Empresas Públicas de Medellín E.S.P.

Separated financial statements and notes
31 December 2019 and 2018

Certification of EPM's Legal Representative and Accountant

March 26, 2020

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, 2019 and 2018, 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 Resolution 049/2019. These accounting and financial reporting standards are based on the International Financial Reporting Standards adopted in Colombia and issued by the International Accounting Standards Board (IASB), as well as interpretations issued by the Interpretations Committee.

We certify that the assertions contained in the aforementioned 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) The economic events are classified, presented and disclosed in accordance with the provisions of the Accounting and Financial Reporting Standards accepted in Colombia (NCIF) and adopted by the General Accounting Office of Colombia through Resolution 037/2017 and Resolution 049/2019.

c) All assets, liabilities and equity in the Separate Financial Statements represent the existence of assets, rights and obligations of Empresas Públicas de Medellín E.S.P. and have been valued in the appropriate amounts.

d) The accounting notes or disclosures are prepared clearly and in accordance with the Accounting and Financial Reporting Standards accepted in Colombia (NCIF) and adopted by the General Accounting Office of Colombia through Resolution 037/2017 and Resolution 049/2019.

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.

Álvaro Guillermo Rendón López
Jorge T **Legal Representative**

John Jaime Rodríguez Sosa
Public Accountant
Professional License No. 144842-T

estamos ahí.

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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 2019, the separated statement of profit or loss and other comprehensive income, changes in equity and cash flows for the year that ended 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 2019, and its separated financial performance of its operations and its separated 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 049 of 2019, 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 4 to the separated 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 events mentioned 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 Company's separated financial statements is foreseen. Our opinion is not modified because of this matter.

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 separated statement of financial position includes property, plant and equipment, net and intangibles in non-current assets for $17,880,484 million COP associated with the Cash Generating Unit (CGU) Electricity Generation. The evaluation of the impairment of the CGU is calculated by the Financial Planning Department through the configured HSF-Oracle application; the base information for the determination of the financial projections of the businesses is approved by the respective Vice President and annually taken to the Board of Directors for ratification. At the end of the year, the Value in Use report for the non-financial assets is generated and compared with the recorded value of the CGU to decide whether impairment should be recognized in the financial statements. We considered the evaluation of the Cash Generation Unit – Electricity Generation as a key audit matter as it involves complex judgments by the Company in assessing impairment, and there was significant judgment and audit effort to evaluate the audit evidence obtained related to (i) the value in use methodology; (ii) asset value calculations and (iii) key inputs and assumptions used in the model such as (1) historical baseline figures for the projection; (2) projected figures	Our audit procedures to evaluate the impairment assessment of the cash generating unit – Electricity Generation included, but were not limited to, the following: - Verification of the approval of projected financial figures by the Vice President of each business. - Review of the approval by the Board of Directors of the financial projections of businesses. - Evaluation of the design, implementation and operating effectiveness of the key controls established by the Company to determine the key assumptions used in the impairment testing, with the involvement of professionals with experience and knowledge in valuation. This included controls related to the determination of the macroeconomic assumptions and variables used for the estimation of the discount rates applied in the determination of the recoverable value of the cash-generating unit. - Valuation professionals assisted us in (i) evaluating the value in use methodology; (ii) performing independent recalculations; and (iii) analyzing and evaluating the key

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for changes in volumes, prices and margins; (3) insurers' claims; (4) rates applied to discount of future cash flows; and (5) growth rate gradient in perpetuity.	inputs used in the model such as (1) historical baseline figures for the projection; (2) variables for changes in volumes, prices and margins; (3) sensitizing the insurance claim model by eliminating estimated amounts receivable in 2021, (4) evaluating the rates applied to discount future cash flows, (5) the range of discount rates for the cash generating unit with market parameters and (6) challenging the growth rate gradient in perpetuity by comparing the rates used by the Company with public market sources.

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's separated statement of financial position includes provisions for Lawsuits of $187,772 million COP and contingent liabilities for $817,938 million COP. The valuation of said provisions and contingent liabilities requires the Company to perform complex estimates and to apply certain judgments and assumptions for the probability of unfavorable outcomes of legal proceedings and, therefore, to determine and recognize the payment obligation, the estimate of the amounts to be paid based on the claims and estimated dates of payment. We have considered the adequacy of the sufficiency of said provisions for lawsuits and contingencies as a key audit matter because of the complexity of assigning amounts to the key assumptions considered and because the valuation of such assumptions could have a material impact on the separated financial statements of financial position and profit or loss and other comprehensive income.	Our audit procedures for assessing the sufficiency of the provisions for contingent liabilities and lawsuits included, but were not limited to, the following: - Understanding of the processes established by the Company for the estimation of provisions and contingent liabilities, including the evaluation of the design and implementation and effectiveness of relevant controls, which included controls related to: definition of probability, classification into labor, administrative, civil, and fiscal, average duration, application of case law, and uniformity in value estimation criteria. - Reading of the Board of Directors' minutes to verify the follow-up and approval of the Legal Department's decisions on the Company's lawsuits. - Obtaining the list of lawsuits prepared

	by the Company's Legal Department and verifying the amounts recorded and disclosed in the separated financial statements. - Obtaining confirmation from the Company's internal and external legal advisors on the probabilities of verdicts and current status of the process. - Selection of a sample of the main lawsuits to analyze the supporting documentation with the involvement of our professionals with experience and knowledge in labor and administrative law who assisted us in: • Legal analysis of the documents supporting the claims, the probability of a verdict against the Company and the estimated amount. • Analysis of the possibility for the Company to file an appeal against the court ruling, according to the current situation of each of the selected cases. - Review of the disclosures made in the notes to the separated financial statements in accordance with the applicable financial reporting framework.

Responsibility of management and of personnel responsible for the corporate governance of the Company for the separated financial statements.

Management is responsible for the preparation and reasonable presentation of this separated 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 049 of 2019. This responsibility includes devising, implementing and maintaining such internal control as management deems necessary to enable the preparation of separated financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable under the circumstances.

In preparing the separated financial statements, management is responsible for assessing the Company's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting, unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The personnel responsible for the corporate governance are responsible for overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the separated financial statements.

Our objectives are to obtain reasonable assurance about whether the separated 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 ISA 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 separated financial statements.

As part of an audit in accordance with ISA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the separated 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 resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the 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 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 Company'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 separated 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 Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the separated financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the separated financial statements give a true and fair view.

We communicate with those charged with corporate governance regarding, 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 corporate governance, we determine those matters that were of most significance in the audit of the separated 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.

Gonzalo Alonso Ochoa Ruiz
Partner
26 March 2020
Medellín

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATE STATEMENT OF FINANCIAL POSITION

31 December, 2019 and 2018

Amounts stated in millions of Colombian pesos

	Notes	2019	2018
Assets			
Non-Current Assets			
Property, plant and equipment, net	5	26,431,775	27,040,487
Investment property	6	126,822	77,829
Goodwill	7	260,950	260,950
Other intangible assets	7	537,497	477,315
Investments in subsidiaries	8	7,406,556	7,290,431
Investments in associates	9	2,434,417	2,434,417
Investments in joint ventures	10	99	99
Right of use assets	14	2,060,120	-
Trade and other receivables	12	1,513,822	2,012,782
Other financial assets	13	2,458,334	2,221,695
Cash and cash equivalents	18	17,787	-
Other assets	16	94,757	100,742
Total non-current assets		**43,342,936**	**41,916,747**
Current assets			
Inventories	17	118,871	117,334
Trade and other receivables	12	2,222,783	1,628,488
Current income tax assets	38	34,413	2,037
Other financial assets	13	557,208	990,676
Other assets	16	115,020	104,483
Cash and cash equivalents	18	861,236	835,779
Total current assets		**3,909,531**	**3,678,797**
Total assets		**47,252,467**	**45,595,544**
Liabilities and Equity			
Equity			
Issued capital		67	67
Reserves	19	1,704,818	1,961,034
Accumulated other comprehensive income	20	3,207,197	2,917,113
Accumulated profit	19	16,702,294	15,332,345
Net profit for the year	19	2,706,035	2,344,822
Other components of equity		64,390	49,944
Total equity		**24,384,801**	**22,605,325**

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

SEPARATE STATEMENT OF FINANCIAL POSITION

31 December, 2019 and 2018

Amounts stated in millions of Colombian pesos

	Notes	2019	2018
Liabilities			
Non-current liabilities			
Loans and borrowings	21	13,783,442	12,050,033
Trade and other payables	22	3,726	4,483
Other financial liabilities	23	2,447,689	2,054,762
Employee benefits	25	351,968	305,695
Income tax payable	38	30,331	30,331
Net deferred tax liabilities	38	2,002,164	2,156,828
Provisions	27	412,151	360,917
Other liabilities	28	31,774	32,136
Total non-current liabilities		**19,063,245**	**16,995,185**
Current liabilities			
Borrowings and Loans	21	1,409,169	3,794,580
Creditors and others payables	22	1,061,083	1,017,938
Other financial liabilities	23	337,205	285,867
Employee benefits	25	144,372	139,497
Income tax payable	38	140,636	25,697
Taxes contributions and rates payable	26	116,424	108,195
Provisions	27	334,691	489,052
Other liabilities	28	260,841	134,208
Total current liabilities		**3,804,421**	**5,995,034**
Total liabilities		**22,867,666**	**22,990,219**
Total liabilities and equity		**47,252,467**	**45,595,544**

The accompanying notes are an integral part of the financial statements

Álvaro Guillermo Rendón López
General Manager
Certification Attached

Jorge Andrés Tabares Ángel
Executive Vice-President Finances 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 period from 1 January to 31 December, 2019 and 2018

Figures stated in millions of Colombian pesos

	Notes	2019	2018
Continuing operations			
Sale of goods	30	733	30
Rendering of services	30	8,448,933	7,849,388
Leases	30	51,520	47,536
Other income	31	348,207	236,655
Income from ordinary activities		**8,849,393**	**8,133,609**
Income for sale of assets	30	369	23,596
Total income		**8,849,762**	**8,157,205**
Costs of goods sold and services rendered	32	(4,548,376)	(4,462,036)
Administrative expenses	33	(902,731)	(1,138,953)
Impairment loss on trade receivables	12	(26,287)	(39,737)
Other expenses	34	(131,067)	(173,100)
Finance income	35.1	340,584	262,217
Finance costs	35.2	(1,103,798)	(817,548)
Net foreign exchange difference	36	(46,542)	(207,444)
Equity-accounted investees	9	866,903	809,606
Gain on equity investments	37	12,822	102,968
Profit for the year, net of tax		**3,311,270**	**2,493,178**
Income tax	38	(605,235)	(148,356)
Profit for the year after taxes from continuing operations	19	**2,706,035**	**2,344,822**
Net profit for the year	19	**2,706,035**	**2,344,822**
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurement of defined benefit plans	20 and 38	(35,969)	372
Equity investments measured at fair value through equity	20 and 38	622,447	(24,810)
Income tax related to components that will not be reclassified	20 and 38	141,668	5,396
Equity accounted investees - share of OCI	20 and 38	(189,209)	(41,274)
		538,937	**(60,316)**
Items that are or may be reclassified subsequently to profit or loss:			
Cash flow hedges	20 and 38	**34,119**	**2,777**
Recognized profit for the year		(49,060)	171,076
Reclassification adjustment		83,179	(168,299)
Income taxes related to components that can be reclassified	20 and 38	**17,673**	**(67,764)**
Recognized profit for the year		33,643	(77,717)
Reclassification adjustment		(15,970)	9,953
Equity accounted investees - share of OCI	20 and 38	**(203,917)**	**115,586**
Recognized profit for the year		(203,917)	115,586
		(152,125)	50,599
Other comprehensive income, net of taxes	**38**	**386,812**	**(9,717)**
Total comprehensive income for the year		**3,092,847**	**2,335,105**

The accompanying notes are an integral part of the financial statements

Álvaro Guillermo Rendón López
General Manager
Certification Attached

Jorge Andrés Tabares Ángel
Executive Vice-President Finances 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

For the years ended 31 December 2019 and 2018

Figures stated in millions of Colombian pesos

					Other comprehensive income					
	Issued capital	Reserves (note 19)	Accumulated other comprehensive income (note 19)	Other components of equity	Equity investments measured at fair value through equity (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 2018	**67**	**2,951,644**	**15,569,351**	**49,995**	**2,173,895**	**(7,357)**	**(8,669)**	**12,079**	**756,976**	**21,497,981**
Profit for the period	-	-	2,344,822	-	-	-	-	-	-	2,344,822
Other comprehensive income for the period, net of income tax	-	-	-	-	(21,431)	2,389	(64,987)	-	74,312	(9,717)
Comprehensive income for the period	**-**	**-**	**2,344,822**	**-**	**(21,431)**	**2,389**	**(64,987)**	**-**	**74,312**	**2,335,105**
Surpluses or dividends declared	-	-	(1,203,504)	-	-	-	-	-	-	(1,203,504)
Movement in reserves	-	(990,610)	990,610	-	-	-	-	-	-	-
Equity-accounted investees for changes in equity	-	-	(24,111)	(51)	-	-	-	-	(95)	(24,257)
Balance at 31 December 2018	**67**	**1,961,034**	**17,677,168**	**49,944**	**2,152,464**	**(4,968)**	**(73,656)**	**12,079**	**831,193**	**22,605,325**
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 in reserves	-	(256,216)	256,216	-	-	-	-	-	-	-
Transfers to retained earnings	-	-	138,392	-	(138,392)	-	-	-	-	-
Equity-accounted investees for changes 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**

The accompanying notes are an integral part of the financial statements

Álvaro Guillermo Rendón López
General Manager
Certification Attached

Jorge Andrés Tabares Ángel
Executive Vice-President Finances 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 period from 1 January to 31 December, 2019 and 2018

Figures stated in millions of Colombian pesos

	Notes	2019	2018
Cash from operating activities:			
Net profit for the year		2,706,035	2,344,822
Adjustments to reconcile the net profit for the year to the net cash flows used in operating activities:		1,200,765	1,053,594
Depreciation and amortization of property, plant and equipment, right of use assets and intangible assets	5, 7 and 14	577,736	503,178
Impairment of receivables	12	88,730	68,366
Reversal of loss for impairment of receivables	12	(62,443)	(28,630)
Gain / loss due to exchange difference	36	46,542	207,444
Proceeds from valuation of investment property	6	(51,943)	(1,597)
Proceeds from valuation of financial instruments and hedge accounting		(36,413)	21,033
Provisions, post-employment and long term defined benefit plans		149,286	483,518
Government subsidies applied		-	(1,146)
Deferred income tax	38	4,678	(226,916)
Current income tax	38	600,558	375,272
Share of loss of equity-accounted investees	8	(866,903)	(809,606)
Proceeds from interest	35	(229,336)	(220,889)
Interest expenses	35	1,087,959	739,507
Proceeds from disposition of property, plant and equipment, right of use assets and intangible assets	5	(383)	(23,563)
Proceeds from disposition of financial instruments	13	47,534	-
Dividends from investments	8	(60,356)	(102,968)
Other adjustments		(94,481)	70,591
		3,906,800	3,398,416
Net changes in operating assets and liabilities:			
Change in inventories		(1,044)	(764)
Change in trade and other receivables		216,657	(53,717)
Change in other assets		(4,887)	166,810
Change in trade and other payables		12,473	(108,872)
Change in employee benefits		(1,947)	15,593
Change in provissions		(211,661)	(70,189)
Change in other liabilities		259,961	97,319
		269,552	46,180
Interest paid		(1,454,068)	(1,004,667)
Income tax paid		(517,659)	(448,757)
Income tax refund		-	308,895
Net cash from operating activities		2,204,625	2,300,067
Net cash from investing activities:			
Acquisition and capitalization of subsidiaries or ventures	8	(266,341)	(10,453)
Disposal of subsidiaries and business	8	782	15,000
Acquisition of property, plant and equipment	5	(2,370,622)	(2,626,682)
Disposal of property, plant and equipment	5	541	116,245
Acquisition of intangible assets	7	(40,888)	(49,372)
Disposal of intangible assets	7	-	154
Disposal of investment property	6	2,165	40,034
Acquisition of investments in financial instruments		(124,285)	(1,085,878)
Disposal of investments in financial instruments		808,731	139,623
Dividends received from subsidiaries, associates and joint ventures	8 and 9	697,521	383,796
Other dividends received	13	56,137	64,486
Loans to economic associates	39	317,989	(51,654)
compensation received	5	531,607	-
Other cash from investing activities		23,883	(8,906)
Net cash used in investing activities		(362,780)	(3,073,607)
Cash from financing activities			
Obtaining of loans and borrowings	21	7,463,935	3,763,343
Payment of loans and borrowings	21	(8,067,058)	(856,594)
Transaction costs by issuance of debt instruments	21	(14,695)	(60,866)
Payment of finance lease liabilities	23	(10,010)	(987)
Dividends or surplus paid	19	(1,289,652)	(1,503,504)
Payments of capital of derivatives designated as cash flow hedge	24	156,514	-
Payment of pension bonds	25	(19,515)	-
Other cash from financing activities		(30,898)	7,322
Net cash flows (used in) / provided by financing activities		(1,811,379)	1,348,714
Net increase in cash and cash equivalents		30,466	575,174
Effects of movements in exchange rates on cash and cash equivalents		12,778	26,079
Cash and cash equivalents at beginning of the year	18	835,779	234,526
Cash and cash quivalents at end of the year	18	879,023	835,779
Restricted resources	18	84,565	79,823

The accompanying notes are an integral part of the financial statements

Álvaro Guillermo Rendón López
General Manager
Certification Attached

Jorge Andrés Tabares Ángel
Executive Vice-President Finances and Investments

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Table of contents of notes to separate financial statements

Notes to the Separate Financial Statements of Empresas Públicas de Medellín E.S.P. for the years ended 31 December 2019 and 2018

(In millions of Colombian pesos, except when indicated otherwise)

Note 1. **Reporting Entity**

Empresas Publicas de Medellin E.S.P. (hereinafter, "EPM" or "the company") is the holding company of a multi-latin Enterprise group; which has as of December 31, 2019 a consolidation perimeter 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.

EPM is a municipal-order decentralized entity, created in Colombia through Resolution 58 of 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 Resolution 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 offers its services through the following business units:

- Energy: comprised by the Electricity Generation, Electricity Transmission, Electricity Distribution and Natural Gas Distribution and Commercialization segments.
- Water: includes the Water Supply, Wastewater Management and Solid Waste Management segments.
- Others segment: Consisting of the investment vehicles, Distribución Eléctrica Centroamericana II S.A. (DECA II), EPM Capital Mexico S.A. de C.V., EPM Chile S.A., EPM Inversiones S.A., EPM Latam S.A., Inversiones y Proyectos Hidrosur SpA (former Inversiones y Asesorias South Water Services SpA) [2], Panama Distribution Group S.A. (PDG). It additionally includes Maxseguros EPM Ltd., captive reinsurer established to negotiate, contract, and provide reinsurance services.
- Furthermore, EPM participates in the telecommunications business, in which it has significant influence since August 2014, through UNE EPM Telecomunicaciones S.A. and its affiliates: Edatel S.A. E.S.P, Orbitel Servicios Internacionales S.A. (OSI), Cinco Telecom Corporation (CTC) and Colombia Movil S.A.; and Inversiones Telco S.A.S. and its affiliate Emtelco S.A.; providing voice, data and Internet utilities, professional services, and data center, among others.

The separate financial statements of EPM corresponding to the year ended 31 December 2019, were authorized by the Board of Directors to be published on 26 March 2020.

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).

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[1] Autonomous Equity Social Funding. Under International Financial Reporting Standards (IFRS), it is considered a structured entity part of the consolidation perimeter of the financial statements of the EPM Group.

[2] It changed its company name on November 26, 2018, through public deed No. 34.861-2018 of Notary 27 of Santiago de Chile.

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.

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

Decree 1524 of 1994 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.

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 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 consolidated 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 049 of 2019 (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. Finance 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 value in records 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 recognised 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 recognised 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 unrecognised 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 recognised as reduction in the value of the investment, and those received from associate or joint venture are directly recognised 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, recognises losses for impairment in the investment of the subsidiary, associate or joint venture. Impairment losses are recognised 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 recognises 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 recognised 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 recognised 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 recognised 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 Group recognises 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 revenues from ordinary activities coming from the sale of its share in the product that arises from the joint operation; its share in revenues from ordinary activities coming 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, revenues from ordinary activities, and expenses related to its ownership in a joint operation according to the guidelines applicable in particular to the assets, liabilities, revenues from ordinary activities, 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 recognised 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 recognised in the other comprehensive income.

2.7 Income from ordinary activities

Income from ordinary activities basically corresponds to the result of the Group's main activity, which is the rendering of residential public utilities of electric power, natural gas, water supply and sewage, and are recognised 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 Group. Income 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 recognised 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 twater 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 recognised for commercial activities.

2.8 Contracts with Customers

When contract results can be reliably measured, the company recognises the revenues 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 recognised 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 recognised 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 recognises it directly in the profit or loss for the period.

Payments received from customers before the corresponding work has been carried out, are recognised as a liability in the Statement of Financial Position as other liabilities.

The difference between the revenues recognised 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 recognised 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 recognised in profit or loss for the period in which they become enforceable. When the grants related to an asset, it is recorded as deferred revenue and is recognised 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 where the Group companies are located, the regulatory frameworks and the plurality of operations that companies undertake make each enterprise a tax passive subject, 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 recognised 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.

The fiscal profit differs from the profit disclosed in the statement of income for the period due to the revenue, and expense items that are 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 fiscal 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 recognised 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 recognised for all imposable temporary differences, while the deferred tax asset is recognised 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 recognised 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 recognised 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 recognised 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 recognised are reassessed on each presentation report date and are recognised 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 recognised in profit or loss for the period, except that related to items recognised 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

Are responsible for this tax in the common regime the companies of the Group located in Colombia that perform sales of movable assets and provides taxed services and obtains exempt revenue 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 recognised as a sum to be paid to the tax office, from which the tax paid is deducted. Income is recognised 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 dismantlement 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 recognised 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 work	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
Water network	40 to 80 years
Sewerage 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 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 recognised, 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 recognises 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 recognised 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.

Lease payments are divided between financial expenses and debt amortization. Finance charges are recognised 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 value of the underlying asset is less than 15 (fifteen) SMMLV are recognised 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 recognised 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.

Revenue 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. Revenue 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 derecognised, 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 recognised in the statement of comprehensive income in profit or loss in the period when it was derecognised.

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 that is find 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 - As contract effective term				
Capitalized development expenses	Indefinite				
Software and IT applications	Finite	3	to	5	years
Licenses	Finite	3	to	5	years
Rights	As contract effective term				
Other intangible assets	Finite	7	to	15	years

An intangible asset is derecognised 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 derecognised are measured as the difference between the value obtained in the disposal and the recorded value of the asset, and it is recognised in 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 recognised 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 recognised 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 a 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 recognised 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 recognised 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 recognises 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 recognised 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 recognised 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 recognised 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[3] if the asset is held within a business model whose objective is to maintain it in order to obtain the contractual cash

[3] 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.

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 recognises 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 recognised 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 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.

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 recognised in the profit for the period.

Derecognition of Financial Assets

A financial asset or part of it, is derecognised 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 derecognises 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 recognise 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 recognise the financial asset and will also recognise a guaranteed loan in the shape of a collateral for the received revenues.

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 recognised 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 recognised 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 recognises 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 recognised 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 recognised 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 recognised in profit and loss for the period.

Compound instruments

Financial instruments that contain both a liability and an equity component (compound financial instruments) are recognised 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 recognised 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 recognised less, the accrued recognised profit.

Derecognition of financial liabilities

A financial liability or part of it is derecognised 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 recognised through profit and loss.

In the event changes are not substantial the company recalculates the gross recorded value of the financial liability and recognises 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 recognised at the revenues received, net of direct issuance costs.

The repurchase of the company's own equity instruments is recognised and directly deducted in equity. No profit or loss is recognised 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 recognised 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 recognised 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 recognised 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 recognised or of non-recognised firm commitments.

  A change in the fair value of a derivative that is a hedging instrument is recognised 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 recognised 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 derecognised, the non-amortized fair value is immediately recognised in profit or loss in the Statement of comprehensive income.

  When a non-recognised 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 recognised as an asset or liability with their corresponding profit or loss recognised 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 recognised asset or liability or to a highly probable foreseen transaction, or to the exchange rate risk in a non-recognised firm commitment.

  The purpose of cash flow hedge accounting is to recognise 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 recognised in the Other comprehensive income, whereas the ineffective portion is immediately recognised in profit or loss in the Statement of comprehensive income period as finance cost.

  Values recognised 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 revenue or financial expense is recognised, or when the foreseen transaction takes place. When the hedged item constitutes the cost of a non-financial asset or liability, the values recognised 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 recognised 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 recognised 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 recognised 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

Finance 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 recognised 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 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 recognised 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 recognised 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 recognised 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 recognised 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 recognised for the asset in the previous years. Such reversal is recognised 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 recognised 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 recognised.

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 recognised as finance expense.

Provisions for dismantling

The company recognises as part of the cost of a fixed asset in particular, to the extent that there is a legal or implicit obligation of dismantling or restoring, the estimation of the future costs in which the company expects to incur in to perform the dismantlement or restoring and its balancing entry is recognised as a provision for dismantling and restoring costs. The dismantling cost is depreciated over the estimated useful life of the fixed asset.

Dismantlement or restoring costs are recognised 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 dismantlement 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 recognised in profit or loss. The change in the provision value associated to the time elapsed is recognised as financial expense in profit or loss in the Statement of comprehensive income.

Onerous Contracts

The Group recognises 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 liquidate the obligation or the amount of the obligation cannot be measured with enough reliability, are not recognised in the Statement of financial position, they are rather disclosed as contingent liabilities. Contingent liabilities generated in a business combination are recognised 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 recognised 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 revenue associated are recognised 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 recognised and the amount initially recognised less the accrued amortization recognised.

2. 20 Employee Benefits

2.20.1. Post-Employment Benefits

Defined Contribution Plans

The contributions to the defined contribution plans are recognised 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 recognised 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 recognised 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 revenue for the plan assets, interest cost for the obligation for defined benefits and interests for the asset ceiling effect and is recognised in profit or loss.

The current service cost, the past service cost, any settlement or reduction of the plan are immediately recognised 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 recognises 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 recognise 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 Group has fully delivered them.

2.20.4. Termination Benefits

The company recognises 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 recognises 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 recognise these infrastructures as property, plant and equipment, it recognises 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 recognised 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 recognised 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.

Income from ordinary activities and costs related to the operating services are recognised according to the accounting policy of ordinary income 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 a revenue-generating activity, is recognised 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 recognises 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 recognised directly in the net equity.

2.24 Changes in accounting policies

During 2019, the company implemented changes to IFRS (new standards, amendments or interpretations), issued by the International Accounting Standards Board (IASB) and adopted in Colombia that are compulsory for the annual period beginning on January 1, 2019:

IFRS 16 Leases. Issued in January 2016, this new standard introduces a comprehensive model for identifying leases and accounting treatments for lessors and lessees. It will replace the current standards for the accounting treatment of leases included in IAS 17 Leases and related interpretations, such as IFRIC 4 Determining whether an arrangement contains a lease, SIC-15 Operating leases—Incentives and SIC-27 Evaluating the substance of transactions taking the legal form of a lease.

The distinction between leases and service contracts is based on the customer's control over the identified asset. For the lessee, the distinction between operating leases (off-balance sheet) and finance leases (on the balance sheet) is removed and replaced by a model in which an asset (right of use) and corresponding liability must be recognised for all leases (i.e. everything in the statement of financial position) except short-term leases and leases of low-value assets.

Assets (rights of use) are initially measured at cost and are subsequently measured at cost (with certain exceptions) less accumulated depreciation and impairment losses, adjusted for any revaluation of the lease liability. Lease liability is initially measured at the present value of future lease payments. Subsequently, the lease liability is adjusted for interest and lease payments and the impact of lease modifications, among other things. In addition, the classification of cash flows is also affected because operating lease payments under IAS 17 are presented as operating cash flows; whereas under IFRS 16, lease payments will be divided into liability amortization and an interest portion that is presented as cash flow from financing and operating activities, respectively.

Unlike lessee accounting, IFRS 16 includes the same accounting requirements for a lessor as IAS 17, i.e. it continues to require a lessor to classify a lease as either an operating or a finance lease.

After completion of the inventory and lease valuation, the company adopted IFRS 16 retrospectively with cumulative effect from initial application, recognised on 1 January 2019, without using restatement of comparative information as required by paragraph C7 of this IFRS. Accordingly, the 2018 financial information has not been restated and continues to be reported in accordance with IAS 17.

The initial cumulative effect recognised as opening adjustments considering the indicative rates currently being used for the financing of the company, applied to the lease liabilities is: Net assets from right of use: $292,567, Total financial liabilities from lease: $292,567, no net deferred taxes and retained earnings.

Additionally, $1,737,744 was reclassified from property, plant and equipment to the assets for right of use corresponding to financial leases that had been recognised under IAS 17.

There is no effect on retained earnings, since the option taken for the valuation of the asset is to match the adjusted liability for prepaid or accrued (earned) leases recognised in the Statement of Financial Position immediately prior to the initial application. In EPM, no pre-paid or accrued lease payments were identified.

Short-term leases not exceeding 12 months or relating to low value underlying assets are not recognised as right of use assets, instead the Company uses the practical record and recognises such leases in the statement of comprehensive income.

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 recognised 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 Group 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 the existence of impairment indicators for the assets, goodwill and assessment of assets for determining the existence of value impairment losses.**

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 recognised in profit or loss for the period.

The assessment of the existence of value impairment indicators is based on external and internal factors, and in turn on quantitative and qualitative factors. Assessment are based on financial results, the legal, social and environmental settings, and the market conditions; significant changes in the scope or way in which the asset or CGU is used or expected to be used and evidence about 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 the 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 every company of 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, so:

- 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 recognised in the financial statements those obligations classified as possible; obligations classified as remote are not disclosed nor recognised.

- **Future expenditure for asset dismantlement and retirement obligations.**

In the assumptions used for determining future expenditure for asset dismantlement 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 dismantlement on which legal or implicit obligations have been identified, the initial date of dismantlement 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 deterioration**

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: derecognised 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 recognises 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 recognised in revenue is stablished.

When the moment at which revenue should be recognised is uncertain, the company determines to recognise the 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 recognises the value of revenues 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**

The significant transactions and other relevant aspects that occurred during the period, different from those of the normal business of the company, are related to the contingencies of the Ituango Hydroelectric Project, that took place on April 28, 2018 due to a geological event that blocked the diversion tunnel of the Cauca River with approximately 160 thousand cubic meters of rock and soil, which caused the occluding and flooding of the dam. As a result, EPM has led its decisions prioritizing the protection of communities and the environment in the first place and after that the infrastructure of the project. Therefore, on May 7, 2018, the decision was made to drain the dammed water through the powerhouse of the future electricity generation plant for rechanneling it to its traditional flow into the Cauca River and thus lower the water level of the dam. On January 16 and February 5, 2019, the intake gates No. 2 and No. 1, respectively, were closed, thus cutting the waterflow through the powerhouse. From February 8, 2019, the recovery of the flow of the Cauca River began through the flow of water through the tailrace. On March 1, 2019: Skava Consulting delivers the results of the root cause analysis indicating the most likely hypothesis that could have generated the Auxiliary Deviation Gallery plugging, which consequently caused the contingency of the Ituango hydroelectric project. On March 7, 2019: At the powerhouse, work is concentrated on water drainage activities. In the dam the construction of the plastic concrete screen (bentonite screen) was concluded and the tailgate operates in an optimal way evacuating the waters of the Cauca river that arrive at the dam.

On May 29, 2019, the closure of one of the two gates of the Auxiliary Deviation Gallery (GAD) was completed, 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 the closure of the left GAD gate, the following work focused on the closure of the right gate to complete the full closure, milestone reached on December 18, 2019, when the second gate of the Auxiliary Deviation Gallery (GAD) was closed. The pre-positioning of the GAD, with its two gates duly closed, reduces the risks for the communities downstream of the works and means the continuation of the project's recovery process. Subsequently, a 22-meter plug will be built downstream of the floodgate chamber in the axis of the dam.

On June 11, 2019, the insurance company Mapfre made a first payment of compensation for the protection of extra-contractual civil liability (RCE) for $6,169 corresponding to the affectations caused to third parties. This indemnification is given in the terms and conditions of the RCE policy, clarifying that according to estimates they have made, indemnifications for the affectations to third parties may exceed $15,000.

On July 19, 2019, the construction work on the dam was completed, allowing this structure to be brought to the height of 435 meters above sea level, that is, the maximum established in the original designs. As a consequence, the other technical advances achieved in the Ituango hydroelectric project and the capacities installed by EPM in the communities to react to a possible eventuality, allowed that on July 26, 2019, the National System of Disaster Risk Management (SNGRD) modified the state of alert for the evacuation of the populations located downstream of the future power generation plant. Determining that no locality remained on red alert, which means permanent preventive evacuation.

On September 16, 2019, Mapfre Seguros Generales de Colombia S.A. indicated its decision to grant coverage under the all-risk construction and assembly policy for the contingency in the Ituango Hydroelectric Project. Said insurance company appointed a series of national and international experts (engineers, geologists and geotechnical specialists in dams and underground works, lawyers, among others) to review the technical information of the main work fronts of the project; including tunnels, caverns, dam and tailgate. They also reviewed the designs, plans, technical specifications, construction processes, construction logs, risk matrix, pre and post-contingency studies. In this way, they concluded that the cause of the contingency, which occurred on April 28, 2018, is framed in the terms and conditions of the policy, thus confirming the coverage.

The insurance policy issued by Mapfre in favor of EPM covers damages to the infrastructure, civil works, project equipment and loss of profit due to the delay in the start of operations. Subsequently, the insurance company will quantify the value of the loss and, following the limits and conditions established in the insurance policy, will reimburse EPM for the resources needed to enter the financial statements of the Ituango Hydroelectric Project.

The insurance policy establishes an insured limit of USD 2,556 million for coverage of material damage to infrastructure and equipment. It also has coverage for delay in starting operations (money not received for damages derived from the contingency) for US$628 million, amounts that set the maximum responsibility of the insurance company. The amount to be recognised by the insurer and its corresponding payment schedule will be the result of a rigorous analysis of damage quantification, whose results will be linked to the policy conditions such as deductibles, limits, additional coverage, among others.

September 27, 2019: By this date, a detailed exploration of 80% of the machine cavern, transformers, beacons, tunnels and adjacent galleries has been carried out. Damage from civil works was found in about 30% of the areas that could be directly inspected. By June 30, 2020 it is expected to have explored 100% of the cave complex and the dimensioning of the damages in order to define and start the activities of total repair of the cave complex

On November 8, 2019, the 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 4, 2019, the insurance company Mapfre made a first payment for material damage in civil works, for $525,438 (USD 150 million).

On December 18, 2019: EPM performed the closing maneuver of the right branch of the Auxiliary Deviation Gallery (GAD). This closure ensures the pre-plugging of the Auxiliary Deviation System (SAD) through the gates and allows reaching optimal conditions for the final plugging.

On March 3, 2020, the National Environmental Licensing Authority (ANLA) authorized EPM to continue works on the Ituango hydroelectric project, which will enable the company to carry out the work to dissipate in an optimal manner, through the turbines that will be housed in the powerhouse, the energy of the water contained in the dam. The decision of the ANLA is based on the provisions of Resolution 0820 (June 2018) of that entity, a preventive measure that does not involve the suspension of "...activities, works, engineering and civil works to be executed by the company to ensure the integrity of the project, and prevent and mitigate risks associated with the contingency presented ...", so that it can preserve the life of communities downstream of the project as a priority.

The company and the relevant control and surveillance bodies continue to assess the root causes of the above-mentioned events.

In relation to the contingency, EPM has recognised the next items in its separated financial statements as of 31 December 2019:

- Cost and progress of construction of the Ituango hydroelectric project for $9,961,227 (see note 5).
- Receivables from the insurance company Mapfre for $456,914 for impairment of civil works and total loss of machinery and equipment covered by the all-risk and construction policy and $8,831 for non-contractual civil liability (see note 12).
- Total provision of $45,676, of which $6,799 was recognised in 2019 (2018: $38,877) for the attention of those affected in Puerto Valdivia, for compensation of emergent damage, lost profits and moral damage, due to the increase in the waters of the Cauca River as a consequence of the occluding of the project on April 28, 2018. During 2019, payments of $9,741 (2018: $62) were made for a balance in liabilities in the provision account of $35,873 (2018: $38,815). (see note 27.1.6).
- Total provision of $48,375 of which $5,459 was recognised in 2019 (2018: $42,917) for the attention of persons who had to be evacuated as a result of the event. During 2019, payments of $20,420 (2018: $23,700) were made for a balance in liabilities in the provision account of $4,256 (2018: $19,217). (see note 27.1.6).
- Total provision of $151,401 of which $14,083 was recognised in 2019 (2018: $137,318) as guarantee for the reliability charge that covers the construction and commissioning of the Pescadero Ituango Hydroelectric Power Plant. At December 31, 2019, payments of $151,401 (2018: $-) were made. (see note 27.1.5).
- Total provision of $69,897 of which $38,509 was recognised in 2019 (2018: $31,388) for environmental and social 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 that the project had on April 28, 2018 and by the closure of floodgates that reduced the flow of the river downstream of the project. During 2019, payments of $15,043 (2018: $-) were made for a balance in liabilities in the provision account of $54,854 (2018: $31,388). (see note 27.1.1).
- Total provision of $108,630 of which $6,833 was recognised in 2019 (2018: $101,797) between estimated expense and interest as a result of the valuation, from January to October 2021, for the default to the Intercolombia transporter for the months subsequent to the entry into operation of the connection infrastructure of the Ituango project. As of December 31, 2019, and 2018 no payments were made for this concept. (see note 27.1.5).
- Total provision of $14,284 of which $11,864 was recognised in 2019 (2018: $2,420) for environmental sanctions filed by the National Environmental Licensing Authority (ANLA). During 2019, payments of $2,420 (2018: $-) were made for a balance in liabilities in the provision account of $11,864 (2018: $2,420). (see note 27.1.6).
- Additionally, other expenses of $24,929 (December 2018: $45,639) were recognised in the Statement of Comprehensive Income for the attention of the community affected by the contingency (see note 34).

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	2019	2018
Cost	30,657,277	30,963,801
Accrued depreciation and impairment loss	(4,225,502)	(3,923,314)
Total	**26,431,775**	**27,040,487**

Figures 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	2019	2018
Networks, lines and cables	248	-
Plants, pipelines and tunnels	4,463	29,833
Land and buildings	15,231	21,508
Machinery and equipment	313	105
Other property, plant and equipment	277	-
Total temporarily idle property, plant and equipment	**20,532**	**51,446**

Figures stated in millions of Colombian pesos

The most significant variation is due to the commissioning of Dolores generation plant and the decommissioning of the Rio Abajo plant.

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 2019 the cost amounts to $20,532 (2018 $51,446), accrued depreciation is $2,806 (2018 $6,474) and accrued impairment is $923 (2018 $22).

The following is the movement of cost, depreciation and impairment of property, plant and equipment:

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	223,493	216,411	85,850	239,204	30,963,800
Additions3	34,825	16,780	2,580,289	6,173	10,492	37,186	582	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	4,119	1,503	2,245	(23,530)	(79,825)
Disposals (-)	-	-	-	-	(60)	-	-	(1,037)	(1,097)
Withdrawals (-)	(352)	(130,941)	(904,057)	(4,156)	(3,008)	(18,785)	(93)	(1,519)	(1,062,911)
Impact due to adoption of IFRS 16 As of January 20194	-	(1,610,257)	1,886	(204,500)	-	-	-	-	(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)	(1,558,401)	-	(628,223)	(98,268)	(126,552)	(34,004)	(60,916)	(3,923,313)
Depreciation for the period	(164,059)	(186,109)	-	(56,102)	(11,097)	(23,328)	(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	-	-	-	77,013	-	-	-	-	77,013
Other changes	113	309	-	(3,085)	1,278	1,425	(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**

Figures stated in millions of Colombian pesos

2018	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	5,060,448	7,322,713	8,450,022	5,111,232	206,506	197,597	68,430	227,233	26,644,181
Additions[3]	19,864	1,632,750	2,791,105	15,448	7,150	32,717	1,002	17,969	4,518,005
Advanced payments (amortized) made to third parties	-	-	28,243	-	-	-	-	1,106	29,349
Transfers (-/+)	484,528	247,388	(900,642)	19,385	11,875	8,979	17,643	(546)	(111,390)
Disposals (-)	(377)	(26,626)	(80,117)	(1,549)	(1,942)	(22,885)	(1,225)	(1,604)	(136,325)
Assets classified as held for sale	-	-	-	-	-	-	-	-	
Final balance	**5,632,717**	**9,102,206**	**10,271,370**	**5,192,549**	**223,493**	**216,411**	**85,850**	**239,204**	**30,963,800**
Accrued depreciation and impairment loss									
Initial balance of accrued depreciation and impairment loss	(1,255,981)	(1,386,950)	-	(569,441)	(89,290)	(124,339)	(28,365)	(56,306)	(3,510,672)
Depreciation for the period	(160,573)	(188,192)	-	(58,272)	(10,782)	(24,636)	(6,835)	(5,969)	(455,259)
Impairment for the period	-	-	-	-	-	-	-	-	-
Disposals (-)	238	16,278	-	79	1,853	22,569	1,225	1,402	43,644
Other changes	(633)	463	-	(589)	(49)	(146)	(29)	(43)	(1,026)
Final balance accrued depreciation and impairment loss	**(1,416,949)**	**(1,558,401)**	**-**	**(628,223)**	**(98,268)**	**(126,552)**	**(34,004)**	**(60,916)**	**(3,923,313)**
Total final balance property, plant and equipment	**4,215,768**	**7,543,805**	**10,271,370**	**4,564,326**	**125,225**	**89,859**	**51,846**	**178,288**	**27,040,487**

Advanced payments made to third parties									
Initial balance	-	-	38,310	-	-	-	-	1,195	39,505
Movement (+)	-	-	81,684	-	-	-	-	1,524	83,208
Movement (-)	-	-	(53,441)	-	-	-	-	(417)	(53,858)
Final balance	**-**	**-**	**66,553**	**-**	**-**	**-**	**-**	**2,302**	**68,855**

Figures stated in millions of Colombian pesos

[1]Includes capitalization of borrowing costs for $366,052 (2018: $310,419), the weighted average effective rate used to determine the amount of borrowing costs was 8.28% in Colombian pesos (2018 7.85%) and 5.19% in USA dollars (2018: 5.73%). Additionally, it includes assets for rights of use associated with constructions in progress amounting to $3,053.

The following are the main projects under construction:

Project	2019	2018
Ituango building project	9,961,227	9,368,040
Playas recovery project	86,876	63,781
Interconex Caldas - La Estrella	68,093	10,278
Distribution network restoration	66,851	-
Distribution network expansion	59,807	-
Cadena de occidente	40,469	9,381
San Nicolas Valley	35,426	17,002
Measurement code	27,827	17,103
Santo Domingo project	27,634	25,926
La Iguana Basin	25,529	16,389
Mobile Substations	18,889	11,332
Convenio Unidos por el Agua Sanitation	16,654	6,316
Rural Electrification	16,282	11,104
Modernization small Ayura plant	15,250	3,493
Envigado, Capiro sector Expansion	14,156	5,898
Control Centers Consolidation	13,718	4,215
Guatapé plant restoration	13,313	3,455
Calizas substation - Associated Lines	13,176	11,496
Unidos por el Agua Agreement Water supply	13,062	11,740
Medium Voltage Quality Improvement	13,014	-
Modernization Ayura plant	12,985	3,604
Modernisation of El Buey collection	12,976	1,619
Other projects	476,249	669,198
Total	**11,049,463**	**10,271,370**

Figures stated in millions of Colombian pesos

- As of December 31, 2019, the Ituango hydroelectric project presented a physical progress of 76.7% (31 December 2018: 88.2%), 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 recovery and commissioning program. As a result of the contingency that occurred on April 28, 2018, caused by a geological event that occluded the Cauca River diversion tunnel with approximately 160 thousand cubic meters of rock and soil, 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. For this, the percentage of progress decreases both in what was programmed and what was executed. This new 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. It is estimated that the first power generation unit could enter into operation by the end of the last quarter of 2021. However, this commissioning date is very dynamic, due to changes in technical variables and the evolution and efficiency of the measures implemented to deal with the contingency.

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, equipment and civil works have been written off for a value of $456,914; additionally, the project has been tested for impairment, considering the provisions of IAS 36 and no impairment has been evidenced.

Once the above activities are completed, adjusted estimates can be made regarding the time of the interventions, the recovery engineering and the works to be implemented to fully recover the project, using up to date information. With regard to compensation for the damage that occurred, on December 4, 2019, that Mapfre insurance company made a first payment for material damage in civil works, for $525,438 (USD 150 million), which implied the cancellation of civil works for this amount.

According to the above, total of write-offs 31 December 2019 amounts to $ 982,352, of which $ 904,057 correspond to 2019.

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.

- Other projects: refers to other projects of the company, among these the most significant is merchandise for projects for $77,298.

[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 dismantling and removal of property, plant and equipment.

[4]Corresponds to property, plant and equipment that as of January 1, 2019 under IFRS 16 were reclassified as rights of use for $1,737,744 and as a result of the first-time adoption of IFRS 16 are $1,886 for construction in progress.

Withdrawals for sale of assets were recognised in income for $369.

Additions to property, plant and equipment of $2,722,581 are taken as effective items, less the movement of advances of $-29,953, capitalized interest of $366,052, additions of right of use of $3,053 and the environmental and decommissioning provisions of $47,206.

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, 2019, 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 (2018 $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, 2019 amount to $ 2,290,755 (2018 $3,452,179).

The following is the historical cost of the fully depreciated property, plant and equipment that continue in operation as of December 31, 2019 and 2018.

Group	2019	2018
Communication and computer equipment	20,345	19,507
Machinery and Equipment	11,703	10,617
Plants, ducts and tunnels	15,225	12,602
Networks, lines and cables	5,386	5,219
Furniture, fixtures and office equipment	3,281	3,015
Other properties, plant and equipment	3,153	2,971
Buildings	1,601	962
Total	**60,694**	**54,893**

Figures 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 recognised professional capacity and recent experience in the category of real estate investments subject to assessment; this value has been determined by *Corporación Avalúos Lonja Inmobiliaria, Ingeniería y Avalúos S.A.S and Activos e Inventarios Limitada*. 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 revenue, taking into account the probable monthly rental fee that tenants would be willing to pay in the lease market. See Note 42. Fair value measurement on a recurring and non-recurring basis.

Investment property	2019	2018
Initial Balance	77,829	116,823
Net income or loss due to adjustment of far value[1]	51,651	1,125
Dispositions (-)	(2,165)	(40,034)
Transfers[2] (-/+)	(493)	(85)
Total	**126,822**	**77,829**

Figures stated in millions of Colombian pesos

[1] See detail in Note 31. Other Income and Note 34. Other Expenses.

[2] Includes transfers to property, plant and equipment from investment properties.

As of December 31, 2019, ren income from investment properties for the period amounted to $679 (2018: $657) and direct expenses for the period related to investment properties amounted to $63 (2018: $61).

Note 7. **Goodwill and other intangible assets**

The breakdown of the recorded value for Goodwill and other intangible assets is as follows:

Intangibles	2019	2018
Cost	**1,197,682**	**1,080,395**
Goodwill	260,950	260,950
Concessions and franchises	452,743	381,251
Rights	7,984	7,984
Licenses	85,491	70,180
Software	186,842	168,556
Easements	167,172	164,516
Disbursements Development Phases	33,522	23,980
Other intangibles	2,978	2,978
Accrued amortization and impairment	**(399,235)**	**(342,130)**
Concessions and franchises	(251,226)	(226,552)
Rights	(1,727)	(1,419)
Licenses	(41,015)	(31,854)
Software	(102,039)	(79,396)
Easements	**(1,237)**	**(1,238)**
Other intangibles	(1,991)	(1,671)
Total	**798,447**	**738,265**

Figures stated in millions of Colombian pesos

The movement of cost, amortization and impairment of intangible assets is detailed below:

2019	Goodwill	Concessions and similar rights	Capitalized development expenses	Software and IT applications	Licenses	Rights	Other intangible assets[1]	Total
Initial balance cost	260,950	381,251	23,980	168,556	70,180	7,984	167,494	1,080,395
Additions[2]	-	3,020	9,444	17,920	9,955	-	548	40,887
Transfers (-/+)	-	68,472	-	2,182	7,116	-	2,057	79,827
Disposals (-)	-	-	-	(1,469)	(2,020)	-	-	(3,489)
Other chahges	-	-	98	(347)	260	-	51	62
Final balance cost	**260,950**	**452,743**	**33,522**	**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)	(10,341)	(309)	(1,211)	(60,762)
Disposals (-)	-	-	-	1,332	1,528	-	-	2,860
Other changes	-	(42)	-	293	(347)	-	893	797
Final balance accrued amortization and impairment	**-**	**(251,226)**	**-**	**(102,039)**	**(41,015)**	**(1,727)**	**(3,228)**	**(399,235)**
Final balance intangible assets net	**260,950**	**201,517**	**33,522**	**84,803**	**44,476**	**6,257**	**166,922**	**798,447**

Figures stated in millions of Colombian pesos

2018	Goodwill	Concessions and similar rights	Capitalized development expenses	Software and IT applications	Licenses	Rights	Other intangible assets[1]	Total
Initial balance cost	260,950	302,217	56,676	115,570	52,918	50,003	124,534	962,868
Additions[2]	-	3,571	15,098	18,349	8,715	-	3,639	49,372
Transfers (-/+)	-	75,662	(47,794)	37,124	10,834	-	35,562	111,388
Disposals (-)	-	-	-	(2,487)	(2,304)	-	(77)	(4,868)
Other chahges	-	(199)	-	-	17	(42,018)	3,836	(38,364)
Final balance cost	**260,950**	**381,251**	**23,980**	**168,556**	**70,180**	**7,985**	**167,494**	**1,080,396**
Initial balance accrued depreciation and impairment loss	-	(211,233)	-	(61,117)	(23,888)	(1,111)	(2,589)	(299,938)
Amortization for the period[3]	-	(15,509)	-	(20,727)	(10,161)	(307)	(1,212)	(47,916)
Disposals (-)	-	-	-	2,450	2,263	-	-	4,713
Other changes	-	191	-	(2)	(69)	-	891	1,011
Final balance accrued depreciation and impairment loss	**-**	**(226,551)**	**-**	**(79,396)**	**(31,855)**	**(1,418)**	**(2,910)**	**(342,130)**
Final balance intangible assets net	**260,950**	**154,700**	**23,980**	**89,160**	**38,325**	**6,567**	**164,584**	**738,266**

Figures stated in millions of Colombian pesos

[1] includes easements, intangibles 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 2019, the purchases associated with capitalized development expenditure were earmarked for IT projects: EAM Asset Management, Sentinel Project (*Proyecto centinela*), Treasury Project (Proyecto Tesorería).

[3] see note 32 Costs of services rendered and note 33 Administrative expenses.

At the end of the periods, impairment testing was performed on assets for those intangibles with an indefinite lifespan.

The amortization of intangible assets is recognised as costs and expenses in the statement of comprehensive income, section profit or loss for the period, in the lines Costs for services rendered and Administrative expenses.

The historical cost at the presentation date and the remaining amortization period for significant intangibles is:

Relevant intangible assets	Lifespan	Remaining depreciation period	2019	2018
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
Distribution circuit network Bello	Indefinite	105	54,558	27,419

Figures 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 2019, have a recorded value of $428,122 and 2018 for $425,271.

Intangible assets with indefinite lifespan	2019	2018
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	167,172	164,321
Subtotal other intangible assets	**167,172**	**164,321**
Total intangible assets with indefinite lifespan	**428,122**	**425,271**

Figures stated in millions of Colombian pesos

Note 8. **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		Date of establishment
			2019	2018	
Empresa de energía del Quindío S.A. E.S.P. EDEQ	Colombia	Provides public utilities of electrical energy, purchase, sale, and distribution of electrical energy.	19.26%	19.26%	12/22/1988
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	Colombia	Provides public energy utilities, operating electricity generating plants, transmission and sub-transmission lines and distribution networks, as well as the marketing, import, distribution and sale of electricity.	24.44%	24.44%	09/09/1950
Electrificadora de Santander S.A. E.S.P. ESSA	Colombia	Provides public electricity utilities buys, sells, markets and distributes electric energy.	0.28%	0.28%	9/16/1950
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	Colombia	Provides public utilities for electrical energy, purchase, export, import, distribution and sale of electrical energy, construction and operation of generating plants, substations, transmission lines and distribution networks.	12.54%	12.54%	10/16/1952
Hidroecológica del Teribe S.A. HET [1]	Panama	Finances the construction of the Bonyic hydroelectric project, required to satisfy the growth in energy demand in Panama.	99.68%	99.18%	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%	12/17/2004
Aguas Nacionales EPM S.A. E.S.P.	Colombia	Provides domestic public utilities of water, sewerage and solid waste management, treatment and use of solid waste, complementary activities, and engineering utilities propoer of those public utilities.	99.97%	99.97%	11/29/2002
Aguas Regionales EPM S.A. E.S.P.	Colombia	Guarantees the provision of domestic public utilities of water supply, sewerage and solid waste management, and compensates for the lack of infrastructure for these utilities in the partner municipalities.	67.25%	67.25%	1/18/2006
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. [3]	Colombia	Provides domestic public utilities of water and sewerage, as well as other complementary activities typical of each of these public utilities.	56.01%	56.00%	11/22/1999
Aguas de Malambo S.A. E.S.P. [4]	Colombia	Dedicated to guarantee the provision of public domestic utilities of water, sewerage and solid waste management in the jurisdiction of the municipality of Malambo, department of Atlántico.	98.03%	97.46%	11/20/2010
Empresas Públicas de Rionegro S.A. E.S.P. - EP RIO	Colombia	Provision of public domestic utilities, including water and sewerage, as well as complementary and related activities to them, specifically the administration, operation, maintenance and investment of water and sewerage systems in the municipality of Rionegro, the implementation of programs and projects on the environment and renewable and non-renewable natural resources, to promote sustainable development. In addition, the company will provide the service of maintenance for the public lighting network in the Municipality of Rionegro.	100.00%	100.00%	12/9/1996
Empresas Varias de Medellín S.A. E.S.P.	Colombia	Subsidiary dedicated to the provision of public solid waste management utility within the framework of integrated solid waste management.	64.98%	64.98%	1/11/1964
EPM Inversiones S.A.	Colombia	Dedicated to capital investment in national or foreign companies organized as public utility companies.	99.99%	99.99%	8/25/2003
Maxseguros EPM Ltd	Bermuda	Negotiating, contracting and managing of reinsurance for policies covering equity.	100.00%	100.00%	4/23/2008
Panamá Distribution Group S.A. PDG	Panama	Capital investment in companies.	100.00%	100.00%	10/30/1998
Distribución Eléctrica Centroamericana DOS S.A. DECA II	Guatemala	Makes capital investments in companies that are dedicated to the distribution and commercialization of electrical energy, and provides telecommunications utilities.	99.99%	99.99%	3/12/1999
EPM Capital México S.A. de CV [2]	Mexico	Develops infrastructure projects related to electricity, lighting, natural gas, telecommunications, sanitation, drinking water plants, sewerage, wastewater treatment, buildings, as well as their operation and utilities.	51,28%	39,36%	04/05/2012
EPM Chile S.A.	Chile	Develops electric energy, lighting, natural gas, telecommunications, sanitation, water potabilization plants, sewage and waste water treatment plants projects, as well as providing these utilities and participating in all types of tenders.	99.99%	99.99%	2/22/2013
patrimonio Autónomo Financiación Social	Colombia	Administers the resources and payments of the social financing program created to facilitate the purchase of electrodomestics, gas appliances and information technology products by users.	100.00%	100.00%	4/14/2008

[1] In December 2019 EPM capitalized Hidroecológica del Teribe S.A. for $178,469

[2] In September 2019, EPM capitalized EPM Capital México S.A. de C.V. for $74,661

[3] In July 2019 EPM capitalized Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. for $1,211

[4] In June 2019, EPM capitalized Aguas de Malambo S.A. E.S.P. for $12,000 and in November 2018 for $8,000.

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:

Subsidiary	31 December 2019					31 December 2018				
	Investment value				Total	Investment value				Total
	Cost	Equity method	Impairment	Dividends[2]		Cost	Equity method	Impairment	Dividends	
EPM Inversiones S.A.	1,561,331	94,126	-	(195,513)	1,459,944	1,561,331	14,117	-	(139,714)	1,435,734
Aguas Nacionales EPM S.A. E.S.P.	1,552,115	100,135	-	(8,578)	1,643,672	1,552,115	(46,953)	-	-	1,505,162
EPM Chile S.A.	1,044,935	59,062	-	-	1,103,997	1,044,935	(667)	-	-	1,044,268
Distribución Eléctrica Centroamericana DOS S.A. DECA II	1,009,257	926,266	-	(356,353)	1,579,170	1,009,257	1,009,464	-	(171,850)	1,846,871
Hidroecológica del Teribe S.A. HET	524,536	(191,769)	(86,963)	-	245,804	346,067	(196,050)	(86,963)	-	63,054
Panama Distribution Group S.A. PDG	238,116	275,838	-	(21,657)	492,297	238,116	284,791	-	(28,401)	494,506
EPM Capital México S.A. de C.V.[3]	177,436	(177,436)	-	-	-	102,774	(37,257)	-	-	65,517
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	140,663	42,153	-	(34,941)	147,875	140,663	32,960	-	(20,677)	152,946
Aguas de Malambo S.A. E.S.P.	70,718	(32,181)	(1,641)	-	36,896	58,718	(26,904)	(1,641)	-	30,173
Maxseguros EPM Ltd.	63,784	107,955	-	(2,944)	168,795	63,784	97,024	-	-	160,808
Patrimonio Autónomp Financiación Social[1]	61,914	87,359	-	-	149,273	69,414	67,325	-	-	136,739
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	57,052	(16,735)	-	-	40,317	57,052	(21,927)	-	(2,418)	32,707
Aguas Regionales EPM S.A. E.S.P.	47,228	19,390	-	-	66,618	47,228	15,106	-	-	62,334
EMPRESAS PUBLICAS DE RIONEGRO SAS ESP	46,905	25,587	-	-	72,492	46,905	9,829	-	-	56,734
Empresas Varias de Medellín S.A. E.S.P.	32,967	106,949	-	(21,444)	118,472	32,967	93,179	-	-	126,146
Empresa de Energía del Quindío S.A. E.S.P. EDEQ	28,878	13,038	-	(5,938)	35,978	28,878	10,638	-	(4,401)	35,115
Gestión de Empresas Eléctricas S.A. GESA	25,782	15,912	-	(3,704)	37,990	25,782	14,766	-	(3,841)	36,707
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	2,774	1,759	-	-	4,533	1,564	1,022	-	-	2,586
Electrificadora de Santander S.A. E.S.P. ESSA	2,514	287	-	(368)	2,433	2,514	48	-	(238)	2,324
Total	**6,688,905**	**1,457,695**	**(88,604)**	**(651,440)**	**7,406,556**	**6,430,064**	**1,320,511**	**(88,604)**	**(371,540)**	**7,290,431**

Figures stated in millions of Colombian pesos

[1]Decrease in the cost of the investment in the autonomous equity *financiación social* is due to a return of contributions in 2019 for $7,500 and in 2018 for $15,000.

[2]Dividends for $654,583 (2018 $383,796) have been received.

[3] the decrease in EPM Capital México investment corresponds to a subsidiary's implicit obligation derived from the application of the equity method.

The breakdown of the equity method recognised in the profit or loss and in other comprehensive income is as follows:

Subsidiary	31 December 2019			31 December 2018		
	Equity method for the period		Total	Equity method for the period		Total
	Profit or loss for the period	Other comprehensive income		Profit or loss for the period	Other comprehensive income	
EPM Inversiones S.A.	287,285	(38,225)	249,060	225,280	41,391	266,671
Aguas Nacionales EPM S.A. E.S.P.	147,088	-	147,088	(24,308)	-	(24,308)
EPM Chile S.A.	200,747	(114,982)	85,765	284,995	(11,855)	273,140
Distribución Eléctrica Centroamericana DOS S.A. DECA II	176,756	(112,332)	64,424	176,749	6,495	183,244
Hidroecológica del Teribe S.A. HET	6,386	(1,969)	4,417	(816)	11,790	10,974
Panamá Distribution Group S.A. PDG	53,457	(26,014)	27,443	45,905	8,312	54,217
Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC	30,125	(255)	29,870	29,057	27	29,084
EPM Capital México S.A. de CV	(120,257)	(95,534)	(215,791)	1,648	6,430	8,078
Maxseguros EPM Ltd	9,674	1,257	10,931	10,711	13,308	24,019
Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS	8,153	(543)	7,610	5,283	(226)	5,057
Aguas de Malambo S.A. E.S.P.	(5,228)	-	(5,228)	(1,330)	-	(1,330)
Aguas Regionales EPM S.A. E.S.P.	4,284	-	4,284	5,642	-	5,642
Empresas Públicas de Rionegro S.A. E.S.P. - EP RIO	15,758	-	15,758	8,967	-	8,967
Empresas Varias de Medellín S.A. E.S.P.	18,139	(4,369)	13,770	11,588	(1,945)	9,643
Empresa de Energía del Quindío S.A. E.S.P. EDEQ	6,903	(101)	6,802	6,489	232	6,721
Gestión de Empresas Eléctricas S.A. GESA	5,111	(124)	4,987	4,334	297	4,631
Electrificadora de Santander S.A. E.S.P. ESSA	410	66	476	385	55	440
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	736	-	736	326	1	327
Patrimonio Autónomo Financiación Social	21,376	-	21,376	18,702	-	18,702
Total	**866,903**	**(393,125)**	**473,778**	**809,606**	**74,312**	**883,918**

Figures 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:

31 December 2019	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Income from ordinary activities	Profit or loss for the period Continuing operations	Other comprehensive income	Total comprehensive income
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
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
Electrificadora de Santander S.A. E.S.P. ESSA	321,713	1,558,855	335,156	850,594	1,195,556	148,540	24,105	172,645
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
Hidroecológica del Teribe S.A. HET	14,295	464,143	28,752	185,252	54,851	5,600	(2,442)	3,158
Gestión de Empresas Eléctricas S.A. GESA	15,403	-	152	-	7,282	5,112	(124)	4,988
Aguas Nacionales EPM S.A. E.S.P.	116,091	1,748,771	82,936	102,902	302,546	178,228	-	178,228
Aguas Regionales EPM S.A. E.S.P.	25,534	143,830	34,000	32,754	56,210	9,932	-	9,932
Empresas Públicas de Rionegro S.A. E.S.P. - EP RIO	16,243	91,013	16,202	16,243	40,114	18,076	-	18,076
Empresa de Aguas del Oriente Antioqueño S.A. E.S.P.	5,100	4,553	1,163	396	3,541	1,314	-	1,314
Aguas de Malambo S.A. E.S.P.	5,122	49,756	6,221	7,091	10,850	(3,264)	-	(3,264)
Empresas Varias de Medellín S.A. E.S.P.	176,084	208,296	144,087	175,979	249,064	28,321	(6,724)	21,597
EPM Inversiones S.A.	17,418	1,448,161	505	5,971	-	265,866	18,219	284,085
Maxseguros EPM Ltd	389,840	-	221,045	-	15,148	9,674	1,257	10,931
Panamá Distribution Group S.A. PDG	676,302	2,068,197	1,148,316	889,845	2,426,283	103,801	4,936	108,737
Distribución Eléctrica Centroamericana DOS S.A. DECA II	1,044,381	2,974,486	1,306,273	1,151,393	3,470,986	212,206	36	212,242
EPM Capital México S.A. de CV	237,476	558,959	165,201	330,019	384,764	156,673	(208,337)	(51,664)
EPM Chile S.A.	243,613	3,322,551	139,033	2,300,790	541,346	198,845	(89,805)	109,040

Figures stated in millions of Colombian pesos

31 December 2018	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Income from ordinary activities	Profit or loss for the period Continuing operations	Other comprehensive income	Total comprehensive income
Empresa de energia del Quindio S.A. E.S.P. EDEQ	66,422	193,750	51,399	39,098	233,114	33,665	1,203	34,868
Central Hidroelectrica de Caldas S.A. E.S.P. CHEC	190,884	864,688	151,124	339,943	681,783	118,901	111	119,012
Electrificadora de Santander S.A. E.S.P. ESSA	312,774	1,427,035	293,144	790,896	1,115,338	139,738	19,994	159,732
Centrales Electricas del Norte de Santander S.A. E.S.P. CENS	173,048	909,308	231,845	621,052	688,659	42,141	(1,800)	40,340
Hidroecologica del Teribe S.A. HET	15,858	475,835	39,035	369,859	50,082	(1,553)	7,349	5,797
Gestion de Empresas Electricas S.A. GESA	14,114	-	146	-	6,477	4,335	297	4,632
Aguas Nacionales EPM S.A. E.S.P.	124,446	1,612,669	161,103	66,635	32,806	(21,698)	0	(21,698)
Aguas Regionales EPM S.A. E.S.P.	19,311	120,376	23,964	23,044	50,942	8,383	0	8,383
Empresa de Aguas del Oriente Antioqueno S.A. E.S.P.	1,544	3,543	255	215	2,219	582	1	583
Aguas de Malambo S.A. E.S.P.	11,223	31,027	3,934	5,484	11,549	(1,375)	-	(1,375)
Empresas Publicas de Rionegro S.A. E.S.P. - EP RIO	36,751	62,810	9,989	32,837	26,617	8,967	-	8,967
Empresas Varias de Medellin S.A. E.S.P.	173,838	149,178	102,784	144,515	227,427	17,916	(2,994)	14,922
EPM Inversiones S.A.	9,317	1,374,403	7,568	5,620	0	225,240	41,375	266,615
Maxseguros EPM Ltd	398,372	-	237,564	-	8,765	10,711	13,308	24,019
Panama Distribution Group S.A. PDG	690,582	1,946,017	948,649	1,036,858	2,017,192	92,800	8,438	101,238
Distribucion Electrica Centroamericana DOS S.A. DECA II	1,006,976	2,701,475	1,130,243	839,050	2,862,252	220,476	6,669	227,145
EPM Capital Mexico S.A. de CV	257,728	561,087	261,457	358,434	250,583	4,180	17,186	21,366
EPM Chile S.A.	336,736	3,784,868	188,725	2,889,541	556,070	286,314	(14,690)	271,623

Figures stated in millions of Colombian pesos

8.1 Changes in Participation of Subsidiaries that did not result in Loss of Control

During 2019, there were changes in participation of the following subsidiaries:

The percentage of participation in Hidroecológica del Teribe S.A. increased to 99.68%, due to the capitalization of EPM. This variation had an effect on the application of the equity method, reducing the investment by $144 directly recognised in equity.

The percentage of participation in EPM Capital Mexico S.A. de C.V. increased to 51.28%, due to the capitalization of EPM. This variation had an effect on the application of the equity method, decreasing the investment by $4,010, directly recognised in equity.

The percentage of participation in Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. increased to 56.01%, due to the capitalization of EPM. This variation did not have an effect on the application of the equity method, since the municipality of El Retiro also capitalized this company.

The percentage of ownership in Aguas de Malambo S.A. E.S.P. increased to 98.03%, due to the capitalization of EPM. This variation had an effect on the application of the equity method, reducing the investment by $49 recognised directly 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 the associate	Location (country)	Main activity	Percentage of participation and voting rights		Date of establishment
			2019	2018	
Hidroeléctrica Ituango S.A. E.S.P.	Colombia	Promotion, design, construction operation, maintenance and electric energy sales at the national and international scale from the Ituango Hydroelectric Power Plant.	46.33%	46.33%	12/29/1997
Hidroeléctrica del Río Aures S.A. E.S.P.	Colombia	Generation and sale of electricity through a hydroelectric plant located in the municipalities of Abejorral and Sonson, in the Department of Antioquia.	32.99%	32.99%	5/14/1997
UNE EPM Telecomunicaciones S.A.	Colombia	Renders telecommunications and ITC utilities, information services and complementary activities.	50.00%	50.00%	6/29/2006
Inversiones Telco S.A.S.	Colombia	Invest in companies whose corporate purpose is the provision of telecommunications utilities, TIC, information services and complementary activities, as well as in companies that render services of business processes outsourcing.	50.00%	50.00%	11/5/2013

The amount of investment in associates at the reporting date was:

Associate	2019				2018			
	Investment value			Dividends[1]	Investment value			Dividends[1]
	Cost	Impairment	Total		Cost	Impairment	Total	
Hidroeléctrica Ituango S.A. E.S.P.	34,227	-	34,227	-	34,227	-	34,227	-
Hidroeléctrica del Río 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	-	2,342,488	-	2,342,488	38,483
Inversiones Telco S.A.S.	55,224	-	55,224	3,103	55,224	-	55,224	3,442
Total investment in associates	**2,434,417**	**-**	**2,434,417**	**3,103**	**2,434,417**	**-**	**2,434,417**	**41,925**

Figures stated in millions of Colombian pesos

[1] In 2019 dividends for $38,483 from UNE EPM Telecomunicaciones S.A. decreed in 2018 were received

Note 10. **Investment in joint ventures**

The breakdown of joint ventures of EPM at the reporting date is as follows:

Name of the joint venture	Location (Country)	Main Activity	Percentage of participation and voting rights		Date of establishment
			2019	2018	
Parques del Río S.A.S. [1]	Medellín	Construction, operation, management and sustainment of the Parques del Rio Medellin project, as well as acting as urban project manager.	33%	33%	12/26/2015

[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 joint venture	2019				2018			
	Investment value			Dividends	Investment value			Dividends
	Cost	Impairment	Total		Cost	Impairment	Total	
Parques del Río S.A.S.	99	-	99	-	99	-	99	-
Total investment in joint ventures	**99**	**-**	**99**	**-**	**99**	**-**	**99**	**-**

Figures stated in millions of Colombian pesos

Note 11. **Asset impairment loss**

11.1 Impairment of investments in subsidiaries, associates and joint ventures

At the presentation date, no impairment loss was recognised in the statement of comprehensive income, related to investments in subsidiaries, associates and joint Ventures.

The following shows the accrued effect for the recognised impairment:

Investment	Recorded value	
	2019	**2018**
Subsidiary		
Hidroecológica del Teribe S.A. HET	86,963	86,963
Aguas de Malambo S.A. E.S.P.	1,641	1,641
Total subsidiaries	**88,604**	**88,604**

Figures 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.
Costs and expenses	It has been necessary to purchase water in bloc from the sociedad de acueducto, alcantarillado y aseo de Barranquilla S.A. E.S.P. - AAA for 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 the entry of EPM that by shareholder agreement should be covered by the previous owner. These costs and expenses are being recovered.
Investment	Master Plan: A master plan is required for the main water and wastewater projects, which diagnoses the current infrastructure, identifies needs, and proposes solutions over time for a population both in terms of investment and operation. The contract for their preparation was added in time to include a wider range of customers. Similarly, 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 users were connected 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	
	2019	2018
Segment Electricity generation		
Goodwill	260,647	260,647
Easements	444	444
CGU - Electricity Generation-	**261,091**	**261,091**
Segment Electricity Transmission		
Easements	127,059	127,023
CGU - Electricity Transmission-	**127,059**	**127,023**
Segment Electricity Distribution		
Easements	29,433	28,906
CGU - Electricity Distribution-	**29,433**	**28,906**
Gas Segment		
Goodwill	303	303
Easements	3,692	3,679
CGU - Natural Gas-	**3,995**	**3,982**
Water supply segment		
Easements	4,713	2,919
CGU - Water Supply-	**4,713**	**2,919**
Sanitation segment		
Easements	594	1,350
UGE - Sanitation-	**594**	**1,350**

Figures 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, 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.

Goodwill is assigned mainly to the segment/CGU Electricity Generation, which presented a balance as of 31 December 2019 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 $165,935 (2018: $164,321).

As of 31 December 2019 and 2018, 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 2019 with indefinite lifespan is detailed below:

CGU	Value in use	Recorded value
Generation	23,458,487	17,880,484
Distribution	6,073,939	4,249,358
Trasmission	1,029,410	847,163
Natural Gas	1,370,182	844,236
Water supply	3,470,608	2,619,466
Sanitation	1,742,237	1,113,710
Total CGU	**37,144,864**	**27,554,417**

Figures 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	2019	2018
Non-current		
Public utilities debtors	343,524	319,038
Impairment loss public utilities	(103,022)	(93,776)
Economic associates	1,135,512	1,652,922
Employee loans	92,525	89,353
Impairment loss employee loans	(2)	(11)
Other debtors receivable	45,285	46,166
Impairment loss other debtors	-	(910)
Total non-current	**1,513,822**	**2,012,782**
Current		
Public utilities debtors	1,708,935	1,410,316
Impairment loss public utilities	(204,529)	(193,238)
Economic associates	27,797	120,601
Employee loans	30,958	29,519
Dividends and participations receivable[1]	5,000	46,687
Impairment loss employee loans	(291)	(321)
Construction contracts	246	782
Compensations [2]	465,959	15,013
Other services	7,983	7,657
Other loans	243,862	250,499
Impairment loss other debtors	(63,137)	(59,027)
Total current	**2,222,783**	**1,628,488**
Total	**3,736,605**	**3,641,270**

Figures stated in millions of Colombian pesos

[1]The non-current portion shows a decrease of $498,960, mainly explained by related parties due to settlement of credits for EPM Chile and EPM Transmisión Chile.

[2]Increase for $594,299 is mainly explained by the payment of the receivable from MAPFRE Seguros as compensation for the Ituango project.

Portfolio 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:

	2019		2018	
	Gross recorded value	Lifetime expected credit losses value	Gross recorded value	Lifetime expected credit losses value
Public utilities debtors				
Not past due nor impaired	1,730,479	(113,726)	1,433,607	(106,629)
Less than 30 days	102,654	(6,989)	94,207	(7,074)
30-60 days	22,675	(4,280)	16,339	(2,242)
61-90 days	7,658	(3,759)	8,114	(2,497)
91-120 days	5,409	(3,119)	5,857	(2,597)
121-180 days	7,353	(5,299)	7,284	(4,578)
181-360 days	14,413	(12,077)	11,783	(10,555)
Greater than 360 days	161,818	(158,302)	152,164	(150,842)
Total public utilities debtors	**2,052,459**	**(307,551)**	**1,729,354**	**(287,014)**
Other debtors				
Not past due nor impaired	1,969,088	(10,117)	2,186,064	(4,688)
Less than 30 days	14,657	(2,611)	7,130	(1,266)
30-60 days	2,722	(823)	9,491	(3,634)
61-90 days	2,125	(524)	2,172	(588)
91-120 days	6,232	(645)	1,152	(483)
121-180 days	1,605	(1,210)	14,530	(13,880)
181-360 days	17,112	(6,461)	11,272	(8,576)
Greater than 360 days	41,586	(41,039)	27,390	(27,155)
Total other debtors	**2,055,127**	**(63,430)**	**2,259,201**	**(60,270)**
Total debtors	**4,107,586**	**(370,981)**	**3,988,555**	**(347,284)**

Figures stated in millions of Colombian pesos

Impairment of receivables for public utility displays an increase of $20,537, mainly explained by the recognition of the higher expected loss in the portfolio with age of more than 360 days. During 2019, the amounts provisioned for receivables were also impacted by higher sales, situation that reflected in an increase for the present portfolio impairment, which is also considered in the expected credit loss model.

Portfolio impairment of balances associated with other debtors also presented an increase of $3,160 explained by the recognition of the greater expected loss for the portfolio with arrears greater than 360 days.

Reconciliation of the expected credit losses in the portfolio is as follows:

Asset lifetime expected credit losses	2019	2018
Initial balance	(347,284)	(310,174)
Changes in impairment of receivables held at the beginning of the period	-	(25,757)
Financial assets not derrecognised during the period	2,570	2,677
New financial assets originated or purchased	(264,315)	(83,701)
Write-offs	238,028	69,721
Other movements	20	(51)
Final balance	**(370,981)**	**(347,284)**

Figures stated in millions of Colombian pesos

Portfolio reconciliation is as follows:

Portfolio balance	2019	2018
Initial balance	3,988,555	3,840,047
New financial assets originated or purchased	18,120,105	11,790,763
Financial assets write-offs	(17,414,648)	(10,983,903)
Derecognition of financial assets	(2,571)	(2,677)
Other movements	(583,855)	(655,675)
Final balance	**4,107,586**	**3,988,555**

Figures stated in millions of Colombian pesos

The Group derecognises, against impairment recognised 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 derecognised.

Bodies responsible for derecognising

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	2019	2018
Non-current		
Derivatives designated as hedging instruments under hedge accounting		
Swap contracts	33,336	173,989
Total derivatives designated as hedging instruments under hedge accounting	**33,336**	**173,989**
Financial assets measured at fair value through changes in profit for the period		
Variable income securities	98,348	64,547
Fiduciary rights	404,365	402,067
Total financial assets measured at fair value through profit or loss	**502,713**	**466,614**
Financial assets designated at fair value through other comprehensive income		
Equity instruments	1,922,285	1,581,092
Total financial assets designated at fair value through other comprehensive income	**1,922,285**	**1,581,092**
Total other non-current financial assets	**2,458,334**	**2,221,695**
Current		
Derivatives designated as hedging instruments under hedge accounting		
Swap contracts	11,727	12,241
Total derivatives designated as hedging instruments under hedge accounting	**11,727**	**12,241**
Financial assets measured at fair value through profit or loss		
Fixed income securities	539,511	972,788
Pledged investments	5,970	5,647
Total financial assets measured at fair value through profit or loss	**545,481**	**978,435**
Total other current financial assets	**557,208**	**990,676**
Total other financial assets	**3,015,542**	**3,212,371**

Figures stated in millions of Colombian pesos

Conventional purchases and sales of financial assets are accounted for by applying the trade date.

13.1 Financial assets measured at fair value through 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	2018
Interconexion Electrica S.A. E.S.P. [1]	1,915,398	1,574,226
Other investments	6,887	6,866
Total	1,922,285	1,581,092
Cumulative gain (loss) through changes in fair value transferred to retained earnings/loss for the period[3]	(47,620)	
Dividends recognised during the period related to investments that are recognised at the end of the period[2]	60,356	102,968
Dividends recognised during the period	12,736	102,968

Figures stated in millions of Colombian pesos

[1] As of 31 December 2018, the market price of *Interconexión Eléctrica S.A. E.S.P.* closed at $19,600 (2017: $13,980) Colombian pesos per share.

[2] In 2019 *Interconexión Eléctrica S.A. E.S.P.* declared dividends for $53,944 and *Inversiones telco* declared dividends for $3,103.

[3] 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.

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. Asset-originating lease for rights of use as a lessee

At the cut-off date, the recorded value of assets with rights of use is as follows (excluding assets with rights of use associated with construction in progress, which are included in note 5 Property, plant and equipment):

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	86,292	7	34	30	(186)	94,630
Re-expression by policy change	5,595	458,210	1,610,257	17,056	1,763	1,596	10,961	2,105,438
Disposals (-)	-	(293)	-	-	-	-	-	(293)
Other changes	(879)	(4,443)	-	(1,080)	2,063	2,380	-	(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	(288)	(13,486)	(41,975)	(806)	(160)	(226)	(3,761)	(60,702)
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**	**2,536**	**2,193**	**7,006**	**2,060,120**

Figures 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:

Financial lease	2019		2018	
	Minimum payments	Present value of minimum payments	Minimum payments	Present value of minimum payments
One year	185,942	177,241	131,283	124,557
More than one year and up to five years	688,252	517,512	533,935	398,745
More than five years	16,333,712	1,547,936	15,521,706	1,282,275
Total leases	**17,207,906**	**2,242,689**	**16,186,924**	**1,805,577**
Less - value of unearned interest	14,965,217	-	14,381,347	-
Present value of minimum lease payments	**2,242,689**	**2,242,689**	**1,805,577**	**1,805,577**

Figures stated in millions of Colombian pesos

The most relevant finance lease arrangements are:

Contrato de Interconexión de Alcantarillado **(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%

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 $209,584 (see note 35 Finance income and expense).

Total cash outflows from leases during the period are $168,066.

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 and these contracts can be renewed.

The value of non-cancellable operating lease payments is as follows:

Operating leases	2019	2018
Year one	46,873	47,656
Year two	6,458	5,940
Year three	3,412	2,986
Year four	1,722	1,562
Year five	1,722	1,562
More that five years	13,775	16,768
Total leases	**73,962**	**76,474**

Figures stated in millions of Colombian pesos

Income from contingent leases recognised in the income statement for the period is $22,699 (2018: $23,576).

The company, as a lessor, does not have contracts that take the legal form of a lease and that in essence do not constitute a.

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 $8143.

The total future minimum non-cancellable sublease payments on assets acquired under operating leases is $54. Contingent lease expense recognised in income for the period is $2.

Lease payments recognised as expense for the period are $5,047.

Total cash outflows from leases during the period are $1,678.

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.

The company has not granted warranties in which a third party is authorized to sell or pledge without a breach by the company.

The company has not received warranties in which it is authorized to sell or pledge without a breach by the owner of the guarantee.

Note 16. Other assets

The breakdown of other assets at the end of the periods being reported is as follows:

Concept	2019	2018
Non-current		
Advance payments[1]	10,820	14,892
Employee benefits	42,047	42,414
Advance paymets to suppliers[2]	18,995	19,868
Deferred loss from leaseback	21,610	22,283
Goods received as dation in payment	1,285	1,285
Total other non-current assets	**94,757**	**100,742**
Current		
Advance payments[1]	67,852	59,569
Advance payments to suppliers[2]	46,053	43,422
Other recoverables due to other taxes	1,000	1,400
Withheld industry and Commerce Tax	18	-
Other advance payments or recoverables due to taxes and contributions	97	92
Total other current assets	**115,020**	**104,483**
Total other assets	**209,777**	**205,225**

Figures stated in millions of Colombian pesos

[1]The non-current portion includes insurance for $2,249 (2018: $5,381) corresponding to the all-risk policies of the Ituango Hydroelectric Project (2018: $5,349), effective until March 2021, which are being amortized; the premium on legal stability contracts for $7,357 (2018: $8,249) and leases for $1,214 (2018: $1,262).

The current portion includes insurance for $59,233 (2018: $52,823), comprised primarily of all-risk policies for $36,865 (2018: $29,740), of which $5,620 (2018: $9,150) is from the Ituango Hydroelectric Project, and other insurance for $22,368 (2018: 23,083) of which $14,990 (2018: $12,985) correspond to climate change insurance; goods and services for $4,423 (2018: $2,941) and leases and maintenance for $4,195 (2018: $3,804).

[2]Corresponds to advances and resources given in administration, mainly from agreements with: *Empresa de Desarrollo Urbano - EDU* for $18,749 (2018: $18,407) and *Corporación Parque Arví* for $387 (2018: $1,544). During the term, an advance was paid to the subsidiary *Aguas Regionales* for $5,000.

Note 17. **Inventories**

Inventories at the end of the period were represented as follows:

Inventories	2019	2018
Materials for the rendering of services	114,131	113,983
Goods in stock	3,922	2,956
Goods in transit	818	395
Total inventories at cost or at net realizable value, whichever is less	**118,871**	**117,334**

Figures 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 $92,124 (2018: $92,222) as the cost of the merchandise sold or cost to provide the service during the period. The inventory decline recognised as an expense during the period amounted to $84 (2018: $3).

The company has not generated any impairment losses when comparing the net realizable value with the average cost of the inventories.

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	2019	2018
Cash on hand and in banks	305,910	537,618
Other cash equivalents	573,113	298,161
Total cash and cash equivalents reported in the statement of financial position	**879,023**	**835,779**
Cash and cash equivalents reported in the statement of cash flows	**879,023**	**835,779**
Restricted cash[1]	**84,565**	**79,823**

Figures stated in millions of Colombian pesos

[1]Of this $17,787 (2018: $-) 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 company has restrictions on cash and cash equivalents detailed below. At 31 December 2019, the fair value of restricted cash equivalents is $84,565 (2018: $79,823).

Fund or convention	Intent	2019	2018
Fondo de Vivienda Sinpro	Contribute to the acquisition of housing and improvement of the same, of the servants who are beneficiaries of the conventional agreement signed between EPM and the unions.	21,319	17,936
Fondo de Vivienda Sintraemdes	Contribute to the acquisition of housing and improvement of the same, of the servants beneficiaries of the conventional agreement signed between EPM with the unions.	19,199	17,002
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	10,760	8,006
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 No. 179: includes the municipality of Sonsón.	5,635	5,443
Transacciones internacionales de energía	Guarantee corresponding to the "compensation" that must be made between the invoice for stock exchange transactions and the advance payments, seeking the actual payment to XM.	5,274	1,636
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	2,605
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.	2,392	2,258
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.	2,274	2,107
Cuenca Verde	Manage resources assigned for compliance with the objectives of the Corporación CuencaVerde	2,167	40

Figures stated in millions of Colombian pesos

Fund or convention	Intent	2019	2018
Contrato No. CT-2019-001105	Contract for the supply of energy and 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.	2,000	-
Convenio puntos SOMOS	Provision of services for the operation of the key capacities associated with the Points element of the Large Scale Loyalty Program for the EPM Group.	1,727	1,651
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.	1,674	1,613
Fondo de Calamidad Sinpro	Promote the welfare of their servants to meet their urgent and unforeseen needs or those of their primary family group.	1,448	1,310
CONTRATO INTERADMINISTRATIVO Número Pc-2017-001532 De 2017,	Construction and intervention of water and sewage networks in the Pepe Sierra I, Barrios de Jesús, el Progreso and Cañada del Niño neighborhoods.	1,438	494
Convenio 5 Esc. Indígenas 2019-20	Co-finance the development of indigenous educational centres within the framework of the villages programme, for the improvement of the quality of life of the indigenous communities in the department of Antioquia	995	-
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.	731	732
Municipio de Medellín - Aguas	Integrated management of water for human consumption by the inhabitants of the municipality of Medellin.	509	382
Municipio de Guatapé y Cornare	Join efforts to improve technical, economic and social conditions for the implementation 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 Guatape	448	1,994

Figures stated in millions of Colombian pesos

Fund or convention	Intent	2019	2018
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.	426	406
Crédito BID 2120	Disbursement for the construction of the Bello wastewater treatment plant (PTAR)	335	2,289
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 San Juan del Puerto boardwalk, for the development of sustainable tourism in the municipality of Guatape	311	1,742
CONVENIO INTERADMINISTRATIVO CT -2017-001388 (460007009)	Agreement for the construction of 7 indigenous schools in 5 municipalities	253	1,057
Fondo Entidad Adaptada de Salud y Fondo Fosyga	Control and monitoring mechanism for the collection of contributions from the General Social Security Health Contribution System.	152	1,857
Administración de recursos para la construcción de infraestructura en Madera para Emvarias en el relleno sanitario La Pradera.	Administration of resources for the construction of infrastructure in wood for Emvarias in the La Pradera landfill.	114	124
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.	68	59
Espíritu Santo	EPM - Liquidation Espíritu Santo	62	60
Municipio de Medellín - Terrenos	Acquisition of land identified and characterized within the watershed protection zones that supply water systems in the municipality of Medellín.	61	58

Figures stated in millions of Colombian pesos

Fund or convention	Intent	2019	2018
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 resources of the 4x1000.	51	1,572
Bogota Galeria Bolivar	Adapting the 51 (Bolívar) race between 44th (San Juan) and 57th (La Paz) streets and converting this segment of the road into what will be called the Boívar Gallery.	15	23
Municipio de Medellín - Moravia	Construction, repair and replacement of aqueduct and sewerage networks and the paving in the municipality of Medellín of the roads affected by these works in the Moravia neighborhood.	3	3
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	2
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
Aporte Municipios de Pueblorrico y Ciudad Bolívar	Agreement for the construction of seven rural indigenous schools	-	90
Banco Bogota INCODER	Join efforts and resources between EPM and INCODER to carry out the project "feasibility study for the construction of the irrigation and drainage district in part of the Urabáantioqueño region" with multipurpose scope.	0	4,791
Bogotá Convenio parques del rio	Relocation of the public service networks for the development of the project called Parques del Rio Medellin,	-	1
Convenio Marco Municipio Medellín No. 4600049285	Construction by EPM of platforms and other road elements in the city centre, taking advantage of the Centro Parrilla project, i.e. the renovation of water and sewage networks.	-	39
Distrito Térmico	Agreement with the Ministry of the Environment and Sustainable Development for the development of activities in the La Alpujarra Thermal District.	-	71
Ministerio de Minas y Energía	Contributions from the Ministry of Mines and Energy in accordance with the provisions of the FAER GGC 430 contract of 2015 for rural electrification works in the Municipality of Ituango	-	191
Municipio de Barbosa - Subsidios	Agreement to partially subsidize the connection of users in strata 1 and 2	-	62
Municipio de Caldas	To manage and administer the resources allocated by the municipality of Caldas for the development of the project: Construction, replacement and modernization of water and sewerage networks and their complementary works, in the urban area of the municipality of Caldas	-	116
Total restricted resources		**84,565**	**79,823**

Figures 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	2019	2018
Legal reserves		
Initial balance	1,379,435	2,370,045
Release	(256,216)	(990,610)
Final balance of legal reserves	**1,123,219**	**1,379,435**
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 of other reserves	**7,591**	**7,591**
Total reserves	**1,704,818**	**1,961,034**

Figures 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, *Plan Financiación*, *Fondo autoseguros*, housing fund).

The Board of Directors, at its meetings of 24 March 2019 and 20 March 2018, approved:

- Release reserves of $256,216 (2018: $990,610) 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	2019	2018
Initial balance	17,677,167	15,569,351
movement of reserves	256,216	990,610
Surpluses or dividends decreed	(1,289,652)	(1,203,504)
Transfer from other comprehensive income	138,395	-
Equity method for changes in equity	(79,832)	(24,112)
Total cumulative profit before net income or loss for the year	**16,702,294**	**15,332,345**
Net profit for the period	**2,706,035**	**2,344,822**
Total retained profit	**19,408,329**	**17,677,167**

Figures stated in millions of Colombian pesos

Surplus paid during the year was $1,289,652 (2018: $1,503,504), $703,447 (2018: $656,457) ordinary and $586,205 (2018: $547,047) extraordinary and in 2018: $300,000 from the sale of ISAGEN.

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	2019			2018		
	Gross	Tax effect	Net	Gross	Tax effect	Net
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 plans	(47,962)	19,036	(28,926)	(11,995)	7,027	(4,968)
Equity investments measured at fair value through equity	2,764,339	1,837	2,766,176	2,280,287	(127,822)	2,152,465
participation in other comprehensive income of subsidiaries	460,679	19,053	479,732	826,024	5,169	831,193
cash flow hedges	8,016	(29,880)	(21,864)	(26,103)	(47,553)	(73,656)
Total	**3,198,511**	**8,686**	**3,207,197**	**3,081,652**	**(164,539)**	**2,917,113**

Figures stated in millions of Colombian pesos

During 2019, net gains from changes in fair value of hedging instruments were reclassified to profit or loss for $83,179.

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	2019	2018
Initial balance	12,079	12,079
Total	**12,079**	**12,079**

Figures 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	2019	2018
Initial balance	(4,968)	(7,357)
Profit or loss for the period due to new measurements of defined benefit plans	(35,969)	372
Associated income tax (or equivalent)	12,011	2,017
Total	**(28,926)**	**(4,968)**

Figures 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	2019	2018
Initial balance	2,152,465	2,173,895
Net earnings due to changes in the fair value of investment property	622,447	(24,810)
Associated income tax (or equivalent)	129,657	3,380
Accumulated income transferred to the accumulated income for the period	(138,393)	-
Total	**2,766,176**	**2,152,465**

Figures 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	2019	2018
Initial balance	831,193	756,976
New measurements of defined benefit plans	(31,836)	(2,215)
Equity investments measured at fair value through equity	(169,196)	(38,347)
Hedging operations	(1,916)	137
Result from translation of foreign operations	(203,267)	115,502
Assets held for sale or distribution to owners	(51)	-
Associated income tax (or equivalent)	13,140	(765)
Total other comprehensive income for the period	**(393,126)**	**831,288**
Cumulative gain (loss) transferred to retained earnings/loss for the period - Reclassification of property, plant and equipment and other assets	-	-
Accumulated gains (losses) transferred to retained earnings/losses for the period -New defined benefit plan measures	(728)	133
Gains transferred to retained earnings of the period -Equity investments measured at fair value through equity	41,348	29
Cumulative 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	21	23
Associated income tax (or equivalent) - Accumulated gains (losses) transferred to the accumulated profits/losses of the period	743	(280)
Total accumulated other comprehensive income	**41,665**	**(95)**
Total	**479,732**	**831,193**

Figures 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	2019	2018
Initial balance	(73,656)	(8,669)
Losses due to changes in the fair value of hedging instruments	(49,060)	171,076
Associated income tax (or equivalent)	33,643	(77,717)
Cumulative losses due to changes in the fair value of hedging instruments reclassified as profit/loss for the period	83,179	(168,299)
Associated income tax (or equivalent)	(15,970)	9,953
Total	**(21,864)**	**(73,656)**

Figures 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	2019	2018
Non-current		
Commercial banks loans	530,908	844,579
Multilateral banks loans	3,326,049	3,249,965
Development banks loans	775,412	1,778,009
Other bonds and securities issued	9,151,073	6,177,480
Total other loans and borrowings non-current	**13,783,442**	**12,050,033**
Current		
Commercial banks loans	40,162	559,344
Multilateral banks loans	268,895	615,310
Development banks loans	210,402	175,734
Bonds and securities issued	392,585	374,717
Other bonds and securities issued	497,125	2,029,387
Loans to economic associates	-	40,088
Total other loans and borrowings current	**1,409,169**	**3,794,580**
Total other loans and borrowings	**15,192,611**	**15,844,613**

Figures stated in millions of Colombian pesos

During 2019, the following disbursements of credits were received:

January

- Received new loan for COP 165 billion from Colpatria.
- Received new loan for COP 300 billion from BBVA.

February

- Received new loan for COP 1 trillion from Bancolombia.
- Received new loan for USD 500 million from HSBC.

July

- Voluntary partial pre-payment for COP 300 billion to Bancolombia.
- Received new loan for USD 1.9 million from BNDES.

- EPM performed a debt exchange / roll-over consisting of:

- Early repurchase of COP 1,100 billion, corresponding to the international bond issue whose maturity was scheduled for January 2021, with a balance of COP 1,250 billion, under a "Tender Offer" scheme. This repurchase corresponded to 89.5% of the balance for this financial obligation.

- Issuance of two tranches of bonds in the international capital market, for an amount equivalent to USD1,382 million: USD 1 billion at a term of 10 years and reopening of global peso bond, with maturity in 2027, for COP 1.23 billion.

- Voluntary prepayment of USD 1.035 billion, for the loans of Club Deal International for USD 235 million, HSBC for USD 500 million and EDC for USD 300 million.

August

- Voluntary partial pre-payment of COP 250 billion to Bancolombia.

September

- New loan for USD 5.6 million from BNDES.

October

- Voluntary partial pre-payment of COP 265 billion to Colpatria.
- – Voluntary partial pre-payment of COP 35 billion to BBVA.

December

- – Voluntary partial pre-payment of COP 300 billion to BBVA.

The breakdown of loans and borrowings is as follows:

Subseries	Original currency	Initial date	Term	Nominal interest rate	2019				2018			
					IRR	Nominal value	Amortized cost value	Total amount	IRR	Nominal value	Amortized cost value	Total amount
2218 BID 800- RELIQUIDATED	USD	7/14/1994	25	LIBOR + 1.43%	0.00%	-	-	-	2.43%	26,312	827	27,139
1665 BID-1664-1	COP	12/9/2005	20	7.8%	9.14%	284,769	3,938	288,707	9.24%	332,231	4,367	336,598
2179 BANK OF TOKYO-MITSUB	USD	9/29/2008	15	LIBOR + 0.95%	1.24%	218,441	9,037	227,478	2.07%	270,782	14,372	285,154
1257 BONDS CPI II TRENCH	COP	1/22/2009	10	CPI + 5.8%	0.00%	-	-	-	9.16%	138,600	2,366	140,966
1259 BONDS TF II TRENCH	COP	1/22/2009	10	10.8%	0.00%	-	-	-	10.79%	74,700	7,558	82,258
1220 BID 2120	USD	3/25/2009	25	LIBOR + 0%	2.83%	353,055	-5,661	347,394	3.62%	374,249	(1,614)	372,635
2021 BID 2120-1	COP	3/25/2009	25	6.272%	7.49%	190,295	-2,750	187,545	7.25%	190,295	(2,591)	187,704
2022 BID 2120-2	COP	3/25/2009	25	7.5%	8.23%	363,057	-679	362,378	8.06%	388,096	1,624	389,720
2023 BID 2120-3	COP	3/25/2009	25	6.265%	6.71%	180,750	825	181,575	6.56%	193,216	2,134	195,350
1261 BONDS CPI III TRENCH	COP	4/21/2009	15	CPI + 6.24%	10.24%	198,400	4,321	202,721	9.63%	198,400	4,260	202,660
1262 BONDS INTERNACIONALE	USD	7/29/2009	10	7.625%	0.00%	-	-	-	8.25%	1,624,875	49,306	1,674,181
1264 BONDS CPI IV TRENCH 2	COP	12/14/2010	12	CPI + 4.2%	8.18%	119,900	513	120,413	7.58%	119,900	515	120,415
1265 BONDS CPI IV TRENCH 3	COP	12/14/2010	20	CPI + 4.94%	8.99%	267,400	634	268,034	8.40%	267,400	548	267,948
1266 GLOBAL 2021 COP	COP	1/31/2011	10	8.375%	14.03%	130,822	2,998	133,820	8.70%	1,250,000	88,210	1,338,210
1013 AFD	USD	8/10/2012	14	4.311%	4.47%	738,875	12,333	751,208	4.47%	824,287	13,588	837,875
1268 BONDS CPI V TRENCH II	COP	12/4/2013	10	CPI + 4.52%	8.80%	96,210	-206	96,004	8.17%	96,210	(311)	95,899
1269 BONDS CPI V TRENCH III	COP	12/4/2013	20	CPI + 5.03%	9.24%	229,190	-1,560	227,630	8.62%	229,190	(1,541)	227,649
5765 AGRARIO	COP	5/20/2014	16	CPI + 4.7%	8.94%	116,000	-862	115,138	8.38%	116,000	(1,234)	114,766
1270 BONDS CPI VI TRENCH I	COP	7/29/2014	6	CPI + 3.57%	7.98%	125,000	1,289	126,289	7.36%	125,000	740	125,740
1271 BONDS CPI VI TRENCH II	COP	7/29/2014	12	CPI + 4.17%	8.39%	125,000	409	125,409	7.78%	125,000	166	125,166
1272 BONDS CPI VI TRENCH III	COP	7/29/2014	20	CPI + 4.5%	8.68%	250,000	219	250,219	8.08%	250,000	(100)	249,900
1273 GLOBAL 2024 COP	COP	9/3/2014	10	7.625%	7.74%	965,745	17,919	983,664	7.74%	965,745	17,243	982,988
1274 BONDS CPI V TRENCH IV	COP	3/20/2015	10	CPI + 3.65%	8.64%	130,000	369	130,369	8.01%	130,000	362	130,362
1275 BONDS CPI VII TRENCH I	COP	3/20/2015	5	CPI + 2.72%	6.81%	120,000	217	120,217	6.13%	120,000	167	120,167
1276 BONDS CPI VII TRENCH II	COP	3/20/2015	12	CPI + 3.92%	7.94%	120,000	132	120,132	7.34%	120,000	146	120,146
1277 BONDS CPI VII TRENCH III	COP	3/20/2015	20	CPI + 4.43%	8.43%	260,000	886	260,886	7.83%	260,000	949	260,949
2015 CLUB DEAL BANK OF TOKYO	USD	12/29/2015	5	LIBOR + 1.4%	0.00%	-	-	-	4.94%	763,691	6,548	770,239
2016 BNDES	USD	4/26/2016	24	4.887%	5.42%	158,247	-4,503	153,744	5.22%	132,517	(4,144)	128,373
1014 EDC	USD	8/4/2016	6	LIBOR + 1.4%	0.00%	-	-	-	4.65%	974,925	10,059	984,984
1015 CAF	USD	10/3/2016	18	LIBOR + 3.1%	5.26%	655,428	3,432	658,860	6.28%	649,950	5,285	655,235
1278 GLOBAL 2027 COP	COP	10/31/2017	10	8.375%	8.45%	3,530,000	28,768	3,558,768	8.46%	2,300,000	15,626	2,315,626
1230 IDB INVEST TRENCH 12 years	USD	12/29/2017	12	Libor 6M + 2.75%	5.66%	1,228,928	-44,316	1,184,612	6.37%	1,218,656	(36,582)	1,182,074
1231 IDB INVEST TRENCH 8 years	USD	12/29/2017	8	Libor 6M + 2.125%	5.26%	245,786	-8,528	237,258	5.88%	243,731	(7,346)	236,385
6017 POPULAR	COP	1/15/2018	1	IBR + 1.8%	0.00%	-	-	-	6.06%	100,000	1,312	101,312
6018 Bancolombia	COP	1/22/2018	1	IBR + 1.59%	0.00%	-	-	-	5.87%	100,000	1,110	101,110
6019 Bancolombia	COP	1/29/2018	1	IBR + 1.59%	0.00%	-	-	-	5.87%	70,000	697	70,697
6020 Bancolombia	COP	2/19/2018	1	IBR + 1.59%	0.00%	-	-	-	5.89%	130,000	873	130,873
1016 EMVARIAS	COP	11/8/2018	1	IBR + 2.1%	0.00%	-	-	-	6.38%	40,000	88	40,088
1018 BANCOLOMBIA	COP	11/22/2018	3	IBR S.V. + 3.5%	7.12%	450,000	9,404	459,404	0.00%	-	-	-
1017 HSBC	USD	11/26/2018	3	Libor 6M + 2.75%	0.00%	-	-3,471	-3,471	0.00%	-	-	-
1019 COLPATRIA	COP	12/19/2018	1	IBR + 1.78%	0.00%	-	-	-	6.06%	100,000	199	100,199
1020 BBVA	COP	12/20/2018	10	8.375%	0.00%	-	-	-	6.07%	35,000	59	35,059
1023 1023 BONDS USD	USD	7/11/2019	10	4.25%	4.39%	3,277,140	39,066	3,316,206	0.00%	-	-	-
Total						**15,128,438**	**64,173**	**15,192,611**		**15,668,958**	**195,841**	**15,864,799**

Figures stated in millions of Colombian pesos

Transaction costs for undisbursed loans were $-0 (2018: $20,186).
Interest paid on loan transactions was $1,243,709 (2018: $925,980).
The net foreign exchange loss (gain) was $58,707 (2018: $503,317).

Bonds and securities issued

Subseries	Original currency	Initial date	Term	Nominal interest rate	2019				2018				Amount awarded					
					IRR	Nominal value	Amortized cost value	Total amount	IRR	Nominal value	Amortized cost value	Total amount	Amount awarded 2018	Amount awarded 2017	Amount awarded 2016	Amount awarded 2015	Amount awarded 2014	Amount awarded 2013
A10a	COP	1/22/2009	10	CPI + 5.8%	0.00%	0	0	0	9.16%	138,600	2,366	140,966	138,600	138,600	138,600	138,600	138,600	138,600
A10a	COP	12/4/2013	10	CPI + 4.52%	8.80%	96,210	(206)	96,004	8.17%	96,210	(311)	95,899	96,210	96,210	96,210	96,210	96,210	96,210
A10a	COP	3/20/2015	10	CPI + 3.65%	8.64%	130,000	369	130,369	8.01%	130,000	362	130,362	130,000	130,000	130,000	130,000		
A12a	COP	12/14/2010	12	CPI + 4.2%	8.18%	119,900	513	120,413	7.58%	119,900	515	120,415	119,900	119,900	119,900	119,900	119,900	119,900
A12a	COP	7/29/2014	12	CPI + 4.17%	8.39%	125,000	409	125,409	7.78%	125,000	166	125,166	125,000	125,000	125,000	125,000	125,000	-
A12a	COP	3/20/2015	12	CPI + 3.92%	7.94%	120,000	132	120,132	7.34%	120,000	146	120,146	120,000	120,000	120,000	120,000	-	-
A15a	COP	4/21/2009	15	CPI + 6.24%	10.24%	198,400	4,321	202,721	9.63%	198,400	4,260	202,660	198,400	198,400	198,400	198,400	198,400	198,400
A20a	COP	12/14/2010	20	CPI + 4.94%	8.99%	267,400	634	268,034	8.40%	267,400	548	267,948	267,400	267,400	267,400	267,400	267,400	267,400
A20a	COP	12/4/2013	20	CPI + 5.03%	9.24%	229,190	(1,560)	227,630	8.62%	229,190	(1,541)	227,649	229,190	229,190	229,190	229,190	229,190	229,190
A20a	COP	7/29/2014	20	CPI + 4.5%	8.68%	250,000	219	250,219	8.08%	250,000	(100)	249,900	250,000	250,000	250,000	250,000	250,000	-
A20a	COP	3/20/2015	20	CPI + 4.43%	8.43%	260,000	886	260,886	7.83%	260,000	949	260,949	260,000	260,000	260,000	260,000	-	-
A5a	COP	3/20/2015	5	CPI + 2.72%	6.81%	120,000	217	120,217	6.13%	120,000	167	120,167	120,000	120,000	120,000	120,000	-	-
A6a	COP	7/29/2014	6	CPI + 3.57%	7.98%	125,000	1,289	126,289	7.36%	125,000	740	125,740	125,000	125,000	125,000	125,000	125,000	-
C10a	COP	1/22/2009	10	10.8%	0.00%	0	0	0	10.79%	74,700	7,558	82,258	74,700	74,700	74,700	74,700	74,700	74,700
International bond	USD	7/29/2009	10	7.625%	0.00%	0	0	0	8.25%	1,624,875	49,306	1,674,181	1,624,875	1,492,000	1,500,355	1,574,735	1,196,230	963,415
International bond	COP	1/31/2011	10	8.375%	14.03%	130,822	2,998	133,820	8.70%	1,250,000	88,210	1,338,210	1,250,000	1,250,000	1,250,000	130,822	130,822	130,822
International bond	COP	9/3/2014	10	7.625%	7.74%	965,745	17,919	983,664	7.74%	965,745	17,243	982,988	965,745	965,745	965,745	965,745	965,745	-
International bond	COP	10/31/2017	10	8.375%	8.45%	3,530,000	28,768	3,558,768	8.46%	2,300,000	15,626	2,315,626	2,300,000	2,300,000	-	-	-	-
International bond	USD	7/11/2019	10	4.25%	4.39%	3,277,140	39,066	3,316,206	0.00%	-	-	-	-	-	-	-	-	-
TOTAL						**9,944,807**	**95,974**	**10,040,781**		**8,395,020**	**186,210**	**8,581,230**	**8,395,020**	**8,262,145**	**5,970,500**	**4,925,702**	**3,917,197**	**2,218,637**

Figures stated in millions of Colombian pesos, the exchange rate used was the MRR at the closing of each period

Debt/EBITDA Covenant

On 29 December 2017, EPM entered into a credit agreement for USD 1 billion ("IDB Invest Loan") with the Inter-American Investment Corporation ("IDB Invest"), the private sector division of the Inter-American Development Bank. The IDB Invest Loan has an A/B structure in which the IDB group funds tranche A and a group of international commercial banks and institutional investors from North America, Europe and Asia (CDPQ, KFW IPEX, BNP Paribas, ICBC, Sumitomo Mitsui, BBVA and Banco Santander) funds tranche B. Additionally, the IDB Invest Loan includes resources from the China Fund – China co-financing fund managed by IDB Invest. Tranche A and the portion financed by the China Fund have a total term of 12 years, and tranche B has terms of 8 and 12 years. Interest on the IDB Invest Loan accrued at a LIBOR rate plus 2.125% or LIBOR + 2.75% according to the term, payable semi-annually. The proceeds will be disbursed gradually over a 4-year disbursement period. EPM may voluntarily prepay the IDB Invest Loan at any time and payment obligations qualify as *pari passu* regarding payment priority with all other present and future unsecured and unsubordinated External Indebtedness of EPM. The IBD Invest Loan provides for certain financial covenants, what indicates that it shall not allow the net debt to Adjusted EBITDA ratio be greater than 4.0 and the interest coverage ratio be less than 3.0. On December 12, 2018, IDB Invest granted EPM a waiver for its non-compliance with certain environmental covenants under the loan agreement caused by of the Ituango Contingency. Currently EPM and IDB Invest are negotiating an amendment to this loan agreement to revise the environmental covenants.

EPM has entered into several loan agreements with the IDB, certain of which are guaranteed by Colombia (the "IDB Loans"). Generally, these loans have been entered into in connection with certain of EPM's infrastructure projects, including the expansion of water and sewage infrastructure in Medellín, the Medellín river clean-up program and the Porce III hydroelectric project. In relation to the Medellín river clean-up program, on March 25, 2009, EPM and the IDB entered into a 25-year credit facility for up to USD 450 million.

These loans provide for an interest rate of (i) LIBOR plus a fixed rate and/or (ii) the IDB lending spread, semi-annual interest payments, cross-defaults in respect of other indebtedness with the IDB and voluntary prepayments. Also, under certain loan agreements, EPM is (i) prohibited from incurring new indebtedness with maturities longer than one year, as a result of which EPM's total financial indebtedness/consolidated Adjusted EBITDA ratio exceeds 3.5, and (ii) required to maintain a long-term indebtedness/net worth ratio not to exceed 1.5. Other restrictive covenants include limitations on liens, limitations on the sale of assets and limitations on investments.

The IDB Loans allow EPM to convert the currency of the outstanding balance, with the authorization of Colombia, the loan's guarantor. On 27 May 2014, EPM converted a tranche of IDB Loan 2120 for an aggregate principal amount of USD 98.6 million to COP 190,295 million, with a fixed interest rate of 6.2716%. On 31 March 2016, EPM converted IDB Loan 1664 for an aggregate principal amount of USD 153.8 million to COP 474,615 million, with a fixed interest rate of 7.80%. On 23 August 2016, EPM converted a tranche of IDB Loan 2120 for an aggregate principal amount of USD 154.3 million to COP 450,692 million, with a fixed interest rate of 7.50%.

On 8 December 2017, EPM converted a tranche of IDB Loan 2120 for an aggregate principal amount of USD 68.3 million to COP 205,681 million, with a fixed interest rate of 6.265%.

Under IDB Loan contract 1664, EPM is required to maintain a total financial indebtedness/consolidated Adjusted EBITDA ratio of 3.5 which is measured and reviewed annually. On December 2018 IDB confirmed that would grant the waiver, in the official communication on 17 January 2019, the IDB granted EPM a waiver for its non-compliance with such ratio for the period ending 31 December 2018 and 2019.

On 29 September 2008, EPM entered into a syndicated loan agreement with The Bank of Tokyo-Mitsubishi UFJ, LTD acting as joint lead arranger and facility and collection agent, and Banco Bilbao Vizcaya Argentaria, S.A., Tokyo Branch, acting as joint lead arranger (the "Japan Bank Loan"). The Japan Bank Loan is guaranteed by the Japan Bank for International Cooperation. The Japan Bank Loan bears interest at LIBOR plus 0.95% per annum. EPM may voluntarily prepay the Japan Bank Loan at any time, without premium or penalty (except for mandatory prepayment break funding costs in case prepayments are made on a date other than on an interest payment date). Amounts prepaid or repaid under the Japan Bank Loan cannot be re-borrowed. All payment obligations under the Japan Bank Loan rank *pari passu* with all of EPM's unsecured and unsubordinated External Indebtedness. The Japan Bank Loan contains both affirmative and negative covenants and provides for certain cross default events, including defaults under agreements guaranteed by the Japan Bank for International Cooperation or defaults under any of EPM's External Indebtedness. On May 29, 2013, EPM and the Japan Bank for International Cooperation entered into an Indemnity Agreement, which provides for certain financial covenants, including covenants pursuant to which EPM may not allow its long-term financial debt to shareholders' equity ratio to exceed 1.5:1.0 or its total financial debt to consolidated Adjusted EBITDA ratio to exceed 3.5:1.0, measured quarterly.

On 24 May 2019, the JBIC granted EPM a waiver for non-compliance with the consolidated Total Financial Debt/Adjusted EBITDA ratio for the period ending December 31, 2018.

On 28 June 2019, the JBIC granted EPM a waiver for non-compliance with the consolidated Long-Term Financial Debt to EBITDA ratio as during the period ended 31 March 2019, the ratio was 4.0:1.0. This waiver also covers the quarters ended 30 June 2019, 30 September 2019 and 31 December 2019, provided that the ratio does not exceed 4.0:1.0.

On 10 August 2012, EPM entered into a credit facility with *Agence Française de Developpement* ("AFD" – French Agency of Development), this loan matures in July 2027 and, after 31 January 2016, EPM may voluntarily prepay the AFD loan at any time, without premium or penalty (except for mandatory prepayment *Break Funding Costs* in case prepayments are made on a date other than on the interest payment date). All payment obligations under the AFD loan rank at least *pari passu* with all EPM's unsecured and unsubordinated External Indebtedness obligations.

The AFD loan provides for certain financial covenants, including covenants pursuant to which EPM shall maintain an interest coverage ratio of no less than 3.0 and a total financial indebtedness to consolidated Adjusted EBITDA ratio of no more than 3.5, which are reviewed semi-annually. Other restrictive covenants include limitations on liens and limitations on the sale of assets. On 14 December 2018, the AFD granted EPM with a waiver for its non-compliance with the total financial indebtedness to consolidated Adjusted EBITDA ratio as of 31 December 2018 and as of 30 June 2019.

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 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.

EPM 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, to the French Development Agency -AFD- on a semi-annual basis and to the Inter-American Development Bank -IADB on an annual basis. Currently, the waivers granted by the above-mentioned banks are valid for 2019.

JBIC established a new monitoring indicator from June, Net Financial Debt / EBITDA including cash and transitional credits.

Regard the HSBC credit, the Net Financial Debt/EBITDA indicator has been agreed and is inactive, since EPM has two credit risk ratings at investment grade level.

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	2019	2018
Non-current		
Adquisition of goods and services	628	628
Deposits received as collateral	2,049	43
Resources received for management	998	3,224
Construction contracts	51	588
Total trade and other payables non-current	**3,726**	**4,483**
Current		
Adquisition of goods and services	565,920	529,266
Creditors	459,065	462,460
Allocated grants	17,206	6,961
Deposits received as collateral	14,950	22,422
Received advanced payments	2,110	2,110
Resources received for management	655	853
Other accounts payable	506	506
Construction contracts	361	(6,950)
Deposits received as collateral	310	310
Total trade and other payables current	**1,061,083**	**1,017,938**
Total trade and other payables	**1,064,809**	**1,022,421**

Figures stated in millions of Colombian pesos

Note 23. **Other financial liabilities**

The other financial liabilities consist of:

Other financial liabilities	2019	2018
Non-current		
Financial leases (see note 14)	2,218,947	1,804,509
Pension bonds[1]	228,742	250,253
Total other financial liabilities non-current	**2,447,689**	**2,054,762**
Current		
Financial leases (see note 14)	23,741	1,070
Pension bonds[1]	313,464	284,797
Total other financial liabilities current	**337,205**	**285,867**
Total other financial liabilities	**2,784,894**	**2,340,629**

Figures stated in millions of Colombian pesos

[1]Variation in current liabilities is due to the payment of pension bonds in EADE and EPM, adjustment of pension liabilities and the amortized cost of the installments. For non-current liabilities, adjustment of pension liabilities and the amortized cost of the installments of EADE.

Note 24. **Derivatives and hedging**

The Company has a cash flow hedge that consists of hedging the variation in future cash flows attributable to certain risks, such as interest rate and foreign exchange rate risks that may impact results, whose fair values at the end of the reporting period amount to a right of $45,062 (2018: $186,230 Right). The risks hedged in these transactions are:

Hedge classification	Description	Risk Covered	Trench	Hedged item	Recorded value of hedged item	Recorded value of hedging instrument	Changes in fair value of the hedging instrument for the period	Changes in fair value of the hedged item for the period	Hedge effectiveness recognized in the profit or loss for the period	Hedge effectiveness recognized in the 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 services	Part of the Club Deal and AFD credits	Credit in U.S. dollars	751,208	(45,062)	(10,737)	(7,735)	N.A	(10,737)	(2,302)
Futures	Derivex	Sale price of elcetricity in the stock market	N.A.	Sales of power: highly probable item	N.A	-	23	N.A	N.A	23	23

[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.

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
Trench No.	1	2	3	4	5
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 amount (USD)	64,750,000	47,381,250	85,312,500	13,164,375	85,312,500
Spot exchange rate	2,850	2,855	2,850	2,899	2,878
Obligation (COP)	184,537,500,000	135,273,468,750	243,140,625,000	38,163,523,125	245,529,375,000
EPM pays	IBR + 0,83	IBR + 0,33	IBR + 0,69	IBR + 0,379	IBR + 0,479
	IBR OIS Compound 1 day	IBR OIS Compound 1 day	IBR OIS Compound 1 day	IBR OIS Compound 1 day	IBR OIS Compound 1 day
EPM receives	Fixed rate 4,50%	Fixed rate 4,04%	Fixed rate 4,32%	Fixed rate 4,25%	Fixed rate 4,32%
	Back starting	Back starting	Back starting	Back starting	Back starting
Expiring date	31-Jul-22	31-Jul-22	31-Jul-22	31-Jul-22	31-Jul-22
Initial exchange	No	No	No	No	No
Final exchange	No	No	No	No	No
Modality	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery

* CCS : Cross Currency Swap

Early termination of hedging

The characteristics of the canceled operations in July 2019 are as follows:

Characteristics	Trench 2	Trench 3	Trench 8	Trench 9	Trench 14	Trench 12	Trench 1	Trench 2	Trench 3
Contract date	24-May-16	26-May-16	20-Jun-16	8-Jul-16	21-Jul-16	8-Aug-16	23-Mar-18	3-Apr-18	11-May-18
Hedged underlying	Loan Club Deal	Loan Club Deal	Loan Club Deal	Loan Club Deal	Loan Club Deal	Loan Club Deal	Loan EDC	Loan EDC	Loan EDC
Derivative type	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS
Counterpart	JP Morgan	JP Morgan	Bank of America Merrill Lynch	BNP Paribas	BNP Paribas	BNP Paribas	Goldman Sachs	Goldman Sachs	Goldman Sachs
Nominal amount (USD)	50,000,000	50,000,000	60,000,000	40,000,000	5,000,000	30,000,000	110,000,000	100,000,000	90,000,000
Spot exchange rate	$ 3,058	$ 3,053	$ 2,976	$ 2,965	$ 2,924	$ 2,990	$ 2,847	$ 2,776	$ 2,816
Obligation (COP)	152,900,000,000	152,650,000,000	178,560,000,000	118,600,000,000	14,620,000,000	89,700,000,000	313,170,000,000	277,600,000,000	253,440,000,000
EPM pays	IBR + 2.17	IBR + 2.17	0.093	0.0842	0.0848	0.0844	IBR + 0,432	IBR + 0,4071	IBR + 0,3286
	IBR OIS Compound 1 day	IBR OIS Compound 1 day					IBR OIS Compound 1 day	IBR OIS Compound 1 day	IBR OIS Compound 1 day
EPM receives	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	Libor +0%	Libor +0%	Libor +0%
Periodicity	Semi-annual	Semi-annual	Semi-annual	Semi-annual	Semi-annual	Semi-annual	Semi-annual	Semi-annual	Semi-annual
Expiring date	29-Dec-20	29-Dec-20	29-Dec-20	29-Dec-20	29-Dec-20	29-Dec-20	4-Aug-22	4-Aug-22	4-Aug-22
Initial exchange	No	No	No	No	No	No	No	No	No
Final exchange	Si	Si	Si	Si	Si	Si	Si	Si	Si
Cancelation date	22-Jul-19	22-Jul-19	24-Jul-19	23-Jul-19	23-Jul-19	23-Jul-19	18-Jul-19	19-Jul-19	19-Jul-19
Cancelation exchange rate	$ 3,172	$ 3,172	$ 3,186	$ 3,181	$ 3,182	$ 3,182	$ 3,180	$ 3,163	$ 3,166
EPM (Pays / Receives)	Receives	Receives	Receives	Receives	Receives	Receives	Receives	Receives	Receives
Amount of reported liquidity (U$	USD 1,476,071	USD 1,557,150	USD 1,037,079	USD 1,309,385	USD 229,134	USD 731,855	USD 10,547,947	USD 11,343,857	USD 9,360,428

Note 25. Employee benefits

The item of employee benefits recognised at the reporting date have the following composition:

Employee benefits	2019	2018
Non-current		
Post-employment benefits	305,919	262,950
Long-term benefits	46,049	42,745
Total employee benefits non-current	351,968	305,695
Current		
Short-term benefits	90,764	89,285
Post-employment benefits	53,608	50,212
Total employee benefits current	144,372	139,497
Total	496,340	445,192

Figures 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	
	2019	2018	2019	2018	2019	2018	2019	2018
Current value of liabilities due to defined benefits								
Initial balance	443,415	446,297	89,675	99,348	81	71	533,171	545,716
Current service cost	-	-	2,954	3,471	-	-	2,954	3,471
Profit (or loss) due to interests cost	29,316	29,529	5,444	6,105	3	3	34,763	35,637
Assumptions by experience	21,805	4,820	4,524	(7,886)	14	39	26,342	(3,027)
Financial assumptions	10,666	450	2,662	1,214	-	-	13,329	1,664
Cost of past service	(4,670)	-	-	-	-	-	(4,670)	-
Payments made by the plan[4]	(39,593)	(37,754)	(12,206)	(12,644)	(32)	(32)	(51,831)	(50,430)
Other changes	-	73	-	67	-	-	(67)	140
Current value of liabilities as of 31 December	**460,939**	**443,415**	**93,053**	**89,675**	**66**	**81**	**553,991**	**533,171**
Fair value of plan assets								
Initial balance	220,010	253,899	-	-	-	-	220,010	253,899
Payments made by the plan[4]	(43,048)	(48,522)	-	-	-	-	(43,048)	(48,522)
Profit due to interests	13,884	15,622	-	-	-	-	13,884	15,622
Expected plan yields (excluding profits due to interests)	3,685	(989)	-	-	-	-	3,685	(989)
Fair value of plan assets as of 31 December	**194,531**	**220,010**	**-**	**-**	**-**	**-**	**194,531**	**220,010**
Surplus or (deficit) of the defined benefit plan	**266,408**	**223,405**	**93,053**	**89,675**	**66**	**81**	**359,460**	**313,161**
Adjustment to surplus per asset limit								
Net assets (or liabilities) of the defined benefit plan	**266,408**	**223,405**	**93,053**	**89,675**	**66**	**81**	**359,460**	**313,161**
Otras partidas de beneficios definidos								
Total defined benefits	**266,408**	**223,405**	**93,053**	**89,675**	**66**	**81**	**359,460**	**313,161**

Figures stated in millions of Colombian pesos

[1]Includes a retirement pension plan recognised 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.

[4] Includes $51,831 (2018: $50,430) of values paid for plan settlements, corresponding to pensions, retroactive layoffs 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.

The weighted average duration, in years, of the defined benefit plan obligations at the cut-off date is as follows:

Benefit	2019		2018	
	From	To	From	To
EPM Pension	8.5	11.5	8.4	11.4
Educationla assistance EPM	1.2	1.2	1.6	1.6
Retroactive severances	5.7	5.7	6.1	6.1

Fair value of the plan assets is composed as follows:

Assets that support the plan	2019		2018	
	Participation %	Fair value	Participation %	Fair value
Cash and cash equivalents	1.17%	2,276	0.40%	873
Equity instruments				
Industry type 1 - Include -	0.00%	0	0.00%	0
Industry Type 2 - Include -	0.00%	0	0.00%	0
Industry Type 3 - Include -	0.00%	0	0.00%	0
Total equity instruments	**0.00%**	**2,276**	**0.00%**	**873**
Debt instruments				
AAA	89.67%	174,426	89.84%	197,649
AA	6.14%	11,949	6.80%	14,950
A	0.00%	0	0.00%	0
BB and less	0.00%	0	0.00%	0
Without rating	0.00%	0	0.00%	0
Investment funds[1]	3.02%	5,880	2.97%	6,538
Total debt instruments	**98.83%**	**192,255**	**99.60%**	**219,137**
Other assets		0	0.00%	0
Total assets that support the plan	**100.00%**	**194,531**	**100.00%**	**220,010**

Figures 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 (2018: COP 5.016 billion).

The main actuarial assumptions used to determine the obligations under the defined benefit plans are as follows:

Assumptions	Post-employment benefits	
	2019	**2018**
Discount rate (%)	6.60 - 4.70	6.90 - 5.00
Yearly salary increase rate (%)	4.6	4.6
Real rate of return on plans assets	4.83	3.14
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 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 by +1%	Salary decrease by -1%	Increase in benefit increasement by +1%	Decrease in benefit increasement by -1%
EPM Pension	319,642	375,030	-	-	-	0
Social security contributions EPM	22,779	26,418	-	-	-	0
Educationl assistance EPM	65	67	-	-	66	65
EADE Pension	80,881	100,637	-	-	-	0
Social security contributions EADE	796	939	-	-	-	0
Retroactive severances	88,619	97,728	101,148	85,313	-	0
Total post-employment benefits	512,782	600,819	101,148	85,313	66	65

Figures 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 obligation	2019	2018
Real technical interest rate	4.8	4.8
Salary increase rate	3.91	5.09
Pension increase rate	3.91	5.09
Mortality rate table	Valid rentiers 2008 table	

The Company's policy is to prepare actuarial calculations for the annual closing of the period, therefore, the estimated data for 2019 are presented.

The following table is the calculation of Pension Liabilities with the previous parameters:

Description	2019		2018	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by the company	643	159,241	652	161,125
Personnel pensioned with amounts shared with Colpensiones (state pension system)	437	62,414	439	65,322
Personnel benefit shared with Colpensiones	468	61,161	457	61,614
Personnel pensioned with amounts shared with other institutions	356	39,119	271	34,489
Total	**1904**	**321,934**	**1,819**	**322,549**

Figures stated in millions of Colombian pesos

Below are Pension Bonuses related to Pension Obligations:

Description	2019		2018	
	Number of people	Amount of the reserve	Number of people	Amount of the reserve
Retirement payment type A modality 1	244	2,707	246	2,524
Retirement payment type A modality 2	4,113	175,568	4,210	172,172
Retirement payment type B	2,248	309,734	2,324	305,588
Retirement payment type T	5	277	5	340
Other - Contributions Law 549	176	5,175	178	4,925
Difference	**6,786**	**493,460**	**6,963**	**485,549**

Figures 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:

	2019	2018
Pension liabilities	370,311	359,774
Fiscal pension liabilities	815,394	808,098
Difference	**(445,084)**	**(448,324)**

Figures 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	2019	2018
Real technical interest rate	4.8	4.8
Salary increase rate	3.91	5.09
Pension increase rate	3.91	5.09
Mortality rate table	Valid rentiers 2008 table	

The following table is the calculation of the pension commutation with the previous parameters:

Description	2019		2018	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by the company	92	25,716	109	23,558
Personnel pensioned with amounts shared with Colpensiones	346	44,513	340	42,781
Personnel benefit shared with Colpensiones	37	3,167	34	2,757
Personnel pensioned with amounts shared with other institutions	31	3,693	44	3,576
Total	**506**	**77,089**	**527**	**72,672**

Below are the pension bonuses related to pension commutation liabilities:

Description	2019		2018	
	Number of people	Amount of the reserve	Number of people	Amount of the reserve
Retirement payment type A modality 1	12	38	12	35
Retirement payment type A modality 2	255	10,803	262	10,398
Retirement payment type B	219	21,928	226	21,795
Retirement payment type T	3	84	3	149
Other - Include type of pension bond-	3	115	3	107
Difference	**492**	**32,968**	**506**	**32,484**

Figures 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:

	2019	2018
Pension commutation liabilities	90,694	83,240
Fiscal pension commutation liabilities	110,055	105,157
Difference	**(19,361)**	**(21,916)**

Figures 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 2018 are presented.

25.1.2. Defined contribution plans

The company made contributions to defined contribution plans for $53,999 (2018: $54,462), recognised in profit or loss for the period as an expense $17,336 (2018: $15,731), cost $29,428 (2018: $31,846) and investment projects $7,234 (2018: $6,886).

25.2 Long-term employee benefits

Long-term benefits	Seniority premium[1]	
	2019	2018
Current value of liabilities due to other long-term benefits		
Initial balance	42,745	38,971
Present service cost	4,369	4,218
Profit (or expenses) due to interests	2,835	2,613
Assumptions by experience	886	588
Financial assumptions	874	433
Payments made by the plan	(5,660)	(4,078)
Final balance of current value of liabilities	**46,049**	**42,745**
Net liabilities due to long-term benefits	**46,049**	**42,745**

Figures 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 labour agreement, in EPM it is granted in relation to years of continuous or discontinued service. It is recognised 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	2019		2018	
	From	To	From	To
Seniority premium	6.8	6.8	6.6	6.6

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	
	2019	2018
Discount rate (%)	6.4	6.7
Yearly salary increase rate (%)	4.85	4.85
Yearly inflation rate (%)	3.5	3.5
Mortality rate tables	Valid rentiers 2008 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%
seniority premium	43,254	49,210	49,462	42,983
Total long-term benefits	**43,254**	**49,210**	**49,462**	**42,983**

Figures 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 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	2019	2018
Payroll payable	3	6,745
Severances	37,395	34,325
Interests on severances	4,356	4,062
Vacations	15,613	14,053
Vacations bonus	31,455	28,363
Prima de servicios	(6)	-
Holidays (Christmas) bonus	18	25
Bonuses	1,899	1,712
Other bonuses, salaries and legal benefits	31	-
Total short-term benefits	**90,764**	**89,285**

Figures 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	2019	2018
Current		
Withholding tax on income and and stamp duty	65,392	60,051
Industry and commerce tax	20,832	21,884
Appreciation tax	64	136
Costom tax and charges	1,431	1,126
Contributions	7,689	4,866
Rates	15,788	15,545
National consumption tax	5	4
Other national taxes	696	696
Other municipal taxes	85	8
Value added tax (VAT)	4,442	3,879
Total taxes, contributions and rates current	**116,424**	**108,195**
Total taxes, contributions and rates	**116,424**	**108,195**

Figures 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	Lawsuits[2]	Contingent consideration	Implied subsidiary obligations[3]	Warranties[4]	Other provisions	Total
Initial balance	**44,831**	**61,051**	**253,527**	**153,669**	**-**	**239,115**	**97,776**	**849,969**
Additions	24,010	-	9,514	-	60,008	-	58,449	**151,981**
Uses	(16,961)	(28,085)	(4,611)	(3,674)	-	(151,401)	(87,163)	**(291,895)**
Unused amounts reversed (-)	-	(2,394)	(14,618)	(21,210)	-	-	(2,192)	**(40,414)**
Adjustment for changes in estimates	37,408	-	(66,516)	152	-	20,916	18,256	**10,216**
Capitalizable decommissioning	47,099	-	-	-	-	-	-	**47,099**
Exchange difference	-	-	695	1,308	-	-	-	**2,003**
Other changes _Financial expenses_	1,292	1,674	9,781	3,101	-	-	2,035	**17,883**
Final balance	**137,679**	**32,246**	**187,772**	**133,346**	**60,008**	**108,630**	**87,161**	**746,842**
Non-current	67,840	-	17,958	126,509	60,008	108,630	31,206	412,151
Current	69,839	32,246	169,814	6,837	-	-	55,955	334,691
Total	**137,679**	**32,246**	**187,772**	**133,346**	**60,008**	**108,630**	**87,161**	**746,842**

Figures stated in millions of Colombian pesos

[1]Increase for the compulsory provisions made at the request of the National Authority of Environmental Licenses (ANLA); and, creation of provision for the dismantling of the Jepírachi Wind Farm. (detail in numeral 27.1.1).

[2]Decrease is due to the downward adjustment in the intention of some EADE processes in December 2019.

[3]Corresponds to the implicit obligation of the Subsidiary EPM Capital México S.A. de CV derived from the application of the equity method.

[4]Decrease in provisions derived from the payment execution of the warranty that covers the construction and commissioning of the Ituango Hydroelectric Project, in accordance with Standby Letter of Credit No. 04156826 issued by BNP Paribas Bank. (detail in numeral 27.1.6).

27.1.1. Dismantling or environmental restoration

EPM is obliged to incur costs for dismantling or restoring its facilities and assets. Currently EPM keeps five provisions for dismantling or restoring:

– Recall of transformers containing PCBs (Polychlorinated Biphenyls). EPM has committed to the dismantling 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. The provision is recognised 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. To date, it has been shown that the provision will be affected given that it is planned to complete the dismantling in a shorter time than estimated, while the estimated costs decrease since the dismantling peak has already passed. As of 31 December 2019, this item closed in $289.

– Amagá coal mine: with Resolution 130 AS-1106242 of 21 October 2011 issued by the competent environmental authority (CORANTIOQUIA), approving the environmental component of the plan to close the coal mines of the mining title and to this end, contracts for the construction of miscellaneous civil works, urban planning and monitoring in the coal mines of the mining title, code RPP 434 of the Amagá area.

  The main assumptions considered in the calculation of the provision are estimated costs, CPI and fixed rate TES. In 2019 the company is in the final stages of the actions contemplated in the aforementioned resolution and in the las quarter of 2019 no payment for the Amagá coal mine was disbursed and decision was made to stop provisioning, given that the possibility of selling the title through this subsidiary was arranged with the subsidiary PROMOBILIARIA; this issue was taken to the board of directors of EPM and approved on 16 December 2019. For this reason, it was not considered for future budgets and the provision was cancelled.

- 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 dismantling 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.

- Environmental provision in the construction of infrastructure projects: this arises as 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 exploitation; 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 executions of the biotic environmental compensations of the project extend 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 a greater value of the construction in progress. The company is committed to compensate the loss of biodiversity, subtraction and closures from 2016 to 2019 according to 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 recognised by 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.

- 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. In accordance with the law, the values of 1% executed are Porce II for $4,525, Porce III for $9,755, La Sierra for $470, and Hidroituango for $47,100.

- 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, which ended at $54,854 as of 31 December 2019. It 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.

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.

27.1.2. Onerous Contracts

As of 31 December 2018, $32,246 have been recognised for the contract of fuel supply and transportation signed with TGI-Transportadora de Gas Internacional S.A. E.S.P., with the objective of supporting the Termosierra plant and obtaining the income from the reliability charge established by the Energy and Gas Regulatory Commission.

The main assumptions considered for calculating the provision are the costs associated to the contract with the conditions stated each quarter, utilization factor or suspension of payments for contract maintenance, LIBOR rate, fixed rate in Colombian pesos TES for the quarter and macroeconomic environment.

The main assumptions used for future events are: to maintain the following assumptions in 2020: Suspension of the contract for 30 days every year and its benefit rights for 15 days each year for generation of the Termosierra plant and the rest of the time would be paid without using the contract (only fixed costs).

27.1.3. Lawsuits

This provision covers the estimated probable losses related to labour, 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 executive	3
Expropriation	4
Comprehensive reparation incident (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
Accusatorial 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 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 the 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 recognised 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	Solidarity. The shareholders claim to have worked for Empresa Antioqueña de Energía S.A. E.S.P., performing different tasks, all the plaintiffs worked for more than 10 years; they state that upon the dissolution and liquidation of said company there was a substitution of employers with Empresas Públicas de Medellín E.S.P., since it carried out the same activities without continuity, it was the owner of the entire EADE upon its liquidation and all the labor claims were obligated. In total, there are 173 plaintiffs.	102,190
Dragados Porce II Consortium	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.	28,006
Various labour	Other proceedings for amounts less than $1,036.	12,411
Various Administrative	Other proceedings for amounts less than $1,070.	10,524
Fiduciaria Colpatria S.A.	Issue a payment order against EPM and in favor of Fiduciaria Colpatria S.A. acting as spokesperson for Patrimonio Autónomo FC - Enertotal.	6,077
Municipio de Yumbo (Valle)	Industry and commerce and its complementary notices and boards and public lighting.	4,756
John Walter Jaramillo	That the dismissal be declared null and void, with the respective salaries and increases, the social benefits during all the time that they remain untied; in the same way it will be on behalf of the claiming party the contributions to the social security until it is effectively reintegrated.	4,153
Dragados Porce II Consortium	That EPM be ordered to recognize and pay the amount of the damages caused in the good name of the companies that constituted the CONSORTIUM DRAGADOS CONCONCRETO PORCE II.	4,107
Oliver Antonio Aguirre Soto	That the nullity of the conciliation act signed due to a defect in the consent is decreed and consequently, the reestablishment of the work contract, the reimbursement, the payment of all the salaries and benefits not received, in the same way that the contributions to the social security are cancelled from the moment of the dismissal and until the moment when the plaintiff is effectively reimbursed.	3,165
Unión Temporal Energía Solar S.A. y Estructuras Arbi Ltda.	Declare that the tender submitted by the applicants to the tender No ES-2043-GI called by EPM was legally capable of being taken into account at the time of the award of the respective contract under tender No ES-2043-GI	1,922

Figures stated in millions of Colombian pesos

Third party (Plaintiff)	Complaint	Amount
Construcciones Pico y Pala Ltda.	Que son nulas las resoluciones 95070 del 05/04/1999, emanadas de EPM, por medio de la cual se liquidó unilateralmente el contrato 1/DJ-682/15 celebrado entre EPM y el Consorcio Trainco S.A. y la 113701 del 15/03/2000, proferida igualmente por EPM, por medio de la cual se resolvió negativamente el recurso de reposición interpuesto en contra de la resolución 95070 del 05/04/1999.	1,838
Humberto Hernando Gómez Franco	Declarar administrativa y patrimonialmente responsable a EPM, por las lesiones que sufrió el señor HUMBERTO HENANDO GÓMEZ FRANCO, cuando fue electrocutado por cables de alta tensión de propiedad de la entidad demandada, el pasado 23/10/2013, en la finca la Playa de propiedad del señor Antonio Lopera, ubicada en el sector la Virgen, de la Vereda Hoyorrico jurisdicción del Municipio de Santa Rosa de Osos.	1,651
Francisco Javier Muñoz Usman	Que se decrete la nulidad del acta de conciliación suscrita por vicio en el consentimiento y consecuentemente se ordene el restablecimiento del contrato de trabajo, el reintegro, el pago de todos los salarios y prestaciones dejadas de percibir, de la misma manera que sea cancelados los aportes a la seguridad social desde el momento del despido y hasta cuando el actor efectivamente este reintegrado.	1,620
Varios fiscales	Otros procesos fiscales con cuantía inferior a $4,756.	1,286
Carlos Olimpo Cardona	Que se reintegra a los accionantes al mismo cargo u oficio o otro de igual o superior categoría que venían desempeñando, que como consecuencial a titulo de indemnización se deben de cancelar todos los salarios y prestaciones sociales legales dejados de percibir, además de ello todas las cotizaciones causadas a favor del Sistema de Seguridad Social Integral.	1,283
Accesorios y Sistemas S.A.	Declarar la nulidad de la resolución 3077 del 11/12/200, expedida por el Gerente General de EPM, por medio de la cual se resolvió declarar la realización del riesgo de calidad y correcto funcionamiento de los vehículos objeto del contrato 090321557.	1,207
TRAINCO S.A.	Que se declare nulidad de las resoluciones 161052 del 05/03/2001, emanada de EPM, por medio de la cual se liquidó unilateralmente el contrato 2101870 celebrado entre EPM y Trainco S.A. y la 178702 del 07/06/2001.	1,070
Omar Augusto Lugo Hoyos	Que se decrete la nulidad del acta de conciliación suscrita por vicio en el consentimiento y consecuentemente se ordene el restablecimiento del contrato de trabajo, el reintegro, el pago de todos los salarios y prestaciones dejadas de percibir, de la misma manera que sea cancelados los aportes a la seguridad social desde el momento del despido y hasta cuando el actor efectivamente este reintegrado.	1,036
Consorcio Dragados Porce II	Registro diferencia en cambio Cuenta 271005 Litigio N° 14000857	210
Pagos	Procesos laborales que se han cancelado parcialmente, en 2019, y aún no terminan por $740.	(740)
Total recognized lawsuits		**187,772**

Figures 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 a provision for $107,797 (approximately USD 3.5 million per month) for the default that would be incurred from January to October 2021 to the transportador Intercolombia for the months following the entry into operation of the connection infrastructure for the Ituango project. The balance as of 31 December 2019 is $108,630.

27.1.7. Other provisions

- **Other miscellaneous provisions _ Contingency assistance for Ituango:** Provision of $25,794 for the attention of the affected people of Puerto Valdivia who were evacuated and sheltered, and who were recognised as being compensated for emergent damage, loss of earnings and moral damage; the recovery of the affected families for the total or partial loss of their homes and economic activities caused by the Hidroituango Project as a result of the opening of the project's diversion tunnel on 12 May 2018. The balance as of 31 December 2019 is $4,256.

- **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 December 2019, there is a record of $12,169 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 2019 is $12,169.

- **Sanctions**: Fines imposed by the competent authority for not applying the law or regulation indicated by the respective body. As of December 2019, there is a provision of $1,656 to be charged to the Superintendence of Public Services for sanctions within the investigation of the Guatapé plant incident that occurred on 15 February 2016.

- 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 recognised 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.

***Somos* 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 authorisations issued and which on the cut-off date have not been redeemed, except those corresponding to authorisations 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:** Provision of $38,877 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. For adjustments and payments this provision ended, in December 2019, at $35,873.

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	Onerous contracts	Lawsuits	Contingent consideration	Warranties	Other provisions	Total
2020	64,626	32,246	173,944	6,837	-	60,868	338,521
2021	39,121	-	4,832	1,197	108,630	7,768	161,548
2022	24,928	-	5,927	3	-	4,026	34,884
2023 and others	24,544	-	11,436	125,309	-	9,340	170,629
Total	**153,219**	**32,246**	**196,139**	**133,346**	**108,630**	**82,002**	**705,582**

Figures 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	Net
Lawsuits	817,938	255,517	(562,421)
Total	**817,938**	**255,517**	**(562,421)**

Figures 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 result of the fire and the consequent unavailability of the Guatapé plant.	290,981
Various administrative	327 lawsuits under $5,931 with an average of $645.	210,915
Hidroeléctrica Ituango S.A.	Value of the execution for the fines of constraint at the date of filing of the lawsuit. Such amount will be increased by interest on arrears, and for each day of delay.	106,158
Aura De Jesús Salazar Mazo	They request 100 SMLMV for the effects on the mining activity; and, for moral damages which are valued at the equivalent of 200 SMLMV for each of the persons in the group, approximately 113.	39,211
Aura De Jesús Salazar Mazo	Collective right, approximately 113 persons, each claiming $1,133,400 for consolidated loss of earnings and $78,753,854 for future loss of earnings for destroying, interrupting and cutting the ancestral horseshoe roads that lead from the Alto Chiri trail in the municipality of Briceño to the village of Valle de Toledo.	29,569
Obras Civiles E Inmobiliarias S.A - Oceisa	Declare that EPM's failure to comply with its main obligation to deliver studies and designs prevented the execution of the contract by OCEISA 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.	16,614
Various labour	201 lawsuits under $784 with an average of $73	14,634
Luis Fernando Anchico Indaburo	Declare EPM administratively liable, as the cause of the anti-legal damage due to the destruction of the fishing resource of the Montecristo swamp complex, which is due to the construction of the PHI (Hydroelectric Project Ituango) and requests the recognition and payment of a minimum wage for each family nucleus from February 2019 until the sentence is issued, this is denominated by the defendants as consolidated lost profits.	13,680
Luis Fernando Anchico Indaburo	Declare EPM administratively liable, as the cause of the anti-legal damage by having destroyed the fishing resource of the Montecristo marshes complex, which is due to the construction of the PHI (Ituango Hydroelectric Project); that a minimum wage be recognized and paid for each family nucleus from February 2019 until the sentence is issued and the recognition of a future loss of profit that goes from the moment of the sentence until the probable life span of each of the plaintiffs.	13,668
Yalida María Madrigal Ochoa	For the eleven defendants, it is estimated that they suffered damages to their family and social environment as a result of the death of Nicolás Alberto Moreno Trujillo.	10,356
Maikol Arenales Chaves	Declare EPM administratively liable, as the cause of the anti-legal damage due to the destruction of the fishing resource of the Montecristo swamp complex, which is due to the construction of the PHI (Hydroelectric Project Ituango) and requests the recognition and payment of a minimum wage for each family nucleus from February 2019 until the sentence is issued, this is denominated by the defendants as consolidated loss of earnings.	10,204
Maikol Arenales Chaves	Declare EPM administratively liable, as the cause of the anti-legal damage by having destroyed the fishing resource of the Montecristo marshes complex, which is due to the construction of the PHI (Ituango Hydroelectric Project); that a minimum wage be recognized and paid for each family nucleus from February 2019 until the sentence is issued and the recognition of a future loss of profit that goes from the moment of the sentence until the probable life span of each of the plaintiffs.	10,204

Figures stated in millions of Colombian pesos

Third party (Plaintiff)	Complaint	Amount
Javier Maure Rojas	Declare EPM administratively liable, as the cause of the anti-legal damage by having destroyed the fishing resource of the Montecristo swamp complex, which is due to the construction of the PHI (Hydroelectric Project Ituango) and requests the recognition and payment of a minimum wage for each family nucleus from February 2019 until the sentence is issued, this is called by the defendants as consolidated loss of earnings.	8,605
Javier Maure Rojas	Declare EPM administratively liable, as the cause of the anti-legal damage by having destroyed the fishing resource of the Montecristo marshes complex, which is due to the construction of the PHI (Ituango Hydroelectric Project); that a minimum wage be recognized and paid for each family nucleus from February 2019 until the sentence is issued and the recognition of a future loss of profit that goes from the moment of the sentence until the probable life span of each of the plaintiffs.	8,605
INMEL Ingeniería S.A.S.	Order EPM to compensate Consorcio Línea BGA for the damages suffered, in proportion to its participation in the contractor consortium (80%), after the submission of the offer, execution and completion of contract CT 2016 001695, where unforeseen situations and circumstances not attributable to the contractor occurred that substantially varied the defined execution conditions and made compliance more onerous for the contractor and which the contractor failed to comply with while refusing to restore the financial or economic balance of the contract.	7,626
CONINSA RAMÓN H S.A.	That EPM, failed to comply with contract No. 2/DJ-2183/43 and its additional agreements, (bilateral modification acts) signed with EL CONSORCIO CONINSA S.A.- CONSTRUCOES E COMERCIO CAMARGO CORRÁ S.A., due to the non payment of the damages suffered by El Consorcio Contratista, during the execution and development of the contract.	6,801
Alejandra Betancur Giraldo	To declare that EPM, the Municipality of Girardota and INGELEL are liable for the occupation of the plaintiffs' property and to pay them the damages, jointly and severally, in the amount of $6,102,004,043.	6,111
VELPA SOLUCIONES INTEGRALES S.A.	EPM is ordered to pay the damages suffered by Velpa Soluciones Integrales, with its respective update and moratorium interests, due to the rejection of its proposal within the 2009-0927 contracting process and its award to the firms ELECTROLUMEN Ltda and MELEC S.A., as well as the amount of the sums that VELPA SOLUCIONES INTEGRALES S.A. will no longer receive, due to the impossibility of contracting with the State for a period of 5 years, as a result of the decision adopted by EPM.	5,931
Moraine Olave De Larios	Relatives of a former Integral worker who died in Ituango, claiming full compensation for damages, for moral damages caused. Solidarity.	5,121
HERNANDO DIAZ CORREA	Plaintiff requests compensation for work accident.	924
Aldo Adrian Gutierrez Posada	Employer substitution exEADE.	788
Juliana Urrea Giraldo	Plaintiff requests that it be declared that the death of the former Mincivil worker occurred due to the employer's fault. It is intended to declare the MISPE Consortium guilty and EPM jointly and severally, for the payment of patrimonial and extra patrimonial damages.	784
Ciudadela Comercial Unicentro Medellín PH	Declare the nullity of the administrative act issued by EPM with filed 20190130037817 of February 27, 2019. Order the reinstatement 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 the amounts paid for such concept from January 1, 2017 and until the date of judicial notification that ends the process.	282
Jesús Evelio Garcés Franco	It requests that the nullity of the resolutions that resolve the Appeal for Replacement by EPM, and of the SSPPD be declared; that EPM be declared administratively liable for restoring the rights of the plaintiff due to the undue collection of alleged works in connection with the water supply.	166
Total contingent liabilities		**817,938**

Figures 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 27.1.3 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 waste water from San Fernando WWTP in violation of the minimum 80% removal level 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. 000415 of April 28, 2014	Not possible to know the sanction to be imposed
Autoridad Nacional de Licencias Ambientales “ANLA”	Construction of a mini-plant without authorization and use of the ecological flow to generate energy without being authorized in the environmental field (hydroelectric plant Porce III)_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 impeded the contribution of the ecological flow, when closing the bottom discharge valves of the Porce III Hydropower Plant, to advance the activities of repairing 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. Order 04260 of September 26, 2017.	Not possible to know the sanction to be imposed
Autoridad Nacional de Licencias Ambientales “ANLA”	Termosierra 1. For performing the air quality sampling reported in the EQI 13, 14 and 15, without the periodicity established by the Industrial Air Quality Monitoring System, authorized in the environmental instrument corresponding to the present project. 2. For performing environmental noise monitoring reported in ICA 13, 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 02574 of June 27, 2017 ANLA_	Not possible to know the sanction to be imposed
Área Metropolitana del Valle de Aburrá	Discharge of domestic waste water from the rupture of the sewerage pipe that carries this water, over a paddock and then over the Doña María stream, a property called Torremolino.	Not possible to know the sanction to be imposed

Third party (Plaintiff)	Complaint	Amount
Autoridad Nacional de Licencias Ambientales "ANLA"	For having disposed of material left over from the excavation activities of the construction of the Via Puerto Valdivia (Site of the Dam - Ituango) on the bed and protection strip of the "Quebrada Tamara"; and, for having replaced the bridges located along the Via Puerto Valdivia to build two (2) Box Culverts without the authorization to do so; and, for having discharged waste water to an infiltration field in the	Not possible to know the sanction to be imposed
Autoridad Nacional de Licencias Ambientales "ANLA"	Having occupied the bed of the "Rio Ituango", for the installation of a pumping system without the respective authorization; and, having made the collection of water resource from the source "Rio Ituango" by pumping without having obtained prior modification of the environmental license. (SAN0047-00-2019_Auto 2919 of 2015).	Not possible to know the sanction to be imposed
Autoridad Nacional de Licencias Ambientales "ANLA"	Not having implemented the environmental management measures established in the Environmental License granted for the development of the project "Construction and Hydroelectric Operation Pescadero - Ituango" related to the management and proper disposal of excess material from the excavation of the Puerto Valdivia road, throwing it on the slopes of the road and the water sources "Rio Cauca" and "Quebrada la Guamera"; and, having formed the deposits "La Planta" and "Cacharimé" less than thirty meters (30 meters) from the water source "Río Cauca". (SAN0046-2019_Auto 0523 of 2016).	Not possible to know the sanction to be imposed
Autoridad Nacional de Licencias Ambientales "ANLA"	"For having carried out inadequate practices with respect to the surface water sources in the project's area of influence; to have carried out the collection of water resources from the "El Roble", "Burundá", "Bolivia" and "Guacimal" streams, at flows higher than those granted in concession and/or authorized for the development of the project; Not having implemented in each one of the water bodies under concession, the infrastructure that would allow the monitoring of the remaining flows, in order to be presented in the environmental compliance reports; not having carried out and delivered the water quality and hydrobiological community monitoring in the "Cauca River", under the conditions established in the environmental license. For not having carried out the reconformation and recovery of the channel of the "San Andres River" and its flood zone to its natural conditions, within the granted term; for having carried out the use of petreous materials coming from the "San Andres River", without the updated environmental permits; for not having delivered the results of the sediment monitoring of the "Cauca River", for the purpose of establishing the comparison base line at the time of initiating the operation phase of the project. Exceeding the maximum permissible levels of PST (particulate matter) and atmospheric pollutants in the asphalt plant located in the "El Valle" Industrial Zone; for not having built the necessary facilities and infrastructure in the asphalt plant's chimney to monitor emissions from fixed sources; for not complying with the management measures in the "Management and Disposal Plan for Materials and Dumping Zones" for disposing of plant material mixed with inert material inside the deposits and for not signaling the disposal zones for material 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 closure without the previous Resolution authorizing their removal and that were in the area of the Ituango Hydroelectric Project reservoir (SAN027 (Minambiente)_Resolución 835 de 2017).	Not possible to know the sanction to be imposed
Autoridad Nacional de Licencias Ambientales "ANLA"	To have initiated the activities related to the construction of the Auxiliary Deviation System (SAD) and its associated infrastructure, within the Project "Construction, filling and operation of the Pescadero - Ituango Hydroelectric Project", without having previously processed and obtained the modification of the environmental license (SAN0210-00-2018_Auto 6880 of 2018).	Not possible to know the sanction to be imposed

Third party (Plaintiff)	Complaint	Amount
Autoridad Nacional de Licencias Ambientales "ANLA"	" * The process is in the preliminary investigation phase due to the contingency associated with the Auxiliary Deviation System. *No charges have been filed; however, a request for cessation of the sanctioning procedure has been presented through File No. 2018064395-1-000 of May 24, 2018 (SAN0097-00-2018_Auto 02021 of 2018)".	Without charges it is considered by the lawyer as possible.
Autoridad Nacional de Licencias Ambientales "ANLA"	*Initiation of an administrative environmental procedure of a sanctioning nature for having carried out forest exploitation activities outside the authorized industrial area for the execution of the works that are part of the construction of the Puerto Valdivia - Presa road (Zona Organí). *No charges have been filed. (SAN0013-2017_Auto 04965 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 project "Construction and operation of the Pescadero - Ituango hydroelectric project" the ecological flow to assure the integrity of the ecosystemic services and the environmental protection goods that are part of the "Río Cauca" water source. *No charges have been made. (SAN0001-2019_Auto 0060 of 2019)	Without charges it is considered by the lawyer as possible.
Autoridad Nacional de Licencias Ambientales "ANLA"	1. Intermittent dry run discharge coordinates X=1157241 and Y=1281506 2. Discharge to the rainwater channel from the mixer washing system located in the industrial zone of the main works The ANLA opened a sanctioning file but this has not been formally initiated. By Resolution No. 1222 of December 3, 2013 the ANLA imposed a preventive measure of suspension of the dumping. By Resolution No. 1363 of October 31, 2017, the ANLA lifted the preventive measure in question. By means of Order No. 01282 of March 22, 2019, the ANLA broke down the proceedings related to this preventive measure from the license file LAM2233 so that they are in the file SAN0031-2019.	Without charges it is considered by the lawyer as possible.
Autoridad Nacional de Acuicultura y Pesca_"AUNAP"	*Preliminary investigation for effects on the fishing activity during the closing of the engine house doors. *No charges have been filed. (without 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 imposed obligations. Order 11359 of December 19, 2019. SAN0284-00-2018 _December 19, 2019_.	Unresolved situation. No charges have been filed to date.

Contingent assets

Third party (Plaintiff)	Complaint	Amount
Municipality of Bello	Integral nullity of the complex administrative act contained in Resolutions 2717 of 2009 and 0531 of 2010 WTP Bello.	117,972
Municipality of Bello	Reimbursement of monies paid by EPM, for the determination and liquidation of the capital gain effect, WTP Bello.	114,820
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 members in relation to medicines and/or procedures, interventions or elements not included in the Compulsory Health Plan (CHP).	7,079
Other administrative	Processes for amounts less than $867.	4,589
Interconexión Eléctrica S.A. E.S.P. ISA	To declare that Interconexión Eléctrica S.A. E.S.P., ISA is civilly responsible 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, a value that to date has not been realized, generating an enrichment without cause by increasing the patrimony of the defendant at the expense and to the detriment of the patrimony of the plaintiff	3,577
Poblado Club Campestre Ejecutivo S.A.	Declare the 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 Honda stream in the Municipality of Envigado, and indemnify EPM for the value of all the patrimonial damages that are proven for the damage to the collector that collects and transports the wastewater from said sanitary basin.	3,369
Other Fiscal	Processes with a value of less than $114,820.	2,321
Fiduciaria Bogotá S.A. - FIDUBOGOTÁ S.A.	TO IMPOSE in favor of EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. a electricity transmission easement, on the lot of land or property called LA BOCA DEL PANTANO, with real estate registration No. 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 landings) of the Transmisión Nueva Esperanza project.	923
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), "By means of which urbanistic sanctions are established", for being contrary to the Political Constitution, the Law and the Regime of Public Home Services. Order by way of restoration of rights, that EPM be refunded $655'460,000 for the sanction imposed on administrative acts whose nullity is requested.	867
Total contingent assets		**255,517**

Figures stated in millions of Colombian pesos

As of 30 December 2019, the amount determined by the experts to compensate is $255,517.

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
2020	70,667	125,855
2021	8,913	9,239
2022	41,715	128,027
2023and others	1,181,871	9,338
Total	**1,303,166**	**272,459**

Figures stated in millions of Colombian pesos

Note 28. **Other liabilities**

The composition of other liabilities is as follows:

Other liabilities	2019	2018
Non-current		
Payments received in advance	2,685	2,892
Assets received from customers or third parties	7,990	8,076
Other deferred credits	21,089	21,159
Collection in favour of third parties[1]	10	9
Subtotal other liabilities non-current	**31,774**	**32,136**
Current		
Payments received in advance	102,411	51,956
Collection in favour of third parties[1]	158,430	82,252
Subtotal other liabilities current	**260,841**	**134,208**
Total	**292,615**	**166,344**

Figures stated in millions of Colombian pesos

[1]Obeys to the collection of the sanitation fee from Emvarias, public lighting from the different municipalities of Antioquia and the commercial representation contract that EPM has with ESSA and CHEC.

[2]Corresponds to the collection associated with the Comprehensive Solar and Energy Solution Offer, which was invoiced in the ERP JDEdwards.

28.1 Payment received in advance

The breakdown of payment received in advance as of the cut-off date was:

Payment received in advance	2019	2018
Non-current		
Leases	2,030	2,203
Sale of energy utility	655	689
Total non-current payment received in advance	**2,685**	**2,892**
Current		
Leases	173	173
Sales	70,947	8,674
Sale of energy utility	13,040	40,862
Sale of fuel gas utility	10,277	5,406
Other payment received in advance	7,974	(3,159)
Total current payment received in advance	**102,411**	**51,956**
Total payment received in advance	**105,096**	**54,848**

Figures stated in millions of Colombian pesos

Note 29. **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 2019	Initial balance	Cash flows	Changes other than cash		Other changes[1]	Total
			Foreign 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 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**

Figures stated in millions of Colombian pesos

Reconciliation of financing activities 2018	Initial balance	Cash flows	Changes other than cash		Other changes	Total
			Foreign exchange	Changes in fair value		
Loans and borrowings (See note 20)	12,447,331	2,845,884	281,444	-	269,954	15,844,613
Lease liabilities (See notes 12 and 22)	196,310	(987)	-	-	1,610,257	1,805,580
Hedging instruments and derivatives (See notes 12, 22 and 23)	51,891	-	-	(162,670)	(75,451)	(186,230)
Dividends or surpluses paid (see note 18)	300,000	(1,503,504)	-	-	1,203,504	-
Other financing flows	-	7,324	-	-	(7,324)	-
Total liabilities from financing activities	**12,995,532**	**1,348,717**	**281,444**	**(162,670)**	**3,000,940**	**17,463,963**

Figures stated in millions of Colombian pesos

[1] Includes interest paid during the year for $ 1,232,367 (2018: $1,002,253), 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 $ 794,754 (2018: $919,927); loans to economic associates in 2018 for $40,088, which are classified as investment activities in the statements of cash flows; and dividends caused and not payed during the year.

Note 30. **Income from ordinary activities**

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 income from ordinary activities is as follows:

Income from ordinary activities	2019	2018
Sales of goods	733	30
Rendering of services		
Electricity generation service	2,959,949	3,002,126
Electricity trasnmission service	172,786	151,184
Electricity distribution service[1]	3,382,717	2,975,226
Fuel gas service	869,777	851,597
Sewage service[2]	507,461	419,580
Water service[2]	643,799	571,677
IT Services	7,679	7,172
Construction contracts	501	22,899
Other services	56,789	42,216
Refunds	(152,525)	(194,289)
Total rendering of services	8,448,933	7,849,418
Leases	51,520	47,536
Gain in sale of assetss[3]	369	23,596
Total	**8,501,555**	**7,920,550**

Figures stated in millions of Colombian pesos

[1]Income from the energy distribution service increased due to the application of Resolution 015 of 2018 and higher income from marketing due to higher unit costs and increased consumption.

[2]The increase is explained by higher discharges and consumption, users and tariffs.

[3]The decrease is due to the sale of land that the company made to the subsidiary *Promobiliaria S.A.* for the development of a real estate project in 2018.

The company recognised 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

2019	Contract asset balance at the beginning of the period	Contract asset balance at the end of the period	Contract liability balance at the beginning of the period	Contract liability balance at the end of the period
Contract of uniform conditions for regulated utilities[1]	352,720	504,423	14,086	13,875
Non-regulated market - (NRM) or large customers[2]	136,800	126,680	34,642	10,098
Total	**489,520**	**631,103**	**48,728**	**23,973**

Figures stated in millions of Colombian pesos

2018	Contract asset balance at the beginning of the period	Contract asset balance at the end of the period	Contract liability balance at the beginning of the period	Contract liability balance at the end of the period
Contract of uniform conditions for regulated utilities[1]	316,578	352,720	18,883	14,086
Non-regulated market - (NRM) or large customers[2]	115,837	136,800	25,575	34,642
Total	**432,415**	**136,800**	**44,458**	**48,728**

Figures 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.

In contracts with customers, no income was recognised 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 31. Other income

The detail of other income, which forms part of income from ordinary activities, is as follows:

Other income	2019	2018
Recoveries[1]	145,613	65,819
Compensation for asset damage	78,295	-
Valuation of investment properties[2]	51,942	1,596
Compensation	25,792	105,932
Commissions	29,604	28,995
Fees	6,267	5,060
Other ordinary income[3]	5,748	21,913
Benefit rights	4,857	6,106
Contracts for the management of public utilities	89	89
Government grants	-	1,145
Total	**348,207**	**236,655**

Figures stated in millions of Colombian pesos

[1]Includes recovery of provisions of $88,084, mainly from labor lawsuits for $75,019; from the Espiritu Santo contingent consideration for $21,211, due to the modification of the estimated payment dates from 2020 to 2036; other recoveries of $20,150, mainly associated with the provision of the industrial and commercial tax after the filing of the returns and recoveries for obligations that were extinguished for $15,729.

[2]This increase obeys the valuation of some properties due to urban developments in the sectors around these.

[3]Decreasing occurred because in 2018 Natural Gas received income from reconciliations with ENERCOR.

Note 32. Costs of goods sold and services rendered

The detail of the costs of services rendered is as follows:

Costs of Services Rendered	2019	2018
Use of lines, networks and ducts[1]	963,668	923,324
Block purchases	636,795	667,949
Stock market purchase	558,725	665,907
Natural gas distribution and/or marketing costs	349,249	347,205
Conection costs[2]	50,091	5,392
Commercial and financial management of the service	25,021	22,780
Liquefied natural gas	4,979	2,171
Other	1,103	870
Costs associated with transactions in the wholesale market	943	556
Personal Services	488,261	484,878
Depreciations	422,584	425,876
Orders and contracts for other services	293,716	277,371
Others	147,266	125,637
Maintenance and repair orders and contracts	149,194	127,275
Licenses, contributions and royalties	143,737	135,845
Materials and other operating costs	107,363	107,793
Insurance	99,135	81,786
General	58,788	59,421
Amortization of rights of use	47,758	-
Total	**4,548,376**	**4,462,036**

Figures stated in millions of Colombian pesos

[1]Increase obeys increased service provision in the Electricity Distribution and Natural Gas segments.

[2]Growth in the Wastewater Management segment due to the Aguas Claras plant interconnection contract.

Note 33. **Administrative expenses**

The breakdown of administrative expenses is as follows:

Administrative expenses	2019	2018
Personnel expenses		
Payroll expenses	239,794	201,611
Social security expenses	88,418	74,720
Pension expenses	15,450	14,101
Other post-employment benefit plans different from pension	1,676	1,354
Other long-term benefits	3,248	2,466
Benfits in interst rates to employees	6,563	6,183
Total personnel expenses	**355,149**	**300,435**
Taxes, contributions and rates	103,314	103,197
Provision for dismantling, decommissioning or restoring.	60,880	31,388
Commissions, fees and services	59,692	54,139
Maintenance	46,609	42,286
Intangibles	38,214	33,059
Other miscellaneous provisions[1]	37,275	310,230
Depreciation of property, plant and equipment	33,687	29,384
Other general expenses	27,561	36,911
Amortization of intangibles	20,270	18,175
Studies and projects	19,753	15,386
Contingency provision	17,444	121,646
Provision of guarantees	15,756	-
Amortization of rights of use	12,944	-
Advertising and publicity	12,000	6,780
General insurance	10,935	7,544
Christmas Lighting	10,925	9,681
Promotion and publications	8,380	6,792
surveillance and private security	6,376	6,695
Services of cleaning, cafeteria, restaurant and laundry	5,567	5,225
Total general expenses	**547,582**	**838,518**
Total	**902,731**	**1,138,953**

Figures stated in millions of Colombian pesos

[1]Decrease obeyed the lower provisions for the Ituango project contingency recorded in 2018: $137,318 for the guarantee covering the construction and commissioning of the Pescadero Ituango Hydroelectric Plant, $101,797 for the *Conexión Ituango*, $42,917 to continue assistance to evacuees due to the project contingency and $31,388 for the environmental contingency.

Note 34. **Other expenses**

The detail of other expenses is as follows:

Other expenses	2019	2018
Loss on asset disposal	85,096	91,325
Other ordinary expenses[1]	27,815	54,461
Contributions to non-corporate entities	14,947	15,024
Arbitral Awards and Extrajudicial Conciliations[2]	2,565	11,737
Court rulings	353	82
Loss due to changes in fair value in investment property	291	471
Total	**131,067**	**173,100**

Figures stated in millions of Colombian pesos

[1]Decrease obeys lower expenses executed for the attention of the community affected by the contingency of the Ituango project.

[2]2018 includes arbitral awards with Rio Piedras for $10,316.

Note 35. **Finance income and expense**

35.1 Finance income

The breakdown of finance income is as follows:

Financial income	2019	2018
Interest revenue:		
Interests by debtors and arrears	211,944	205,119
Gains from valuation of financial instruments at fair value[1]	79,240	17,132
Gains from trust rights	29,949	21,631
Bank deposits	17,391	15,769
Others	2,060	2,566
Total financial income	340,584	262,217

Figures stated in millions of Colombian pesos

[1]Corresponds to the valuation of the temporary investment portfolio. The variation with respect to the previous period obeys the increase in the amount invested in said portfolio.

35.2 Finance expenses

The breakdown of finance expenses is as follows:

Financial expenses	2019	2018
Interest income:		
Lease contracts[1]	209,583	39,570
Other interests	441	3,227
Total interest	210,024	42,797
Long-term internal public credit operations	158,318	148,410
Long-term external public credit operations	605,971	546,463
Short-term internal financing operations	30,464	1,756
Total interest expense on other financial liabilities not measured at fair value through profit or loss	-	79
Other financial costs		
Commissions	2,114	575
Interest on financial liabilities and losses on valuation of investments and other assets	96,907	77,468
Total financial expenses	**1,103,798**	**817,548**
Figures stated in millions of Colombian pesos		

[1]Increase associated with the implementation of IFRS 16 - Leases, from January 2019.

[2]Increase related to new loan disbursements received in the period.

Note 36. **Net foreign exchange difference**

The effect of transactions in foreign currency is the following:

Foreign exchange difference	2019	2018
Foreign exchange difference gains		
Own position		
For goods and services and others	32,820	4,163
For liquidity	12,777	52,933
Receivables	292,368	119,941
Total Own position	**337,965**	**177,037**
Financial		
Gross income	62,519	5,249
Debt hedging	(40,312)	(42)
Total Financial	**22,207**	**5,207**
Total foreign exchange difference gains	**360,172**	**182,244**
Foreign exchange difference expenses		
Own position		
For goods and services and other	11,115	12,852
Por liquidez	18,459	-
Receivables	254,050	77,055
Other adjustments in foreign exchange difference	2,003	13,130
Total Own position	**285,627**	**103,037**
Financial		
Gross expenditure	121,287	508,566
Debt hedging	(200)	(221,915)
Total Financial	**121,087**	**286,651**
Total foreign exchange difference expenses	**406,714**	**389,688**
Foreign exchange difference, net	**(46,542)**	**(207,444)**

Figures stated in millions of Colombian pesos

The rates used for the conversion of foreign currency in the separated financial statements are:

Currency	Numeric code	Exchange to USD as of 31 December		Exchange rate as of 31 December		Average exchange rate	
		2019	2018	2019	2018	2019	2018
United States Dollar	USD	1.00	1.37	3277.14	3249.75	3281.09	2956.43
Guatemalan quetzal	GTQ	7.70	7.74	425.67	420.03	426.21	393.01
Mexican peso	MXN	18.88	19.69	173.54	165.01	170.45	153.78
Chilean peso	CLP	751.95	694.00	4.36	4.68	4.67	4.61
Euro	EUR	0.89	0.87	3678.59	3714.95	3671.66	3486.87
Japanese yen	JPY	108.67	109.72	30.16	29.62	30.11	26.77
Pound sterling	GBP	0.75	0.79	4341.39	4138.88	4188.11	3941.13
Swiss franc	CHF	0.97	0.99	3384.25	3296.56	3302.52	3021.12

Note 37. Gain on equity investments

The Participation on Equity Investments is as follows:

Participation on equity investment	2019	2018
Dividends and participations[1]	60,356	102,968
Profit or loss on sales of equity investments[2]	(47,534)	-
Total	**12,822**	**102,968**

Figures stated in millions of Colombian pesos

[1]I Includes dividends of investments classified in Financial Instruments for $60,356 (2018: $102,968) See note 13. Other financial assets.

[2]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.

Note 38. Income tax

38.1 Tax Provisions

Tax Provisions applicable and in effect, establish the following:

- The nominal income tax rate is 33%.
- 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.

Ley de Financiamiento 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.

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%

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 as a tax deduction of 50% of the payed industry and commerce tax is kept. It is expected that, starting in 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-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.

38.2 Effective rate Reconciliation

Reconciliation between the applicable tax rate and the effective rate and the composition of income tax expense for the periods 2019 and 2018 is as follows:

Income tax and complementary	2019	%	2018	%
Profit before tax	3,311,270		2,493,178	
Nominal income rate		33%		37%
Income tax nominal rate	1,092,719		922,476	
Effects of changes in tax rates	-		(217,950)	-9%
Effect of permanent tax differences:	**(340,691)**	**-10%**	**(320,251)**	**-13%**
Dividend Income	249,911	8%	145,018	6%
Tax-only income	194,444	6%	27,518	1%
Special deduction refund	118,768	4%	11,588	0%
Non-deductible provisions	43,612	1%	179,356	7%
Loss of assets	28,082	1%	33,073	1%
Equity method	(328,122)	-10%	(309,342)	-12%
Untaxed dividends	(147,548)	-4%	(114,876)	-5%
Compensation for consequential damage	(173,991)	-5%	(33,207)	-1%
Exempt income	(138,605)	-4%	(14,236)	-1%
Special deduction for productive real assets	(196,923)	-6%	(289,015)	-12%
Net result other permanent differences	9,681	0%	43,872	2%
Rate difference adjustment (impto cte/deferred)	(67,136)	-2%	(132,965)	-5%
Tax discounts	(39,146)	-1%	(5,570)	0%
Occasional Earnings	133	0%	539	0%
Income adjustments from previous years	(40,644)	-1%	(97,923)	-4%
Income tax at effective rate	**605,235**	18%	**148,356**	6%
Details of current and deferred expenditure				
Current tax	600,557	18%	375,273	15%
Deferred tax	4,678	0%	(226,917)	-9%
Income Tax	**605,235**	**18%**	**148,356**	**6%**

Figures 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 2019 and 2018 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.

38.3 Income tax recognised through profit or loss

The most significant components of income tax expense at the cut-off date are:

Income tax	2019	2018
Current income tax		
Expenses (revenue) due to current income tax	680,347	478,766
Adjustments recognized in the current period related to the current income tax of previous periods	(40,645)	(97,923)
Tax benefits for tax losses, tax credits or temporary differences used in the period	(39,145)	(5,570)
Total Current income tax	**600,557**	**375,273**
Deferred tax		
Net expenses (revenue) due to deferred tax related to the origen and reversal of temporary differences	4,678	(8,966)
Net expenses (revenue) due to deferred tax related to changes in income tax or regulations		(217,951)
Total deferred tax	**4,678**	**(226,917)**
Income tax	**605,235**	**148,356**

Figures stated in millions of Colombian pesos

The rates used to determine deferred tax are:

Year	2019	2020	2021	2022
Income	33%	32%	31%	30%
Total rate	**33%**	**32%**	**31%**	**30%**

38.4 Income tax assets and liabilities

The balance in favor (balance payable) of income and supplementary tax for the years 2017 and 2018 is:

Description	2019	2018
Asset (or liability) for current income tax		
Total Asset current income tax	**34,413**	**2,037**
Recoverable balances of income tax	34,413	2,037
Total Asset (or liability) for income tax	**34,413**	**2,037**

Figures stated in millions of Colombian pesos

Description	2019	2018
Income tax liability		
Total construction tax liabilities	**56,027**	**56,027**
Current liabilities	140,636	25,696
Non-current liabilities	30,331	30,331
Total income tax liability	**170,967**	**56,027**

Figures stated in millions of Colombian pesos

38.5 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 accumulated comprehensive income	2019			2018		
	Gross	Tax effect	Net	Gross	Tax effect	Net
Items that will not be reclassified after profit for the period						
New measurements of defined benefit plans	(35,969)	12,011	(23,958)	372	2,017	2,389
Equity investments measured at fair value through equity	622,447	129,657	752,104	(24,810)	3,380	(21,430)
Participation in other comprehensive income of subsidiaries	(201,032)	11,823	(189,209)	(40,562)	(712)	(41,274)
Items that can be reclassified after profit for the period						-
Cash flow hedges	34,119	17,673	51,792	2,777	(67,764)	(64,987)
Participation in other comprehensive income of subsidiaries	(205,235)	1,317	(203,918)	115,639	(53)	115,586
Total	**214,330**	**172,482**	**386,812**	**53,416**	**(63,132)**	**(9,716)**

Figures stated in millions of Colombian pesos

38.6 Deferred tax

The breakdown of deferred taxi s as follows:

Deferred tax	2019	2018
Deferred tax asset	509,907	656,975
Deferred tax liability	2,512,071	2,813,803
Total net deferred tax	**(2,002,164)**	**(2,156,828)**

Figures stated in millions of Colombian pesos

38.6.1. Deferred tax asset

Deferred tax assets	Initial balance 2018	Net changes included in profit or loss 2018	Changes included in other comprehensive income 2018	Final balance 2018	Net changes included in profit or loss 2019	Changes included in other comprehensive income 2019	Final balance 2019
Assets	**479,335**	**(295,873)**	**-**	**183,462**	**31,251**	**1,836**	**216,549**
Property, plant and equipment	241,226	(200,666)	-	40,560	(40,558)	-	2
Intangibles	16,494	(9,375)	-	7,119	(7,119)	-	-
Investment property	2,594	(2,594)	-	-	-	-	-
Right of use assets	-	-	-	-	51,801	-	51,801
Investments and derivative instruments	15,187	(15,187)	-	-	-	1,836	1,836
Receivables	189,939	(70,058)	-	119,881	4,926	-	124,807
Inventories	6	(6)	-	-	-	-	-
Other assets	13,889	2,013	-	15,902	22,201	-	38,103
Liabilities	**921,384**	**(449,887)**	**2,017**	**473,514**	**(192,167)**	**12,011**	**293,358**
Loans and borrowings	77,177	135,500	-	212,677	(115,300)	-	97,377
Payables	52,471	(52,471)	-	-	6,031	-	6,031
Employee benefits	275,138	(258,994)	2,017	18,161	8,347	12,011	38,519
Derivatives	24,985	(24,762)	-	223	(223)	-	-
Provisions	158,560	(528)	-	158,032	(18,278)	-	139,754
Other liabilities	333,053	(248,632)	-	84,421	(72,744)	-	11,677
Deferred tax asset	**1,400,719**	**(745,760)**	**2,017**	**656,976**	**(160,916)**	**13,847**	**509,907**

Figures stated in millions of Colombian pesos

In 2019, the deferred tax recognised for the investment in ISA will be reversed, due to the partial sale of the investment, which will reduce EPM's participation in that entity from 10.16% to 8.82%. In the eventual sale of the total investment, there are no future tax consequences since it is not income or occasional profit in accordance with Article 36-1 of the Tax Code.

38.6.2. Deferred tax liability

Deferred tax liabilities	Initial balance 2018	Net changes included in profit or loss 2018	Changes included in other comprehensive income 2018	Final balance 2018	Net changes included in profit or loss 2019	Changes included in other comprehensive income 2019	Final balance 2019
Assets	**3,102,764**	**(484,616)**	**64,384**	**2,682,532**	**(94,930)**	**(97,942)**	**2,489,660**
Property, plant and equipment	2,726,203	(311,302)	-	2,414,901	10,967	-	2,425,868
Intangibles	44,424	(20,481)	-	23,943	5,459	-	29,402
Investment property	7,459	(6,099)	-	1,360	10,910	-	12,271
Investments and derivative instruments	218,155	(83,475)	64,384	199,064	(87,113)	(97,942)	14,009
Receivables	93,352	(60,051)	-	33,301	(33,301)	-	-
Inventories	7	(7)	-	-	-	-	-
Other assets	13,164	(3,201)	-	9,963	(1,852)	-	8,110
Liabilities	**619,331**	**(488,059)**	**-**	**131,272**	**(61,308)**	**(47,553)**	**22,411**
Loans and borrowings	8,774	(8,774)	-	-	316	-	316
Payables	124,652	(55,396)	-	69,256	(50,011)	-	19,245
Employee benefits	232,857	(228,570)	-	4,287	(1,437)	-	2,850
Derivatives	-	57,729	-	57,729	(10,176)	(47,553)	-
Provisions	5,318	(5,318)	-	-	-	-	-
Other liabilities	247,730	(247,730)	-	-	-	-	-
Deferred tax liabilities	**3,722,095**	**(972,675)**	**64,384**	**2,813,804**	**(156,238)**	**(145,495)**	**2,512,071**
Total deferred tax assets/liabilities	**2,321,376**	**(226,915)**	**62,367**	**2,156,828**	**4,678**	**(159,342)**	**2,002,164**

Figures stated in millions of Colombian pesos

38.6.3 Temporary differences

Temporary differences associated with investments in subsidiaries, associates and joint ventures, for which no deferred tax liabilities have been recognised, amount to $4,661,434 (2018: $4,884,192).

In assets, the greatest impact on deferred taxes arises from temporary differences in property, plant and equipment, in receivables related to portfolio provisions due to differences in the cleansing of the portfolio provision under the tax standard and portfolio impairment under IFRS and due to the effect of valuation at amortized cost and implicit interest of the accounts receivable. The unrealized exchange difference of the receivables is another representative item in the temporary differences, concept introduced by Law 1819/2016.

Regarding liabilities, the items that most impact the calculation of deferred tax are actuarial accounting and tax calculation, valuation at amortized cost of bonds, securities issued, loans and borrowings, unrealized exchange difference of credits and payables.

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 39. **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:					
2019	566,511	406,004	1,230,790	89,002	-
2018	438,352	250,162	1,575,289	89,870	-
Associates:					
2019	67,377	30,926	6,539	4,411	-
2018	57,912	32,760	44,831	12,176	-
Key management personnel from the company or its controller:					
2019	-	8,675	627	2,380	521
2018	-	8,181	894	1,065	317
Other related parties:					
2019	49,517	63,479	16,997	2,846	-
2018	23,231	67,728	9,805	214,522	-

Figures 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	2019	2018
Subsidiaries	Sale of goods and rendering of services	414,478	298,512
	Interests	116,767	108,475
	Professional fees	8,035	8,730
	Other	27,223	22,636
Total Subsidiaries		**566,503**	**438,353**
Associates	Sale of goods and rendering of services	46,365	14,691
	Other	21,012	43,221
Total Associates		**67,377**	**57,912**
Other related parties	Sale of goods and rendering of services	45,724	22,465
	Intereses	-	351
	Honorarios	34	23
	Other	3,759	393
Total Other related parties		**49,517**	**23,232**

Figures stated in millions of Colombian pesos

[2]The breakdown of costs and expenses incurred by the company with its related parties is as follows:

	Costs and expenses	2019	2018
Subsidiaries	Purchase of goods and services	402,964	173,911
	Interests	4	-
	Professional fees	753	797
	Other	2,284	75,454
Total Subsidiaries		**406,005**	**250,162**
Associates	Purchase of goods and services	28,861	29,035
	Professional fees	2,048	3,725
	Other	17	-
Total Associates		**30,926**	**32,760**
Other related parties	Purchase of goods and services	41,741	42,553
	Interests	1	2
	Professional fees	1,143	907
	Other	20,594	24,266
Total Other related parties		**63,479**	**67,728**

Figures 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	2019			2018		
					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 3M + 4.43	195,179	14,800	209,979	375,160	30,959	406,119
EPM chile S.A.	Loan 1	USD	15.7 years	Libor 6M + 3.80	-	-	-	258,333	307	258,640
HIDROSUR	Loan 1	CLP	8,5 years	0.072	952,214	1,116	953,330	1,091,371	(690)	1,090,681
EPM Chile Transmisión	Loan 1	USD	8 years	Libor 6M + 3.40	-	-	-	18,076	7	18,083

Figures stated in millions of Colombian pesos

[4]The breakdown of the loans received by the company from its related parties is as follows:

	Received loans	Original currency	Term	Nominal interest rate	2019			2018		
					Nominal value	Amortized cost value	Total amount	Nominal value	Amortized cost value	Total amount
Empresas Varias de Medellín S.A.	Préstamo 2	COP	1 AÑO	IBR + 2.1%	-	-	-	40,000	88	40,088

Figures stated in millions of Colombian pesos

[5]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 2019 was $1,289,652 (2018 $1,503,504).

Compensation to the Board of Directors and key Personnel of the company:

The members of the Key management personnel of the company includes:

Description	2019	2018
Wages and other short-term employee benefits	6,936	7,335
Other long-term employee benefits	918	856
Compensation to key management personnel	**7,854**	**8,191**

'Figures stated in millions of Colombian pesos

Amounts disclosed are those recognised as Costs or Expenses during the period report for compensation to key management personnel.

Note 40. **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 2019 and December 2018.

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:

	2019	2018
Bonds and loans	16,431,715	15,844,613
Commercial bank loans	571,071	1,403,923
Multilateral bank loans	3,594,944	3,865,275
Development bank loans	985,814	1,953,743
Bonds and securities issued	10,040,782	8,581,584
Other loans	-	40,088
Total debt	**15,192,611**	**15,844,613**

Figures stated in millions of Colombian pesos

Note 41. **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.

41.1 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 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.
- For swaps, the sensitivity analyses were performed under the assumption of maintaining constant the hedges contracted according to their indexation rates.

41.2. 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	Financial effect	
		In earnings before taxes	In equity
2019			
Financial assets measured at fair value through change in profit or loss			
Investments at fair value with change in profit or loss	*100*	*(1,407)*	*(1,126)*
	(100)	*1,407*	*1,126*
Financial assets measured at amortized cost			
Receivables in foreign currency	*100*	2,100	1,680
	(100)	*(2,100)*	(1,680)
Financial liabilities measured at amortized cost			
Loans and borrowings	*100*	*54,287*	*43,430*
	(100)	*(54,287)*	*(43,430)*
Financial liabilities measured at fair value through change in other comprehensive income			
Derivative instruments	*100*	*(6,451)*	*(5,160)*
	(100)	*6,451*	*5,160*
2018			
Financial assets measured at fair value through change in profit or loss			
Investments at fair value with change in profit or loss	*100*	*(14,054)*	*(11,243)*
	(100)	*14,054*	*11,243*
Financial assets measured at amortized cost			
Accounts receivable in foreign currency	*100*	6,828	5,463
	(100)	*(6,828)*	(5,463)
Financial liabilities measured at amortized cost			
Credits and loans	*100*	*(38,243)*	*(30,594)*
	(100)	*38,243*	*30,594*
Financial liabilities measured at fair value through change in other comprehensive income			
Derivative instruments	*100*	*(3,991)*	*(3,193)*
	(100)	*3,991*	3,193

Figures 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.

41.3. 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.

EPM has identified that financial instruments affected by foreign exchange risk include:

- Cash and cash equivalents
- Other financial assets:
    - Fixed income securities
    - 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	
		In earnings before taxes	In equity
2019			
Financial assets measured at fair value through change in profit or loss			
Other financial assets - fixed income securities	*100*	*1,176*	*941*
	(100)	*(1,176)*	*(941)*
Cash and cash equivalents	*100*	*15,192*	*12,154*
	(100)	*(15,192)*	*(12,154)*
Financial assets measured at amortized cost			
Receivables in foreign currency	*100*	*2,477*	*1,981*
	(100)	*(2,477)*	*(1,981)*
Financial liabilities measured at amortized cost	*100*	*(228,458)*	*(182,766)*
Loans and borrowings	*(100)*	*228,458*	*182,766*
Financial liabilities measured at fair value with change in other comprehensive income			
Derivative instruments	*100*	*(8,455)*	*(6,764)*
	(100)	*8,455*	*6,764*
2018			
Financial assets measured at fair value through change in profit or loss			
Other financial assets - fixed-rate bonds	*100*	*28,773*	*23,019*
	(100)	*(28,773)*	*(23,019)*
Cash and cash equivalents	*100*	*(8,244)*	*6,595*
	100	*(8,224)*	*(6,595)*
Financial assets measured at amortized cost			
Receivables in foreign currency	*100*	*3,799*	*3,039*
	(100)	*(3,799)*	*(3,039)*
Financial liabilities measured at amortized cost			
Loans and borrowings	*100*	*482,159*	*385,727*
	(100)	*(482,159)*	*(385,727)*
Financial liabilities measured at fair value through change in other comprehensive income			
Derivative instruments	*100*	*64,773*	*51,819*
	(100)	*(64,773)*	*(51,819)*

Figures 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.

41.4 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. 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, analysing, 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 recognise 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, 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.

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	2019	2018
Cash and cash equivalents	879,024	835,779
Investments in debt instruments	545,481	978,435
Investments in equity instruments	1,922,285	1,581,092
Receivables	(307,551)	(287,014)
Other receivables	(63,430)	(60,270)
Maximum exposure to credit risk	**2,975,809**	**3,048,022**

Figures stated in millions of Colombian pesos

41.5 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 analysed 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:

	Aerage 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
2019							
Non-derivative financial liabilities with variable interest rate	6.67%	214,480	794,760	99,446	1,188,808	4,080,673	6,378,167
Non-derivative financial liabilities with fixed interest rate	6.62%	42,483	177,325	308,147	177,325	8,998,657	9,703,937
Non-derivative financial assets	4.80%	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		**1,166,579**	**1,173,903**	**672,916**	**1,624,824**	**14,677,936**	**19,316,158**
2018							
Non-derivative financial liabilities with variable interest rate	7.94%	1,876,128	176,553	1,426,553	176,553	4,487,658	8,143,445
Non-derivative financial liabilities with fixed interest rate	6.17%	818,213	1,092,793	93,483	1,455,151	4,065,843	7,525,483
Non-derivative financial assets	7.39%	953,136	12,500	8,000	1,100	-	974,736
Non-derivative financial assets - portfolio	7.39%	141,611	201,399	264,558	265,406	1,610,953	2,483,927
Total		**3,789,088**	**1,483,245**	**1,792,594**	**1,898,210**	**10,164,454**	**19,127,591**

Figures 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 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
2019						
Swap Contracts	(13,699)	(14,592)	(17,561)			(45,853)
Total	(13,699)	(14,592)	(17,561)	-	-	**(45,853)**
2018						
Swap Contracts	21,520	(45,843)	12,165	(192,984)	-	(205,142)
Future contracts	-					-
Total	21,521	(45,843)	12,165	(192,984)	-	**(205,141)**

Figures 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 42. **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 2019 and 2018 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 optimise 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.

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 recognised 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.

The following table shows for each level of the fair value hierarchy, the company's assets and liabilities measured at fair value on a 2019 and 2018 recurring basis:

2019	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	488,548	-	-	488,548
	488,548	-	-	488,548
Other investments in debt titles				
Fixed income securities	539,511	-	-	539,511
Variable income securities	98,348	-	-	98,348
Investments pledged as collateral	5,970	-	-	5,970
	643,829	-	-	643,829
Other equity investments				
Variable income securities	1,915,552	-	6,733	1,922,285
	1,915,552	-	6,733	1,922,285
Trust rights				
Trust in management	404,365	-	-	404,365
	404,365	-	-	404,365
Derivatives				
Swap contracts	-	45,062	-	45,062
	-	45,062	-	45,062
Investment property				
Urban and rural land	-	-	110,116	110,116
Buildings and houses	-	-	16,706	16,706
	-	-	126,822	126,822
Contingent considerations				
Provisions-business combination	-	-	133,346	133,346
	-	-	133,346	133,346
Total	**3,452,294**	**45,062**	**209**	**3,497,565**
Figures stated in millions of Colombian pesos	**99%**	**1%**	**0%**	

2018	Level 1	Level 2	Level 3	Total
Assets				
Negociable or designated at fair value				
Cash and cash equivalents	218,338	-	-	218,338
	218,338	-	-	218,338
Other investments in debt titles				
Fixed income securities	972,788	-	-	972,788
Variable income securities	64,547	-	-	64,547
Investments pledged as collateral	5,647	-	-	5,647
	1,042,982	-	-	1,042,982
Other equity investments				
Variable income securities	1,574,359	-	6,733	1,581,092
	1,574,359	-	6,733	1,581,092
Trust rights				
Trust in management	402,067	-	-	402,067
	402,067	-	-	402,067
Derivatives				
Contratos de futuros	-	-	-	-
Swap contracts	-	186,230	-	186,230
	-	186,230	-	186,230
Investment property				
Urban land	-	70,040	-	70,040
Buildings and houses	-	7,789	-	7,789
	-	77,829	-	77,829
Derivatives				
Swaps	-			
	-			
Contingent considerations				
Provisions-business combination	-	192,484	-	192,484
Disaggregation level 2	-	-	-	-
	-	192,484	-	192,484
Total	**3,237,746**	**71,575**	**6,733**	**3,316,054**
Figures stated in millions of Colombian pesos	**98%**	**2%**	**0%**	

Recorded value and estimated fair value of the company's assets and liabilities that are not recognised at fair value in the separate statement of financial position, but require disclosure at fair value, as of 31 December 2019 and 2018 are as follows:

Description	2019			2018	
	Recorded value	Estimate fair value		Estimate fair value	
		Level 2	Total	Level 2	Total
Assets					
Public utilities receivables	1,744,908	1,753,485	1,753,485	1,449,122	1,449,122
Employee loans	123,190	125,990	125,990	121,740	121,740
Associates	1,163,309	1,163,309	1,163,309	1,773,524	1,773,524
Other receivables	705,198	704,482	704,482	307,956	307,956
Total assets	3,736,605	3,747,266	3,747,266	3,652,342	3,652,342
Liabilities					
Other Issued bonds and securities	9,648,197	9,648,197	9,648,197	8,206,866	8,206,866
Commercial bank loans	571,071	571,071	571,071	1,403,924	1,403,924
Multilateral bank loans	3,594,944	3,594,944	3,594,944	3,865,274	3,865,274
Development bank loans	985,814	985,814	985,814	1,953,742	1,953,742
Issued bonds and securities	392,585	392,585	392,585	374,719	374,719
Loans to economic associates	-	-	-	40,088	40,088
Total liabilities	15,192,611	15,192,611	15,192,611	15,844,613	15,844,613
Total	**(11,456,006)**	**(11,445,345)**	**(11,445,345)**	**(12,192,271)**	**(12,192,271)**
Figures stated in millions of Colombian pesos		**100%**		**100%**	

As of 31 December 2019, and 2018, there were no items in levels 1 and 3.

Note 43. **Service concession arrangements**

At 31 December 2019, 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 date	Activity	Country	Concession period	Initial remaining period
Empresas públicas de Medellín - Municipality of 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 services and sewerage.	Colombia	30 years (extendable)	9 years
Empresas públicas de Medellín - Municipality of 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 services and sewerage.	Colombia	10 years (extendable)	5 years
Empresas públicas de Medellín - Municipality of La Estrella	1/DJ/-7835/17	10/09/1984	Execution of works and provision of water supply services drinking water and sewage.	Colombia	10 years (extendable)	5 years
Empresas públicas de Medellín - Municipality of 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)	8 years
Empresas públicas de Medellín - Municipality of Itagüí	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 the service of the assigned neighborhoods. Construction of a collector parallel to the La Justa stream and a sewerage system on 36th Street at the Ditaires Park. Construction of the collector parallel to the coverage of the La Muñoz stream. Handing over of hydraulic structures to provide the sewage service in the municipality and provide sanitation to the Medellín River.	Colombia	30 years (extendable)	28 years
Empresas públicas de Medellín - Municipality of Bello	1/DJ/-6208/11	05/09/1978	Execution of works and provision of the water and sewage service.	Colombia	10 years (extendable)	4 years
Empresas públicas de Medellín - Municipality of Copacabana	1/DJ-9994/9	31/10/1990	Execution of works for the drinking water supply, sewerage and the provision of such services.	Colombia	20 years (extendable)	11 years
Empresas públicas de Medellín - Municipality of Girardota	1/JD-591/2	12/04/1993	Provision of water service and sewerage.	Colombia	20 years (extendable)	13 years
Empresas públicas de Medellín - Municipality of 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 services and sewerage.	Colombia	30 years (extendable)	8 years

As of the cut-off date, no income and costs incurred for construction services have been recognised 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 44. **Facts occurred after the period being reported**

Main impacts COVID19, oil trade war and representative market rate (TRM):

Following the situation caused by the coronavirus, the oil trade war and representative market exchange rate (TRM, for its Spanish initials), EPM is analyzing the financial impacts considering changes in the macroeconomic scenario:

TRM is identified as a variable that presents a high risk in its behaviour mainly due to:

- Lower oil prices in the face of lower global demand due to the impact of the Coronavirus on value chains and the disagreement between OPEC and Russia on the possibility of prolonging the agreement to cut oil production, with the risk of a possible price war. The Markets Directorate estimates a downward trend in the next four years with an average of 42.85 USD/barrel.
- Increased risk aversion in the global financial markets represented by the spread of COVID-19 (coronavirus). If the global volatility scenario continues, there will be a strong demand for safe haven assets such as US Dollar.
- Risk of downward revision of investment grade for Colombia, associated with the fall in oil prices due to higher current account and fiscal.
- Geopolitical and commercial tension.
- Financial market volatility associated with the U.S. election process in the second half of 2020.

For the purposes of financial results, there is a natural hedge, since the company has companies whose functional currency is the dollar.

As for the results in Colombia, the greatest risk is in the difference in foreign exchange rate for the debt contracted in dollars, which could generate an increase in the debt balances.

EPM's Electricity Generation business does not foresee major impacts, as it is highly contracted in 2020 and in the following years, its income will not significantly depend on what happens in the stock market. In addition, many of the effects that push down revenues on the stock market are mitigated by countervailing economic effects.

While the effect of the increase in TRM could increase the cost of inputs and investments, measures to eliminate tariffs for some products associated with the provision of public services could offset this increase.

Likewise, the CPI is another of the variables that are mainly impacted by:

- Stress caused by high depreciation that is transferred to prices.
- Increase in the price of raw materials from China due to shortages.
- Price indexation due to wage increases.
- Supply shocks that generate higher than expected increases in agricultural prices. If the annual devaluation is maintained, greater exchange rate pass-through strains are expected due to the increase in the price of imported goods.
- Increased cost of raw materials from China and other trading partners affected by the pandemic.
- Supply shocks associated with a shortage of supplies due to the effects on production chains of the coronavirus, which will push up food prices.
- The expectations of economic agents are no longer anchored to the goal.
- The effect of tariff indexation represents an upward risk for the basket of non-tradable and regulated services.

What is expected to impact this variable is associated with the main components of the income, the commercial operation and the investment plan for all businesses, as well as the costs and expenses of operation, maintenance and management that depend on the behavior of this variable.

In addition to the macroeconomic scenario, the government has been announcing some measures that will directly impact companies in Colombia, among them we have identified the following:

- The demand for reconnections to users in energy and water utilities.
- The non-application of real indexation to the tariff in the Water business.
- Generalized social isolation policies.
- Elimination of tariffs for certain goods and materials associated with the provision of public utilities.

In the framework of the COVID-19 crisis, EPM aims to mitigate the impact on the company's finances through measures to address the crisis such as, reviewing the investment plan for the year 2020 in order to identify what can be optimized or postponed, without putting at risk the provision of public utilities. Additionally, a thorough review of the business' operating costs is initiated to identify what can be optimized without putting the operation at risk.

In addition, in order to ensure liquidity, EPM currently has approved credit lines and quotas, which would be managed for disbursement if necessary.

Award of one of the two companies resulting from the exit of *Electricaribe* from the market:

On 20 March 2020, EPM was awarded to operate CaribeMar, one of the two auction processes in which the markets of Electricaribe were separated by the National Government.

As the operator of the electrical energy utility in the Caribbean Region, the company is committed to growth with sustainability in the electricity sale and distribution market in Colombia, as a contribution to the growth of the country and the quality of life of the inhabitants of the departments of Bolívar, Cesar, Córdoba and Sucre. When it starts operating in the Caribbean Region, EPM Group will reach a 35% share in the energy distribution and sale market in Colombia, extending its services to a population of 19 million people. CaribeMar will have 1.5 million new customers in the Caribbean Region in the coming months. This new business will include investments of around $4 billion over the next five years.

After the award of CaribeMar, the National Government must close the financial transaction to purchase 100% of the shares, incorporate the new company and prepare and deliver the assets and liabilities included. Only, until that moment, EPM will take control of the operation.

With this operation, the Group becomes the main operator of the national electricity system, both in electricity distribution and sales and assumes the challenge and commitment to contribute to the quality of life of the community, through the improvement of the energy utility, the care for the environment and the contribution to the growth and competitiveness of the Caribbean Region.

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.