.P.; and Emprea de Energía del Quindío S.A. E.S.P.	2,857
	Fabián Alexander Bedoya Machado and others	Other Litigation under $568.	2,718
	María Amparo Fernández Gil	To be ordered jointly and severally to pay all damages, due to the death of Mr. Otálvaro Sánchez.	2,289
	Diana Rocío Vargas Álzate and others	Claim for direct reparation for the death of the minor Joan Manuel Vargas Peláez, which occurred on November 16, 2013 at the Finca La Molienda Quindiana. (Baraya- Montenegro Quindío).	1,037
	John Jairo López Pérez and others	EDEQ is sued for the damages allegedly suffered by the plaintiffs with the death by electrocution of Jhon Esteban López Henao, which occurred on November 4, 2016 in the Lotería del Quindío building.	878

Company	Third party (plaintiff)	Complaint	Amount
EDEQ	Sandra Milena Sánchez	That the co-defendants be declared administratively liable for the acts and omissions that caused the death of Mr. Otálvaro Sánchez, and that as a consequence of said declaration, the co-defendants be ordered to pay the costs of the co-defendants.	629
Total EDEQ			**10,408**
Aguas de Antofagasta	LASERMED / Aguas de Antofagasta S.A. professional society.	M$300.000.- C-3934-2020	1,465
	Maritime Government	30.000 pesos oro. 12.050/73	1,146
	Díaz with ADASA	M$200.000.- C-234-2020	972
	Soto with ADASA	M$200.000.- C-234-2020	965
	Robledo with MYC Engineering Company	M$170.000.- O-30-2020	822
	Municipality of Sierra Gorda with ADASA	M$120.000.- C-2883	579
	Inmobiliaria Bicentenario Ltda / Aguas de Antofagasta S.A.	M$30.000.- C-4468-2020	146
	Castle with ADASA	M$30.000.- C-4468-2020	146
	Flores Brewe, Patricia con Aguas Antofagasta S.A.	M$641.- C-3899-2016	3
Total Aguas de Antofagasta			6,244
Aguas Regionales	María Inés Osorio Montoya	That the Municipality of Apartadó and/or Aguas Regionales EPM S.A ESP, jointly and severally or independently are administratively liable for the omission in the fulfillment of their constitutional and legal duties for the death of young Cesar Augusto Jiménez Osorio (q.e.p.d) determined by the injuries suffered in the events that occurred on June 01, 2016 in the city of Apartadó.	3,425
	Elsa Rubiela Henao Pérez	The municipality of Apartadó and Aguas Regionales EPM be ordered to pay the material and immaterial damages caused by the failure in the service derived from the paving of 104th, 106th and 107th streets in the Laureles neighborhood.	540
	Rosmery Velásquez Herrera	That Aguas Regionales EPM S.A E.S.P. be ordered to return the property to the owners / That the defendant company be ordered to pay the civil fruits that the owners could have received with medium intelligence and activity, from August 2012 until the date of the judgment / That if the voluntary surrender of the property is not made within the term set by your office, the competent police officer be commissioned to enforce said order / That the defendant be ordered to pay the costs of the process.	133

Company	Third party (plaintiff)	Complaint	Amount
Aguas Regionales	Ilda Patricia Franco Molina	According to cadastral value	1
Total Aguas Regionales			**4,099**
Elektra Noreste S.A.	Chugani Investments	Civil proceeding filed by Inversiones Chugani, S.A.,	688
	Harry Acedo	Ordinary lawsuit of greater amount	343
	Rodrigo Bethancourt and others	Labor lawsuit	284
	ENSA	Appeal for Reconsideration Resolution No. 262-12 of October 15, 2012.	257
	Ruyer Amores	Consumer Protection Proceeding	17
	Manuel Macis	Labor Law	10
Total Elektra Noreste S.A.			**1,599**
Aguas de Malambo	Nelson Mercado Luna	Payment of invoice No. 0095 for alleged works carried out to attend to the emergency at Cra 22 and Calle 22 in the Municipality of Malambo.	218
	Fabian Bacca Jiménez	Recognition by Aguas de Malambo of an employment relationship acquired in 2015 and 2016 where he rendered his services as a worker on assignment for the company Temporal S.A.S. and, consequently, recognition of the payment of vacations, bonuses, severance pay, bonus for signing the agreement and compensation for dismissal without just cause.	20
	Emer Enrique Conrado Anguila and others.	That the Nation, Municipality of Malambo, Department of Atlántico, National Infrastructure Institute (ANI), concessionaire company, Autopista del Sol SAS, Aguas de Malambo S.A. ESP. be declared administratively liable for the damages and material damages to health, to other goods and/or rights conventionally and constitutionally protected and in general of any other type that are proven to have been caused as a result of the failure in the provision of the service.	17
Total Aguas de Malambo			**255**
Total contingent liabilities			**1,614,826**
- Amounts stated in millions of Colombian pesos -			

Regarding the uncertainty of the estimated payment date and the estimated value payable, the same business rules indicated in note 28.1.3 Lawsuits apply to contingent liabilities.

Warranties

Company	Third party (plaintiff)	Complaint	Amount
Elektra Noreste S.A.	Generating Companies	Performance bond to provide credit security and compliance with the obligations under the power purchase agreements.	171,019
	National Public Utilities Authority	Performance bond to guarantee compliance with the obligations under the Concession Contract.	51,488
	Empresa de Transmisión Eléctrica, S.A.	Bank guarantee to guarantee payment of one month's billing of the Transmission System.	12,530
	Empresa de Transmisión Eléctrica, S.A.	Letter of credit as guarantee for the payment of energy purchase costs in the occasional market.	9,306
	Regulatory Operator of El Salvador	Letter of credit as guarantee for the payment of energy purchase costs in the occasional market.	1,609
Total ELEKTRA NORESTE S.A.			**245,952**
Total Contingent liabilities Warranties			**245,952**
- Amounts stated in millions of Colombian pesos -			

Others-Controversies

Company	Third party (plaintiff)	Complaint	Amount
AGUNAL	HHA Consortium (Controversy)	There is a dispute of a contractual, not legal nature arising from the construction of the Aguas Claras plant, related to timing, engineering, design and financial issues.	437,009
Total AGUNAL			**437,009**
Total Contingent liabilities Others			**437,009**
- Amounts stated in millions of Colombian pesos -			

28.3.2 Contingent assets

Company	Third party (plaintiff)	Complaint	Amount
EPM	The Nation Ministry of Health and Social Protection	Minsalud has the legal and constitutional obligation to recognize and cancel the value of the services rendered to the affiliates in relation to medicines and/or procedures, interventions or elements not included in the Mandatory Health Plan (POS).	8,369
	Misc. Administrative	112 Proceedings with an average amount of less than $889 with an average of $64.	7,189
	Constructora Monserrate de Colombia SAS	To decree by judicial means the expropriation in favor of Empresas Públicas de Medellín E.S.P. for the Project "Expansion of the Primary Distribution Capacity in the Western Sector of Medellín - Western Chain - Calazans Tank", property called Lot 7, located in the sector Altos de Calazans, Municipality of Medellín, owned by Sociedad Constructora Monserrate de Colombia SAS.	7,124

Company	Third party (plaintiff)	Complaint	Amount
	Interconexión Eléctrica S.A. E.S.P. ISA	Declare that Interconexión Eléctrica S.A. E.S.P., ISA is civilly liable for not recognizing to EPM, the value that corresponds to it, of the remuneration that ISA received between the years 1995 to 1999, for the line modules that correspond to assets of use of the STN in the Playas and Guatapé substations represented by it, in which there is shared property, value that to date has not been made, generating an unjust enrichment by increasing the patrimony of the defendant at the expense and to the detriment of the plaintiff's patrimony.	3,744
	Poblado Club Campestre Ejecutivo S.A.	To declare Poblado Club Campestre Ejecutivo S.A., Optima S.A. Vivienda y Construcción and the Municipality of Envigado responsible for the damage to the collector owned by EPM, which collects and transports the wastewater from the sanitary basin of the La Honda stream in the Municipality of Envigado, and to indemnify EPM for the value of all the proven pecuniary damages resulting from the damage to the collector that collects and transports the wastewater from said sanitary basin.	3,567
	Fiduciaria Bogotá S.A. - FIDUBOGOTÁ S.A.	Impose in favor of Empresas Públicas de Medellín E.S.P. an energy conduction easement over the lot of land or property named La Boca del Pantano, with real estate registration number 50 C-1497258 located in a rural area of the Municipality of Madrid (Cundinamarca) for the 500 Kv transmission lines, and for one (1) tower point (with its grounding) of the Nueva Esperanza Transmission Project.	960
	Municipality of Envigado	To declare the nullity of the administrative act contained in Resolutions 2656 of August 13, 2007 and 4176 of October 26 corresponding to the sanction imposed for the alleged violation of Municipal Decree 259 of August 14, 2002; to declare the inapplicability of Decree 259 of August 14, 2002 of the Municipality of Envigado (Antioquia), "Whereby urban development sanctions are established", for being contrary to the Political Constitution, the Law and the Regime of Domiciliary Public Services. Order by way of reestablishment of rights, that EPM be reimbursed $655'460,000 for the penalty imposed in the administrative acts whose nullity is requested.	889
	CORANTIOQUIA - Regional Autonomous Corporation of Central Antioquia	To declare the nullity of Article Five of Resolution No. 130 TH - 1302 - 9864 issued by the Territorial Director Tahamies of "Corantioquia" for the fee for the use of surface water for the period 2011, of the source Río Grande, in a flow of 19.5 mts3/sec; to reimburse Empresas Públicas de Medellín E.S.P., the higher amount paid for the fee for the use of surface water Dec. 155 - 4742, Hydrological Unit: Magdalena River, between January 1, 2011 and December 31, made through invoice TH - 1927 of April 30, 2012. That Corantioquia be CONDEMNED to recognize and pay to EPM the legal interest, current and late payment interest legally caused; to pay the costs and agencies in law that may be applicable in accordance with the provisions of Article 188 of Law 1437 of 2011 and other concordant norms.	804
	Municipality of Caloto	Declare the nullity of: -Resolution No. 035 of 2012, (Declares not proven the exceptions proposed by EPM against the payment order and orders to go ahead with the execution) and, -Resolution No. 039 of 2012, (Resolves Appeal for Reposition). //2) That by way of reinstatement, the Municipality of Caloto reimburse EPM for any amount paid by EPM for ICA, by virtue of what has been raised in this lawsuit, and that said amount be returned with commercial interest //3) That the Municipality be ordered to pay the costs.	767
	Other Prosecutors	Proceeding for amounts less than $766	67
Total EPM			**33,480**

Company	Third party (plaintiff)	Complaint	Amount
CENS	Tax and Customs Directorate DIAN	Declare the nullity of the official review liquidation > No 072412015000018 of September 14, 2015 and Resolution No 007521 of October 4, 2016./Refund of the higher value paid for income tax.	10,517
	Tax and Customs Directorate DIAN	Declare the nullity of the following administrative acts: Sanction Resolution No. 900.001 of September 14, 2015, and Resolution No. 007390 of September 29, 2016, issued by the DIAN. By way of reestablishment of rights, ORDER the defendant to make the refund of the liquid amount of money paid by CENS S.A E.S.P. for the higher income and complementary tax and the penalty for inaccuracy established in Resolution No. 007390 dated September 29, 2016, with current and moratorium interest in accordance with the provisions of art. 863 of the Tax Statute.	4,208
	Carmen Pastora Santander De Monsalve and Others	Other processes imposed in favor of CENS S.A E.S.P., less than $242 million.	2,276
	Consortium CDE Ltda.	Obtain cancellation of the resources owed in favor of CENS.	987
	Minuto de Dios Corporation	Impose in favor of CENS S.A E.S.P. a public easement for the conduction of electric energy, on a property called "Part of Abstract No 4 El Rodeo" with real estate registration number 260-131753 of the Public Instruments Office of Cúcuta and property number 010307560001000. To authorize CENS: 1. To construct the electrical infrastructure. 2. To allow transit through the area. 3. Remove crops and other obstacles. 4. Construct transitory roads and/or use existing roads. 5. 5. Prohibit the planting of trees that may hinder the exercise of the easement. 6. The registration of the easement sentence. -To fix the value of the compensation. To order the defendant to pay the costs.	386
Total CENS			**18,374**
Aguas Regionales	Municipality of Chigorodó	That the defendant be ordered to pay costs and legal expenses. To pay the default interest calculated at the maximum rate certified by the financial superintendence for consumer loans, caused as of the date of full payment of the obligation.	1,031
	Municipality of Chigorodó	Payment in favor of Aguas de Urabá S.A. E.S.P. and against the Municipality of Chigorodó, legally represented by Doctor Daniel Segundo Álvarez Sosa, in his capacity as mayor, or whoever is acting in his stead at the time of notification of the claim.	789
	Several prosecutors	Several prosecutors	581
	Corpourabá - Corporation for the Sustainable Development of Urabá	To declare the nullity of the retributive rate corresponding to the municipality of Apartadó between January and December 2014, since it does not correspond to the reality of the loads discharged by the sewage users of the company Aguas de Urabá S.A. E.S.P. in the urban area of the Municipality of Apartadó (Antioquia).	414
Total Aguas Regionales			**2,815**
Aguas de Malambo	Municipality of Malambo	A payment order is issued against the Municipality of Malambo - Atlántico and in favor of Aguas de Malambo S.A. ESP. for the following sums of money: For the amount of $1.446.217.806,90, for the concept of capital represented in the promissory note and for the interest in arrears of the previous capital.	1,829
Total Aguas de Malambo			**1,829**

Company	Third party (plaintiff)	Complaint	Amount
Aguas Nacionales	Superintendency of Residential Public Utilities	Official liquidation of the Special Contribution corresponding to the year 2019. Reimbursement of the amount of money corresponding to the higher amount paid for the Special Contribution for the year 2019 for the Sewage Service, which is equivalent to $14,019,585, amount that shall be indexed at the time of issuance of the judgment. Additionally, the amount paid as an advance payment, which is equivalent to $23'082.000, should be recognized.	38
	Superintendency of Residential Public Utilities	Declare the nullity of the administrative acts issued by the defendant entity containing Official liquidation Special Contribution year 2018 No. Radicado 20185340037336 of 2018/09/06 and Resolution No. SSPD 20185000132915 of November 27, 2018, whereby the appeal filed by Aguas Nacionales is resolved.	3
Total Aguas Nacionales			**41**
Emvarias	Marta Nelly Quintero R.	Mortgage Executive	27
Total Emvarias			**27**
CHEC	Cesar Augusto Ocampo Arenas	Old Age Pension	2
Total CHEC			**2**
EDEQ	Nueva EPS S.A.	A claim is filed before the Superintendence of Health for the recognition and payment of the disability due to general illness of Nelson Forero, a former employee of the company.	1
Total EDEQ			**1**
Total contingent assets - Litigation			**56,569**
- Amounts stated in millions of Colombian pesos -			

Warranties

The Group has provided the following warranties:

Company	Third party (plaintiff)	Complaint	Amount
ESSA	State Insurance	Constituted and granted with the purpose of covering litigious process against the Municipality of Bucaramanga.	133
Total ESSA			133
Total Contingent assets Warranties			133

Amounts stated in millions of Colombian pesos

Estimated payments and collections

The estimated dates on which the Group expects to make payments related to the contingent liabilities or receive collections related to the contingent assets included in this note to the consolidated statement of financial position at the cut-off date are as follows:

Estimated payment and collections	Contingent liabilities	Contingent assets
To One year	217,946	21,006
To Two years	72,021	5,612
To three years	48,518	4,074
To four years and beyond	2,181,022	33,281
Total	**2,519,507**	**63,973**

Amounts stated in millions of Colombian pesos

Note 29. Other liabilities

The composition of other liabilities is as follows:

Other liabilities	2020	2019
Non-current		
Collection in favour of third parties[1]	10	10
Payments received in advance	3,965	4,130
Government grants[2]	866,921	25,745
Assets received from customers or third parties	28,682	30,955
Other deferred loans	21,019	21,089
Transfer of financial assets and guarantees	33,820	34,511
Total other liabilities non-current	954,417	116,440
Current		
Collections in favour of third parties[1]	222,711	197,144
Payments received in advance	94,422	123,711
Government grants[2]	780	708
Assets received from customers or third parties	53	248
Transfer of financial assets and guarantees	12,440	8,253
Total other liabilities current	330,406	330,064
Total other liabilities	1,284,823	446,504

Amounts stated in millions of Colombian pesos

[1] Related to the collection in favour of third parties through agreements on public lighting, portfolio collection, solid waste management, taxes, among others.

[2] Increase explained by the acquisition of the subsidiary Caribemar de la Costa S.A.S. E.S.P.

29.1 Deferred Reinsurance Commissions

The breakdown of Deferred reinsurance commissions, which is included in the Payment received in advance, is as follows:

Deferred income from reinsurance commissions	2020	2019
Initial balance	5,111	6,612
Additions	12,303	-
Amortization	(11,829)	(1,501)
Saldo final	5,585	5,111

Amounts stated in millions of Colombian pesos

Corresponds to reinsurance commissions of the subsidiary Maxseguros, it is included in the caption of other income received in advance (see note 29.3)

29.2 Government Grants

Movement of Government grants to the cutoff date is as follows:

Grants	2020	2019
Initial balance	26,453	26,540
Awarded during the period	460	154
Recognized in profit or loss for the period	(30,782)	(1,023)
Business combination [1]	870,894	-
Effect of foreign exchange translation	967	255
Other changes	(291)	527
Final balance	**867,701**	**26,453**
Non-current	866,921	25,745
Current	780	708
Recorded value at 31 December	**867,701**	**26,453**

Amounts stated in millions of Colombian pesos

[1] Corresponds to the subsidies from Caribemar de la Costa SAS ESP, received from the Government for compensatory payments for variations in energy collection and loss indicators, in accordance with the share purchase agreement signed by Electrificadora del Caribe SA E.S.P. and Empresas Públicas de Medellín on March 30, 2020.

The Group has received grants from the Inter-American Development Bank (IADB) for the micro and small business financing program; from Financiera del Desarrollo (FINDETER) as a favorable rate loan for the construction of water and sewerage infrastructure; and from the Fund for the Reconstruction of the Coffee Belt (FOREC) for the reconstruction of energy networks following the earthquake in that region of the country; by the Financial Fund for Development Projects (FONADE) for the promotion of telecommunications in rural schools, and by the Rural Electrification Office (Panama) and the National Investment Fund for Electricity and Telephony (El Salvador) for the construction of rural electrical infrastructure.

The Group has not breached any of the conditions relating to grants.

29.3 Payment received in advance

The breakdown of payment received in advance as of the cut-off date was:

Payments received in advance	2020	2019
Non-current		
Leases	209	298
Sales	196	162
Sale of energy services	3,560	3,670
Total Non-current payment received in advance	**3,965**	**4,130**
Current		
Leases	297	326
Fees	895	-
Sales[1]	39,980	70,130
Sale of energy service	14,856	19,480
Sale of water service	7,435	7,435
Sale of sewer service	34	34
Sale of cleaning services	677	677
Sale of fuel gas service	2,483	10,277
Other payment received in advance[2]	27,765	15,352
Total current payment received in advance	**94,422**	**123,711**
Total payment received in advance	**98,387**	**127,841**

Amounts stated in millions of Colombian pesos

[1] The decrease is explained in EPM, by lower values received in long-term energy contracts.

[2] Includes $5,585 (2019 $5,111) for deferred reinsurance commissions of the subsidiary Maxseguros.

Note 30. Changes in liabilities due to financing activities

The reconciliation of liabilities due to financing activities is as follows:

Reconciliation of liabilities due to financing activities 2020	Initial balance	Cash flows	changes other than cash		Other changes [1]	Total
			Foreing exchange	Changes in fair value		
Loans and borrowings (see note 22)	20,656,005	3,499,751	24,286	-	407,759	24,587,802
Lease liabilities (see note 24)	682,761	(46,527)	-	-	51,433	687,667
Pension bonds (see note 24)	650,817	(7,711)	-	-	27,481	670,586
Hedging instruments	(46,148)	19,586	-	395,896	(12,586)	356,747
Dividends or surpluses paid	44,890	(1,592,575)	-	-	1,593,359	45,675
Capital subsidies	26,453	460	-	-	840,788	867,701
Other financing cash flows	-	(3,267)	-	-	3,267	-
Total liabilities from financing activities	**22,014,778**	**1,869,717**	**24,286**	**395,896**	**2,911,501**	**27,216,178**

Reconciliation of liabilities due to financing activities 2019	Initial balance	Cash flows	changes other than cash		Other changes [1]	Total
			Foreing exchange	Changes in fair value		
Loans and borrowings (see note 22)	20,834,800	(140,692)	103,866	-	(141,969)	20,656,005
Lease liabilities (see note 24)	195,483	(40,883)	-	-	528,160	682,761
Pension bonds (see note 24)	643,188	(26,091)	-	-	33,720	650,817
Hedging instruments	(192,465)	156,514	-	51,155	(61,352)	(46,148)
Dividends or surpluses paid	42,207	(1,392,814)	-	-	1,395,497	44,890
Capital subsidies	26,540	154	-	-	(241)	26,453
Other financing cash flows	-	(16,708)	-	-	16,708	-
Total liabilities from financing activities	**21,549,754**	**(1,460,519)**	**103,866**	**51,155**	**1,753,815**	**22,014,778**

[1] Includes interest paid during the year of $1,310,176 (2019: $1,612,421), which by policy is classified as operating activities in the statement of cash flows; interest accrued $1,436,498 (2019: $1,444,332); translation effect $278,538 (2019 $-82,614); origination of dividends and surplus $1,593,359 (2019 $1,395,497); business combination $ 877,041 (2019 $ -) and Other $36,239 (2019 $609,021).

Note 31. Deferred regulatory accounts

The balance of deferred regulatory accounts at the date of presentation of the consolidated financial statements corresponds to the local regulatory framework applicable to the subsidiary Elektra Noreste S.A. - ENSA, established by the National Public Services Authority of Panama (ASEP). This entity is responsible for regulating and establishing the rates that the Company invoices to its customers. The Company maintains its accounting records in accordance with the uniform system of accounts established by ASEP for electric companies.

The regulated system under which the Company operates allows any excess or deficiency between the estimated cost of energy considered in the tariff and the actual cost incurred by the Company to be included as a compensatory adjustment, to be recovered from (or returned to) customers, at the next tariff review. Any excess in the cost of energy charged to customers is accrued as a credit to a deferred regulatory account in the Group's consolidated statement of financial position and carries a reduction in the next tariff review to be applied to customers. Similarly, any shortfall in the cost of energy charged to customers is accumulated as a debit balance in the deferred regulatory account in the Group's consolidated statement of financial position and leads to an increase in the next tariff review to be recovered from customers.

Deferred regulatory accounts with a debit balance represent probable future revenues associated with certain costs that are expected to be recovered from customers through the tariff process. Deferred regulatory accounts with a credit balance represent probable future revenue reductions associated with amounts expected to be credited to customers through the tariff process.

The movement of Deferred regulatory accounts is as follows:

Regulatory accounts	Asset (Liability)	
	2020	2019
Initial balance	(25,610)	111,868
Profit or loss form the period	30,534	(139,997)
Foreign exchange rate/discount rate effect	(4,157)	2,519
Final balance	**767**	**(25,610)**

Amounts stated in millions of Colombian pesos

Balances associated with Regulatory deferral accounts in accordance with regulation must be recovered or returned in the following two semesters.

The movement of deferred tax associated with the regulatory accounts is as follows:

Deferred tax related to regulatory accounts	Asset (Liability)	
	2020	2019
Initial balance	7,683	(33,560)
Profit or loss form the period	(8,423)	41,988
Effect of changes in foreign exchange	510	(745)
Saldo final	**(230)**	**7,683**

Amounts stated in millions of Colombian pesos

Cash flows generated by the regulatory accounts amounted to $26,377 (2019: $-137,478), which, by Group policy, are classified as operating activities in the statement of cash flows.

Note 32. Revenue

For presentation purposes, the Group breaks down its revenues from the services it provides according to the lines of business in which it participates and the way in which management analyses them. The detail of revenue is as follows:

Revenue	2020	2019
Sales of goods	27,928	24,222
Rendering of services		
Electricity generation service (1)	5,014,157	4,043,982
Electricity trasnmission service	349,980	299,243
Electricity distribution service (2)	12,675,962	11,985,016
Inter-segments electricity elimination	(2,096,552)	(1,755,233)
Fuel gas service	898,095	860,675
Sanitation service	710,049	696,033
Sewage service (3)	1,312,884	1,188,428
Solid waste treatment service	241,385	240,848
Insurance and reinsurance services	32,073	15,148
Financing services	34,310	
IT Services	562	389
Construction contracts	55,876	61,317
professional fees	1,386	2,253
commissions	6,206	33,730
Billing and collection services	33,358	
Financing component	85,417	
Other services	235,523	215,623
Refunds	(388,729)	(238,796)
Total rendering of services	19,201,942	17,648,656
Leases	96,741	111,841
Total revenue	19,326,611	17,784,719

Amounts stated in millions of Colombian pesos

(1) The increase in the generation service is mainly originated in EPM Parent Company due to higher energy sales in long-term contracts for new contracts signed based on the expected power generation of the Ituango project and higher sales to the EPM distributor and the CHEC subsidiary grow 32% for $ 43,147, for long-term energy sales and on the stock market.

(2) The increase for the distribution service is due to the incorporation as of October 1 of the income of the subsidiary CaribeMar de la Costa S.A.S. E.S.P. and a greater demand for the sale of energy at a higher price in the national subsidiaries. In contrast, international subsidiaries had lower demand and a lower average price, although they were favored by the growth of the exchange rate.

(3) In aqueduct, revenues increased mainly due to ADASA since in 2019 there was a great impact due to red tide and highland winter.

As of December 31, 2020, the impacts of the coronavirus pandemic (COVID -19) that have been estimated in relation to revenue from ordinary activities are: lower consumption or demand of public services for ($ 1,020,346), lower invoiced rates for ($ 324,456), discount for timely payment in national subsidiaries according to Resolution No. 517 of 2020 for ($ 18,931) and lower value in other income from ordinary activities , mainly for construction contracts of the TICSA subsidiary, for ($ 32,078).

The Group recognizes all its revenue from the satisfaction of performance obligations and most of its contracts with customers are for less than one year.

The Group recognized the following values in the period, for the contracts in force at the cut-off date:

Other contracts with customers

2020	Contract asset balance at beginning of period	Contract asset balance at the end of the period	Liability balance at the beginning of the period	Liability balance at the end of the period
Contract of uniform conditions for regulated services(1)	580,974	502,035	16,719	9,400
Non-regulated market -NRM or Large Customers(2)	126,680	127,875	10,098	8,365
Other contracts with customers	-	-	4,191	4,006
Total	707,654	629,910	31,008	21,771

Amounts stated in millions of Colombian pesos

2019	Contract asset balance at beginning of period	Contract asset balance at the end of the period	Liability balance at the beginning of the period	Liability balance at the end of the period
Contract of uniform conditions for regulated services(1)	554,948	707,810	17,285	20,459
Non-regulated market -NRM or Large Customers(2)	136,800	126,680	34,642	10,098
Other contracts with customers	-	4	5,857	6,216
Total	691,748	834,494	57,784	36,773

Amounts stated in millions of Colombian pesos

(1) The purpose of this contract is to define the uniform conditions by which Grupo EPM companies, provides home public services, provides public residential utilities in exchange for a price in money, which will be fixed according to the current rates, and according to the use given to the service by the users, subscribers or owners of properties, hereinafter the USER, who by benefiting from the utilities provided by the companies, accepts and abides by all the provisions defined herein.

(2) Resolution 131 of 23 December 1998 of the Energy and Gas Regulation Commission (CREG) establishes the conditions for the supply of energy and power to large consumers

and indicates in Article 2 the power or energy limits for a user to contract for the supply of energy in the competitive market; The aforementioned resolution allows the conclusion of contracts with large consumers to establish by common agreement the prices for the supply of energy and power; the object of the contract is to supply energy and power to the consumer, as an unregulated user, to meet its own demand.

Another important contract is the XM representation contract, which is not disclosed since there are no balances in assets and liabilities.

The contract liabilities primarily relate to the advance consideration received from customers for rendering of services, for which revenue is recognized over time. The amount of $57,784 included in contract liabilities at 31 December 2018 has been recognized as revenue in 2019 (2018: $51,184). The balance at the end of the period of $36,773 is expected to be recognized as revenue over the next twelve months.

The Group recognized revenue from ordinary activities for asset construction agreements within the scope of IAS 11 - Construction contracts at the cut-off date of $61,317 (2018: $125,697).

In contracts with customers, no income was recognized during the period from performance obligations satisfied in previous periods.

For these contracts it is not possible to identify the outstanding value of unmet performance obligations considering that they are contracts without a termination date.

Note 33. Other Income

The breakdown of other income is as follows:

Other income	2020	2019
Recoveries(1)	253,265	340,202
Severance payments(2)	102,256	109,993
Other ordinary income(3)	61,202	61,732
Government grants(4)	30,782	1,023
Surplus	9,605	1,228
Leverages	7,149	7,313
Valuation of investment properties(5)	6,876	51,808
Reversal of inventory impairment(6)	657	-
Photocopies	2	4
Total	**471,794**	**573,303**

Amounts stated in millions of Colombian pesos

(1) Mainly includes recoveries from EPM Matrix for $ 239,740: $ 89,527 for the return judgment in favor of EPM of the judicial process, advanced by the company against the Municipality of Bello, based on the lawsuit filed against the administrative act that determined the participation and liquidation of the capital gain generated by the change in land use in the area where some properties owned by the company are located; $ 73,832 for the commissioning of the assets of the Jepírachi Wind Farm permitted by CREG resolution 136 of 2020; $ 14,630 for compensation for consequential damage due to the incident that occurred in 2017 at the Playas Hydroelectric Power Plant; $ 8,597 recovery of provisions for administrative litigation and $ 8,011 recovery of provision for high-cost illnesses and of CaribeMar de la Costa S.A.S E.S.P. for $ 84,174 of the business combination. he values of the effective recoveries amounts to $ 142,058 and the non-effective ones $ 201,975.

(2) Corresponds in EPM Parent to the compensation received from loss of earnings for the low hydrology policy $ 65,848 (USD 17.6 million); $ 9,241 for loss of earnings due to the incident that occurred in 2017 at the Playas Hydroelectric Power Plant; $ 8,000 for non-contractual civil liability of the Ituango project and $ 4,107 received for lost profits from the Jepírachi Wind Farm. The value of the effective indemnities amounts to $ 102,064 and the non-effective ones $ 192.

(3) Mainly includes in EPM Matrix $ 42,206 of the indexation since December 29, 2009, the date on which the payment of the tax was made and until the execution of the sentence (December 10, 2020) of the processing of the judicial process, advanced by EPM against the Municipality of Bello.

(4) The increase is explained by $ 29,574 that CaribeMar de la Costa S.A.S. received. E.S.P. for Compensatory Payments for variations in energy collection and loss indicators, in accordance with the share purchase agreement signed by Electrificadora del Caribe S.A. E.S.P. and Public Companies of Medellín on March 30, 2020.

(5) The decrease is explained by the 2019 appraisal of some properties that grew due to urban developments in the sectors around these.

(6) This value is considered as non-cash income.

Note 34. Income for sale of assets

The detail of the profit on the sale of assets is as follows:

Profit on sale of assets	2020	2019
Profit from sale of property, plant and equipment(1)	233	1,576
Profit on disposal of rights of use	152	16
Profit on sale of intangible assets	14	-
Profit on sale of investment properties	108	-
Total	**507**	**1,592**

Amounts stated in millions of Colombian pesos

(1) The decrease is present in ESSA given that in 2019 a property was sold to Promioriente S.A. E.S.P. and in EPM Matrix because vehicle sales could not be made due to the coronavirus pandemic (COVID-19).

The gain from the sale of assets for $ 507 is ineffective and is disclosed as part of the caption result from disposal of property, plant and equipment, rights of use, intangibles and investment properties in the statement of cash flows.

Note 35. Costs of services rendered

The breakdown of costs of services rendered is as follows:

Costs for services rendered	2020	2019
Block and/or long-term purchases(1)	3,421,373	2,485,111
Exchange and/or short-term purchases	3,419,027	3,523,410
Use of lines, networks and pipelines(2)	1,573,973	1,291,976
Personal services(3)	920,281	818,587
Depreciation(9)	894,929	814,417
Orders and contracts for other services	658,533	667,938
Cost of distribution and/or commercialization of natural gas(4)	540,410	349,249
Maintenance and repair orders and contracts	392,858	384,846
Licenses, contributions and royalties(5)	283,757	156,973
Impairment of property, plant and equipment(6) (9)	187,114	2,243
Depreciation and amortization(9)	181,738	155,773
Materials and other operating costs	156,077	181,681
Consumption of direct inputs	151,564	109,537
General	123,241	110,080
Insurance	113,389	121,725
Fees	91,764	91,206
Taxes and fees	88,619	86,191
Commercial and financial management of the service	76,427	31,023
Other(8)	46,614	34,477
Amortization of rights of use(9)	41,878	36,505
Public utilities	30,272	26,462
Connection cost(7)	24,536	8,879
Marketed goods	20,498	18,202
Leases	17,905	19,795
Impairment of intangible assets(9)	9,194	-
Costs associated with transactions in the wholesale market	13,541	10,886
Depletion(9)	10,190	9,426
Liquefied natural gas	7,478	4,980
Insurance and reinsurance	6,259	5,990
Impairment of right-of-use assets(9)	3,959	11
Inventory write-down(8) (9) (9)	1,193	36
Cost of water service rendering losses	37	192
Total cost of services rendered	**13,508,628**	**11,557,807**

Amounts stated in millions of Colombian pesos

(1) Increase explained by higher energy purchases in long-term contracts due to new contracts based on the expected energy generation of the Ituango project.

(2) The increase is mainly due to the incorporation as of October 1 of the costs of the subsidiary CaribeMar de la Costa S.A.S. E.S.P.

(3) Increase for connections, salary increase and for social benefits, fees and services.

(4) The growth is explained by the increase in demand, and by the higher price impacted by the exchange rate.

(5) Increase given mainly in national companies by the additional contribution for the Business Fund - Superintendency of Domiciliary Public Services, which was created in article 314 of Law 1955 of 2019, as of January 1, 2020 and until December 31 from 2022.

(6) Includes the impairment values of the CaribeMar Distribution CGU, CHEC Generation CGU, HET Generation CGU and Ciudad Lerdo Wastewater Management CGU (see Note 8. Impairment of assets).

(7) Includes in EPM the impacts of the coronavirus pandemic (COVID-19) for $ 2,247 that were allocated for the reconnection of public services.

Additionally, as of December 31, 2020, other impacts of the pandemic that have been estimated in relation to the costs of providing services are: lower costs associated with consumption or demand of services for $ -835,869, higher costs for reconnections for $ 578 and biosecurity measures associated with general costs, personal services, orders and contracts for $ 18,832.

(8) Includes $ 848 (December 2019 for $ 36) corresponding to reduction of inventory value, net.

(9) Corresponds to non-effective costs.

Note 36. Administrative expenses

The breakdown of administrative expenses is as follows:

Administrative expenses	2020	2019
Personnel expenses		
Wages and salaries	489,976	450,255
Social security expenses	113,202	120,928
Pension expenses	47,338	49,961
Other post-employment benefit plans other than pensions	5,144	5,334
Other long-term benefits	9,717	7,464
Termination benefits	2,907	(732)
Interest rate benefits to employees	8,609	12,599
Total personnel expenses	**676,893**	**645,809**
General expenses		
Taxes, contributions and fees	191,573	187,662
Commissions, fees and services	136,350	135,020
Provision for contingencies(1) (4) (4) (5)	86,926	69,591
Maintenance	75,783	63,726
Depreciation of property, plant and equipment(5)	73,708	70,102
Intangible assets	61,011	43,396
Provision for warranties(2) (4) (5)	60,100	15,757
Environmental expenses(4) (5)	56,161	61,450
General insurance(3)	46,340	19,864
Other miscellaneous provisions(4) (5)	44,022	38,397
Amortization of intangible assets(5)	41,513	35,444
Other general expenses(5)	32,055	33,447
Surveillance and security	23,835	19,045
Amortization of rights of use(5)	21,667	18,432
Advertising and publicity	15,443	20,294
Christmas lighting	12,719	12,945
Cleaning, cafeteria, restaurant and laundry services	11,897	11,482
Public utilities	11,606	6,570
Licenses and safe conducts	10,998	8,725
Promotion and dissemination	9,973	11,331
Communication and transportation	9,464	9,315
Legal expenses	9,361	5,568
Studies and projects	9,024	19,921
Provisions for onerous contracts(4) (5)	5,945	802
Printing, publications, subscriptions and memberships	5,798	3,970
Leases	5,549	6,098
Apprenticeship contracts	4,722	5,156
Materials and supplies	4,420	4,690
Provision for insurance and reinsurance(5) (6)	4,214	2,455
Information processing	3,513	2,612
EAS technical reserve(4) (5)	3,431	331
Photocopies	2,820	2,735
Fuel and lubricants	2,115	2,549
Administration contracts	2,048	2,101
Total general expenses	**1,096,104**	**950,983**
Total	**1,772,997**	**1,596,792**

Amounts stated in millions of Colombian pesos

(1) Increase explained in EPM due to the updating of provisions, mainly in the provision for the care of those affected by the Ituango project, which represented an expense of $ 33,509.

(2) Corresponds to the update of the provision in the parent EPM of the guarantee for non-compliance from April 2021 to November 2022, to the Intercolombia transporter for the months after the connection infrastructure of the Ituango project enters into operation.

(3) Explained increase in the premiums of the all risk policy due to high claims and in the directors and administrators policy.

(4) It is disclosed under provisions, post-employment and long-term defined benefit plans in the statement of cash flows.

(5) Corresponds to non-effective expenses and Other general expenses includes non-effective expenses for the loss from construction contracts $ 8 (2019: $ 6), which are disclosed in the caption of provisions, post-employment defined benefit plans and long term in the statement of cash flows.

(6) Tax, insurance and reinsurance obligations and financial update of the statement of cash flows are disclosed under the heading of provisions.

Additionally, as of December 31, 2020, the impacts of the coronavirus pandemic (COVID -19) that have been estimated in relation to administration expenses represent an increase of $ 10,755 due to biosecurity measures and other expenses associated with the management of the COVID-19 and that had an effect on general expenses and personal services.

Note 37. Other Expenses

The breakdown of other expenses is as follows:

Other expenses	2020	2019
Loss on changes in fair value of investment properties(1)	25,126	291
Other ordinary expenses(2)	24,030	37,101
Contributions in non-corporate entities	15,870	14,947
Loss on retirement of property, plant and equipment(3) (5)	14,908	99,445
Effective interest financing services	5,220	-
Arbitration awards and out-of-court settlements	3,300	3,294
Judgments	1,428	484
Assumed taxes	862	1,667
Donations	710	171
Loss on sale of property, plant and equipment(4) (5)	409	53
Loss on retirement of inventories(4) (5)	312	-
Loss on retirement of intangible assets(4) (5)	22	-
Loss on derecognition of rights of use(4) (5)	(10)	14
Total	**92,187**	**157,467**

Amounts stated in millions of Colombian pesos

(1) It is mainly explained in EPM by the 2020 appraisal, where in some properties their fair value was lower than the previous year.

(2) Includes $ 3,148 in the parent EPM as a contribution to provide the Intensive Care Unit of the University IPS of the University of Antioquia; and in the subsidiaries contributions and donations to hospitals and vulnerable population for $ 3,435, as social measures to face the coronavirus (COVID19).

Additionally, it includes in EPM parent, expenses for $ 4,278 for the attention of the community affected by the contingency of the Ituango Hydroelectric Project.

(3) Decrease explained by EPM due to the fact that in December 2019 it included the retirement of the assets of the Jepírachi Wind Farm.

(4) They are disclosed in the income item for disposition of property, plant and equipment, rights of use, intangibles and investment properties of the statement of cash flows.

(5) Corresponds to ineffective expenses.

Note 38. Financial income and expenses

38.1 Financial income

The breakdown of finance income is as follows:

Financial income	2020	2019
Interest revenue:		
Bank deposits(3)	35,043	40,022
Interest income from financial assets at amortized cost(3)	2,042	46
Interest on accounts receivable and late payment(1) (3)	26,274	207,976
Restricted funds(3)	2,309	-
Funds received in administration(3)	2,314	-
Yield from monetary restatement(3)	10	11
Gain from valuation of financial instruments at fair value(2)	41,793	86,702
Gain from valuation of financial instruments at amortized cost(2)	427	111
Gain on valuation of non-hedging derivative financial instruments(2)	237	-
Gain on trust rights(2)	37,254	32,212
Other financial income(3)	9,570	3,757
Total financial income	**157,273**	**370,837**

Amounts stated in millions of Colombian pesos

(1) Decrease due to the suspension of the collection of delinquent interest to users for the implementation of relief measures for the coronavirus pandemic (COVID -19) for $ 11,532.

(2) Decrease in the valuation of financial instruments that is explained by the behavior of the market that has presented significant devaluations and is thus reflected in the temporary investments of the portfolio. They are included in the caption of results for valuation of financial instruments and hedge accounting of the statement of cash flows.

(3) It is disclosed under the heading of interest income and income in the statement of cash flows.

38.2 Financial expenses

The breakdown of finance expenses is as follows:

Interest expense	2020	2019
Interest on lease obligations(3)	59,222	58,618
Other interest expense(3)	33,195	34,126
Total interest	**92.417**	**92.744**
Short-term domestic public short-term borrowings(3)	-	1,005
Long-term domestic public long-term loans(1) (3)	-	230,612
Long-term external long-term public credit operations(1) (3)	8,108	615,810
Short-term domestic financing operations(3)	59,953	56,775
Long-term domestic financing operations(1) (3)	249,521	72,336
Short-term external financing operations(3)	19,517	-
Long-term external financing transactions(1) (3)	634,940	59,646
Financial instruments for hedging purposes(3)	42,865	-
Total interest expense on other financial liabilities not measured at fair value through profit or loss(3)	1,643	2,885
Other financial costs:		
Fees and commissions other than amounts included in determining the effective interest rate(3)	10.059	7,534
Interest on financial liabilities and valuation losses on investments and other assets(2)	148,609	150,935
Total financial expenses	**1,267,632**	**1,290,202**

Amounts stated in millions of Colombian pesos

(1) Decrease in EPM Parent company due to the partial prepayment of the Bancolombia loan, renegotiation of interest rates and payments due to maturity of some local bond issues, additional in 2019 included several treasury loans.

(2) Includes in EPM a loss from valuation of financial instruments and other investments for $ 83,297 and the financial update of provisions for $ 20,988, mainly the valuation of provisions of the Ituango project: $ 5,588 provision of guarantee, $ 2,759 provision corresponding to the environmental and social recovery plan, $ 2,167 forced investment of 1% and $ 1,807 provision for the care of those affected, thus reflecting higher financial expenses.

For presentation purposes in the statement of cash flows: $ 44,027 (2019 $ 31,910) are disclosed in the caption of results for valuation of financial instruments and hedge accounting and $ 28,649 (2019 $ 2,455) are disclosed in the caption of provisions for tax obligations, insurance and reinsurance and financial update.

As of December 31, 2020, the impacts of the coronavirus pandemic (COVID -19) that have been estimated are higher financial expenses, net of $ 18,032, corresponding to refinancing of credits and loans, cost of financing commercial debtors and other financial expenses.

(3) It is disclosed in the item of expenses for interests and commissions of the statement of cash flows.

Note 39. Net foreign exchange difference

The effect of transactions in foreign currency is the following:

Exchange difference, net	2020	2019
Exchange difference income		
Own position		
For goods and services and others	33,042	34,219
For liquidity	73,496	15,038
Receivables	117,072	292,688
Other adjustments due to exchange differences	1,873	50,198
Financial		
Gross profit	358,393	23,748
Total foreign exchange difference income	583,876	415,891
Foreign exchange difference expense		
Own position		
For goods and services and others	(5,975)	(13,503)
For liquidity	(224,400)	(25,250)
Receivable accounts	(1,595)	(254,053)
Other adjustments due to exchange difference	(33,739)	(51,354)
Financial		
Gross expense	(382,679)	(127,614)
Debt coverage	(309,748)	-
Total foreign exchange difference expense	(958,136)	(471,774)
Exchange difference, net	(374,260)	(55,883)

Amounts stated in millions of Colombian pesos

The accumulated net expense of $ 374,260 corresponds mainly in EPM Parent Company to the restatement of the debt in dollars, associated with the accumulated devaluation of the Colombian peso of 4.74% and a rate of closing $ 3,432.50.

The rates used for the conversion of foreign currency in the consolidated financial statements are:

Currency	Currency code	Direct exchange rate conversion to USD as of December 31		Exchange rate as of December 31		Average exchange rate as of December 31	
		2020	2019	2020	2019	2020	2019
United States Dollar	USD	-	-	3,432.50	3,277.14	3,466.13	3,378.05
Quetzal	GTQ	7.79	7.70	440.41	425.67	444.31	439.36
Mexican Peso	MXP	19.93	18.89	172.27	173.52	173.69	176.86
Chilean Peso	CLP	710.50	769.88	4.83	4.26	4.75	4.39

Note 40. Gain on equity investment

Gain on equity investment is as follows:

Equity in equity investments	2020	2019
Result from business combinations. See note 10.	1,592,003	-
Dividends and participations (1)	72,984	57,262
Profit/(loss) on sale of equity investments, net (2)	(192)	(47,535)
Total effect of equity in equity investments	1,664,795	9,727

Amounts stated in millions of Colombian pesos

(1) Includes dividends of investments classified in Financial Instruments (See note 14. Other financial assets).

(2) In 2019 corresponds to a loss of $47,620 generated in EPM Parent for the sale of 14,881,134 ISA shares, originated by the difference between the sale price and the valuation of the share on the day of the transaction, ($15,700 pesos/share - $18,900 pesos/share = $-3,200 pesos/share and the sale of all Gasoriente shares generating a profit of $ 86.

Note 41. Income tax

41.1 Tax Provisions

Tax Provisions applicable and in effect, establish the following:

- The nominal income tax rate is 32% for EPM and its subsidiaries in Colombia.
- For Guatemalan subsidiaries, the tax is determined by the Regime on Profits from Profitable Activities consisting of applying the rate of 25% on profits; or by the Simplified Optional Regime on Income from Profitable Activities, consisting of applying the tax rate on monthly taxed income. From 2014 onwards, the tax rate is 5% on the first Q 30,000 and 7% on the surplus; likewise, the tax legislation contemplates a Regime on Capital Income which establishes a rate of 10% and a tax of 5% on the distribution of dividends and profits to both resident and non-resident shareholders.
- For subsidiaries in El Salvador, 30% for companies with taxable income over US$150,000 and 25% for those that do not exceed that ceiling; for subsidiaries in Mexico, a tax rate of 30%; and for subsidiaries in Chile, the nominal rate is 27% for 2018 and subsequent periods. Panama subsidiaries have a general rate of 25% and for companies in which the State has a shareholding greater than 40%, a rate of 30%.
- Public utilities domiciled in Colombia are excluded from determining income tax by the presumptive income system calculated from fiscal liquid assets of the immediately preceding year.
- The Congress of the Republic of Colombia approved through Law 2010 of 2019 reiterating the income tax rate, which had been modified by Law 1943 of 2018 that was declared unconstitutional by the Constitutional Court.
- The Holding company of the EPM Group uses the tax benefit called "Special deduction for investment in real productive fixed assets", equivalent to a 40% deduction on investments made during the taxable period. This benefit is in force for the EPM Generation segment on the occasion of the legal stability contract signed with the National Government in 2008.

41.2 Effective rate Reconciliation

Reconciliation between the applicable tax rate and the effective rate and the composition of income tax expense for the periods 2020 and 2019 is as follows:

Income tax and supplementary taxes	2020	%	2019	%
Income before taxes	4,217,836		4,015,939	
Nominal income tax rate		32%		33%
Income tax nominal rate	1,349,707		1,325,260	
Elimination in consolidated results	(363,671)	-9%	(138,403)	-3%
Tax effect of tax rates for foreign subsidiaries	(55,790)	-1%	(196,484)	-5%
Effect of permanent tax differences:	(265,183)	-6%	(97,491)	-2%
Dividend income	113,576	3%	249,911	6%
Tax-only income	120,446	3%	196,078	5%
Refund of special deduction	37,307	1%	118,768	3%
Non-deductible provisions	52,290	1%	48,242	1%
Impairment of investments in subsidiaries	281,300	7%	-	
Gain on bargain purchase	(433,025)	-10%	-	
Untaxed dividends	(142,479)	-3%	(151,361)	-4%
Compensation for consequential damages	(127,247)	-3%	(174,205)	-4%
Exempt income	(16,644)	0%	(141,713)	-4%
Special deduction of real productive fixed assets	(184,580)	-4%	(196,923)	-5%
Net result of other permanent differences	26,296	1%	33,345	1%
Adjustment of tax rate difference (current/different tax)	7,576	0%	(79,633)	-2%
Tax deductions	67,710	2%	46,173	1%
Occasional earnings	2,738	0%	3,120	0%
Adjustment of prior years' income	(101,064)	-2%	(39,630)	-1%
Income tax at effective rate	499,028	12%	810,199	20%
Detail of current and deferred expenses				
Current tax	736,268	17%	1,043,701	26%
Deferred income tax	(237,239)	-6%	(233,502)	-6%
Income tax	499,028	12%	810,199	20%

Amounts stated in millions of Colombian pesos

41.3 Income tax recognized through profit or loss

The most significant components of income tax expense at the cut-off date are:

Income tax	2020	2019
Current income tax		
Current income tax expense	837,332	1,083,331
Adjustments recognized in the current period related to current income tax of prior periods	(101,064)	(39,630)
Total current income tax	736,268	1,043,701
Deferred income tax		
Net deferred tax expense related to the origination and reversal of temporary differences	(232,119)	(232,202)
Net deferred tax expense (income) related to changes in tax rates or laws	(5,120)	(1,364)
Other deferred taxes	-	63
Total deferred taxes	(237,239)	(233,502)
Income taxes	499,028	810,199

Amounts stated in millions of Colombian pesos

The rates used for the determination of deferred tax are:

32% for 2020, which varied from the previous year's 33% for long-term items that revert during 2020. 31% for 2021, which varied from the previous year's 32% for long-term items that revert during 2021.

30% for 2022 and subsequent periods, which varied from the previous year's figure of 31% for long-term items that reverse during 2022 and subsequent periods.

For property, plant and equipment, the current rate was used considering the year in which the difference is expected to be reversed, taking as a reference the remaining useful life of each asset.

For assets which profit is expected to be realized from occasional earnings a rate of 10% is used.

27% for temporary differences generated in subsidiaries in Chile, 30% and 25% for subsidiaries in Panama and Mexico and 25% for other subsidiaries in Central America.

The current income tax expense is impacted for 2020 mainly by the lower profits obtained in the period, in the same way the decrease is justified by the lower nominal income rate applied in Colombia in the reporting period. Higher tax discounts also explain the lower income tax.

Regarding the amounts not recognized as a refund by the National Tax and Customs Administration for the 2011 taxable period, EPM, in exercise of the control of nullity and restoration of rights, filed a claim before the Administrative Court of Antioquia against the tax authority, which amounts to approximately $258,000 million.

The rates used to determine deferred tax for subsidiaries in Colombia are:

Year	2020	2021	2022	2023
Income	32%	31%	30%	30%
Total tariff	**32%**	**31%**	**30%**	**30%**

EPM's electricity generation segment has an income and supplementary tax rate of 33%, stabilized for 20 years under the legal stability agreement EJ-04 of March 31, 2008, as amended by OTRO SI EJ-01 of June 4, 2010. This rate is only used in cases where, by law, the rental rate in Colombia is increased above 33%.

41.4 Temporary differences with no effect in deferred tax

Deductible temporary differences and unused tax losses and credits, for which the Group has not recognized deferred tax assets, are as follows:

Concept	2020	2019
More than one year and up to five years	34,443	672
More than five years	3,330	3,367
No time limit	5,342	5,341
Unused tax losses	**43,114**	**9,380**
No time limit	202,465	161,653
Unused tax credits	**202,465**	**161,653**
More than one year and up to five years	64	71
More than five years	2,698	2,697
Surplus of presumptive income over ordinary net income	**2,761**	**2,768**
Total	**248,340**	**173,801**

Amounts stated in millions of Colombian pesos

The unused deductible temporary differences and losses, tax credits and surplus of presumptive income over ordinary liquid income, correspond to unused tax losses by Aguas de Malambo S.A. E.S.P. of $7,298 million (2019 $5,521), EPM Inversiones S.A. of $1,373 (2019 $0), Hidroecológica del Teribe S.A. of $34,443 (2019 $672) EV Alianza Energética S.A. for $37 (2019 $47), unused tax credits by Empresas Públicas de Medellín E.S.P. of $202,331 million (2019 $161,519), Aguas de Malambo S.A. E.S.P. of $134 million (2019 $59) and unused presumptive income over ordinary liquid income by EPM Inversiones S.A. of $2,698 million (2019 $2,222), EV Alianza Energética S.A. of $7 (2019 $7), Aguas de Malambo S.A. E.S.P. of $64 million (2019 $0).

The value of current income tax assets or liabilities is the following:

	2020	2019
Current income tax assets or liabilities		
Total non-current income tax liabilities		
Income tax (1)	(33,701)	(33,701)
Total income tax liabilities	**(33,701)**	**(33,701)**
Total current income tax liabilities		
Income tax	(197,380)	(363,584)
Total income tax assets	**416,267**	**169,185**
Income tax credit balances	416,267	169,185
Total income tax assets (or liabilities)	**185,186**	**(228,100)**

Amounts stated in millions of Colombian pesos

(1) Corresponds to the tax liabilities for works of EPM and EDEQ, which represents the possibility for companies to partially pay income and complementary taxes by financing and executing public works of social importance in the areas most affected by the conflict - ZOMAC - instead of transferring the resources to the tax authority DIAN. This possibility arose with Law 1819 of 2016, It was added mainly through laws 1955 and 2010 of 2019 and was regulated with Decrees 1915 of 2017 and 1147 of 2020.

This liability is backed by a commercial trust contract which is being executed as the works under this program are built.

41.5 Income tax recognized in other comprehensive income

The detail of the tax effect corresponding to each component of "other comprehensive income" in the consolidated statement of comprehensive income is as follows:

Accumulated other comprehensive income	2020			2019		
	Brut	Tax effect	Net	Brut	Tax effect	Net
Reclassifications of property, plant and equipment to investment property	13,439	(1,184)	12,255	13,438	(1,204)	12,234
New measurements of defined benefit plans	(163,586)	53,081	(110,505)	(115,483)	38,338	(77,145)
Equity investments measured at fair value through shareholders' equity	3,392,529	(3,925)	3,388,604	2,796,497	(2,092)	2,794,405
Share in other comprehensive income of associates and joint ventures	(3,868)	-	(3,868)	(3,914)	-	(3,914)
Cash flow hedges	(19,037)	(18,862)	(37,899)	8,421	(30,005)	(21,584)
Translation of financial statements of foreign operations	831,289	-	831,289	600,765	-	600,765
Total	4,050,766	29,110	4,079,876	3,299,724	5,037	3,304,761

Amounts steted in millions of Colombian pesos

41.6 Deferred tax

The breakdown of deferred tax is as follows:

Deferred tax	2020	2019
Deferred tax assets	726,806	220,026
Deferred tax liability	(1,978,080)	(2,243,327)
Total net deferred tax	**(1,251,274)**	**(2,023,301)**

Amounts stated in millions of Colombian pesos

41.6.1 Deferred tax assets

Deferred tax assets	Initial balance	Changes included in ORI	Net changes included in income	Business combination	Effect of translation adjustments	Other	Equity valuation	Effect of foreign currency translation	Ending balance
Assets	1,203,322	(1,805)	257,309	496,291	(124)	(178)	(5)	28,455	1,983,264
Property, plant and equipment	566,065	12	51,912	361,195	7	-	(5)	(178)	979,008
Intangible assets	5,744	-	2,982	-	-	-	-	(62)	8,664
Investments and derivative instruments	13,560	(1,834)	75,085	-	-	3	-	(77)	86,736
Accounts receivable	194,140	-	75,665	7,734	-	-	-	115	277,654
Cash and cash equivalents	-	-	1,231	-	-	-	-	-	1,231
Inventories	6,171	-	1,992	-	(131)	-	-	-	8,031
Other assets	345,932	17	(33,029)	127,361	-	(181)	-	28,658	468,758
Rights of use - Deferred tax assets	71,711	-	81,470	-	-	-	-	-	153,181
Liabilities	(983,297)	30,881	(283,637)	2,297	-	(8,648)	-	(14,054)	(1,256,458)
Receivables and loans	217,626	-	(68,427)	-	-	-	-	6,118	155,318
Accounts payable	32,564	-	(5,089)	-	-	-	-	(15)	27,459
Employee benefits	258,995	15,191	(23,495)	2,297	-	1	-	(1)	252,987
Derivatives	3	15,855	111,862	-	-	-	-	27	127,746
Provisions	193,843	5	50,006	-	-	8	-	2,522	246,384
Other liabilities	49,088	-	1,282	-	-	-	-	250	50,619
Effect of elimination against assets	(1,735,416)	(169)	(349,776)	-	-	(8,656)	-	(22,955)	(2,116,972)
Total deferred tax assets	220,026	29,076	(26,328)	498,587	(124)	(8,826)	(5)	14,401	726,806

Amounts stated in millions of Colombian pesos

41.6.2 Deferred income liability

Deferred tax liabilities	Initial balance	Changes included in ORI	Net changes included in income	Effect of translation adjustments	Other	Effect of foreign currency translation	Ending balance
Assets	3,554,392	8,031	337,643	-	(2,794)	9,066	3,906,339
Property, plant and equipment	3,358,824	(249)	42,832	-	(46)	3,877	3,405,239
Intangible assets	76,541	3,090	187,240	-	-	4,644	271,515
Investment property	12,286	-	2,723	-	-	-	15,009
Investments and derivative instruments	(59,806)	5,112	(6,877)	-	(2,751)	(2)	(64,323)
Receivables	96,597	1	39,852	-	-	(463)	135,986
Cash and cash equivalents	-	-	-	-	-	-	-
Inventories	1,011	77	11,640	-	-	80	12,808
Other assets	19,253	-	(14,134)	-	3	930	6,052
Rights of use	49,685	-	74,368	-	-	-	124,053
Liabilities	(1,311,065)	(4,121)	(601,211)	(34)	(8,656)	(3,170)	(1,928,259)
Receivables and loans	66,412	-	(15,400)	(34)	-	107	51,084
Payables	47,417	-	(38,587)	-	-	(12)	8,817
Employee benefits	166,335	(658)	(42,425)	-	-	(221)	123,031
Derivatives	326	(398)	3	-	-	(4)	(73)
Provisions	6,476	-	19,831	-	-	(36)	26,272
Other liabilities	137,385	(2,896)	(174,859)	-	-	19,952	(20,418)
Effect of elimination against liability	(1,735,416)	(169)	(349,774)	-	(8,656)	(22,957)	(2,116,972)
Total deferred tax liabilities	2,243,327	3,909	(263,567)	(34)	(11,450)	5,896	1,978,080

Amounts stated in millions of Colombian pesos

Significant variations in deferred tax and liability, another significant item is the unrealized exchange difference resulting from the application of the exchange rate at the end of the reporting period for accounting purposes, which when compared to the exchange rate established by the tax standard, generates a higher deductible temporary difference than the one reported in the calculation of the deferred tax from the previous year, i.e. the exchange difference of the debt causes the accounting base of the financial liability to be higher than its tax base.

The deferred tax asset recognized for the business combination corresponds to the subsidiary Afinia, Much of this originated in the deterioration of property, plant and equipment and portfolio, which constitutes temporary differences that in the future may be used against the taxable income of the company, by taking the deductions for tax depreciation of property, plant and equipment and the provision of the tax portfolio in the terms of article 145 of the Tax Statute and Decree 187 of 1975. On the other hand, what is related to the deferred tax asset in the business combination for other assets corresponds to the deferred tax associated with tax losses, which according to article 145 of Law 2010 of 2019 are not subject to compensation terms , that is, they can be taken indefinitely, which allows the calculation and recognition of the deferred tax asset associated with this tax benefit.

41.6.3 Temporary differences

The most significant concepts on which Temporary Differences were presented are the following:

In assets, the greatest impact arises from temporary differences in property, plant and equipment by virtue of asset purchase and sale transactions between EPM Group companies, which imply the recognition of unrealized accounting profits in the Group, on which individual companies must pay taxes, and from the valuation at amortized cost of long-term receivables. In trade receivables, this corresponds to the portfolio deterioration due to the difference in the depreciation of the portfolio provision under the tax standard and the portfolio impairment under the accounting standard with the expected loss method; additionally, there are temporary differences due to the effect of the valuation at amortized cost of short-term loans to economic associates.

Regarding liabilities, the items that impact the calculation of deferred taxes are, for the most part, the settlement of the provision corresponding to installments of pension bonds, the actuarial calculation of pensions and the pension commutation of EADE, the amortization of the actuarial calculation of Emvarias' pensions, and the loans and borrowings from the valuation at amortized cost of bonds, securities issued, and short-term loans and borrowings. Differently, the temporary differences in the liabilities for long-term employee benefits such as retirement pensions, installments of pension bonds and actuarial calculation of retroactive severance payments and interest on severance payments and the unrealized exchange difference of payables.

No deferred tax was generated on items that have no future tax consequences, such as tax liabilities and finance income generated on the plan assets of, EPM, CHEC and Emvarias as they are exempt income in accordance with Article 235-2, paragraph 7 of the Tax Code.

In addition, in the Aguas Claras wastewater treatment plant operating contract, the valuation of the account receivable recorded by Aguas Nacionales compared to the valuation made by EPM for the finance lease under accounting standards is asymmetrical as they use different financial assumptions and accounting bases.

Temporary differences on which no deferred tax was generated were, among others, for the investments in subsidiaries, associates and joint ventures, in accordance with paragraph 39 of IAS 12; also, in the items without future tax consequences, such as tax liabilities and plan assets, of EPM, CHEC and Emvarias because they correspond to items except of income tax.

The approval of dividends in the EPM Group after the date of presentation and before the financial statements were authorized for publication, does not generate income tax consequences as is the policy of national subsidiaries to distribute only non-taxed profits and reserves. Tax effects that in the income tax could be generated by dividends declared by foreign subsidiaries are eliminated with the entry into force of article 77 of Law 2010 of 2019, since these distributions are considered income exempt from capital in application of the Colombian Holding Companies (CHC) regime.

Finally, the devaluation effect that the Colombian currency has experienced during the last taxable period, close to 4.84%, generates a substantial increase in the accounting value of liabilities and payables in foreign currency, while its continuous stable tax base and its effects are only evident at the time of settlement or partial payment of the obligations, based on the difference in exchange effectively made, as provided by articles 269 and 288 of the Tax Code. The above implies a decrease in net deferred tax.

New regulations for subsidiaries in Colombia

Financing Law Colombia

During 2019, Law 1943 of 2018 "By which financing rules are issued for the reestablishment of the balancing of the national budget and other provisions", was the subject of lawsuits filed with the Constitutional Court, seeking a declaration of unconstitutionality due to procedural defects in its formation.

Thus, through Ruling C - 481 of 16 October 2019, the Constitutional Court accepted the claims of one of the lawsuits and declared that the articles contained in the financing law are unconstitutional, stating: "THIRD. TO PROVIDE that (i) the declaration of unconstitutionality provided for in the second resolution shall take effect as from the first (1st) of January of two thousand and twenty (2020), so that Congress, within its own power to configure it, may issue the regime that ratifies, repeals, modifies or subrogates the contents of Law 1943 of 2018; (ii) the effects of the present ruling shall only be produced towards the future and, consequently, in no case shall they affect the consolidated legal situations". Thus, the rules contained in Law 1943 of 2018, remain in force during the taxable period 2019, since the ruling of the Constitutional Court was made with deferred effect, that is, maintaining the validity of the law until 31 December 2019.

According to the above, the Congress of the Republic had a limited term to issue a regime to ratify, repeal, modify or subrogate the contents of the law that was declared unconstitutional.

Economic Growth Act 2019 Colombia

During the last quarter of 2019, the National Government submitted to Congress a bill on economic growth, in order to comply with the Constitutional Court's ruling.

Under this scenario and after exhausting the stages required by the Colombian legal system for the creation of the law, on 27 December 2019, Law 2010 of 2019 was passed "By means of which regulations are adopted for the promotion of economic growth, employment, investment, the strengthening of public finances and the progressiveness, equity and efficiency of the tax system, in accordance with the objectives that Law 1943 of 2018 promoted on this matter, and other provisions are issued".

Thus, among the main modifications, we can highlight:

General rate of income and supplementary taxes

The income and supplementary tax rate will have the following modification:

2020:	Thirty-two percent (32%)
2021:	Thirty-one percent (31%)
2022 onwards:	Thirty percent (30%)

Presumptive Income

Will experience a progressive elimination as follows:

2019: 1.5%

2020: 0.5%

2021 onwards: 0%

Exemption in the determination of presumptive income for home utilities is maintained.

Sales tax (VAT)

The general rate of 19% is conserved.

The 5% rate is maintained for electric vehicles and their components, parts and accessories, as well as for the components and spare parts of the natural gas vehicle plan.

The VAT rule of Article 192 of Law 1819 of 2016 remains, according to which, the VAT rate of contracts in which a public entity is a contracting party will be the one corresponding to the date of the resolution or awarding act, or subscription of the respective contract, the rate is increased once they are added.

Other elements

- Tax deductions on income tax is kept as on VAT paid in the acquisition, import, construction and forming of real productive fixed assets, including the required services to put the good in use conditions, and those assets acquired through leasing.

- The possibility of taking 50% of the industry and commerce tax paid as a tax discount is retained. It is estimated in accordance with the growth law that from the year 2022 this discount will be 100%.
- The tax on dividends received by national companies continues in effect to the general rate of 7.5% by way of withholding tax on income, that will be transferable and imputable to the resident natural person or investor resident abroad.
- The sale of electricity generated from wind energy, biomass or agricultural waste, solar, geothermal or sea energy by electricity generating companies, as defined in Law 1715 of 2014 and Decree 2755 of 2003, will continue to be exempt of income tax for a period of 15 years as from 2017, as defined by Law 1715 of 2014 and Decree 2755 of 2003.
- The Colombian Holding Companies (CHC) framework is ratified as an instrument to promote foreign investment in the country.
- The requirements to access the tax benefits through the figure of Mega Investments are updated with the possibility of accessing a tax stability regime.
- The amendments made by Law 1943 of 2018 to the sub-capitalization rule in Article 118-1 of the Tax Code remain in force, limiting the deductibility of interest paid when there is over-indebtedness, specifying that such limitations only apply to debts incurred between economic associates.

During 2020, due to the situations derived from the declaration by the National Government of the economic, social and ecological emergency, added to the declaration and extension of the sanitary emergency decreed by the Ministry of Health and Social Protection; Various norms with tax scope were issued that generate effects on the recognition of economic facts by the company and on the determination of its tax burden.

One aspect in favor was the decrease in the value added tax from 19% to 5% effective until December 31, 2021, for air passenger transport, a situation that occurred through the issuance of Decree 575 of April 15 of 2020. This decrease favors the execution of costs and expenses of the entity in the use of air transport by officials. The validity of this measure was extended until December 31, 2022 by Law 2068 of 2020.

Through Decree 789 of June 4, 2020, the exclusion of the value added tax was determined for all hotel and tourism services in the country until December 31, 2020, this situation also generates benefits in the execution of costs and expenses in cases in which officials make use of the hosting service. This standard will be in force until December 31, 2021 in accordance with Law 2068 of 2020.

Through Legislative Decree 799 of 2020, the temporary suspension was ordered, until December 31, 2020, in the payment of the surcharge or special contribution in the electricity sector referred to in paragraph 2. of article 211 of the Tax Statute -ET- for tourism service providers with active and current registration in the National Tourism Registry and who carry out as their main economic activity one of those described by the standard. This decision, although it constitutes a relief in the costs of the hotel sector, can generate an

imbalance in the reconciliation of subsidies and contributions for home utility companies, to the extent that they are contributions that are no longer collected. The validity of this rule was extended until December 31, 2021 according to Law 2068 of 2020.

On the other hand, a circumstance that favors the growth and massification in the use of non-conventional sources of renewable energy, a business of high importance for the company, is the incorporation as exempt goods in article 477 of the Tax Statute by Law 2069 2020, of components for electricity generation through solar panels.

Through Law 2069 of 2020, donations made in favor of iNNpulsa Colombia by taxpayers are incorporated as a tax deduction and discount, in articles 158-1 and 256 of the Tax Statute.

Finally, Law 2070 of 2020 adds a subsection to article 392 of the Tax Statute in order to establish a withholding rate at source of 4% for cultural and creative activities.

Note 42. Discontinued operations

On 16 September 2019, the EPM Group announced the signing of a share purchase agreement with AES Gener S.A. and its subsidiary Norgener Renovables SpA to dispose of 100% of the shares it holds in Parque Eólico Los Cururos SpA. and EPM Transmisión Chile S.A., as part of the sale plan promoted by the Group to meet the liquidity requirements arising from the contingency in the Ituango Hydroelectric Project.

As of 30 September 2019, the operations of Parque Eólico Los Cururos SpA. and EPM Transmisión Chile S.A. were classified as discontinued operations and are presented in the generation and transmission segments, respectively.

The detail, by function, of the income for the period from discontinued operations net of tax in the consolidated statement of comprehensive income and the net cash flows in the consolidated statement of cash flows, corresponding to the subsidiaries Parque Eólico Los Cururos SpA. and EPM Transmisión Chile S.A., is as follows:

Discontinued operations	2020	2019
Income(1)	-	70,196
Cost of services rendered	-	(16,837)
Expenses	-	(4,877)
Other income	-	168
Other expenses	-	(22)
Income from discontinued operations before income taxes	**-**	**48,628**
Income tax associated with income from discontinued operations	-	(383)
Income from discontinued operations	**-**	**48,245**

Amounts stated in millions of Colombian pesos

(1) Includes $ 27,148 for realization of capitalized interests and 8,222 for reclassification of other comprehensive income in translation of financial statements.

Cash flows related to discontinued operations are:

Assets held for sale	2020	2019
Operating activities	-	15,206
Investing activities	-	475,471
Financing activities	-	(9,471)
Net cash flows	**-**	**481,206**

Amounts stated in millions of Colombian pesos

The disposition of the investments was made on 27 November 2019.

Note 43. Information to be disclosed on related parties

EPM, the Holding company of the EPM Group, is a decentralized industrial and commercial company of municipal order, whose sole owner is the Municipality of Medellín. Its capital is not divided into shares.

Related parties of the Group are subsidiaries, associates and joint ventures, including subsidiaries of associates and joint ventures, key management personnel, as well as entities over which key management personnel may exercise control or joint control and post-employment benefit plans for the benefit of employees.

Balances and transactions between EPM Group companies have been eliminated in the consolidation process and are not disclosed in this note. The total value of the transactions performed by the Group with its related parties during the corresponding period is shown below:

Transactions and balances with related parties	Income(1)	Costs/ Expenses(2)	Amounts receivable(3)	Amounts payable(4)	Guarantees and collateral received(5)
Associates:					
2020	77,116	40,773	2,264	7,898	-
2019	70,363	32,728	6,815	4,693	-
Key management personnel of the company or its controlling company:					
2020	5	20,416	1,237	3,310	1,532
2019	5	27,090	790	2,738	1,082
Other related parties:					
2020	108,275	112,870	24,972	11,311	-
2019	58,499	80,039	18,956	4,552	-

Amounts stated in millions of Colombian pesos

(1) Income from transactions with associates corresponds to the sale of services related to information and communication technologies, information services and the complementary activities related to them. Income generated with other related parties corresponds mainly to the sale of electricity, the rendering of public utilities and financial services. Detail of the income obtained by the Group from its related parties is as follows:

	Revenues	2020	2019
Associates	Sale of goods and services	51,416	49,351
	Other	25,700	21,012
Key management personnel of the company or its controlling company	Sale of goods and services	5	5
	Other	-	-
Other related parties	Sale of goods and services	87,372	50,976
	Interest	1,525	-
	Fees	10,186	3,764
	Other	9,191	3,759
Total income from related parties		**185,396**	**128,868**

Amounts stated in millions of Colombian pesos

(2) Corresponds to costs and expenses arising from transactions involving the purchase

of electricity, the acquisition of goods and services, including services related to communications and complementary activities, with associates and other related parties. The detail of costs and expenses incurred by the Group with its related parties is as follows:

	Costs and Expenses	2020	2019
Associates	Purchase of goods and services	38,338	30,664
	Fees	2,393	2,047
	Others	42	17
Key management personnel of the company or its controlling company	Purchase of goods and services	13,997	4,224
	Fees	1,715	54
	Other	4,704	22,812
Other related parties	Purchase of goods and services	51,191	51,175
	Interest	4	1
	Fees	14,209	8,268
	Other	47,465	20,595
Total costs and expenses incurred with related parties		**174,058**	**139,856**

Amounts stated in millions of Colombian pesos

(3) The Group keeps receivables from its related parties arising from the sale of electricity, the rendering of public utilities, the sale of services associated with information and communications technologies and information services, among others. The EPM Group classifies its receivables using criteria that enable it to prioritize the management of their recovery through the agencies responsible for them or collection entities. The collection applies according to the billing cycle with respect to public home utilities.

(4) Payment policy, generally, is 30 days from the date of the invoice.

(5) Collaterals and endorsements received correspond to mortgage collateral on housing loans granted to key management personnel.

Transactions between the Group and its related parties are carried out under conditions equivalent to those that exist in transactions between independent parties, in terms of their purpose and conditions.

Transactions and balances with government-related entities

Surpluses paid during the year were $1,488,319 (2019: $1,289,652), $811,810 (2019: $703,447) ordinary and $676,509 (2019: $586,205) extraordinary.

Compensation to the Board of Directors and key Personnel of the Group:

Compensation to the members of the Board of Directors and key management personnel of the Group is as follows:

Concept	2020	2019
Wages and other short-term employee benefits	32,949	27,274
Pensions and other post-employment benefits	532	564
Other long-term employee benefits	906	1,156
Remuneration to key management personnel	**34,387**	**28,994**

Amounts stated in millions of Colombian pesos

Amounts disclosed are those recognized as Costs or Expenses during the period report for compensation to key management personnel.

Note 44. Capital management

Capital of the Group includes indebtedness through the Capital Market, Commercial Banks, Development Banks, Development Agencies and Multilateral Banks, at national and international levels.

The Group manages its capital in order to plan, manage and assess the attainment of financial resources in the national and international financial markets, for strategic investments, and investment projects, through several options that optimize costs, guarantee the stability of adequate financial indicators and adequate credit rating, and minimize financial risk. For this, the following capital management policies and processes have been defined:

Financing Management: financing management comprises the performance of all long-term credit operations, in order to guarantee the timely availability of the resources required for the normal operation of the Group and to materialize the investment and growth decisions, striving to optimizing financing costs.

The Group has not made any changes to its capital management objectives, policies and processes during the period ended the cut-off date, nor has it been subject to external capital requirements.

In order to face the changes in the economic conditions, the Group implements proactive management mechanisms for its financing, enabling as far as it is feasible, different financing alternatives, so that at the time performance of any long-term credit operation is required, there will be access to the source that each time has availability of competitive market conditions at the necessary time.

Below are presented the values that the Group manages as capital:

Capital management	2020	2019
Bonds and loans		
Commercial bank loans	6,006,780	5,317,391
Multilateral bank loans	2,962,186	3,594,944
Development bank loans	1,589,648	1,035,265
Bonds and securities issued	13,691,688	1,060,207
Other bonds and securities issued	-	9,648,198
Other loans	337,500	-
Total debt	**24,587,802**	**20,656,005**
Total capital	**24,587,802**	**20,656,005**

Amounts stated in millions of Colombian pesos

Note 45. Financial risk management objectives and policies

The Group is exposed to financial risk, defined as the possibility of occurrence of an event that affects negatively the financial results, among which are price risk, liquidity risk, credit risk and operating risk.

Price risk refers to the changes or volatility of market variables that can generate economic losses. Market variables refer to exchange rates, interest rates, securities, commodities, among others; and their changes may impact, for example, the financial statements, cash flow, financial indicators, contracts, project viability and investments.

Credit risk refers to the possible default of payment obligations by third parties derived from contracts or financial transactions performed.

Liquidity risk is the scarcity of funds and the inability to obtain the resources at the time they are required to cover the contractual obligation and execute investment strategies. The scarcity of funds leads to the need to sell assets or to contract financing operations in unfavorable market conditions.

Finally, operating risk, from a financial standpoint, is defined as deficiencies or failures in the processes, technology, infrastructure, human resources or occurrence of unforeseen external events.

The objective of the Integral Risk Management Department is to lead the definition and implementation of strategies for integral risk management, in order to achieve adequate protection and assurance of the assets, resources and interests of the EPM Group.

The Group's policy is to manage risks that affect its activity and environment, adopting the best practices and international standards of Integrated Risk Management (IRM), as a way of facilitating compliance with the purpose, strategy, objectives and business goals, both statutory and legal. It has an information system that facilitates integral risk management, guarantees the confidentiality, availability and reliability of the information and allows analysis and monitoring of risks and improvement plans. It has implemented an integral risk management system and deploys a methodology for the identification, analysis, assessment, control and monitoring of risks, among which are those associated with money laundering and financing of terrorism, which allows reducing vulnerability, and propose and implement effective mechanisms for the proper development of business, processes, projects and contracts. As valuation criteria there are tables for the evaluation of the consequences of the materialization of risks and probability tables, which are applicable to the different management levels defined in the methodological guide for integral risk management.

The monitoring and review activity to the integral risk management is aligned with the follow-up process to the management established in the Group, in order to propose and implement improvement actions. The monitoring and review scheme established assesses, among others, the following aspects.

- The implementation strategy for integrated risk management.
- Changes in the internal and external context that imply adjusting the treatment of identified risks or that generate new risks.
- The variation of risks in terms of frequency, probability and consequence.
- The assessment criteria for the probability and consequence of the risks.
- The implementation and effectiveness of the treatment plans.

The Group manages financial risks associated with the different levels of management by identifying the risks within the market, liquidity and credit groupings that are classified as financial risks, quantifying their impact and implementing strategies to mitigate them.

45.1. Price risk

Price risk is the risk that the fair value of the future cash flows of a financial instrument may fluctuate because of changes in market prices. The Group has identified that the financial instruments affected by price risk include:

- Cash and cash equivalents (fixed income securities and trust duties)
- Investments at fair value through profit and loss.
- Investments measured at fair value through equity.
- Sensitivity analyses correspond to the financial situation as at 31 December 2020 and apply to the following concepts:
- Cash and cash equivalents (fixed income securities and trust duties)
- Investments at fair value through profit and loss.

The methodology used for measuring market risk is Value at Risk (VaR), consisting of the quantification of the maximum loss that the portfolio could present in a month with a 95% confidence level. For the quantification of VaR the methodology defined by the Superintendence of Finance in the Basic Financial Accounting Circular Letter (CE100 of 1995) is used.

	Daily COP VaR*	VaR % COP
VaR Total Portfolio	50.978	1,58%

45.2. Interest rate risk

Interest Rate Risk is the risk that the fair value or future cash flows of a financial instrument may fluctuate as a result of changes in market interest rates. The Group has identified that financial instruments affected by interest rate risk include:

- Cash and cash equivalents.
- Investments at fair value through profit and loss.
- Financial liabilities measured at amortized cost-Loans and borrowings.
- Financial liabilities measured at fair value with changes in other comprehensive income-Derivative instruments

Concentration of Interest Rate Risk materializes when there are large individual exposures and significant exposures to counterparties whose probability of default is determined by factors such as the economic sector, currency and credit ratings. Interest rate risk management seeks to preserve capital and maintain or increase profitability. The EPM Group has defined policies on risk in interest rates through the identification of risks, the determination of the position of rates and the simulation of possible hedging strategies. This assist decision making, oriented to maintaining the position to hedge it, and later the results of the executed strategies are assessed.

Analysis of sensitivity to interest rates

The following table indicates the sensitivity to a possible reasonable change in the interest rates of financial instruments exposed to this risk, without considering the effect of hedge accounting. Keeping all other variables constant, the pre-tax income or loss and the equity of the EPM Group would be affected by changes in variable interest rates as follows:

	Increase/decrease in pesos	Value at exposure	Financial effect	
			In profit before taxes	In equity
2020				
Financial assets measured at fair value through profit or loss				
Investments at fair value through profit or loss	100	2,109,882	(5,473)	(4,378)
	(100)		5,473	4,378
Financial liabilities measured at amortized cost				
Loans and receivables	100	7,946,304	(79,464)	(63,571)
	(100)	7,946,304	79,464	63,571
Financial liabilities measured at fair value with changes in other comprehensive income				
Derivative instruments	100	213,715	(46,666)	(37,333)
	(100)	213,715	46,666	37,333
2019				
Financial assets measured at fair value through profit or loss				
Investments at fair value through profit or loss	100	1,459,726	(3,882)	(3,105)
	(100)	1,459,726	3,882	3,105
Financial liabilities measured at amortized cost				
Loans and receivables	100	7,456,598	(74,866)	(59,893)
	(100)	7,456,598	74,866	59,893
Financial liabilities measured at fair value through other comprehensive income				
Derivative instruments	100	93,812	(6,451)	(5,160)
	(100)	93,812	6,451	5,160

Amounts stated in millions of Colombian pesos

The Group considers that the sensitivity analysis is representative in respect to the exposure of the interest rate risk.

45.3. Foreign exchange risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

The Group has identified that financial instruments affected by foreign exchange risk include:

- Cash and cash equivalents.

- Investments at fair value through profit and loss.
- Financial liabilities measured at amortized cost-Loans and borrowings.
- Financial liabilities measured at fair value with changes in other comprehensive income-Derivative instruments

Exposure to foreign exchange rate risk relates, firstly, to financing activities in a currency other than the functional currency and to contracted hedging operations.

The Group manages its foreign exchange rate risk by means of hedging operations on a medium-term horizon. It is the Group's policy not to close speculative hedging transactions, so the terms of the hedging derivative instruments replicate the terms of the underlying in order to maximize the effectiveness of the hedge.

The Group covers its exposure to exchange rate fluctuations by using different hedging instruments, among which are Swaps, Forwards and Options at several terms.

Analysis of sensitivity to foreign exchange rates

The following table indicates the sensitivity to a possible reasonable change in foreign exchange rates for $100 pesos in the currency against the U.S. dollar without considering the effect of hedge accounting. The impact is caused by the change in monetary and non-monetary assets. Holding all other variables constant, pre-tax profit or loss and equity would be affected by changes in foreign exchange rates as follows:

	Increase/decrease in pesos	Value at exposure	Financial effect	
			In profit before taxes	In equity
2020				
Financial assets measured at fair value through profit or loss	100	2,132,948	151,441	121,153
	(100)		(151,441)	(121,153)
Financial liabilities measured at amortized cost				
Loans and receivables	100	14,019,211	(408,426)	(326,741)
	(100)	14,019,211	408,426	326,741
Financial liabilities measured at fair value with changes in other comprehensive income				
Derivative instruments	*100*	*4,827,351*	*140,637*	*112,509*
	(100)	*4,827,351*	*(140,637)*	*(112,509)*
2019				
Financial assets measured at fair value through profit or loss	100	562,524	16,657	13,325
	(100)	562,524	(16,657)	(13,325)
Financial liabilities measured at amortized cost				
Loans and receivables	100	10,851,375	(331,123)	(264,899)
	(100)	10,851,375	331,123	264,899
Financial liabilities measured at fair value through other comprehensive income				
Derivative instruments	*100*	*277,078*	*8,455*	*6,764*
	(100)	*277,078*	*(8,455)*	*(6,764)*

Amounts stated in millions of Colombian pesos

The Group considers that the sensitivity analysis is representative in respect to the exposure of the foreign Exchange Risk.

45.4. Credit Risk

Credit Risk is the risk that one of the counterparts does not comply with the obligations derived from a financial instrument or purchase contract and that this will translate in a financial loss. The Group has identified that the financial instruments affected by credit risk include:

- Cash and cash equivalents
- Other financial assets:
- Trade and other receivables

Credit risk management by type of financial instrument is detailed below and is considered representative of credit risk exposure:

Cash and cash equivalents and investments at fair value through profit or loss

For credit risk management in the EPM Group quotas are assigned per issuer, per counterparty and intermediary, taking into account the financial, risk and fundamental analysis of the entities, emphasizing shareholder support. The methodology considers the characteristics of the investment portfolio and applicable regulations. Credit risk concentration is limited since it follows the provisions of the business rules manual for treasury operations. The description of the factors that define risk concentration is as follows:

- Quotas are updated quarterly based on the latest available financial statements of the entities analyzed.
- When the value of the consolidated portfolio of temporary investments exceeds the equivalent of 10,000 minimum wages (SMMLV), no more than 20% of this value must be concentrated in the same issuer, counterparty or intermediary, with the exception of securities issued by governments that comply with current regulations.
- Securities market intermediaries, other than supervised banking establishments, may act as counterparties for transactions but cannot be considered as eligible issuers
- Brokerage firms acting as counterparties to treasury operations must have at least the second risk rating in strength or quality of portfolio management.
- Stockbrokerage companies backed by banks, i.e. banked counterparties, must have a minimum net worth of 30,000 minimum wages (SMLMV).

Finally, efforts to avoid the concentration of risk are aimed at establishing, analyzing, monitoring and controlling quotas, for which purpose the current quotas and their occupation status are controlled. Justifications related to the need to temporarily exceed the quotas are submitted for approval.

Receivables measured at amortized cost and other receivables: The EPM Group is exposed to the risk that users or customers who use public utilities may fall into arrears or default on the payment for these services. Receivables from utility customers are classified into two major groups: those arising from arrears and the other group relates to financing or payment agreements with customers as a portfolio recovery strategy or for linking new customers.

EPM Group companies evaluate at the end of each period the behavior and value of receivables to determine if there is objective evidence of portfolio impairment and thus identify its possible impact on future cash flows. The criteria used to determine objective evidence of impairment are:

- Defaults in payments by the customers.
- It is known or there is evidence of the customer entering processes of corporate restructuring or in insolvency or liquidation.
- The rise of social turmoil, be it of public order or natural disasters, which according to experience are directly correlated with default of accounts.

In order to avoid excessive concentration of risk, EPM Group companies have developed and implemented various strategies to mitigate the risk of default in the portfolio, including:

- Persuasive collection by making phone calls and sending letters to customers with the support of specialized collection agencies.
- Segmentation of customers to identify those of greater risk, due to their value, in order to carry out personalized collection activities with them.
- Possibility of making payment agreements or partial payments that lead to the recovery of the exposed capital.
- Offsetting of receivables against payables for EPM with customer-suppliers.
- When the above strategies do not generate satisfactory results, coercive collection actions are taken by suspending and disconnecting the service.
- If the above strategies do not produce satisfactory results, the portfolio is collected through legal proceedings.

The Group considers that the value that best represents its exposure to credit risk at the end of the period, without considering any collateral taken or other credit enhancements is:

Concept	2020	2019
Cash and cash equivalents	4,097,964	629,791
Investments in debt instruments	2,360,888	927,077
Accounts receivable	2,132,910	531,228
Other accounts receivable	279,386	215,142
Maximum exposure to credit risk	**8,871,148**	**2,303,238**

Amounts stated in millions of Colombian pesos

* Corresponds to the value of the portfolio provision.

Impairment of receivables

Expected credit losses are estimated considering the probability that an uncollectible loss may or may not occur and are recognized as profit or loss in the statement of comprehensive income against a lower value of the financial asset. The Group evaluates the credit risk of receivables on a monthly basis at the time of reporting in order to determine the value adjustment for expected credit losses on financial assets.

Breach of contract is measured in accordance with service contracts and the subsidiary's own rules in each country.

45.5. Liquidity Risk

Refers to the possibility of insufficient resources for the timely payment of operations and commitments of the entity, and thus the Group would be forced to obtain liquidity in the market or to liquidate investments in an onerous manner. It is also understood as the possibility of not finding buyers for offered bonds.

The Group has identified that the financial instruments affected by liquidity risk include:

- Non-derivative financial assets.
- Variable-rate debt financial instruments
- Fixed-rate debt financial instruments

To control liquidity risk, time comparisons of figures, benchmarks and liquidity levels are made over different time horizons. From this analysis, investment strategies that do not affect the liquidity of the Group are developed, considering the cash budget and market risk analyses to assess the diversification of the sources of funds, the capacity to sell assets and the creation of contingency plans.

Generally, the main aspects considered in the analysis are:

a. Liquidity of the securities: the characteristics of the issuer, the amount of the issue and the trading volume are analyzed.

b. Market liquidity: the general behavior of the market is analyzed and rate forecasts are made to infer its future behavior.

c. Portfolio liquidity: cash flows are coordinated in order to determine investment strategies according to future liquidity requirements, and diversification is sought to avoid concentration of securities by issuer, rate, and/or terms.

The following table shows the remaining contractual maturity analysis for non-derivative financial assets and liabilities:

	Average effective interest rate	Less than 1 year	1 to 2 years	2 to 3 years	3 to 4 years	More than 4 years	Total contractual obligation
2020							
Non-derivative financial assets	2.90%	2,137,000	166,627	-	11,000		2,314,627
Debt financial instruments with variable interest rates	4.32%	1,823,191	1,345,794	2,363,507	910,858	4,227,936	10,671,287
Fixed interest rate debt financial instruments	6.22%	738,795	216,709	750,255	1,174,508	11,255,003	14,135,269
2019							
Non-derivative financial assets	4.82%	1,045,747	15,949	21,796		9,340	1,092,832
Floating interest rate debt financial instruments	5.80%	820,505	385,391	2,494,672	1,006,647	5,156,011	9,863,226
Fixed interest rate debt financial instruments	6.59%	259,253	635,861	177,325	695,334	8,893,208	10,660,982

Amounts stated in millions of Colombian pesos

Values included in the above tables for non-derivative financial assets and liabilities may change as a result of fluctuations in the variable interest rate relative to the estimated interest rate at the end of the reporting period. The Group believes that cash flows may not occur earlier than indicated above.

The following table shows the analysis of contractual maturity of remaining derivative financial liabilities:

	Less than 1 year	1 to 2 years	2 to 3 years	3 to 4 years	More than 4 years	Total contractual obligation
2020						
Swap Contracts	157,138	61,100	90,966	91,581	766,656	1,167,440
Total	157,138	61,100	90,966	91,581	766,656	**1,167,440**
2019						
Swap Contracts	(13,699)	(14,592)	(17,561)			(45,853)
Total	(13,698)	(14,592)	(17,561)	-	-	**(45,851)**

Amounts stated in millions of Colombian pesos

The main method for measuring and monitoring liquidity is cash flow forecasting which is carried out in the companies of the Group and consolidated in the cash budget. As a result, its cash position is monitored daily and projections are made on an ongoing basis in order to:

- Monitor liquidity needs related to operating and investing activities associated with the acquisition and disposal of long-term assets.
- Pay, pre-pay, refinance and/or obtain new loans, according to cash flow generation capacity in the Group.

These projections consider the Group's debt financing plans, compliance with ratios, compliance with organizational objectives and applicable regulations.

Finally, in addition to managing investments and forecasting cash flow as part of the strategy of prudent liquidity risk management, in order to control the current and working capital ratios, the EPM Group seeks to guarantee adequate liquidity through the availability of long-term financing with credit alternatives.

45.6. Insurance risk

The EPM Group has incorporated a reinsurance captive company, domiciled in Bermuda, registered with REACOEX Colombia and rated A- by AM Best, and it is through this company that the reinsurance risk is transferred from the insurance company in Colombia (currently Sura) to the reinsurance market, for the policies of Material Damage + Loss of Profit, Sabotage and Terrorism, Directors and Managers, Infidelity and Financial Risks ("Crime"), Errors and Omissions, Civil Liability and Coverage for cyber risks.

As mentioned, this risk management is done through Maxseguros EPM Ltd., which consolidates the risks assumed and assigns them through reinsurance operations.

With reference to selection, cession and reinsurance management policies, these are performed on the basis of a strategy established jointly by EPM's Comprehensive Risk Management Department and Maxseguros EPM Ltd., which may change from year to year according to fluctuations in the reinsurance market and the conditions of the insured risks; however, solid backing is sought and a minimum rating of A- or equivalent is required.

The reinsurance companies with which operations were carried out in 2020 were the following:

Reinsurer	Risk Score
Liberty Mutual USA	S&P A
Chubb Seguros (Federal Insurance)	S&P AA
AIG (National Union Fire 78%)	AM Best A
Swiss Re International SE	AM Best A+
Hannover Re	S&P AA-

The main claims assumed by the Group are:

Type of claim	Value of the claim settled	Value of reserve	EPM Group value	Value of reinsurance company
PTAR Aguas Claras - Aguas Nacionales	2,208	2,208	2,208	2,208
Jepirachi - EPM	1,002	1,002	1,002	1,002
SE San Diego - EPM	993	993	993	993
Subestación Malena- ESSA	969	969	969	969
SE Ancón Sur - EPM	768	768	768	768
Distrito Térmico - EPM	532	532	532	532
SE Cabañas - EPM	118	118	118	118
Castilla - EPM	66	66	66	66
Santuario - CHEC	19	19	19	19
San Cancio - CHEC	11	11	11	11
Marsella I - CHEC	9	9	9	9
SE Marquetalia - CHEC	5	5	5	5
Total	**6,700**	**6,700**	**6,700**	**6,700**

Amounts stated in millions of Colombian pesos

The value of the insured assets is as follows:

Type of asset	2020	2019
Small and wind power plants (<20MW)	1,702,308	1,422,758
Large hydroelectric plants (>20MW)	10,058,666	9,986,526
La Sierra thermal plant	1,099,258	1,056,070
Water Assets	964,164	916,734
Transmission and Distribution Assets	2,001,145	1,826,292
Corporate Assets	1,355,042	1,346,307
Gas Assets	4,864	4,644
Total	**17,185,447**	**16,559,331**

Amounts stated in millions of Colombian pesos

Note 46. Measurement of fair value on a recurring and non-recurring basis

The methodology established in IFRS 13 -Fair value measurement specifies a hierarchy in the assessment techniques based on whether the variables used in the determination of the fair value are observable or not.

The Group determines the fair value on a recurring and non-recurring basis, as well as for disclosure purposes:

- Based on prices quoted in assets or liabilities markets identical to those the Group can access on the measurement date (level 1).
- Based on inputs applied on valuation methodologies commonly used by market participants, which are different from observable quoted prices for assets or liabilities, directly or indirectly (level 2).
- Based on internal valuation techniques of cash flow discounts or other valuation models, using variables estimated by the Group that are non-observable for the asset or liability, in absence of variables observed in the market (level 3).

During 2020 and 2019 no transfers have been made in the Group between the fair value hierarchy levels, either for transfers in or out of the levels.

Assessment techniques and variables used in the Group for measurement of fair value for recognition and disclosure:

Cash and cash equivalents: include fixed income instruments and trust duties. The latter reflects the balance of the Collective Investment Funds (CIF) held by the EPM Group. These funds are used as a savings and investment mechanism and are managed by trust companies. Through these funds, resources are invested in a portfolio of assets which are restated to fair value. The EPM Group uses the market approach as a valuation technique for this item. These items are classified in level 1 of the fair value hierarchy.

Fair value investments through profit or loss and through equity: corresponds to investments made to optimize surplus liquidity, i.e. all those resources that are not immediately allocated to the development of the activities that constitute the corporate purpose of the companies. Additionally, includes the resources given to a financial institution as collateral for the sale of the Los Cururos Wind Farm and EPM Transmisión Chile. The EPM Group uses the market approach as a valuation technique, these items are classified in level 1 of the fair value hierarchy.

Equity investments: corresponds to the resources placed in participative securities of national or foreign entities, represented in shares or parts of societal interest. The methodologies used are: the market price for those listed on the stock exchange (level 1) and the discount of cash flows for the remaining ones (level 3).

Trust rights: corresponds to the rights arising from the conclusion of commercial trust contracts. The EPM Group uses the market approach as a valuation technique, these items are classified in level 1.

Derivative instruments: The Group uses derivative financial instruments such as forward contracts, futures contracts, swaps and options to hedge various financial risks, primarily interest rate, foreign exchange and commodity price risks. Such derivative financial instruments are initially recognized at fair value on the date the derivative contract is entered into and are subsequently remeasured at fair value. The Group uses as a valuation technique for swaps the discounted cash flow, in an income approach. The variables used are: Interest rate swap curve for dollar-denominated rates, to discount dollar flows; and external interest rate swap curve for Colombian peso-denominated rates, to discount flows in Colombian pesos. These items are classified in level 2 of the fair value hierarchy. Additionally, for the put option of the climate derivative, the Monte Carlo method is used as a valuation technique, which simulates the non-financial variable(Rainfall measured in two meteorological stations located in the basins of two of the most important rivers in EPM's area of influence: Río Abajo and Riogrande I) in a series of situations or possible scenarios for a certain event, including the limits and the present value of the flows defined in the contract. This item is classified in Level 3 of the fair value hierarchy because variables not obtained from observable data in the market are used.

Receivables: comprised by the receivable from the business combination for the acquisition of the subsidiary Empresas Públicas de Rionegro. For its valuation, the discount of payment flows is considered, applying the weekly collection rates for 360-day CDT published by Banco de la República; and for the receivable associated with the contract for the steady supply of liquid fuel (ACPM) for the Termoeléctrica La Sierra and Termodorada plants, which is updated according to the value of the fuel unit stated in the contract. Both items are classified in level 3 of the fair value hierarchy.

Investment property: are properties (land or buildings, considered in their entirety or in part, or both) held (by the Group in its own name or under a finance lease) to earn income, capital gains or both, rather than:

- Their use in the production or supply of goods or services, or for administrative purposes; or
- Their sale in the ordinary course of business.

The Group uses two valuation techniques for these items. Within the market approach, the comparative or market method is used, which consists of deducting the price by comparison of transactions, supply and demand and valuation results of similar or comparable properties, after adjustments of time, conformation and location. Within the cost approach, the residual method is used, which is applied only to buildings and is based on the determination of the updated cost of construction, less depreciation for age and condition. Both items are classified in level 3 of the fair value hierarchy.

Contingent considerations: originated by the business combinations in the acquisitions of the subsidiaries Espíritu Santo Energy S. de R.L. and Empresas Varias de Medellín S.A E.S.P. - EMVARIAS, the discount of payment flows is considered by applying the following discount rates: Libor rate and TES rate, respectively. These items are classified in level 3 of the fair value hierarchy.

Other accounts payable: corresponds to the premium payable of a weather derivative whose valuation technique is the average of expected future flows, discounted at a risk-free rate plus a spread that contemplates the possibility of default (own credit risk). This item is classified in Level 3 of the fair value hierarchy because variables not obtained from observable data in the market are used, such as own credit risk.

The following table shows for each of the fair value hierarchy levels, the Group's assets and liabilities measured at fair value on a recurring basis at the cut-off date:

2020	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	624,500	-	-	624,500
Total negotiable or designated at fair value	**624,500**	**-**	**-**	**624,500**
Fixed income securities	2,245,812	-	-	2,245,812
Equity securities investments at fair value	79,928	-	-	79,928
Investments pledged or pledged in guarantee	35,148	-	-	35,148
Total other investments at fair value (See note 14)	**2,360,888**	**-**	**-**	**2,360,888**
Variable income securities other equity investments	2,551,207	-	7,924	2,559,131
Total other equity investments (See note 14)	**2,551,207**	**-**	**7,924**	**2,559,131**
Trust in administration	449,679	-	-	449,679
Total trust rights (See note 14)	**449,679**	**-**	**-**	**449,679**
Options	-	-	128,204	128,204
Derivative swaps	-	62,385	-	62,385
Total derivatives (See note 14)	**-**	**62,385**	**128,204**	**190,589**
Other accounts receivable	-	-	23,237	23,237
Total debtors (See note 13)	**-**	**-**	**23,237**	**23,237**
Investment properties Urban and rural land	-	-	129,172	129,172
Investment property Buildings and houses	-	-	35,947	35,947
Total investment properties (See note 6)	**-**	**-**	**165,119**	**165,119**
Liabilities				
Provision - business combination	-	-	155,378	155,378
Total contingent consideration (See note 28)	**-**	**-**	**155,378**	**155,378**
Other accounts payable	-	-	120,429	120,429
Total accounts payable (See note 23)	**-**	**-**	**120,429**	**120,429**
Swaps derivative liabilities	-	419,132	-	419,132
Total derivative liabilities (See note 24)	**-**	**419,132**	**-**	**419,132**
Total fair value on a recurring basis	**5,986,274**	**(356,747)**	**48,677**	**5,678,204**

Amounts stated in millions of Colombian pesos

2019	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	629,791	-	-	629,791
Total marketable or designated at fair value	**629,791**	**-**	**-**	**629,791**
Fixed income securities	814,271	-	-	814,271
Variable income securities investments at fair value	59,005	-	-	59,005
Investments pledged or pledged in guarantee	53,800	-	-	53,800
Total other investments at fair value (See note 14)	**927,077**	**-**	**-**	**927,077**
Variable income securities other equity investments	1,955,134	-	7,947	1,963,081
Total other equity investments (See note 14)	**1,955,134**	**-**	**7,947**	**1,963,081**
Trust in administration	431,973	-	-	431,973
Total fiduciary rights (See note 14)	**431,973**	**-**	**-**	**431,973**
Futures contracts	-	-	-	-
Derivative swaps	-	46,148	-	46,148
Total derivatives (See note 14)	**-**	**46,148**	**-**	**46,148**
Other accounts receivable	-	-	51,638	51,638
Total receivables (See note 13)	**-**	**-**	**51,638**	**51,638**
Investment properties Urban and rural land	-	-	123,377	123,377
Investment property Buildings and houses	-	-	16,977	16,977
Total investment properties (See note 6)	**-**	**-**	**140,354**	**140,354**
Liabilities				
Provision - business combination	-	-	134,841	134,841
Total contingent consideration (See Note 28)	**-**	**-**	**134,841**	**134,841**
Total fair value on a recurring basis	**3,943,975**	**46,148**	**65,098**	**4,055,222**

Amounts stated in millions of Colombian pesos

No transfers between levels were made during 2020.

The following tables present a reconciliation of the Group's assets and liabilities measured at fair value on a recurring basis using unobservable inputs (classified in level 3 of the fair value hierarchy) at 31 December 2020 and 2019:

Changes in level 3 of the fair value hierarchy 2020	Initial balance	Changes recognized in income	Changes recognized in other comprehensive income	Acquisitions	Sales and transfers	Final balance
Assets						
Variable income securities Other equity investments	7,947	-	(23)	-	-	7,924
Total other equity investments (See note 14)	7,947	-	(23)	-	-	7,924
Options	-	(14,028)	-	142,232	-	128,204
Total derivatives	-	(14,028)	-	142,232	-	128,204
Other accounts receivable	51,638	(28,401)	-	-	-	23,237
Total receivables	51,638	(28,401)	-	-	-	23,237
Investment properties Urban and rural land	107,398	-	(7,123)	-	28,897	129,172
Investment properties Buildings and houses	32,956	-	(10,297)	-	13,288	35,947
Total investment properties (See Note 6)	140,354	-	(17,420)	-	42,185	165,119
Liabilities						
Provision - business combination	134,841	20,537	-	-	-	155,378
Total contingent consideration (See Note 28)	134,841	20,537	-	-	-	155,378
Other accounts payable	-	(21,803)	-	142,232	-	120,429
Total accounts payable	-	(21,803)	-	142,232	-	120,429

Amounts stated in millions of Colombian pesos

Changes in level 3 of the fair value hierarchy 2019	Initial balance	Changes recognized in income	Changes recognized in other comprehensive income	Acquisitions	Sales and transfers	Final balance
Assets						
Variable income securities Other equity investments	54,515	-	(11,090)	-	(35,478)	7,947
Total other equity investments (See note 14)	54,515	-	(11,090)	-	(35,478)	7,947
Other accounts receivable	48,180	3,458	-	-	-	51,638
Total receivables	48,180	3,458	-	-	-	51,638
Investment properties Urban and rural land	70,301	39,667	88	-	(2,658)	107,398
Investment properties Buildings and houses	21,080	11,849	27	-	-	32,956
Total investment properties (See Note 6)	91,381	51,516	115	-	(2,658)	140,354
Liabilities						
Provision - business combination	169,392	(34,551)	-	-	-	134,841
Total contingent consideration (See Note 28)	169,392	(34,551)	-	-	-	134,841

Amounts stated in millions of Colombian pesos

The recorded value and estimated fair value of the Group's assets and liabilities that are not recognized at fair value in the consolidated statement of financial position, but require disclosure at fair value, at 31 December 2020 and 2019 are as follows:

2020	Book value	Level 2	Total
Assets			
Utility Services	3,581,997	3,488,421	3,488,421
Employees	168,434	170,538	170,538
Construction contracts	598	482	482
Other accounts receivable	1,699,415	1,499,545	1,499,545
Total Assets	**5,450,444**	**5,158,986**	**5,158,986**
Liabilities			
Development bank loans	1,589,648	1,583,496	1,583,496
Multilateral bank loans	2,962,186	2,962,186	2,962,186
Commercial bank loans	6,006,780	6,539,779	6,539,779
Bonds and securities issued	13,691,688	14,392,309	14,392,309
Other liabilities	337,500	354,071	354,071
Total liabilities	**24,587,802**	**25,831,841**	**25,831,841**
Total	**(19,137,358)**	**(20,672,855)**	**(20,672,855)**

Amounts stated in millions of Colombian pesos

2019	Book value	Level 2	Total
Assets			
Utility Services	3,254,831	3,294,299	3,294,299
Employees	165,042	167,529	167,529
Construction contracts	2,001	2,001	2,001
Other accounts receivable	1,660,250	1,652,240	1,652,240
Total Assets	**5,082,124**	**5,116,069**	**5,116,069**
Liabilities			
Development bank loans	1,035,266	1,035,266	1,035,266
Other bonds and securities issued	9,648,198	9,648,198	9,648,198
Multilateral bank loans	3,594,944	3,594,944	3,594,944
Commercial bank loans	5,317,391	5,317,391	5,317,391
Bonds and securities issued	1,060,207	1,060,207	1,060,207
Total liabilities	**20,656,005**	**20,656,005**	**20,656,005**
Total	**(15,573,881)**	**(15,539,936)**	**(15,539,936)**

Amounts stated in millions of Colombian pesos

As of 31 December 2020 and 2019, there were no items in levels 1 and 3.

Note 47. Service concession arrangements

At the cut-off date, the Group, as operator, managed various concessions containing provisions for the construction, operation and maintenance of facilities, as well as the provision of public utilities such as water supply, wastewater collection and treatment, in accordance with applicable regulations.

The remaining period of the concessions where the Group acts as an operator is detailed below:

Company/agreement	Activity	Country	Concession period	Initial remaining period
Empresas Públicas de Medellín - Municipality of Itagüí.	Construction of water and sewage networks for the provision of service to the assigned neighborhoods. Construction of collector parallel to the La Jucta stream and sewage system on 36th Street at the height of Ditaires Park. Construction of the collector parallel to the coverage of La Muñoz creek.	Colombia	30 years (extendable)	27 years old
Empresas Públicas de Medellín - Municipality of Girardota	Transfer of hydraulic structures to provide sewage services in the municipality and provide sanitation to the Medellín River.	Colombia	20 years (extendable)	12 years old
Empresas Públicas de Medellín - Municipality of Copacabana	Provision of water and sewage services.	Colombia	20 years (extendable)	10 years
Empresas Públicas de Medellín - Municipality of Caldas.	Execution of works for the supply of drinking water, sewerage and provision of such services.	Colombia	30 years (extendable)	8 years
Empresas Públicas de Medellín - Municipality of Barbosa.	The Municipality undertakes to make available and facilitate the use of the networks and other infrastructure for the provision of water and sewage services.	Colombia	30 years (extendable)	7 years
Empresas Públicas de Medellín - Municipality of Envigado.	The Municipality undertakes to make available and facilitate the use of the networks and other infrastructure for the provision of water and sewage services.	Colombia	10 years (extendable)	7 years
Empresas Públicas de Medellín - Municipality of Sabaneta.	Provision of water and sewage services and construction of works for the provision of water and sewage services.	Colombia	10 years (extendable)	4 years
Empresas Públicas de Medellín - Municipality of La Estrella.	The Municipality undertakes to make available and facilitate the use of the networks and other infrastructure for the provision of aqueduct services.	Colombia	10 years (extendable)	4 years
Empresas Públicas de Medellín - Municipality of Bello.	Execution of works and provision of drinking water supply and sewerage services.	Colombia	10 years (extendable)	3 years
Aguas Regionales - Municipality of San Jerónimo".	Execution of works and provision of water supply and sewerage services.	Colombia	30 years	17 years
Aguas Regionales - Municipality of Santa Fe	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water supply and sewerage services.	Colombia	30 years	17 years
Aguas Regionales - Municipality of Sopetrán	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years
Regional Waters - Municipality of Olaya	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years

Company/agreement	Activity	Country	Concession period	Initial remaining period
Aguas Regionales - Municipality of Apartadó	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years
Aguas Regionales - Municipality of Carepa	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years
Aguas Regionales - Municipio de Chigorodó	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years
Aguas Regionales - Municipio de Mutatá	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years
Aguas Regionales - Municipio de Turbo	The Municipality undertakes to make available the movable and immovable assets that make up the system for the provision of water and sewage services.	Colombia	30 years	17 years
Aguas de Oriente - Municipio El Retiro	To operate and maintain the networks and other infrastructure received during the concept of an adequate provision of the service.	Colombia	No explicit duration period	
Adasa - Econssa Chile S.A.	Exploitation of public services of production and distribution of drinking water, collection and disposal of sewage and other services related to such activities.	Región de Antofagasta	30 years	13 years
Colima wastewater treatment plant.	Wastewater Treatment	México	34 years	22 years
Plantas de tratamiento de aguas residuales de Morelos y Tierra Negra, Tamaulipas.	Wastewater Treatment	México	24 years	21 years
Wastewater treatment plants in Morelos and Tierra Negra, Tamaulipas.	Wastewater Treatment	México	24 years	21 years
Atapaneo and Itzicuaros wastewater treatment plants, in Morelia.	Wastewater Treatment	México	27/14 years	16/9 years
Tuxtla and Paso el Limón wastewater treatment plants, in Tuxtla Gutiérrez.	Wastewater Treatment	México	18 years	13 years
Celaya wastewater treatment plant, Guanajuato.	Wastewater Treatment	México	18 years	10 years 5 months
Wastewater treatment plant in Torreón, Coahuila.	Wastewater Treatment	México	20 years	2 years 7 months

Service concession arrangements for the provision of water and sewage utilities

In Colombia:

The concession arrangements between the Group companies in Colombia and the municipalities establish the conditions under which the water and sewerage networks are managed, operated, and maintained to provide drinking water and wastewater treatment utilities to their inhabitants, under the terms, conditions, and rates established by the Commission for the Regulation of Drinking Water and Basic Sanitation – CRA -.

The agreements indicate the following rights and obligations for the companies of the Group as an operator in the service concession arrangement:

- The right to receive from the municipality the totality of the water and sewage networks and to have exclusivity as system operator.
- Obligation to make exclusive use of the water and sewage networks for the purposes for which they are intended, maintain and return them under the use conditions in which they were received.
- Some concession arrangements have the option to be renewed automatically for equal periods unless one of the parties expresses the intention not to continue.
- The concession arrangements do not establish the obligation of construction of property, plant and equipment elements.

Upon termination of the concession, the companies of the Group must return the water and sewage networks without any consideration to the municipalities. No changes have occurred in the terms of the concession arrangements during the period.

Obligations of Aguas del Oriente: Provide the aqueduct and sewerage services in the municipality of El Retiro in compliance with Law 142 of 1994 and the Resolutions issued by the Commission for the Regulation of Drinking Water and Basic Sanitation.

Obligations of the Municipality: Deliver the aqueduct and sewerage distribution networks to Aguas del Oriente as a bailment.

Obligations of the agreement: The expansion of the networks will be done in accordance with the regulations on the matter and will be in charge of the parties, who may do it directly or through the municipality in projects of greater coverage. The recoveries of said investments will be made by the parties under the schemes that for the purpose agree with the beneficiaries of the projects and in accordance with the provisions on this aspect contemplated by the Law. With resources from the tariffs, Aguas del Oriente will carry out the maintenance and replacement of networks and will do them under technical and economic criteria.

In Chile:

On December 29, 2003, Aguas de Antofagasta S.A., subscribed with Empresa de Servicios Sanitarios de Antofagasta S.A. (current Empresa Concesionaria de Servicios Sanitarios S.A. - Econssa S.A.) the "Contract for the Transfer of the Right to Exploit Sanitary Concessions", for a total term of 30 years from the date of its subscription.

As part of the contract that granted the concession to the Company, the latter received real estate, furniture, installations, water use rights and easements, which are used in the operation of the sanitary concessions. The Company is prohibited from assigning, encumbering, leasing or constituting any right in favor of third parties over the assets received through the concession, which must be returned to the Company at the end of the contract in the condition in which they were at the beginning of the arrangement ensuring its correct operation at all times. Subsequent investments made by the Company, in that part that cannot be recovered via tariffs because its estimated use exceeds the remaining term of the Sanitary Concession, will be recovered in that portion at the end of the concession, where ECONSSA Chile S.A. will reimburse these investments, since the investment reimbursement clauses are applicable, as indicated and established in the respective transfer contract signed.

As part of its obligations, the Company must present annually specific information on the assets of use maintained under a loan agreement, as well as new investments made within the framework established in the transfer contract signed between both Companies, including a cadaster of each and every one of the facilities and networks of the sanitation utilities for the production and distribution of drinking water and for the collection and disposal of sewage.

In México:

For Ticsa, as of December 31, 2020 and 2019, the Company manages as an operator various concession that contain provisions for the treatment of wastewater, during the concession period.

Note 48. Operating segments

48.1 Information by segments

For management purposes, the Group is organized into segments based on its products and services, and has the following eight operating segments on which information is presented:

- Electricity Generation Segment, which activity consists in the generation of electric power and commercialization of large electric power blocks, from the acquisition or development of a portfolio of power proposals for the market.
- Electricity Distribution Segment, which activity consists in transporting electric power through a set of lines and substations, with their associated equipment, which operate at voltages below 220 kv, the commercialization of energy to the end user of the regulated market and the development of related and complementary activities. it includes the Regional Transmission System (STR), the Local Distribution System (SDL), the public lighting utility and the provision of associated services.
- Electricity Transmission Segment, which activity consists in the transportation of energy in the National Transmission System (STN), consisting of the set of lines, with their corresponding connection equipment, operating at voltages equal to or greater than 220 KV. The National Transmitter (TN) is the legal entity that operates and transports electricity in the STN or has established a company whose purpose is the undertaking of such activity.
- Segment of Natural gas distribution and commercialization, which activity consists of the gas conduction from the city gate to the final user, through medium-pressure and low-pressure pipes. It includes the sale of natural gas by different systems, among them distribution by network, vehicular natural gas, compressed natural gas and service stations.
- Water Segment, which activity consists of conceptualizing, structuring, developing and operating systems to provide water. It includes performing commercial management of the portfolio of services related to water supply for different uses, in addition to the use of the productive chain, specifically in the production of energy, and the supply of raw water.
- Sewage Segment, includes the activities of conceptualizing, structuring, developing and operating wastewater and solid waste management systems, in addition to the use of the production chain, specifically in the production of energy and gas.
- Waste Management Segment, includes performing commercial management related to these services and the use of biosolids and other byproducts of wastewater treatment and solid waste management.
- Others Segment, which corresponds to the other activities not included in the segments mentioned above. Comprises: Entidad Adaptada de Salud (EAS) and Medical and Dental Services Unit, billing and collection services for third parties, income received

from investment properties (leases), social financing, EATIC Laboratory tests, provision of the specialized transport service and services associated with information and communication technologies, information services and related activities.

The Group has not added operating segments to conform these eight reportable segments; however, it performs the activity of energy sale, which consists in the purchase of electricity in the wholesale market and its sale to other market agents or to regulated or non- regulated end users. Therefore, the Group includes its financial information in the corresponding segments of this activity.

Management supervises the results of operating segments separately in order decide on the allocation of resources and assess their performance. Each segment performance is assessed on the basis of the profit or loss from operations before taxes and discontinued operations and is measured uniformly through profit or loss from operations of the Consolidated Financial Statements.

Transfer prices between operating segments are agreed as between independent parties in a manner similar to that agreed with third parties.

2020	Generation	Transmission	Distribution	Natural Gas	Water supply	Wastewater management	Solid waste management	Other segments	Total segments	Intersegment eliminations	Consolidated
Revenues from external customers	3,420,762	245,548	12,551,721	926,653	1,321,895	930,067	247,864	154,402	19,798,912	-	**19,798,912**
Inter-segment revenues	1,596,162	108,711	490,680	252,990	32,524	20,584	1,514	92,494	2,595,659	(2,595,659)	-
Total net income	**5,016,924**	**354,259**	**13,042,401**	**1,179,643**	**1,354,419**	**950,651**	**249,378**	**246,896**	**22,394,571**	**(2,595,659)**	**19,798,912**
Costs and expenses excluding depreciation, amortization, provisions and impairment of PP&E and intangibles	(3,015,989)	(84,830)	(10,416,048)	(1,047,372)	(688,451)	(396,126)	(181,471)	(249,882)	(16,080,169)	2,526,436	**(13,553,733)**
Depreciation, amortization, depreciation, provisions and impairment of PP&E and intangibles	(543,146)	(52,907)	(740,765)	(21,369)	(222,046)	(119,742)	(39,304)	(23,527)	(1,762,806)	34,914	**(1,727,892)**
Impairment of accounts receivable	150	388	(257,476)	18	(10,489)	(8,614)	(1,974)	(23,652)	(301,649)	6,178	**(295,471)**
Other expenses	(17,033)	(945)	(33,020)	(784)	(12,871)	(5,938)	(106)	(23,137)	(93,834)	1,647	**(92,187)**
Interest and yield income	23,011	784	84,431	2,349	17,488	57,738	3,319	32,001	221,121	(117,916)	**103,205**
Interest income (other than interest and yields)	13,302	407	13,560	4,655	2,452	8,171	4,290	7,208	54,045	23	**54,068**
Total interest income	36,313	1,191	97,991	7,004	19,940	65,909	7,609	39,209	275,166	(117,893)	**157,273**
Interest expense	(230,332)	(42,443)	(344,291)	(44,263)	(115,168)	(136,886)	(4,035)	(317,507)	(1,234,925)	125,960	**(1,108,965)**
Interest expense (other than interest)	(73,313)	(483)	(24,668)	(3,023)	(42,073)	(8,055)	(4,966)	(3,447)	(160,028)	1,361	**(158,667)**
Total interest expense	(303,645)	(42,926)	(368,959)	(47,286)	(157,241)	(144,941)	(9,001)	(320,954)	(1,394,953)	127,321	**(1,267,632)**
Net foreign exchange difference	(288,061)	(36,629)	(63,162)	(10,088)	(8,783)	(25,058)	2	57,278	(374,501)	241	**(374,260)**
Equity method in income of associates and joint ventures	-	-	-	-	-	-	-	(91,970)	(91,970)	-	**(91,970)**
Effect of equity in equity investments	-	-	2,657	-	-	4	-	1,662,149	1,664,810	(15)	**1,664,795**
Profit or loss for the period before income tax	**885,513**	**137,601**	**1,263,619**	**59,766**	**274,478**	**316,145**	**25,133**	**1,272,410**	**4,234,665**	**(16,830)**	**4,217,835**
Income tax	(50,589)	(28,657)	(376,030)	(18,419)	(9,571)	(21,849)	(4,525)	(186)	(509,826)	10,798	**(499,028)**
Net movement in regulatory accounts related to income for the period	-	-	22,111	-	-	-	-	-	22,111	-	**22,111**
Net profit or loss for the period	834,924	108,944	909,700	41,347	264,907	294,296	20,608	1,272,224	3,746,950	(6,032)	3,740,918
Total assets without investments in associates and joint ventures and debit balances of deferred regulatory accounts	22,588,907	2,098,540	19,844,621	1,398,421	7,356,873	5,726,492	360,276	14,390,309	73,764,439	(11,661,919)	**62,102,520**
Investments in associates and joint ventures accounted for under the equity method of accounting	-	-	-	-	-	-	-	1,675,500	1,675,500	-	**1,675,500**
Deferred assets related to regulatory account balances	-	-	767	-	-	-	-	-	767	-	**767**
Total assets and liabilities related to deferred	**22,588,907**	**2,098,540**	**19,845,388**	**1,398,421**	**7,356,873**	**5,726,492**	**360,276**	**16,065,809**	**75,440,706**	**(11,661,919)**	**63,778,787**
Total liabilities	13,299,839	1,200,295	11,525,504	924,461	3,866,868	2,391,988	300,677	5,197,020	38,706,652	(2,055,288)	**36,651,364**
Deferred liabilities related to regulatory account balances	-	-	230	-	-	-	-	-	230	-	**230**
Total liabilities and credit balances of deferred regulatory accounts	13,299,839	1,200,295	11,525,734	924,461	3,866,868	2,391,988	300,677	5,197,020	38,706,882	(2,055,288)	**36,651,594**
Additions to non-current assets	1,578,138	122,021	1,092,752	14,468	604,313	299,871	22,883	92,615	3,827,061	-	**3,827,061**

Amounts stated in millions of Colombian pesos

2019	Generation	Transmission	Distribution	Natural Gas	Water supply	Wastewater management	Solid waste management	Other segments	Total segments	Intersegment eliminations	Consolidated
Revenues from external customers	2,782,352	227,603	11,939,830	865,312	1,185,344	889,999	248,073	221,101	18,359,614	-	**18,359,614**
Inter-segment revenues	1,265,114	75,513	502,395	30,701	41,113	53,849	991	69,396	2,039,072	(2,039,072)	-
Total net revenues	**4,047,466**	**303,116**	**12,442,225**	**896,013**	**1,226,457**	**943,848**	**249,064**	**290,497**	**20,398,686**	**(2,039,072)**	**18,359,614**
Costs and expenses excluding depreciation, amortization, provisions and impairment of PP&E and intangibles	(1,887,185)	(78,370)	(9,502,222)	(781,950)	(609,685)	(417,656)	(169,490)	(240,860)	(13,687,418)	1,863,996	**(11,823,422)**
Depreciation, amortization, depreciation, provisions and impairment of PP&E and intangibles	(325,986)	(46,798)	(615,629)	(20,133)	(186,240)	(99,008)	(36,616)	(28,454)	(1,358,864)	27,687	**(1,331,177)**
Impairment of accounts receivable	(3,742)	532	(48,562)	2,092	(6,760)	(9,282)	528	(11,994)	(77,188)	(613)	**(77,801)**
Other expenses	(172,133)	(634)	(28,517)	(1,329)	(9,177)	(4,697)	(2,341)	(790)	(219,618)	62,151	**(157,467)**
Interest and yield income	52,503	1,339	155,218	42,704	41,736	93,690	6,420	69,662	463,272	(183,050)	**280,222**
Interest income (other than interest and yields)	29,605	2,769	23,264	9,322	5,494	6,963	2,880	13,918	94,215	(3,600)	**90,615**
Total interest income	82,108	4,108	178,482	52,026	47,230	100,653	9,300	83,580	557,487	(186,650)	**370,837**
Interest expense	(328,013)	(51,113)	(347,771)	(50,387)	(89,027)	(155,555)	(5,783)	(314,983)	(1,342,632)	210,819	**(1,131,813)**
Interest expense (other than interest)	(28,388)	(2,188)	(36,124)	(3,223)	(40,685)	(7,575)	(5,626)	(18,652)	(142,461)	(16,008)	**(158,469)**
Total interest expense	(356,401)	(53,301)	(383,895)	(53,610)	(129,712)	(163,130)	(11,409)	(333,635)	(1,485,093)	194,811	**(1,290,282)**
Net foreign exchange difference	(34,376)	4,668	(10,546)	(3,889)	(909)	457	2	(11,265)	(55,858)	(25)	**(55,883)**
Equity method in income of associates and joint ventures	-	-	-	-	-	-	-	15,620	15,620	(3,827)	**11,793**
Effect of equity in equity investments	-	-	1,829	-	-	-	-	9,235	11,064	(1,337)	**9,727**
Income for the period before taxes	**1,349,751**	**133,321**	**2,033,165**	**89,220**	**331,204**	**351,185**	**39,038**	**(228,066)**	**4,098,818**	**(82,879)**	**4,015,939**
Income tax	(312,388)	(28,606)	(661,617)	(26,605)	(23,726)	(44,399)	(10,716)	232,774	(875,283)	65,084	**(810,199)**
Discontinued operations, net of income taxes	(243)	116	-	-				20,554	20,427	27,818	**48,245**
Net movement in regulatory accounts related to profit or loss for the period	-	-	(98,009)	-	-	-	-	-	(98,009)	-	**(98,009)**
Net income for the period	1,037,120	104,831	1,273,539	62,615	307,478	306,786	28,322	25,262	3,145,953	10,023	3,155,976
Total assets without investments in associates and joint ventures and debit balances of deferred regulatory accounts	20,970,368	1,992,608	15,783,112	1,159,540	6,198,019	5,339,015	384,290	11,221,096	63,048,048	(9,914,126)	**53,133,922**
Investments in associates and joint ventures accounted for under the equity method of accounting	-	-	-	-	-	-	-	1,758,544	1,758,544	-	**1,758,544**
Deferred assets related to regulatory account balances	-	-	7,683	-	-	-	-	-	7,683	-	**7,683**
Total assets and deferred regulatory account balances due from regulatory accounts	**20,970,368**	**1,992,608**	**15,790,795**	**1,159,540**	**6,198,019**	**5,339,015**	**384,290**	**12,979,640**	**64,814,275**	**(9,914,126)**	**54,900,149**
Total liabilities	11,952,920	1,176,126	9,612,610	688,746	2,973,592	2,328,239	320,061	4,412,121	33,464,415	(2,768,836)	**30,695,579**
Deferred liabilities related to regulatory account balances	-	-	25,610	-	-	-	-	-	25,610	-	**25,610**
Total liabilities and credit balances of deferred regulatory accounts	11,952,920	1,176,126	9,638,220	688,746	2,973,592	2,328,239	320,061	4,412,121	33,490,025	(2,768,836)	**30,721,189**
Additions to non-current assets	1,664,109	167,281	1,049,709	20,276	635,256	296,410	16,225	121,432	3,970,698	-	**3,970,698**

Amounts stated in millions of Colombian pesos

48.2 Information by geographic area

Income outer customers

Country	2020	2019
Colombia (country of domicile of EPM)	13,330,791	11,548,671
Guatemala	2,591,468	2,427,919
Panama	2,117,722	2,469,950
El Salvador	922,197	1,043,549
Chile	639,210	541,341
Mexico	159,325	316,024
Ecuador	10,095	402
Bermuda	32,073	15,148
International intersegment eliminations	(3,969)	(3,390)
Total countries other than Colombia	**6,468,121**	**6,810,943**
Total consolidated revenues	**19,798,912**	**18,359,614**

Amounts stated in millions of Colombian pesos

Income information is based on customer´s location.

There is no customer in the Group who generates more than 10% of its income.

Non-current assets

Country	2020	2019
Colombia (country of domicile of EPM)	34,737,721	32,823,008
Chile	3,573,899	3,074,627
Panama	2,419,912	2,365,809
Guatemala	2,531,817	2,367,158
El Salvador	359,724	348,644
Mexico	1,621	12,627
Total countries other than Colombia	**8,886,973**	**8,168,865**
Total non-current assets	**43,624,694**	**40,991,873**

Amounts stated in millions of Colombian pesos

For these purposes, non-current assets include property, plant and equipment, intangible assets and investment property including assets from the acquisition of subsidiaries and goodwill.

Note 49. Events after the Reporting Period

Environmental sanction of the National Environmental Licensing Authority - ANLA to the Ituango Hydroelectric Project:

On January 15, 2021, ANLA issued Resolution No. 00172 that fully confirms the decision adopted in the first article of Resolution No. 2854 of December 30, 2019, which imposes an environmental penalty of $5,510 and other determinations are made, in facts or omissions that occurred in the framework of the development of the project "Construction, filling and operation of the Pescadero - Ituango hydroelectric project". Said sanction does not represent an adjustment to the figures of the consolidated financial statements as of December 31, 2020, since it was recognized for the same amount as a provision liability.

Direct repair Ríos Vivos Movement Colombia:

Through a request for direct reparation, 632 individualized persons, who belong to the Movement Ríos Vivos seeks a prior declaration of responsibility for the alleged violation of rights environmental, cultural, social and human, as well as against the impact of the solidarity economy and living conditions of the population on the occasion of the Ituango Hydroelectric project and the contingency that was presented in the same, in addition to the assumption by all the defendant entities of measures satisfaction in favor of the affected communities, all damages are recognized and paid patrimonial and extra-patrimonial caused to each of the summons (plaintiffs). The amount of the claims amount to $ 705,854.

After the date of presentation of the condensed consolidated interim financial statements and before the date of authorization of their publication, no other relevant events were presented that would imply adjustments to the figures.

Grupo EPM certification

Back to content

CERTIFICATION OF FINANCIAL STATEMENTS

Medellín, March 23, 2021

To the Board of Directors of Empresas Públicas de Medellín E.S.P.

We, the undersigned, in our capacity as the Legal Representative and Accountant of Empresas Públicas de Medellín E.S.P., hereby certify that the balances of the consolidated Financial Statements of Empresas Públicas de Medellín E.S.P. and its subsidiaries at December 31, 2020 and 2019, were faithfully taken from the accounting books, which are prepared in accordance with the Accounting and Financial Reporting Standards accepted in Colombia (NCIF, for the Spanish original) and adopted by the General Accounting Office of Colombia through Resolution 037/2017 and its amendments. These accounting and financial reporting standards are based on the International Financial Reporting Standards issued by the International Accounting Standards Board (IASB), as well as interpretations issued by the Interpretations Committee, adopted in Colombia through Decree 2420/2015 and its amendments.

We certify that the assertions contained in the consolidated Financial Statements were verified for accuracy in relation to:

a) All economic events that have occurred during the reporting period have been properly recorded for their due recognition in the appropriate amounts and accounts, measured at fair value and adequately disclosed.

b) That economic events are classified, presented and disclosed in accordance with accounting and financial reporting standards.

c) All assets, liabilities and equity in the consolidated financial statements represent the existence of assets, rights and obligations and have been valued at the appropriate amounts.

d) The disclosures or accounting notes are prepared clearly and in accordance with accounting and financial reporting standards.

The Consolidated Financial Statements do not contain any defects, inaccuracies or misstatements that would prevent the true financial position and financial performance of the Entity and its subsidiaries from being known.

Mónica María Ruiz Arbeláez
Acting Legal Representative

John Jaime Rodríguez Sosa
Public Accountant
Professional License No. 144842-T

KPMG S.A.S.
Calle 2 No. 20 – 50, Piso 7, Edificio Q Office
Medellín - Colombia

Teléfono 57 (4) 3556060
home.kpmg/co

INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Empresas Públicas de Medellín E.S.P.:

Opinion

We have audited the consolidated financial statements of Empresas Públicas de Medellín E.S.P. (the Group), which comprise the consolidated statement of financial position as of December 31, 2020, the consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and the notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements, present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2020, and its consolidated financial performance of its operations and its consolidated cash flows for the year then ended, in accordance with the Accounting and Financial Reporting Standards accepted in Colombia adopted by the Nation's General Accounting Office through resolution 037 of 2017 and resolution 056 of 2020, applied consistently with the previous year.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing accepted in Colombia (ISAs). Our responsibilities under those standards are further described in the "Auditors' Responsibilities for the Audit of the Consolidated Financial Statements" section of our report. We are independent with respect to the Group, in accordance with the Code of Ethics for Accounting Professionals issued by the International Ethics Standards Board for Accountants (IESBA Code) included in the Information Assurance Standards accepted in Colombia together with the ethical requirements that are relevant to our audit of the consolidated financial tatements established in Colombia and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code mentioned above. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter

We draw attention to note 5 to the consolidated financial statements, which describes the events that occurred at the Ituango Hydroelectric Project and their impact on the financial statements. The root causes of the mentioned events are still being evaluated by the Company and the relevant control and surveillance agencies, therefore the final result cannot be determined at present and consequently no further effect on the Group's consolidated financial statements is foreseen. Our opinion is not modified because of this matter.

© 2021 KPMG S.A.S., sociedad colombiana por acciones simplificada y firma miembro de la red de firmas miembro independientes de KPMG afiliadas a KPMG International Limited, una entidad inglesa privada por garantía. Todos los derechos reservados.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Evaluation of the Impairment of the Cash Generating Unit - Power Generation (See notes 2.24 and 8.2 to the consolidated financial statements)	
Key Audit Matter	**How our audit addressed the key audit matter**
The Company's consolidated statement of financial position includes property, plant and equipment, net and intangible assets for Ch$16,773,466 million associated with the cash generating unit (CGU) of Power Generation. For the impairment assessment, the Financial Planning and Analysis Department establishes the value in use considering the calculations generated by the HSF - Oracle application and the base information for the determination of the financial projections of the businesses is approved by the respective Vice-Presidencies and annually ratified by the Board of Directors. We consider the evaluation of the impairment of the Cash Generating Unit - Power Generation as a key audit matter, because it involves complex judgment elements by the Company such as: (i) the methodology used and calculations performed for the estimation of the value in use and (ii) the relevant inputs and assumptions used in the model such as: (1) the historical behavior of certain base variables for the projection; (2) the discount rates applied and macroeconomic variables used (3) the projection period and (4) the perpetual growth gradient.	Our audit procedures to evaluate the impairment of the cash generating unit - Power Generation included, among others, the following: Evaluation of the design, implementation and operative effectiveness of controls established by the Group to calculate CGU impairment. This included controls associated with the approvals of key operating assumptions included in the financial projections for the determination of value in use by the Vice President of each business and the Board of Directors. With the involvement of professionals with experience and knowledge in the evaluation of information technology, automatic controls associated with the proper administration and management of access to the HSF application were evaluated to ensure the integrity and protection of historical information and the configuration of the financial projection model. - Involvement of professionals with knowledge and experience in valuation who assisted us in: (i) the evaluation of the methodology used to estimate the value in use and the development of independent recalculations, and (ii) the evaluation of the following input data and relevant assumptions used in the model: (1) historical behavior of

	certain base variables for the projection; (2) discount rates and macroeconomic variables; (3) projection period; and (4) the perpetual growth gradient.
Evaluation of the adequacy of provisions for litigation and adequate evaluation of contingent liabilities (See notes 28.1.3 and 28.3 to the consolidated financial statements).	
Key audit matter	**How our audit addressed the key audit matter**
The Group is involved in certain tax and legal proceedings. The Company records provisions for these proceedings when it is probable that an outflow of resources will be required to settle a present obligation and when the amount of the outflow can be estimated. The Group discloses a contingency when the probability of loss related to such proceedings is considered possible or when it is considered probable, but the amount of the disbursement cannot be reliably estimated. The Group's consolidated statement of financial position includes provisions for litigation of $300,056 and the notes to the financial statements disclose contingent liabilities of $1,614,826 million. The valuation of these provisions and contingent liabilities requires the Group to make significant judgments on the probability of judgment in administrative, tax and labor proceedings, as well as the determination of the amounts of the obligations to be paid based on the claims and the related estimated dates of payment. We have considered the evaluation of the adequacy of provisions for litigation and contingencies as a key audit matter because it requires significant judgment and effort. Specifically, because of the nature of the estimates and assumptions, including judgments about the probability of loss and the amounts that would be paid in the event of unfavorable outcomes.	Our audit procedures for the evaluation of the adequacy of provisions for litigation and contingent liabilities included, among others, the following: - Understanding of the processes established by the Group for the estimation of provisions for litigation and determination of contingent liabilities including the evaluation of the design, implementation and effectiveness of relevant controls, such as: (i) compliance with professional profiles of lawyers, established by the entity for the handling of litigation according to their complexity and specialty, (ii) evaluation by the Conciliation Committee of the probability of judgment as well as the claims of administrative, tax and labor litigation that resulted in a judgment, (iii) reconciliation of the report generated from the repository of litigation and disputes of Maya legal management against the records of the accounting application JDEdwards. - Evaluation of the competence and capacity of professionals with internal and external expertise, which determined the probability of loss and the estimated amount of disbursement in each litigation. - Confirmation from the Group's internal and external lawyers on the probability of judgment and the status of current proceedings.

	- Selection of a sample of the main litigations to analyze the supporting documentation with the involvement of professionals with experience and knowledge in administrative, tax and labor law, who assisted us in: • The legal analysis of the supporting documents of the lawsuits, the probability of judgment indicated by the Company and the estimated amount. • The analysis of the possibility for the Company to file an appeal against the judicial decision, according to the current situation of each of the selected cases. - Evaluation of the disclosures included in the notes to the consolidated financial statements in accordance with the applicable financial reporting framework.

Other Matters

The consolidated financial statements as of and for the year ended December 31, 2019 are presented solely for comparative purposes, were audited by us and in our report dated March 26, 2020, we expressed an unqualified opinion on them and included an emphasis of matter paragraph related to the events that occurred in the Ituango Hydroelectric Project, a situation that to date remains.

Other Information

Management is responsible for the other information. The other information comprises the information included in the management report, but does not include the consolidated financial statements and our related auditors' report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether there is a material inconsistency between that information and the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

Back to content

If, based on the work we have performed, we conclude that there is a material misstatement in this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibility of management and of personnel responsible for the corporate governance of the Group for the consolidated financial statements.

Management is responsible for the preparation and reasonable presentation of this consolidated financial statements in accordance with Accounting and Financial Reporting Standards accepted in Colombia adopted by the Nation's General Accounting Office through resolution 037 of 2017 and resolution 056 of 2020. This responsibility includes: designing, implementing and maintaining such internal control as management deems is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and establishing accounting estimates that are reasonable in the circumstances.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and for using the going concern basis of accounting, unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to proceed in one of these ways.

The personnel responsible for the corporate governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit conducted in accordance with ISAs, we exercise professional judgment and maintain professional skepticism during the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one arising from error, because fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Back to content

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of the management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the consolidated financial statements give a true and fair view.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express our opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group's audit. We remain solely responsible for our audit opinion.

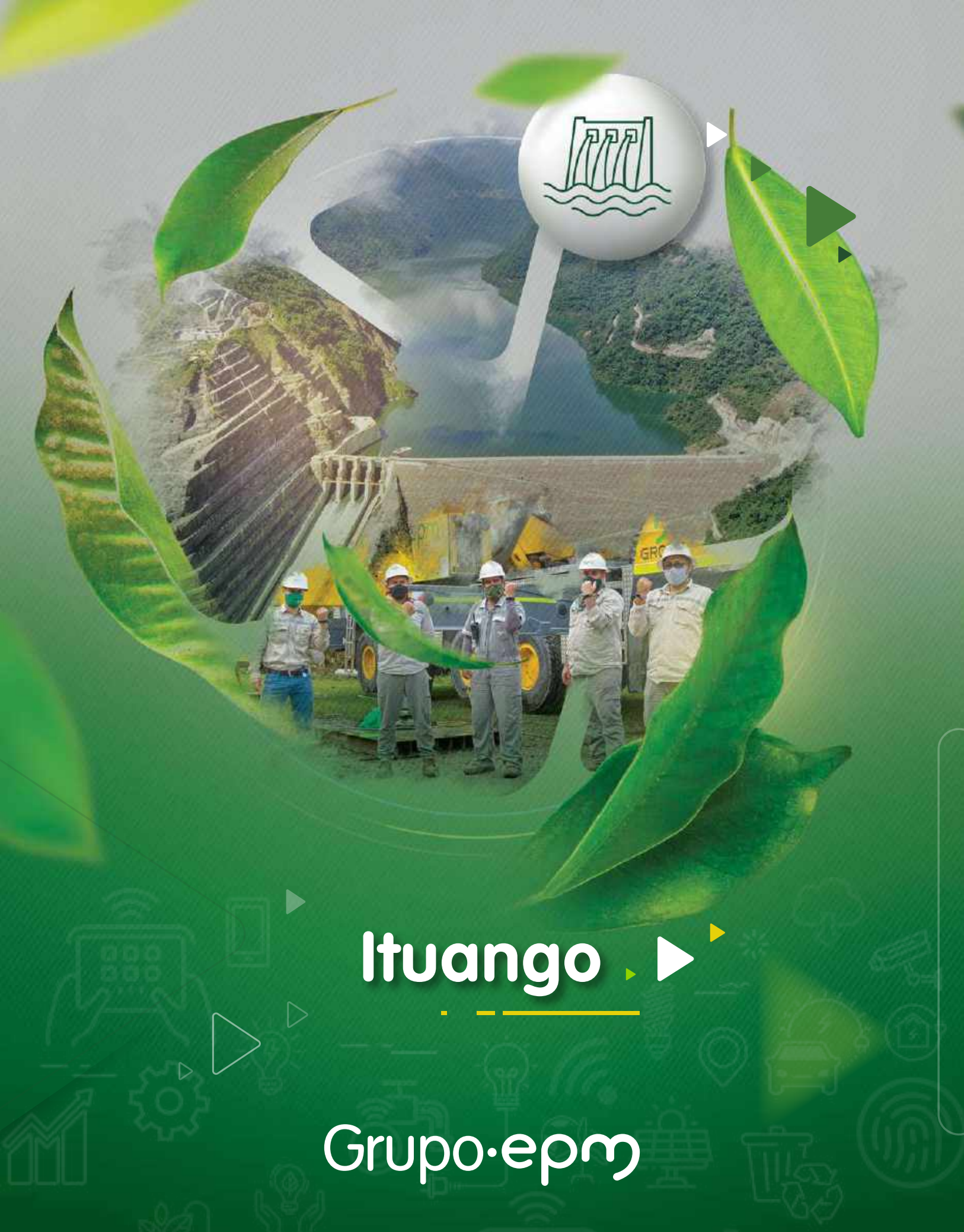
We communicate to those charged with governance of the Group, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with corporate governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

KPMG S.A.S.
March 23, 2021
Medellín

Back to content



Ituango

Grupo·epm

Introduction

Ituango Hydroelectric Project: a commitment to the country

2020 meant that, every continent on the planet, people, companies, and projects had to face a pandemic generated by COVID-19, which this year caused the decease of more than 2 million people in the world and notably affected all human activities.

The Ituango Hydroelectric Project - PHI was not immune to this situation, the virus outbreak caused a reduction in personnel on the different work fronts, both from the various contractors and EPM's own personnel. Additionally, the pandemic has delayed or prevented the supply of basic elements and equipment that came from other countries, mainly China, Spain and Brazil, places where the health emergency meant the closure of industries and businesses. Coping with the pandemic has been a difficult issue for any company or project, but in the specific case of PHI, an additional factor must be considered: **address the pandemic in the midst of a contingent event.**

Between May 2 and 5, 2020, the first three positive cases for COVID-19 were known in the PHI, without being clear about how these people were infected since they were physically in the Project. This made it necessary to propose defense strategies, protocols, and actions, in such a way that the workers population had to be reduced from 4,318 to 1,000 and at the same time a new challenge had to be faced: guaranteeing the continuity of works and minimum-security activities in the Project.

The articulation of national, regional and local efforts, the preexistence, since 2012 of an Epidemiological Surveillance System (SVE) in the Project, the existence since 2016 of a contingency plan that included a health contingency scenario and compliance with the agreements established with the municipality of Medellín and the Antioquia Government, who have significantly contributed to manage the situation.

The challenge that the COVID-19 pandemic has represented for the Project, has been and continues being the need to develop the essential works for the protection of the communities downstream the dam site, while preventing the contagion of the neighboring populations, enable the recovery of positive cases and avoid COVID-19 fatalities in the Project.

This is why EPM took the following preventive measures:

- Activation of the PMU Unified Command Post that led the formulation of a guide or protocol for containment and management of possible COVID -19 cases.
- Development and implementation of the ArcGIS tool with a physical and mental health survey where each of the Project workers records daily his location, physical and mental

health symptoms, as well as contact with positive people or health workers, among other variables, which allow to identify and characterize the employees and make the epidemiological barrier if necessary.

- Implementation of proximity handles, which transfer the proximity information between handles at less than 2 meters and their contact time, the data collected is downloaded by EPM medical personnel to determine the close contacts and activate the respective isolation protocols if necessary.
- Formation and activation of a team constantly evaluating the risks and necessary controls inside and outside the camp.
- Articulation to receive experts support on the subject: Colombian Red Cross; Universidad de Antioquia, which since 2012 had been implementing an Epidemiological Surveillance System (SVE) as part of the Environmental License obligations, in charge of the Project Contingency Plan, among others.
- The different contractor's actions were articulated to the Sectional Health Service guidelines of the Government of Antioquia, and the digital platform from the Mayor's Office in Medellín called "Medellín takes care of me", the demand for timely health services and the respective EPS, IPS and ARL coverage.
- Contribution to the reactivation opportunity from the hotel sector, since COVID-19 positive patients were transferred to several of these establishments in the city of Medellín, to facilitate timely care and access to high-level hospitals and ICUs.
- Formation of work bubbles to reduce the spread of COVID-19 between different work groups, withdrawal of personnel with pre-existing health issues, or over 60 years of age to work at home, social distancing, activation of disinfection programs, updating biosafety protocols and activating protocols for entering and leaving the Project, modification of work shifts, among others.

These actions were evaluated daily, complementing them with a timely communication strategy aimed at stakeholders, conducting COVID-19 tests to 100% of the Project population, a shift strategy with staff rotation according to the colored traffic light, developed to classify positive cases, suspects and those free of COVID -19, the increase in ambulances, medical staff, and resources in charge of EPM.

Additionally, all the work carried out, the established protocols and the implemented actions, were shared with the mayors, municipal councils, health sections and all the Project's stakeholders.

> *From the National Government we will continue accompanying this important Project essential for national energy security to guarantee the energy supply in the coming years and we see with satisfaction that the drawn-up schedule is being met after the contingency.*
>
> ▶ ***Diego Mesa Puyo***
> *Minister of Mines and Energy, Colombia*

> *An important engineering task in our country's history, and clearly a sign of progress of what EPM is, not only in Antioquia's development but also in the development of the entire country in terms of energy and essential Public Services.*
>
> ▶ ***Miguel Lotero Robledo***
> *Vice Minister of Mines and Energy, Colombia*

> *I am proud of what you have achieved since May 2018, definitely the resilience of the entire EPM team is worthy of pride, and admiration. Congratulations.*
>
> ▶ ***Juan Emilio Posada Echeverri***
> *Presidential Advisor for Management and Compliance, Colombia*

Sustainability Report 2020

Relevant milestones 2020

1. Work progress: 80.62 %
2. Accumulated cost: COP 11,9 Billions
3. Investment in improving the living conditions of families: COP 59,468 Millones
4. Extracted material volume accumulated in the reservoir: 412,887.76 m^3
5. Returned families: 95 %
6. Early Warning Systems installed: 133

- ✓ Began the manufacture of turbines, generators, and other minor equipment for the generation units
- ✓ Cavity filling between Pits 1 and 2

- ✓ Continuity in the construction of the Project and start-up, considering the information provided to the National PMU to control the reservoir energy dissipation.

Extension of the three main contracts. Advice, supervision, and construction of main works **until December 2021**

- ✓ Payment of an **additional USD 100 million** for the All Risk, Design and Assembly insurance.
- ✓ Payments for an **additional COP 8,667 million** in the Non-contractual Civil Respect insurance

Containment and Mitigation of COVID-19, reducing the NUMBER of positive cases to **1% of the almost 6,000 workers** currently active in the Project

Recognition for the degree of **commitment and quality** of EPM's environmental and social team, for facing in an exemplary way the challenges resulting from COVID-19

Grupo·epm

Back to content

1. Technical advance

Volver al contenido

1. Technical advance

In the Ituango Hydroelectric Project, progress is being made without pause to generate the energy that Colombia needs. As of December 31, 2020, the Project reached a general progress in physical work of 80.62%, which contributes to comply with Resolution 820 of 2018 of the National Environmental Licensing Authority and focuses on the protection of the communities downstream the Dam site to guarantee the Project's integrity, prevent and mitigate associated risks.

During 2020, the following stand out as main milestones:

1.1 Civil works progress

In the dam, treatments were completed on the dam's left bank slope, continue injections to consolidate the dam's CORE from left bank galleries, drilling and injection of deep curtain boreholes, also building the drainage works in the downstream dam's crestwall, as well as the construction of filters and infiltration meters.

Sloping top of the replacement via Ituango-Dam, left margin km 0 + 900 m 1 + 190, continue drilling and installation of 10 m drainage.

In the intermediate discharge, the construction of the by-pass system continues from the auxiliary deviation gallery GAD and from the Right Deviation Tunnel - TDD. Rebar supports and anchor blocks are currently being built to dock the pipeline. During the period, the growth of cap "A" was carried out in gallery 285 with 83.7 m in length, in addition, the concrete pouring continues for the discharge cap 12 regrowth.

In the access gallery to the GAD gate chamber, the slab's lining concrete was completed, in addition, the channel construction for infiltration management was finished.

In the construction of the pre-cap 2 for the closure of the right deviation tunnel, the primary perforations and injections and the secondary perforations were completed. Secondary injections, punctures, and tertiary injections, drilling for slurries released or granular material, continue.

Construction of pre-cap 2 micropiles, 48 pipes were drilled and installed for micropiles, out of a total of 58, for an 83% progress, in addition, the micropiles consolidation injections began. On the other hand, progress was made with the verification drilling and with the manufacture of the nylon spheres, as well as with the platform assembly in a metallic structure for the sphere's storage.

Hollow between pressure Pits 1 and 2: this hole was filled with concrete, with a total volume of 59.491 m³, at 72.5 m elevation. In the pressure Pit 2, the demolition and sediments removal were completed, the lower elbow where excavations will be made was reached to proceed with the shielding. In Pit 1, material excavation continued to reach the lower elbow.

Due to topography adjustments and design updates, the excavation volume increased in the gate square upper part. 375,592 / 392,438 m³ have been excavated, 95.7%. The excavation is partially between levels 607 and 597.

North zone powerhouse, the gable treatments of units 1 and 2 were completed. In unit 1, the shielding cutting, and removal was completed, and the first soak empties of aspiration tube 1 were made at 192 meters above sea level. In addition, the installation of support elements and activities for the downstream wall began. In units 3 and 4 progress was made with the demolitions, in unit 3 the demolition of the generator enclosure walls was completed.

On the other hand, the first entry of ferrules to the powerhouse for the assembly of the aspiration tube of unit Nº. 1 was registered.

Powerhouse in southern area continue leveling and compacting floor, installing reinforcing steel and pouring concrete in temporary slab to be mounted by General Electric at 217.25 level between units 5 and 6 gable downstream.

Other activities were recorded in the powerhouse, such as the completion of the temporary 25-tonne overhead crane assembly and the continuation of the 300-tonne overhead crane assembly.

Transformer cavern: the transformers dismantling was completed, the treatments began in the cells, progress was made with the erection of scaffolding to make slab formwork in the north zone, in addition to cutting and demolishing the slab at 227.50 height in south zone km 0 + 145/160. In the upper smoke gallery, treatments and perforations for consolidation injections were started.

Beacon 1: the beacon portal demolition and the gable treatments were completed; the first concrete casting was carried out in the foundation beam. In hole 2, the main treatments were completed, additional treatments were started; In the cavity towards the machine cavern, the construction of the expanded mesh plug and the bracing of modules between 221/205 heights continued.

Beacon 2: excavation of the aeration gallery towards beacon 2 has been completed. Progress was made with the gallery widening.

Central downloads: Material removed from discharge tunnels, with 185.127 /288.000,0 m³, 64,3%. In discharge tunnel 2, the treatments inside the tunnel began, with removal of material, shear cleaning, shotcrete, and mesh.



1.2 Electromechanical equipment assembly advance

Supply of 2 300-tonne overhead cranes for the powerhouse, the two overhead cranes are already in the Project's Tenerife warehouse.

The replacement of 19 500 kV power transformers with their associated equipment was carried out, as well as customs management for the delivery of 7 transformers in 2021.

Supply and replacement of 10 energy cables of 500 KW with their associated equipment: With this delivery, the cables and associated equipment of the 8 generating units remain complete and in EPM's warehouse.

Turbines supply affected generators and the built-in units 1 to 7. Advances were made in the suction tube U2 manufacture, the phase ducts of U4, U3 and U2, the spiral chamber and stationary ring of the U2, casting the Francis runners of U3 and U4; and in the manufacture of the U4 moving blades. Ferrules 209F to 213F were received at the powerhouse. Pre-

assembly, leveling and alignment of sections 212F and 213F was carried out for unit 1 in the underground energy plant.

Supply and services of metal shields (pit, lower tunnel, and ecological flow system): we continued with the equipment assembly in the workshop, corresponding to the rolling machine and the surface preparation system for painting. The main welding equipment was received. The installation of the supports for the electrical trays of the main hall began. The main hall of the workshop advanced by 94% and the secondary by 60%.

In the works there are 2,700 tons of sheet for shielding two pits and in the port, in Barranquilla, there are 2,700 tons in the unloading process from the ship. Delivery to the Project is expected by the end of January 2021.

1.3 Impacts on the schedule due to the health emergency

A new version of the contingency, recovery and commissioning schedule of the Ituango Hydroelectric Project was prepared, under premises and including the requests made by the manufacturers of the electromechanical equipment due to partial impact of the pandemic generated worldwide.

The start-ups before the pandemic were programmed like this: the first unit in 2021 and the next three units in 2022. In the new schedule, the entry sequence of the first four units is estimated before December 2022, as follows:

- First Unit, first quarter of 2022
- Second Unit, second quarter 2022
- Third Unit, third quarter of 2022
- Fourth Unit, fourth quarter of 2022

1.4 Dam stability studies in progress

POYRY: the purpose of the contract is to issue a clear, precise, detailed, and objective opinion on the current stability conditions (under the contingency scenario) and future (under the operating scenario) of the Ituango Hydroelectric Project.

The contract was extended to meet ANLA's request to present the "Final Opinion - Resolution 820" to the advisors and officials of the environmental authority, as well as to EPM and Sociedad Hidroeléctrica Ituango S.A. E.S.P. According to POYRY's statement, the final opinion will be issued once the results of the dam modeling by HATCH are available.

HATCH: the contract object is to carry out a dam's behavior analysis with the inclusion of the plastic concrete screen (bentonite) in the Ituango Hydroelectric Project's

priority fillings. It began on May 28, 2019, and its termination date, according to the AMB5 Bilateral Modification Act, is February 16, 2021.

Once the preliminary analysis results defined in the contract scope were obtained, the consultant concluded that complementary tests were required on the bentonite screen material to determine, more accurately, its behavior and possible failure criteria, as well as confirm that the Ituango dam complies with international standards such as the bulletin of the International Commission on Large Dams ICOLD 148.

During 2020, the consultant worked on the seismic threat update studies (essential input for updating the dam behavior report) and on the evaluation of Potential Failure Modes (PFMA).

These analyses are expected to be delivered in February 2021.

2. Environmental Management Plan

Volver al contenido

2. Environmental Management Plan (PMA)

2.1 Advances in the physical environment

The Environmental Management Plan (PMA) authorized by the National Environmental Licensing Authority (ANLA) for the physical environment is made up of 10 programs and two subprograms, as can be seen in the following scheme:

Main advances of each program and the physical environment subprograms for year 2020:

Biotic environment management program

- Air quality management
- Excavation material management
- Surface water management
- Domestic and industrial wastewater management
- Comprehensive waste management
- Impacts management due to vehicular traffic
- Management of material sources
- Management of instability and erosion
- Air quality management
- Reservoir management
  - Reservoir operation subprogram
  - Macrophyte and floating waste management subprogram
- Reservoir filling and deviation of the Cauca River

2.1.1 Atmospheric quality management program

With the activity's execution of this program, it contributed to minimize the impact generated in the air, with activities such as:

- Wetting roads and exposed areas using tank cars and sprinklers.
- Dump truck tent.
- Emission control systems in crushing, concrete, and asphalt plants.
- Carp and moistening of stone construction materials stockpiles.

Fixed sources
Fixed sources estimation monitoring is carried out at all the Project's crushing and concrete plants in order to define the generation of particulate material.

During 2020, preventive and corrective maintenance was carried out on the sleeve and cartridge type filters, located in the cement and ash storage silos, in the Project's concrete plant. The sprinkler systems for wetting raw materials and processed aggregates continued in constant operation, as well as the fogging systems, sprinkler cyclone and spray flutes, as well as metal or plastic covers on the conveyor belts.

Mobile sources
The vehicles maintenance, the technical-mechanical review and optimal conditions of the bodywork and machinery operation were carried out. The 288 vehicles and equipment ascribed to the Project have complied with the technical-mechanical and gas revision certification, in accordance with the current regulations established in Resolution 0019 of 2012. In 2020, the contractors performed the vehicles maintenance in the workshops of the industrial zone of Main Works and Humagá

The monitoring of PM10-PM2.5-SO2-NO2-O3 and CO was suspended in March due to the COVID-19 pandemic and restarted in September 2020, however, the control and mitigation measures implemented in each one of the work fronts, crushing plants, concrete plants, warehouses, industrial roads, such as covering the fine materials collected, covering the dump trucks, the energy plants encapsulation, the Project's vehicles and machinery preventive maintenance, as can be seen in the following photographic record:



Washing vehicle tires entering paved roads



Tunnel track washing

2.1.2 Excavation Material Management Program

With the execution of this program activities, it helped to minimize the impact generated on the air, water and soil by the excavations carried out for the construction of the required infrastructure. The following activities were carried out:

- Removal of materials and its disposal in storage areas.
- Shaping and compaction of materials in the storage areas.
- Construction of drainage works.
- Final revegetation of the intervened area.



Humagá 2 depot closed



Ticuitá Sur deposit

2.1.3 Surface waters management program

With the execution of this program activities, it contributed to reduce the impacts that could be generated on water resources, for this were implemented actions such as:

- Gauges in water sources.
- Tracking the resource use.
- Intake's operation.
- Construction of ditches and canals, on roads and storage areas.

Photographic record of the measurements carried out in 2020:



Construction of hydraulic work to allow the continuous flow of surface waters



Filtration water capacity by the float method

Likewise, surface water sources in the streams and in the Cauca River (reservoir area and downstream) were permanently monitored. By 2020, 2,574 water samples and 32,725 laboratory analyses were made.

Classification of water quality by the WQI

One of the great concerns on the part of the environmental authority is to be able to determine if there is any effect on the water quality due to the reservoir formation. In order to determine this variation, different indexes have been implemented, including the Water Quality Index (WQI), defined in 1970 by the National Sanitation Foundation (NSF) and widely used in the world.

This index adopts a maximum determined value of 100 for optimal conditions, which decreases with the increase in contamination of the watercourse under study.

By 2020 it was possible to determine that the water quality that reaches the reservoir's tail (Occidente and Santa María bridges) had a medium quality, improved by the reservoir; in addition, it is important to highlight that it remained that way downstream (Puerto Valdivia).

The external advisory board for the Project highlighted and concluded that the reservoir's water quality performed favorably, even better than predictions. This was demonstrated by the monitoring and studies that were carried out; They also indicated that the reservoir has been professionally managed.

2.1.4 Domestic and industrial wastewater management program

This program seeks to minimize the impact generated on the water by the wastewater discharges that are generated in the different facilities of the Project, through the execution of different activities such as:

- Treatment of both domestic and industrial wastewater.
- Permanent monitoring of discharges and receiving water sources.
- Portable sanitary systems for work fronts.

During 2020, strategies were implemented for the necessary treatment of domestic and industrial wastewater, and thus guarantee that no spillage with contaminants into water sources occurred.



Cleaning of portable sanitary units' km 19 + 990



Sedimentation system for non-domestic wastewater treatment

2.1.5 Comprehensive waste management program

This program helped to minimize the impact generated on the soil, water, and air, as a result of the generation of liquid and solid waste on the different work fronts, with activities such as:

- Separation at source
- Harvest
- Storage
- Final disposition
- Exploitation
- Treatment

During 2020 continuous improvement actions were implemented through tidy and clean activities, environmental awareness in the classification of waste according to its typology, as well as collection of dispersed waste on some work fronts.

Despite the mobility difficulties presented at the national level, due to the pandemic caused by COVID-19, the waste management was not affected in the Project, and was included within the biosecurity protocols in the management of these under the parameters established in Colombian environmental regulations.

Adequate management of the Bolivia sanitary landfill continued in its ramp stage, for the final and adequate disposal of ordinary waste originated in the Project.



Weighing and registration of hazardous waste in conjunction with the Audit Office



Disinfection of waste generated in blocks of isolated personnel due to suspicion of COVID-19

2.1.6 Impact management program for vehicular traffic

In this program, activities were carried out aimed at mitigating the impacts caused by vehicular traffic, which can affect the population settled in the area of influence of the Ituango Hydroelectric Project and the animals that cross the roads, as well as deteriorate air quality by emissions of particulate matter and gases.

The activities carried out during 2020 were:

- Wetting the tracks.
- Installation of preventive and informative signage on speed restriction, pedestrian crossings, and wildlife protection.
- Preventive and corrective maintenance to vehicles, machinery, and equipment.
- Installation of speed bump type speed reducers.
- Permanent training and campaigns focused on road safety.
- Campaigns to minimize the running over of wildlife.



Road moistening



Construction of a speed bump to reduce vehicle speed

2.1.7 Building materials source management program

Through this program activities, it contributed to minimize the impact generated on water, soil, air, and flora, with a focus on proper environmental management of the construction material extraction areas. In 2020, progress was made in the revegetation and surface water management activities in the areas of materials sources. Actions such as:

- Air quality: humidification of access roads and exposed areas and tenting of vehicles that transport materials.
- Water quality: control of rainwater and runoff through drainage and maintenance works, and construction of energy dissipation works.
- Closure or abandonment plan: final formation of the exposed areas and construction of drainage works, to improve soil stability, prevent erosive processes and mitigate the impact for the landscape deterioration.
- Re-vegetation in the areas where the extraction of materials and planting of native tree species were completed in stages 6 and 7 of this area.



Formation of ditches for surface water treatment



Concrete drainage and revegetation

2.1.8 Instability and erosion management program

This program helped to prevent, avoid, and minimize the impact generated on the soil and water by erosive processes or instability that may occur during the development of the Project activities, as well as, in some cases, erosive processes or instability generated by natural phenomena and that may affect the works.

These activities were carried out:

- Slope treatments through works such as conformation, drainage works and revegetation.
- Treatment in areas that present erosive processes or instability through shaping, drainage works in polymez and re-vegetation.
- Electro-welded mesh and shotcrete treatments, subdrains and bolt installation.

Additionally, instability and erosion monitoring were carried out at 66 sites in the reservoir area and downstream the Project, on the Puerto Valdivia-Dam Road, as well as in the Project works. Where possible, measures for their care were proposed and implemented. In other cases, such as the reservoir, monitoring was carried out while reaching the upper level and stabilizing the reservoir.

2.1.9 Macrophyte and floating waste management subprogram



Drainage works in polymez material



Complemented with re-vegetation processes

This subprogram, which began in May 2018, was aimed at controlling macrophytes (waterspout) and floating waste in the reservoir, with proper management and final disposal of these, some of the activities carried out were:

Containment of plant material (spout and floating waste), removal from the reservoir, separation, classification, final disposal, and treatment.

For the mechanical extraction operation, there are two ports in the municipality of Sabanalarga, called La Pista and Arenal, and the ports Algarrobo, Mameyes and Bocas de Niquia, which are available in case they are required by any eventuality.

For the disposition of the floating material in the reservoir's middle zone, there are collection points named G1P4- Mameyes, Algarrobo, Meseta El Ciruelar, La Pista and La Peñá.



Floating material separation



Macrophyte control

As a control strategy, the activity was carried out with the support of the associations of community action boards of the municipalities of Liborina, Sabanalarga and Ituango, which were contracted through the Social Contracting strategy, for a one-year period (counted from August 26, 2019). During the 2020 term, 56 jobs were generated with this program.

Floating material coverage in the reservoir

Coverage monitoring was carried out on a weekly basis through processing satellite photographs with the Planet tool, and they were contrasted with the evidence recorded in the field. The area covered in the reservoir is 3.6%, equivalent to 117.14 hectares, indicating that the permitted coverage levels are being met.

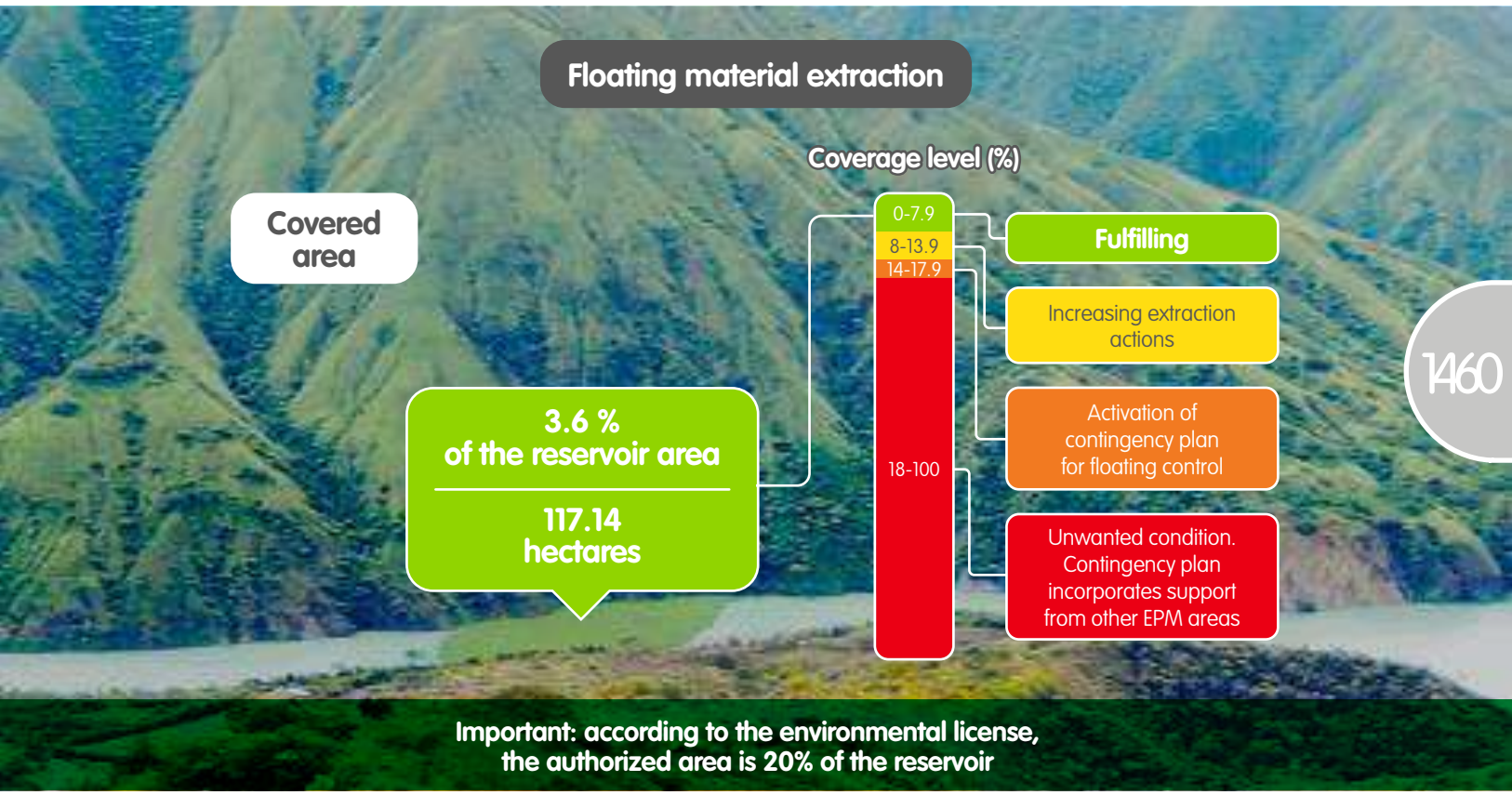


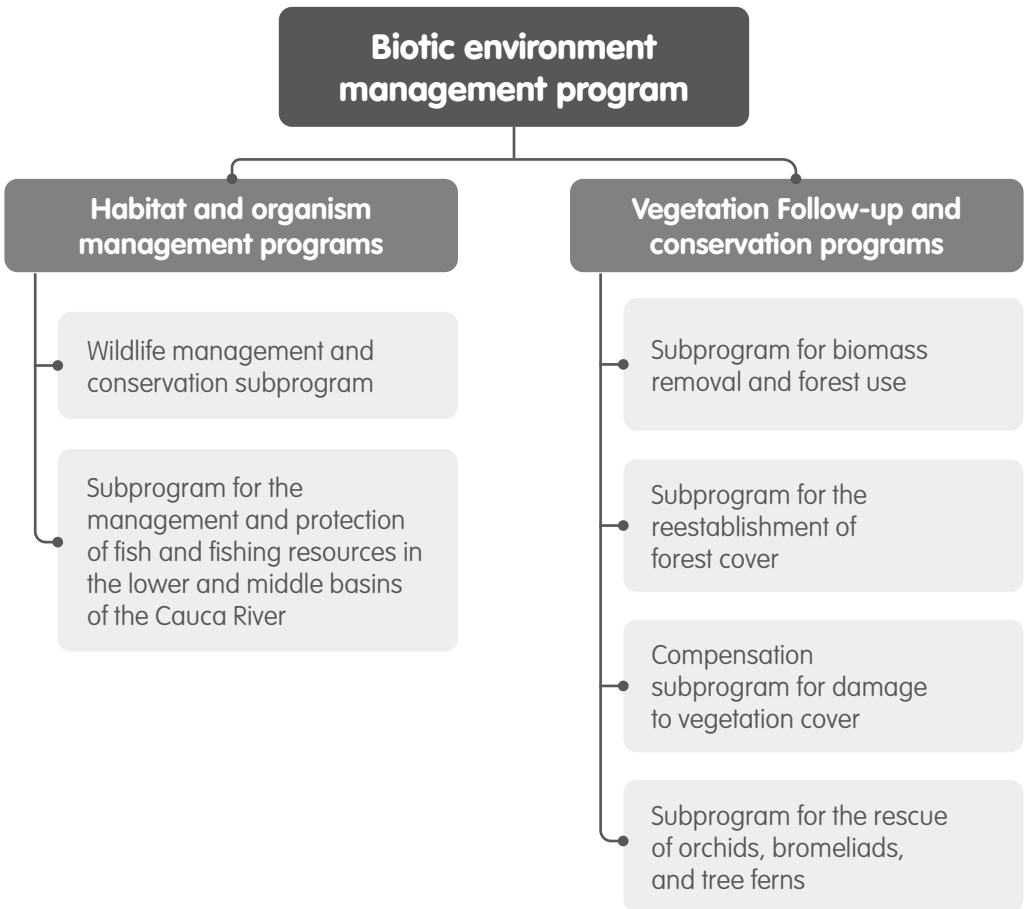
Illustration N° 1. Area covered with waterspout

The volume of material extracted among waterspout, wood, and inert waste in 2020 was 335,579.75 m^3.

2.1.10 Efficient Use and Water Saving Program PUEAA

Law 373 of 1997 establishes the guidelines for the Program implementation for Efficient Use and Water Saving - PUEAA, which promotes actions aimed at implementing the efficient use of water resources. During 2020, activities were carried out focused on the personnel linked to the Ituango Hydroelectric Project to generate habits that would reduce and optimize the use of water, among them: environmental talks, installation of informational signs, audiovisual projections, control of water consumption, recirculation of water by pumping means, use of rainwater, change obsolete technologies for savings, preventive maintenance of supply systems, maintenance of drinking water intake treatment plant and auxiliary systems, among others, allowing compliance with what is established within the program and the protection of water resources at work and camps.

2.2 Advances in the biotic environment



2.2.1 Habitat and organism management program

It is divided into two subprograms:

2.2.1.1 Wildlife management and conservation subprogram:

The activities carried out helped to minimize the impacts caused by the construction and operation of the Project on wildlife and to carry out the monitoring and follow-up of the populations and species with high conservation value in the area of influence.

During 2020, the implementation of activities to scare off, controlled dispersal, rescue and release of wild fauna continued on the work fronts, such as roads and main works. The Center for the Attention and Assessment of Wild Fauna - CAV operated

On a permanent basis for the receipt and management of individuals who were affected by the different activities and works, this year 19 individuals received medical-veterinary care.

In the Project's compensation areas, wildlife monitoring was carried out in areas designated for ecological conservation and restoration, in order to assess the non-net loss of biodiversity and changes in the composition and structure of the different populations. Population studies of fauna species also continued, particularly during this year progress was made in the design, implementation, and socialization of strategies for monitoring, follow-up, management, protection, and conservation of focal species of birds present in the Project's area of direct influence. In the case of other species of interest such as felines and otters, contractual processes were carried out to continue their monitoring during 2021.



Frog sighting
(Leptodactylus colombiensis)



Rescue and relocation activities of active nests of gulungo (Psarocolius decumanus)

2.2.1.2 Subprogram for the management and protection of fish and fishing resources in the middle and lower basins of the Cauca River

Within the fish and fishing component, there are programs for the management, monitoring, conservation and protection of fish and fishing resources in the lower and middle basins of the Cauca River, the latter associated with the Project's operative phase. During 2020, the three main monitoring activities continued:

1. Monitoring the association of fish species located in the lower and middle basins of the Cauca River.

2. Monitoring the reproductive activity of migratory species in the lower and middle basins of the Cauca River (spawning areas and migration routes).

3. Monitoring fishing activity in the lower and middle basins of the Cauca River.

Although the situation caused by COVID-19 limited some of the activities, all were carried out successfully. Regarding the determination of the composition and structure, four monitoring campaigns were carried out in 90 stations through the University of Antioquia, in which approximately 90 species were identified, the old *Cyphocharax magdalenae* and species of the genus *Astyanax* being representative.

In relation to the fishing dynamics carried out by the Fundación Humedales, activities were carried out in three strata: high, medium and low, to collect data on catches per effort and trade unit, as well as sizes, weight and sexual maturity of the different species of fish subject to fishing use in said area, in addition the "Catfish Component" was started, in which the National Authority for Aquaculture and Fisheries - AUNAP also participated; This seeks socioeconomic development alternatives to the ban on striped catfish and to strengthen the governance of fishing in the middle and lower Cauca.

On the other hand, the University of Córdoba carried out the evaluation of the spawning areas in 34 stations, and it was found that the spawning areas downstream the IHP of the main migratory species are mainly found in the sector of the river between Cáceres and Achí. The marking of species showed in a general way that the bocachico P. magdalenae constitutes one of the country's main fishing resources, as well as that there are river areas that are suggested as maturation and spawning areas due to the high presence of mature fish, coinciding with the spawning areas estimation.



Fish monitoring with cast net



Fish marking activity to know the migration routes

2.2.2 Vegetation management and conservation program

2.2.2.1 Biomass removal and forest leverage subprogram

The subprogram managed the impact generated on flora, landscape, and wildlife, both in the works area, roads, and camps, as well as in the reservoir basin. The following activities were carried out:

- Road's adaptation.
- Topographic alignment.
- Driving away or rescuing fauna.
- Rescue of epiphytic plants and other plant species.
- Clear felling, chopping, limbing, transporting and storing forest products or by-products.

This subprogram began in 2010, as part of the roads opening to access the main works area; Already in 2016, the removal of the vegetation cover from the reservoir basin began. At the end of 2020, the Project's Forest, leverage totaled 1,495.3 ha intervened, considering the reservoir and other works (roads, camps, industrial zones, and dam wall), with a total volume of forest biomass removed equivalent to 140,691.1 m^3.



Chopping and temporary storing of trees close to felling sites



Chopping and chipping of trees removed

2.2.2.2 Reestablishment of vegetation cover subprogram

The reforestation activities of the protection strip advanced in multiple logistical and operational activities necessary for planting the trees. The main activities focused on the roads development to access the planting sites, holes in the delimited areas at a density of 500 holes per hectare, tree planting and maintenance, which includes weeding the area adjacent to each planted tree and 300 native trees of natural regeneration in each hectare. In this way, in each hectare there will be 800 trees destined to make up the protective vegetation.



Adaptation of roads



Adaptation of roads

In total there have been delivered by El Palmar nursery around 18,241 plants that have been sown in the protection strip, represented in 10 species, to which fertilization and weeding activities are carried out.



"I have been working for EPM for 15 years and this has allowed me to organize my farm and raise my children. They give me my spaces to compose and that is why I also write songs for the Project as a symbol of gratitude."

▶ ***Aníbal de Jesús Valle Zapata***
Singer-songwriter, Ituango municipality

Aníbal is one of the 38 people who currently work for EPM in the reforestation of 39 hectares in the protection strip of the Ituango Hydroelectric Project reservoir.

2.2.2.3 Compensation subprogram for damage to vegetation cover

The compensation activities being carried out by the Ituango Hydroelectric Project are mainly aimed at the non-net loss of biodiversity and the recovery of the ecosystem services provided by the different ecosystems within the compensation areas.

The Environmental License, as well as its subsequent modifications and permits with other authorities, established the obligation to compensate 17,468 ha, to comply with this obligation, the Project has been acquiring areas along the Cauca river canyon and adjacent to the reservoir, by December 2020, 17.623 ha were acquired and legalized, of these 4.055 ha correspond to tropical humid forest (bh-T), 13,565 ha to tropical dry forest (bs-T) and 4 ha to premontane humid forest, exceeding what is established in the obligation.

In addition to the areas that correspond to compensation obligations, 6,532 ha of areas located in the premontane humid forest life zone (B-hp) were acquired to contribute to the connectivity between the areas of importance for the Project, the mobilization of wildlife fauna, the protection of water resources and the generation of ecosystem services.

Within the compensation areas that the Project has acquired, active restoration activities were carried out with 60,900 individuals of 80 species (88.5 ha), passive and conservation:



Pitting activities



Maintenance activities

2.2.2.4 Subprogram for the rescue of orchids, bromeliads, and tree ferns

The activities in this subprogram were aimed at the protection and conservation of vascular epiphytes species and tree ferns that are registered in the Project's area of influence, which may be affected by the construction of the works and adaptation of areas. These activities were rescue, relocation, and maintenance of individuals.

The relocation of the rescued individuals was carried out in selected and previously characterized sites, with optimal conditions for the adaptation of these organisms, maintaining physical-biotic conditions similar to those found in the rescue site. In these sites, maintenance, and monitoring activities of the phenological status of the relocated individuals were also carried out.

In 2020, rescue, maintenance, monitoring, and follow-up activities were carried out on the rescued individuals, specifically in the main works and Project roads. In the reservoir area, no activities were carried out to remove vegetation cover and rescue orchids, bromeliads, and tree ferns.



Maintenance of vascular epiphytes



Epiphyte rescue

2.3 Advances in the socioeconomic environment

Social media management program

Communication and community participation programs

1. Information and communication project
2. Communication for participation project

Living conditions restitution program

1. Project for the restitution of living conditions
   - Housing
   - Economic activities
   - Social and cultural networks
2. Community infrastructure restitution project

Regional Project Integration program

- Job generation project
- Institutional and community strengthening project
- Project for the articulation of the Territorial Organization Schemes (TOS) and Municipal Development Plans
- Project monitoring and mitigation of impacts by migratory pressure
- Project to link regional development

Components:

- Educative development
- Productive development
- Development with a gender perspective
- Environmental educational project.

Monitoring program for the Project's area of influence

Preventive archeology program

- Observatory project of socio-political environment
- Implementation of methodology for the construction of agreements
- Security and coexistence

The development of Social Management programs and projects, like the other work fronts, faced great challenges since last March 20, 2020, after the declaration of the COVID-19 pandemic. To mitigate the impacts generated by this health emergency, EPM developed new strategies such as the use of ICTs (Information and Communication Technologies) to keep active those actions that could be developed without the need for face-to-face meetings such as Meetings, workshops, and virtual encounters with those AUDIENCES with whom this

ease of access and connectivity exists, under the scheme of interaction with small groups of people and through technological facilitation by the social management team.

2.3.1 Community communication and participation program

To provide continuity and promote the construction of relationships of trust and mutual understanding between stakeholders in the Project and Company's area of influence, pedagogical communication strategies were implemented, based on the generation and delivery of accurate and timely information, as well as the promotion of spaces for dialogue and strengthening communication and leadership skills.

This program is made up of two projects: communication for participation and information and communication:

2.3.1.1 Communication project for participation

Youth Collective

In 2020, training meetings with youth groups continued. 33 training workshops were held with the six youth communication groups in the municipalities of Ituango, Sabanalarga, Peque, Briceño, Valdivia, Liborina, and Olaya. In these spaces, young people received practical tools on content production, media analysis, as well as communication and leadership skills.

The strengthening of youth participation scenarios such as collectives, municipal youth platforms, and organized groups, contributed to the promotion of citizenship.

Citizen Oversight Offices

Strengthening of supervisory committees: During the year, citizen oversight bodies were strengthened, in accordance with the management and articulation of the process led by the municipal authorities. Progress was made according to the dynamics of each legal entity.

Village conversations

The talks, spaces for dialogue par excellence, were the opportunity to listen and build the topics of interest to the communities. In total, 85 talks were held in 49 villages in the Project's area of influence.

Municipal and institutional conversations

Additionally, 12 conversations were held with stakeholders from the urban areas of 10 municipalities in the area of influence in order to report the progress of the Project's work and the activities of the Environmental Management Plan.



La Honda Sidewalk Conversation



Yar Sidewalk Conversation

Attention to requests, complaints, claims and requests from the community of the PQRyS project area

A new service strategy was implemented through interactive channels, in order to guarantee information and communication mechanisms with the communities in the area of influence.

Since April, requests, complaints, claims and requests have been received –PQRyS, through the virtual channel. Once the community service offices were opened, the reception was made physically and in person.

2.3.1.2 Information and communication project

Radio strategy: radio for the people

The radio strategy consisting of two programs, "Sobre la mesa" and "Con vos" was continued. During 2020 approximately 100 programs were broadcast, that allowed communities to connect to talk about topics of common interest: environment,development, biosafety

protocols for COVID-19, opportunities, and Project progress. The contents and radio dialogues with the community can be heard at the following links:

https://www.epm.com.co/site/home/epm-radio/en-la-hidroelectrica-ituango/con-vos

https://www.epm.com.co/site/home/epm-radio/en-la-hidroelectrica-ituango/sobre-la-mesa

Periodical circulation printed media:

The virtual edition of the newspaper "La Voz de Ituango" editions 81, 82, 83, 84 and 85 was carried out and distributed through WhatsApp groups with authorities and community leaders, educational institutions, women's associations, productive associations, service providers institutions, the media, the armed forces, oversight offices, environmental roundtables, youth groups and indigenous community organizations. You can check the editions published here: https://www.epm.com.co/site/publicaciones

Project's teaching books

During the year 2020, the contents of the kit called "Advancing in family, guides to strengthen living conditions" were defined and drafted, made up of seven guides, through which it is delivered to families in the process of implementing the restitution of life conditions, the main recommendations are to strengthen and maintain optimal living conditions from all components.

- **Guides developed:** 1. Social. 2. Healthy housing. 3. Home maintenance. 4. Administration and tax. 5. Coffee cultivation 6. Cattle raising. 7. Poultry production.

Press releases and newsletters

In an exercise of openness and information transparency, the progress of the Ituango Hydroelectric Project on its social and environmental management was disclosed in a timely and truthful manner to the media. In 2020, 40 press bulletins sent to the different regional and national communication media and 10 communications directed to community media were published with specific information on the progress of the Project, attention protocol and management of COVID-19, as well as 2 press conferences and 2 talks.

Radio announcements or informational flyers

5,000 flyers were made with information on care in the reservoir and COVID-19, and radio announcements related to rainy season employment policy, COVID-19, and community care offices.

Disclosure of specific topics

In order to inform the Project's activities and progress to the greatest number of people, the strategy of disseminating topics of interest was implemented through different news media such as press bulletins and national television, social networks and chats with communities and leaders.

- Wide dissemination of the process established by the Company for the management of the reservoir and awareness campaign "I am the reservoir of the Ituango Hydroelectric Project"
- Complementary studies and comprehensive approach to leishmaniasis were continued; strengthening public health actions, with emphasis on COVID-19 and clinical monitoring; accompaniment to outbreaks and events in public health; complementary activities, as well as Occupational Health and Safety.
- Celebration of the environmental week in the 12 municipalities of the area of influence.
- Wide dissemination through the media and in the territory about the delivery of the collective property to the Nutabe indigenous community of Orobajo as part of previous consultation.
- During 2020, information was permanently delivered about mobility in the reservoir by means of ferries, to the communities of Ituango, Sabanalarga, Buriticá and Peque through the local media and chat rooms.
- Monitoring and disclosure of the judicial actions and decisions that have been taken regarding the Project.

All the information is available publicly and permanently on the website www.epm.com.co, at the link: https://www.epm.com.co/site/home/sala-de-prensa/noticias-y-novedades/comunicado-proyecto-hidroelectrico-ituango/preguntas-y-repuestas-ituango

2.3.2. Living conditions restitution program

This program is in charge of restoring the living conditions of those who were affected in the components of: habitat, housing, social networks, economic base, and community infrastructure.

For 2020, the universe of population groups was updated in accordance with the identification of the impacts generated, both those evaluated from the previous studies in 2006, and those identified later. Of these population groups, 258 families are subject to restitution of living conditions with periodic monitoring for five years, 297 families are subject to annual follow-up and monitoring, and 744 families were subject to compensation with investment orientation at the time of the agreement carried out the closure, this last population group has no follow-up or monitoring.

In addition, actions were taken to close the restitution process of living conditions with 100 families that currently have, according to their impact, housing, economic project, social and cultural networks in the new territory.

Land acquisition

Within the restitution process of living conditions, habitat and economic activity, the acquisition of properties by each one of the families continued.

During the year, actions were carried out for the search, management, and acquisition of 5 properties for families that still required it. As of December 2020, of the total of 237 families in implementation with habitat impairment, 236 had housing property restitution.

2.3.3. Regional Project Integration program

Program that aims to insert the Project in the region, through interaction between EPM, the communities in the area of influence, public or private institutions and the region's political-administrative entities.

The projects that make up the Project Region integration program are:

Job creation project: during 2020, the Project's employment policy was aligned with the national employment policy through the Comfenalco public employment system platform. To date, 7,214 jobs have been created, of which 29% belong to the municipalities in the Project's area of influence.

Institutional and community strengthening project: It was implemented through meetings and workshops with municipal administrations on issues such as public management, transparency in administrative actions, control instruments, targeting, prioritization, among others. To the 62 community organizations strengthened by the Project were applied the instrument of the Organizational Capacity Index - ICO.

Project articulation of the Ituango Hydroelectric Project to the Territorial Ordering Schemes (EOT) and Municipal Development Plans (PDM): The agreement was initiated with the Universidad Nacional for the study of threat, vulnerability, and risks for the updating of the EOT and the articulation of the reservoir management plan.

Project for the monitoring and management of impacts due to migratory pressure: The measures to prevent, control or mitigate the identified impacts are agreed in a participatory manner in technical tables with municipal coordination bodies. In the municipalities in which there are Municipal Social Policy Councils (COMPOS) in operation, this will be the space for coordinating monitoring and defining management measures for impacts due to migratory pressure. In municipalities where this Council does not exist, the installation of a Local Management Committee is coordinated with the municipal administration. In this way, the Ituango Hydroelectric Project, in the municipalities of San Andrés de Cuerquia, Toledo, Ituango and Valdivia, carried out projects in:

- **Primary Health Care (PHC):** to families living in the villages of the area of influence.
- **Expansion of health coverage:** with attention brigades in oral, sexual, and reproductive health, prevention of cardiovascular risk, diseases transmitted by vectors, as well as training on water treatment.
- **Strengthening the municipal family police station** for the mitigation of psychosocial risks in the young population.

Project to link to regional development: By 2020, in pursuit of the educational development of the municipalities communities in the area of influence, the following Rural Educational Centers (REC) were improved in a participatory manner:

Proyect	Municipality	Sidewalk / Township
San Francisco de Asís	Liborina	Cristóbal
IE San José sede El Junco	Sabanalarga	El Junco

Development with a gender perspective: In order to comply with the PMA, in relation to the integration program Project Region Development component with a gender perspective, the Ituango Hydroelectric Project must develop during 2020 - 2021 twelve agreements with the same number of hospitals and municipalities in the area of influence.

The target population is in the age range of 10 to 29 years and the purpose, as stated in the Environmental License, is to contribute to gender equality, the prevention of gender-based violence, training in sexual and reproductive health and rights, the promotion of life skills in adolescents, young people, and the general community in the Project's area of influence.

Since July 2020, 5 agreements were initiated that will run until July 2021, to strengthen APS strategies in the municipalities where the Project has a greater presence due to the settlement of families returned to their territory, the municipalities are: Sabanalarga, Peque, Buriticá, Ituango and Valdivia, in the 7 remaining municipalities Liborina, Olaya, Santa Fe de Antioquia, Toledo, San Andrés de Cuerquia, Yarumal and Briceño, working to strengthen the friendly services strategy.

To strengthen the provision of health services in the villages of the Project's area of influence and other villages agreed with the municipal administrations, investments worth COP 2,624 million were made.

Environmental education project: Activities were carried out with the educational community through the delivery of pedagogical material (folding format) focused on two themes: use and appropriation of the infrastructure, to 16 schools in the municipalities of the area of influence and conservation; and care and respect for the environmental ecosystem in 24 educational institutions.

2.3.4 Monitoring program for the Project's area of influence

There is a socio-political risk matrix for the Ituango Hydroelectric Project that is updated every six months, and accounts for the risks in terms of collective social action, human rights, security, and strategic litigation, to which the Project is exposed in the local, regional, national, and international order. It is worth mentioning that each of these risks has preventive and corrective controls in order to avoid or mitigate the risk materialization. There is also an actor's map, with a sociopolitical approach, which is periodically updated according to the territory readings and its dynamics.

For the second semester of 2020, monthly monitoring was carried out on the Project's socio-political risks and Human Rights matrix. The risk scenarios identified were 12 (1 collective social action, 5 strategic litigation, 2 human rights, 4 security), of these 1 is valued at an extreme level, 7 are valued at high and the others are tolerable. These risks are managed through preventive and corrective controls to attend events that may be generated.

2.3.5 Preventive archeology program

During 2020 the Project carried out preventive archeology actions in the following works:

Component	Advances
Vía El Aro	The team of archaeologists from Integral S.A. carried out the prospecting and rescue work, for 2021 it will advance the monitoring. Integral S.A. delivered results report.
Vía Tabacal	The Archaeological company is in charge of carrying out the archaeological work on this road. Delivered weekly and monthly reports. During 2020 archaeological rescue and monitoring was carried out.
La Angelina bridge	Archaeological prospecting was carried out. Rescue and monitoring of the works should continue. Integral S.A. geoinformation of the Project was requested to register with the Colombian Institute of Anthropology and History, ICANH.

2.3.6 Indigenous communities

Among the significant achievements of 2020 are:

- Articulation with: Secretariat of Agriculture of the Department, Federation of Coffee Growers, Indigenous Management of Antioquia, among other entities, for the conclusion of association agreements for the formulation and implementation of 10 projects agreed upon in previous consultation.
- Spaces arrangement for dialogue with the Nutabe indigenous community of Orobajo to address the formulation and implementation methodology of the prior consultation projects.
- Face-to-face meeting in Los Galgos, in order to discuss observations and proposals for the implementation of projects and delivery of financial resources for travel expenses.
- Delivery of deeds, APPRAISAL report, minutes of agreements protocolization, and responses were given to the concerns, proposals and observations of the property planning and training projects.
- Broadcasting of a special program on EPM Radio on the prior consultation process and on the implementation of the agreements with the Nutabe.
- Virtual meeting between the Indigenous Management of Antioquia and EPM to advance in the proposal of the agreement to execute some of the projects (1,3 and 4); In addition, it was reported on the conflicts occurring in the community and the need for mediation by this entity.
- Request to Integral S.A. to update the cost because the protocols related to COVID-19 must be included.

- Contractual procedures were carried out for the signing of the agreement with the National Federation of Coffee Growers, in response to the project transformation, processing and positioning the own brand of the economic coffee activity of the Nutabe indigenous community of Orobajo.
- The work order was brought forward with the consulting firm Integral S.A., to execute the planning of the property through a study that allows knowing the quality of the soil, unstable slopes, water sources and environmental characterization.
- Education, training, and participation of the Nutabe indigenous community of Orobajo in the processes of direct contracting and the provision of services required by the project. 15 members of the Nutabe community were trained.
- Meeting with this indigenous community to plan the activities with the Red Cross that allow the management of the N13 project related to the permanent training, formation and updating the community and the indigenous guard on Risk Management issues and formulation of the Community Management Risk Plan. The Red Cross socialized with the Nutabe families in the workshops that were held in Los Galgos, La Florida, and La Esperanza.
- Signing the agreement and initiation act between EPM and the Nutabe indigenous community of Orobajo, to join forces in the implementation of the protocolized agreements in the previous consultation, considering the ethnic knowledge, ancestral uses, and customs of this community.
- Meeting with the Nutabe Board of Directors and the Ministry of the Interior to follow up on the protocolized agreements on June 7, 2019.



Follow-up to the agreement with the Nutabe indigenous community of Orobajo



We are grateful to God, EPM and the Indigenous Management who have supported us with the houses acquisition, through the Aldeas program. Today we feel another environment with our houses because the ones we lived in were made of plastic and we did not feel as safe as we do now. It has been a blessing for the 18 families of our reservation.

▶ ***Damaris Carvajal Carupia***
Governor resguardo Carupia

The construction of these 18 homes is part of the recovery plan that EPM designed for the communities downstream of the Ituango Hydroelectric Project dam. Today it is a reality that in the Carupia indigenous reservation, in Cáceres, the Embera Chamí community has a decent home.

2.4 Contingency plan

During 2020, the contingency plan implementation of the Ituango Hydroelectric Project continued, thus complying with the actions contemplated in its environmental license, through the application of risk awareness processes (identification, analysis, evaluation, monitoring and risk communication), risk reduction (prospective and corrective intervention of risk and financial protection) and disaster management (preparation and execution of the response, preparation and execution of recovery), in the event of a hazard situation associated with the Project's construction or operation.

2.4.1 Risk awareness

The Ituango Hydroelectric Project has all the disaster risk management planning instruments contemplated in Colombian regulations, which have allowed it to adequately manage the risks associated with the construction of the hydroelectric plant. These were the actions in 2020:

- Development of more than 240 activities at the community and institutional level in the area of influence and in the areas likely to be affected by its risks.
- Updating the disaster risk management plan, which includes the identification of Project risks, the actions of reduction, management, recovery, and financial protection, in the short, medium, and long term. In December, the Plan was delivered to POYRY and on December 31, the most up-to-date version of the PHI's disaster risk management plan for public and private entities was posted on the vital platform of the ministry of the environment - ANLA.

- Update the emergency and contingency plan due to dam failure and flooding downstream the Project.
- Protocol for Attention to Events and Crisis -PADEC-, of EPM, which is activated from the beginning of the critical event and is led from the Company strategic level.

In 2020 EPM modernized locally and technologically the Technical Monitoring Center - CMT, with the purpose of continuing to monitor comprehensively, 24 hours a day and 7 days a week, all the existing instrumentation in the Project, in order to inform with sufficient anticipation any dangerous situation that may arise. This Center is one of the most updated in Colombia.

In order to improve the quality of the data available in the emergency and contingency plan due to dam failure and flooding downstream the Project, field work was carried out that allowed taking the geographical coordinates with GPS of each of the populated centers. that would be within the modeling of the flood patch of 368,000 m^3/s in the La Mojana region and georeferencing of community infrastructure points.

As outstanding actions in risk communication, EPM delivered 4,850 booklets with the "Community Protocol for the preparation and response to emergencies in the event of a possible dam failure and floods downstream the Ituango Hydroelectric Project" to municipal authorities, aid agencies and leaders in the municipalities of Briceño, Ituango, Valdivia, Tarazá, Cáceres, Caucasia and Nechí, this activity complemented the community workshops carried out downstream.

260 community booklets for the "Prevention and control vegetation cover fires in initial stage" were also delivered to 26 community action boards located in the area of influence of the reservoir and its adjacent areas.





2.4.2 Risk reduction

During 2020, prospective actions were developed aimed at reducing vulnerability, increasing capacities, and improving knowledge in risk management for the inhabitants and authorities of territories located in the Project's area of influence and in the areas of probable affectation, where 183 activities and 4,917 attendees stand out, as follows:

- 104 risk management workshops in the municipalities downstream the Project, in the departments of Antioquia, Bolívar, Córdoba and Sucre.
- 49 dissemination actions on the emergency and contingency plan.
- 12 plant cover fire prevention and control workshops.
- 10 attention drills.



Workshop with the community - Puerto Valdivia



Practical forest fire workshop - Ituango

2.4.3 Disaster management

In terms of preparing for the response, the following activities were carried out in 2020:

- Formulation, socialization, and implementation of the contingency plan for the prevention, control, and care of the COVID-19 pandemic at Project facilities and the update of the fourth version of the emergency and contingency plan.

EPM made progress in the implementation of a mobile application called "Alertas Ituango", aiming to deliver timely notice to the communities downstream the Project, in case of being required to activate the emergency evacuation plan. 133 alarm systems are installed in coordination with the Administrative Department of Risk Management in Antioquia – DAGRAN- and with the accompaniment of community leaders from each sector.

As part of the EPM - Siata agreement, in 2020 157 preventive and corrective maintenance were carried out on the early warning systems (SAT) installed by this entity, these included: cleaning, signal checking and energy to the station; an average of 3 visits a year were made to each station and some stations had up to 4 visits.

Simultaneously with the maintenance, a presentation and explanation about the operation and usefulness of these EWS was made to the communities, the leaders of the region and relief agencies.



Alarm system maintenance work - Nechí



SAT Maintenance - Caucasia



Siata Training for leaders of Lower Cauca

2.4.4 Preparation for emergency response

Within the strategy to strengthen the capacity to respond to emergencies, which EPM has been carrying out with the municipal councils for disaster risk management –CMGRD- and the communities in the department of Antioquia, delivered in 2020 emergency kits equipped with equipment and elements to strengthen emergency logistics, pre-hospital care, forest fire control and aquatic safety, according to the need of each municipality, as well as biosecurity elements for the protection of COVID-19. 86 meeting points and 270 evacuation routes were also marked in the municipalities of Ituango, Valdivia, Tarazá, Cáceres, Caucasia and Nechí, in the department of Antioquia.



Kit delivery to the CMGRD of Olaya



Delivery of an emergency kit to the Valdivia CMGRD

EPM delivered 26 kits for the prevention and basic control of forest fires, with the tools and elements for the direct or indirect combat of vegetation cover fires for the municipalities located in the reservoir's area of influence and its adjacent areas, such is the case of Buriticá, Ituango, Liborina, Peque and Sabanalarga.



Forest fire prevention and management workshop

Ambulance service in Puerto Valdivia.

During 2020, 282 services were carried out: 249 people were transferred to a hospital and 33 were treated at site. As a cumulative figure during the 683 days of operation, 604 visits were made, of these 105 (17.4%) were pre-hospital care to people who did not require transfer, and 409 (82.6%) transfer services were made to the same number of patients.

3. Investment 1 %

Volver al contenido

3. Investment 1%

In accordance with the provisions of Colombian regulations, any project that involves the use of water taken directly from natural sources in its execution and that is subject to obtain an environmental license, must allocate at least 1% of the total investment for the recovery, conservation, preservation, and surveillance of the hydrographic basin that feeds the respective water source.

In the case of the Ituango project, resources are being invested as follows:

- Protection and management of strategic areas: purchase, reforestation, isolation of areas of influence from sources supplying aqueducts.
- Environmental sanitation: construction of sewers and domestic wastewater treatment plants in the municipalities of the area of influence.
- Training of environmental leaders and managers through environmental education activities.

During 2020, the following stand out as main milestones:

3.1 General management

Meetings were held with the municipalities of Sabanalarga, Liborina, Olaya, Santa Fe de Antioquia, Buriticá, Peque, Ituango, Toledo, San Andrés de Cuerquia and Valdivia, to present the status of each of the prioritized projects in the 1% investment lines and agree on the work plan to follow in year 2021. It was contextualized on each of the prioritized projects in their municipality, progress status, budget ceilings, challenges, commitments for 2020 and later, and pending activities in charge of each territorial entity.

3.2 Land purchase line for the protection of micro-watersheds:

Some meetings were held with the owners of the properties to be purchased in order to inform them about the Projects' progress. In addition, steps were taken related to the review of the legal documents that between 2014 and 2016 provided by the municipal administrations of 39 approved properties, in order to identify which ones, require updating since, due to the suspension of activities, their validity expired.

The payment of the remaining 50% of the properties in the municipality of Sabanalarga that were negotiated in 2018 and the payment of the associated legal expenses was made.

3.3 Basic sanitation line

In this investment line, 3 types of projects are identified: domestic wastewater treatment plants -PTARD- in urban areas, septic tanks in rural areas and individual septic systems in rural areas in 11 of the 12 municipalities in the area of influence.

During the first semester of 2020, the municipalities were accompanied in the efforts, such as the purchase of the properties where the works will be located and the dumping permits, meetings with the Corantioquia environmental authority to contextualize the projects and the importance of its execution. Thanks to these efforts carried out in coordination with the municipalities, the regional environmental authority made visits in order to issue a technical concept to the properties where the works of the municipalities of Buriticá, Sabanalarga, Liborina and Santa Fe de Antioquia will be located. Later, the discharge permits were issued for the municipalities of Sabanalarga and Liborina.

4. Specific Action Pan (PAE)

Volver al contenido

4. Specific Action Pan - PAE

After the Project contingency, EPM has been executing specific actions for the recovery of the aquatic and terrestrial ecosystems, as well as the attention to the affected communities. With this objective, a Specific Action Plan (PAE) was structured, derived from Decree 2018070001272 of May 14, 2018, by means of which the PUBLIC calamity is declared in the department of Antioquia for the municipalities located in the area of direct influence of the Ituango Hydroelectric Project, as well as those located between the dam and the municipality of Nechí (Antioquia), which from the scope as the Project executing company and in accordance with its social and environmental responsibility policies has comprehensively and bindingly contemplated the needs of these communities.

The PAE contains 9 lines where 86 activities are contained, with direct compliance responsibility on the part of EPM, of these 23 were closed, in the 2019 term. Therefore, the procedures for the 2020 term included the start of 63 activities, with a time horizon for execution until December 31, 2022. Each one has its own schedule, budget, and goals established according to the contractual and application strategy in the territories and communities. Next, a report of the actions executed by each line is presented:

4.1 Social line

Through actions to strengthen human rights, socio-political environment and community information program with leaders, a psychosocial baseline was drawn up and the families were monitored, based on the socio-political and human rights particularities of the areas to intervene, for 2,090 families of the 2,135 families that returned to the Puerto Valdivia township.

Progress was made in the articulation with international organizations with a presence in the area (UN, OAS), and in the relationship and communication with community representatives and spokespersons for the socialization of the EPM role in the field of Human Rights, as well as contracting with community spokespersons to implement the relationship and communication strategy with stakeholders.

2,836 financial support was given to evacuated families for a value of COP 3,604 million. With an accumulated 28,087 supports equivalent to COP 32,842 million. As of December 2020, 2,141 of a total of 2,255 returned.

It contributed to the strengthening of the installed capacity for disaster risk management in the municipalities where 2,707 people participated in workshops and 220 people in drills. Likewise, 54 automatic activation early warning systems were installed by Siata, and the Technical Monitoring Center (CMT) advanced a new agreement for the maintenance and automation of the remaining systems.

From the program to strengthen the social fabric, 60 educational institutions were linked to the Cuidamundos program, 12,245 people attended with the relationship days where the current status of the IHP and the SAP is presented, 90 hours of training to 247 rural leaders, 243 training meetings as part of the environmental education strategy, and management of the environmental legality process to begin the construction of 9 water treatment plants for educational institutions.

4.2 Housing line

To restore the living conditions of the families affected by the contingency, the socialization process of the offer and agreement with the affected family groups was carried out, with partial impact on infrastructure and economic losses on the occasion of the May 12, 2018, event.

Of the 370 family groups identified, 327 accepted the offer made by EPM, which represents an acceptance percentage of 97%, 9 family groups (3%) did not accept the offer. However, EPM submitted requests for extrajudicial conciliation before the respective notary in order to carry out the financial recognition. The executed value as of December 2020 was COP 3,884 million.

4.3 Accessibility and transport line

During 2020, progress was made in the construction and repair of the bridges affected by the contingency, the repair works of the El Doce bridge were completed, benefiting approximately 2,000 people who today travel safely and can transport products such as corn, yucca, banana, rice, yams, squash, and watermelon. Environmental permits, bidding and contract award were advanced to start the construction of the Palestina and El Turcó bridges and the recovery of the El Dorado bridge. With these advances it contributed to connect communities with progress and new opportunities.

4.4 Health line

The ambulance service continued providing care 24 hours a day, between the municipal seat and the village of Puerto Valdivia.

The Mobile Terrestrial Health Unit was delivered to the San Juan de Dios Hospital, this unit is equipped with three offices to offer dental services, general consultation, visual and auditory examination and nursing accompaniment for promotion and prevention activities.

The construction license application process for the health center and community center in Puerto Valdivia was filed.

4.5 Public services line

Negotiations were carried out for the viability to install 9 water purification plants in the same number of educational institutions. Technical visits, analysis of property legality, water samples, procedures before the Antioquia Health Section, pumping tests and formulation of the Efficient Water Use Plans - PUEA were carried out. Likewise, knowledge transfer was carried out to operators of aqueduct systems of the municipalities and townships.

4.6 Education line

EPM acquired the property located in the La América village in the Valdivia municipality, in the sector known as Remolinos, likewise the approvals were managed with the Departmental Education Secretariat, and it is expected to receive the construction license from the Valdivia municipality to start the hiring process. Execution is planned to begin in mid-2021. The maintenance of some schools for the return was also continued.

4.7 Livelihoods

During 2020, efforts were focused on 2 important actions: with the recognition of activities affected in the municipalities of Valdivia and Tarazá, it was possible to attend 100% claims, with 58% acceptance. And in the inclusion of local commerce as providers of goods and services for EPM, with which a contribution to social contracting in repairs and locative maintenance was achieved through two contracts with ASOCOMUNAL Valdivia and one with the Palomas Community Action Board.

4.8 Environmental line

In its commitment to the communities located downstream of the Ituango Hydroelectric Project reservoir, EPM has made alliances with different authorities: Corantioquia, National Aquaculture and Fisheries Authority AUNAP, Alexander Von Humboldt Institute, universities: Nacional, Antioquia, Córdoba, Javeriana, Medellín, Fundación Humedales and Parque Explora, among others. Initially the studies have proposed to establish the effects caused to the ecosystems by the closing of gates, results that have led to the formulation and implementation of an adaptive restoration plan, the ANLA approved the delivery of this in 3 phases: short-term adaptive restoration plan (February 2020), medium-term (February 2021), and long-term (December 2021).

4.9 Information and communication line

Actions were carried out to generate PUBLIC information for the management of relations with national, local and community media; strengthening and transfer of knowledge in each municipality for disaster risk communication; holding academic and community events and sharing the progress of the recovery plan with stakeholders, among others.

More than COP 59,468 million were invested in repairing the families that were affected by the contingency, to improve their conditions with more dignified homes, and the Mobile Health Unit was delivered in Puerto Valdivia, to strengthen attention and life care. The road infrastructure was intervened to facilitate the community's reconnection through the bridge's recovery.



5. Territorial Integration Model (MIT)

Volver al contenido

5. Territorial Integration Model (MIT)

The Bajo Cauca MIT is a construction that favors the integration and articulation of programs and projects, dynamics, and sustainable development. The MIT aims to strengthen institutional capacities, to contribute to environmental sustainability and the conservation of biodiversity, to increase the economic competitiveness conditions, to improve the living conditions of the population in the municipalities of Valdivia, Cáceres, El Bagre, Zaragoza, Caucasia, Nechí and Tarazá. It is projected to have a long-term presence in the territory, generating two-way benefits for both EPM and the municipalities (Figure 1).

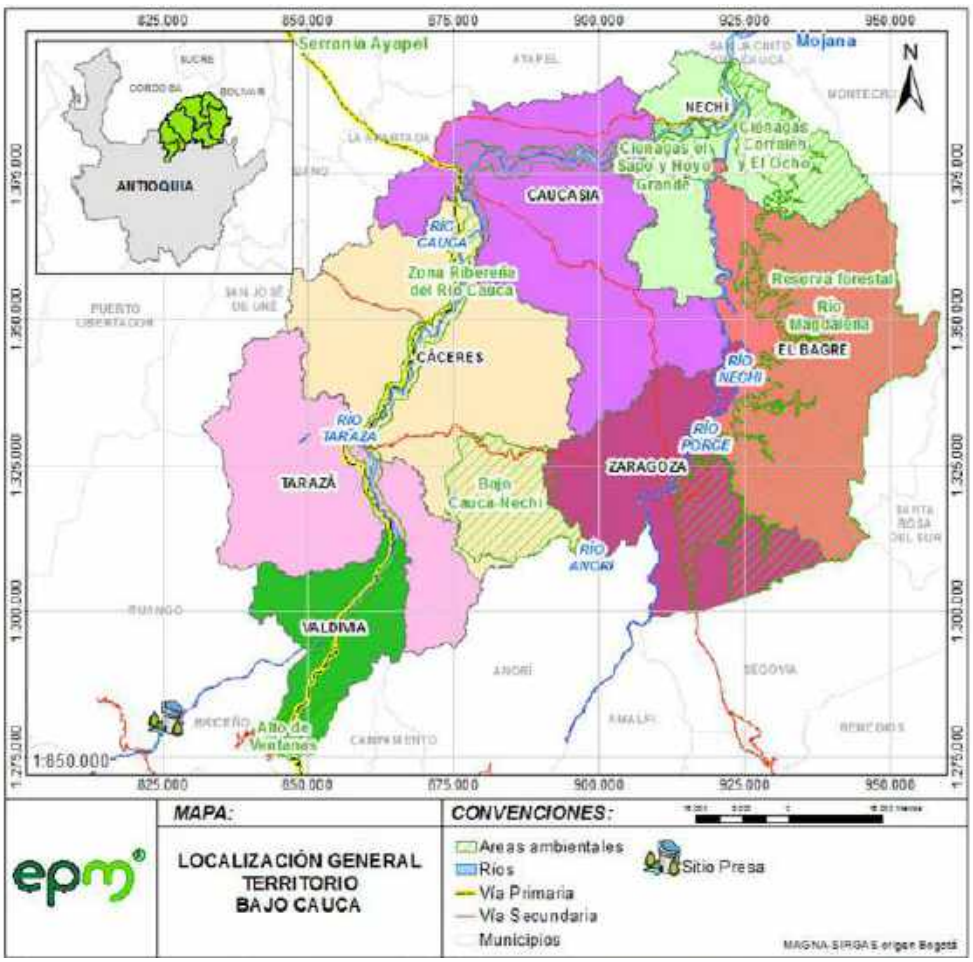


Illustration N° 2. General location of the Bajo Cauca MIT territory.

Most significant progress in 2020

5.1 Initiative

1. Cooperate in relevant inter-institutional spaces and promote alliances and collaborative networks.

During 2020, progress was made participating in inter-institutional spaces and collaborative networks that allowed the strengthening of relations and the management of alliances and initiatives of territorial integration MIT Bajo Cauca to define and establish work plans, such as support for the strengthening of the Committee University, Company, State and Society - (CUEES), participation in the construction of elements for the change theory in line with the formulation of the 2040 Subregional Plan with the Government of Antioquia, among others.

In EPM, Integration and Coordination Meetings - RIC have been formed to facilitate internal coordination and follow-up of the Company's actions in the subregion.

5.2 Initiative

2. Advance in the universalization of the energy service.

During 2020, electrical interconnection works were developed, in order to reduce the gap in the provision of energy service in rural and urban areas of the municipalities of Bajo Cauca Antioquia, which has allowed 1,416 families to enjoy the electric energy service. For the period 2021-2023, it is expected to implement the service provision through isolated solutions, such as the individual solar photovoltaic solution - (SISFV), in such a way that access to the energy service in the territory is achieved by approximately 2,000 new families.

Additionally, coordination continues with local entities such as the Agencia de Renovación Territorial - ART, the Antioquia Government, and the municipal mayors, to join forces that allow the formulation of projects to expand coverage with PUBLIC resources through the SISFV system. It also seeks to reactivate the bank of business development projects and move to the formulation stage of the Coverage project, which seeks to reach those dispersed rural homes that do not have electricity service.

5.3 Initiatives

3 and 4. Promote strengthening the capacities of community organizations and promote training and opportunities for income generation in accordance with the territory potential.

Within the community strengthening and training processes, there has been continuity with strategies and actions on different topics to promote the capacities of organizations through the construction of trust bonds.

The status of producers' organizations was characterized by each municipality, the local contracting strategy was strengthened through social contracting with community and non-community action boards and the acquisition of goods and services with local suppliers. The products commercialization was promoted and accompanied by solidarity organizations, using virtual spaces for relationships through local and regional peasant markets.

Finally, institutional alliances were established with entities such as Desmarginalizar, UAEOS, Fundación EPM, Corporación Antioquia Presente and PNUD, to promote the strengthening



At this time, we carry between 6 and 7 tons of fruits and vegetables per week for the casinos of the Ituango Hydroelectric Project, which come from 5 municipalities in the region. We are grateful to EPM who has opened the doors for us, has trained us and now supports us with the purchase and marketing of our products. We are creating jobs and that makes us feel happy and grateful.

▶ ***John Henry Villa Lopera***
Asociación Productiva San Andrés de Cuerquia

EPM accompanies and strengthens the productive associations in the from the area of influence of the Ituango Hydroelectric Project, and through the purchase of goods and services, it boosts the region economy.

Being in the community action board has transformed my life and now with the presence of EPM in our territories we are contributing to the generation of employment and the improvement of different spaces in the village.

▶ ***Óscar Sucerquia Holguín***
President of the Community Action Board, El Junco-Sabanalarga village.

of community capacities in the territory.

5.4 Initiative

5. Support initiatives that seek to improve the population's access to drinking water and basic sanitation.

Within this initiative, the advances made in the period show the synergies to contemplate the participation of EPM, in order to establish the strategy to support initiatives through the transfer of knowledge on this issue, which seeks to improve access to drinking water and basic sanitation for the population. Efforts were made in different municipalities with territorial initiatives that have resources allocation such as the Development Programs with a Territorial Approach - PDET and the General System of Royalties; and with the Government of Antioquia the definition to form a team dedicated exclusively to this task.

Procedures were carried out with the municipal administrations of Nechí, Tarazá and Cáceres in order to carry out the corresponding procedures with the environmental authority for the installation of new purification plants for rural educational centers through the "Environment for Life" contract with the EPM Foundation. Likewise, the design formulation of an aqueduct for the Caño Pescado in the Nechí village was managed in coordination with the Nechi municipality, the Agencia de Renovación Territorial - ART and the Government of Antioquia.

5.5 Initiative

6. Contribute to the protection of water resources and biodiversity

Progress is being made in the definition, prioritization and implementation of actions related to the conservation and protection of aquatic and terrestrial ecosystems, the management and protection of boggy ecosystems, the identification of some priority areas for restoration, among others, that favor the conservation of natural resources in the territory.

As a result of the management in 2020, the identification of some priority areas was achieved for the agreement formulation with the Government of Antioquia, Fondo Paz and Corantioquia aimed at the restoration of ecosystems, the structuring of the bank of properties and the preliminary feasibility analysis for its intervention, among others.

5.6 Initiative

7. Contribute to update and implement the Territorial Organization Instruments.

Within the results of EPM's participation in the updating and implementation of the Territorial Ordinance Instruments - IOT, the agreements structure for updating the Territorial Ordering Schemes - EOT of five municipalities and as achievements are the realization of the territorial

ordering diagnosis, the formulation and development of the territorial ordering guidelines in the Valdivia municipality, the analysis of the municipalities development plans and delivery of observations aimed at risk management and updating the Territorial Ordering Instruments (IOT), the identification of development plans programs and initiatives of EPM and other entities, and the construction of environmental determinants associated with the Cauca River, useful for municipal administrations.

The roadmaps for the first phase implementation were formulated and agreed with a time horizon until 2023, seeking to build the foundations for the medium and long term. The actions progress in 2020 was in line with what was projected, despite the health emergency of COVID-19, which allowed an advance of 32% compared to the 29% projected, that is, a general execution of 110% was achieved.

In this way, the foundations have been laid for the construction of alliances, methodologies, strategies, and information that allow significant progress in the development of the seven initiatives, with a positive impact for the Bajo Cauca region and especially for its inhabitants.

6. Other relevant topics

Volver al contenido

6. Other relevant topics

6.1 Reconciliation process with contractors

On August 10, 2020, EPM requested the Office of the Attorney General of the Nation to summon the Consorcio Generación Ituango and also the companies that currently comprise it (Integral S.A. and Integral Ingeniería de Supervisión S.A.S.); Consorcio CCC Ituango, as well as the companies that comprise it (made up of Construções e Comércio Camargo Corrêa S.A., Conconcreto S.A. and Coninsa - Ramón H. S.A.); Consorcio Ingetec-Sedic, and the companies that compose it (Ingetec S.A. and Sedic S.A.); Seguros Generales Suramericana S.A., and (v) Chubb Seguros to a hearing for preliminary conciliation in law, in order to settle the differences that have arisen between the aforementioned, due to the events arising on April 28, 2018 in the Ituango Hydroelectric Project.

6.2 Insurance management

6.2.1 Construction all risk policy claim

The Ituango Hydroelectric Project is insured under the Construction and Assembly All Risk policy contracted with the insurance company Mapfre Seguros Generales de Colombia S.A. In general, the policy covers material damage suffered by the Project or its assets for any reason not excluded, as well as delays in starting operations.

EPM, the Project Audit Office and a team of expert adjusters appointed by the insurer have been working together to review the costs associated with the contingency, considering that since it is a project under construction, the works and assembly of Project equipment at the time of the incident (April 2018) had not been completed, and that the magnitude of the works and the complexity to access the sites affected by the contingency has not been fully possible.

For this reason, there is not yet a determined amount of the claim costs that allow meeting the burden of sufficiently demonstrate the amount of the loss and raising a formal claim to the insurer in order to obtain final compensation for the loss.

Faced with the coverage of delayed entry into operation, the total costs that can be claimed in the policy may only be incurred to the extent that the generation units enter into commercial operation, a process that is estimated for the second half of 2022.

Once the insurance coverage of the event has been confirmed, and in the face of difficulties to have an adjusted and final figure of the losses generated by the contigency and claimable.

In the policy, EPM and Mapfre signed a Framework Agreement at the end of November 2019, in which the conditions for making the advance payments were established. It is important to indicate that the purpose of advance payments is to provide the insured with a cash flow that allows them to attend the repairs and / or replacements that are already known to have been generated by the claim covered by adjustment once the amount of losses can be demonstrated with the respective supports.

As of December 2020, Mapfre has made payments of USD 250 million, corresponding to emergent damage to civil works and equipment.

6.2.2 Claim of Extra-contractual Civil Liability policy

In the case of damages to third parties, the Project has a Civil Liability policy, contracted with the insurance company Mapfre Seguros Generales de Colombia S.A. In general, the policy covers patrimonial damages (consequential damages and loss of profits) and extra-patrimonial (moral damages and physiological damages or to the relationship life), caused to third parties as a consequence of the execution of activities related to the construction of the Project.

After the flood occurred, EPM began a process of verification and validation of the information with the purpose of establishing the damages and identifying the people who suffered them. Accordingly, to date, 358 family groups and / or people have been identified who suffered direct material damage, mainly in: infrastructures (intended for housing, or for the exercise of economic activities); personal property and furnishings that were inside these; and community infrastructure.

Considering that EPM certified to have made compensatory acknowledgments to third parties in an amount greater than that received in the first advance payment of COP 6,168 million in 2019, MAPFRE proceeded to pay EPM on July 30, 2020, the sum of COP 608 million, for the acknowledgments made to third parties as of December 31, 2019.

EPM received a second compensation advance payment for the claim amounting COP 8,057 million, which was paid to EPM in 2 payments, COP 5,000 million on August 27 and COP 3,057 million on October 8, 2020.

The Company continues in the process of quantifying the damages caused to third parties on the occasion of the event presented on May 12, 2018. As of December, the adjustment procedure was in process, which is why there is still no certainty about the amounts that will be definitively compensated by MAPFRE SEGUROS under policy Nº 2901311000164.

6.3 Comprehensive risk management

Comprehensive Risk Management (GIR) is conceived to facilitate the achievement of strategic direction and decision-making. For the Ituango Hydroelectric Project (PHI), risk management offers benefits such as: identification of possible events that may affect the achievement of the Project's particular objectives, support, and document decision-making, minimize, and prevent losses, as well as generate confidence in the face of stakeholders.

This chapter shows the risk behavior index, in addition to the main results obtained during 2020 in the aspects referring to the most critical risks and in comprehensive risk management.

6.3.1 PHI Risk Index

In this graph, the month of February can be seen as a turning point and since the appearance of COVID-19 in March, an upward index trend began. This behavior is associated in addition to COVID-19, to other variables such as: findings and technical difficulties during the stabilization of the works, legal conflicts with the main Project's contractors, irregular occupation of miners and fishermen downstream of the discharges and the difficulties that would result by not obtaining the All-Risk Construction policy coverage, among others.

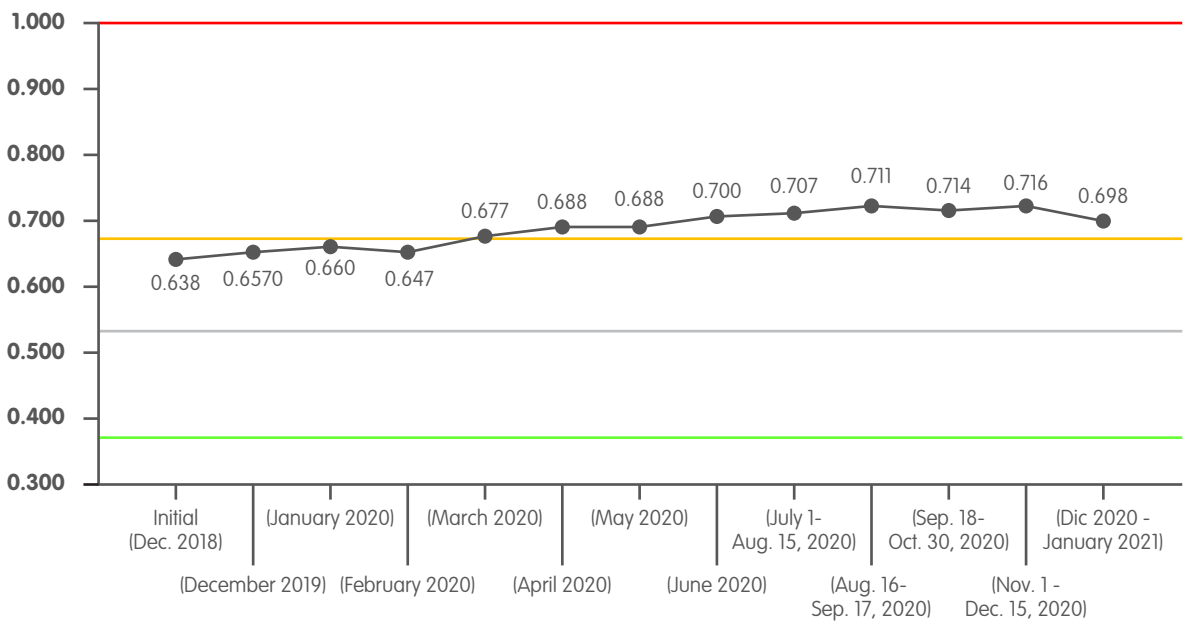


Illustration N° 3. Evolution of the PHI general risk index

6.3.2 Specific risk analysis for COVID-19

After the confirmation of the first positive case for COVID-19, at the beginning of March 2020, in the Colombian territory and the increase of these, the arrival of the virus to the Project was imminent, due to the high number of collaborators and the diversity of their original places. For this reason, a specific risk analysis for COVID-19 was carried out for the Ituango Hydroelectric Project. The virus appearance and its expansion have had and will have repercussions on the following variables or impact objects: cost / financial resource, execution time, impact on people's health, EPM's reputation, environment, information, and quality.

Some of the events that influenced the index increase were: confirmation of the first 3 positive cases for COVID-19, fears and resignations of collaborators in CCCI, fears on the part of municipal administrations and restrictions on the collaborators return to their homes, suspension of some contracts and activities of social and environmental components in the area of influence, delay in the execution of Project activities, death of a CCCI collaborator, instruction to remove all personnel and make replacements, leaving the Project suspended in its construction progress and stabilization works for more than 45 days, among others.

In order to face these difficulties, different strategies were implemented to reduce the probability of occurrence and mitigate the possible impacts, some of these strategies that influenced the index decrease were biosafety protocol implementation and outbreak control, gradual reactivation of all contracts, environmental and social activities that had been suspended, implementation of proximity handles, among others.

6.3.3 Legal conflicts between the parties that hinder the Project's execution

Following the request for conciliation presented by EPM against the Consorcio Generación Ituango (designer), the Consorcio Interventor, the Consorcio Constructor CCCI and the reinsurance companies Suramericana and Chubb Seguros, a reputational exposure arose, and there was even fear for the non-continuity of the contractors or any of them, a situation that could represent unwanted effects on the date of entry into operation, possible instabilities on work fronts, and economic losses, among others.

On December 22, 2020, the extension of the Consultancy, Audit Supervision and Construction contracts of main works was signed until December 2021. With the signing of these contracts, great concerns were overcome and continuity in the development of Project's activities was ensured. This milestone had a positive impact on the Project and therefore a risk decrease.


Sustainability
Report
2020
www.sostenibilidadgrupoepm.com.co/en
Grupo·epm