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## INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of
EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.:

**Identification of the financial statements subject to audit**
We have audited the financial statements of EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P., which comprise the statement of financial position as of December 31, 2016, and the related statements of income and other comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information. The financial statements as of December 31, 2015, included for comparative purposes only, was audited and we have expressed an unqualified opinion dated on March 31, 2016.

**Responsibility of the Company's management for the financial statements**
Management is responsible for the preparation and fair presentation of the accompanying financial statements in accordance with International Financial Reporting Standards, and for such internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatements, whether due to fraud or error; select and apply the appropriate accounting policies; and make accounting estimates that are reasonable in the circumstances.

**Auditor's Responsibility**
Our responsibility is to express an opinion on the accompanying financial statements based on our audit. We conducted the audit in accordance with International Standards on Auditing accepted in Colombia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements. In making those risk assessments, the auditor considers internal control relevant to the entity´s preparation and fair presentation of the financial statements 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. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence that we have obtained is sufficient and appropriate to provide a basis for my audit opinion.

**Opinion**

In our opinion, the accompanying financial statements referred above, taken from the accounting books, present fairly, in all material respects, the financial position of EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P. as of December 31, 2016, the results of its operations and its cash flows for the year then ended in conformity with International Financial Reporting Standards.

## Emphasis of Matter Paragraphs

1. As described in note 19 of the attached financial statements, during 2016 EPM obtained the waivers from the financial entities related to the compliance with the financial covenant, in accordance with the provisions of the contracts with multilateral banks, measured in the long-term financial debt to EBITDA ratio at December 31, 2016, except for the obligation with the financial entity Bank of Tokyo-Mitsubishi for $372,104 million, on which it made the reclassification of the total financial debt from long term to short term in accordance with the provisions of the International Financial Reporting Standards.

2. Without modifying our audit opinion, we draw attention to Note 2.25.2 to the financial statements, in respect to:

    a) The Company applied earlier IFRS 9 Financial Instruments (revised in July 2014), which generated an impact by the effect on the change of the policy for measuring the value correction for expected credit losses on the accounts receivable, in the accumulated results at December 31, 2016 for $69,278 million and in the result of the period, net for $58,540 million.

    b) The Company changed its policy for subsequent measurement of investments in subsidiaries by passing from the cost method to equity method, in accordance with the modification to IAS 27 Separate Financial Statements, determining adjustments that have been recorded with charge to accumulated results of December 31, 2015 for $103,850 million. The financial statements previously issued for the year ended on December 31, 2015, have been re-expressed retroactively to reflect those adjustments as if they had been made on that date.

Deloitte & Touche Ltda.

DELOITTE & TOUCHE LTDA.
March 14, 2017.

# Empresas Públicas de Medellín E.S.P.

**Separate Financial Statements and Notes**
December 31, 2016 and 2015

**EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.**

## SEPARATE STATEMENT OF FINANCIAL POSITION

Years ended as of December 31, 2016 and 2015

Figures expressed in millions of Colombian pesos

| | Notes | December 2016 | December 2015 Restated | January 1, 2015 Restated |
|---|---|---|---|---|
| **Assets** | | | | |
| **Non-current assets** | | | | |
| Properties, plant and equipment, net | 4 | 20.729.952 | 18.472.539 | 16.611.956 |
| Investment properties | 5 | 116.628 | 157.213 | 138.212 |
| Goodwill | 6 | 260.950 | 260.950 | 260.950 |
| Other intangible assets | 6 | 277.110 | 244.767 | 234.576 |
| Investments in subsidiaries * | 8 | 6.043.104 | 6.200.633 | 4.682.660 |
| Investments in associates | 9 | 2.434.417 | 2.431.939 | 2.431.939 |
| Investments in a joint ventures | 10 | 99 | 99 | - |
| Trade and other accounts receivable | 11 | 1.961.386 | 2.123.296 | 1.105.973 |
| Other financial assets | 12 | 1.522.810 | 2.391.070 | 2.437.551 |
| Other assets | 14 | 87.717 | 82.020 | 77.059 |
| **Total non-current assets** | | **33.434.173** | **32.364.525** | **27.980.877** |
| **Current assets** | | | | |
| Inventories | 15 | 115.080 | 97.402 | 107.518 |
| Trade and other accounts receivable | 11 | 1.365.826 | 1.667.161 | 1.105.098 |
| Current tax assets | 35 | - | 122.558 | - |
| Other financial assets | 12 | 379.000 | 55.599 | 1.793.824 |
| Other assets | 14 | 86.953 | 190.944 | 133.095 |
| Cash and cash equivalents | 16 | 519.078 | 487.182 | 284.923 |
| **Total Current assets** | | **2.465.937** | **2.620.846** | **3.424.458** |
| Total assets | | 35.900.110 | 34.985.371 | 31.405.335 |
| **Liabilities and Equity** | | | | |
| **Equity** | | | | |
| Capital | 17 | 67 | 67 | 67 |
| Reserves | 17 | 3.087.207 | 3.452.499 | 3.093.359 |
| Other comprehensive income * | 18 | 2.378.296 | 2.650.575 | 2.236.701 |
| Retained earnings * | 17 | 12.932.194 | 11.687.030 | 9.629.888 |
| Profit for the year * | 17 | 1.834.792 | 1.369.673 | 2.472.421 |
| Other components of equity * | | 51.626 | 58.312 | 58.312 |
| Total equity | | 20.284.182 | 19.218.154 | 17.490.747 |

**EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.**

## SEPARATE STATEMENT OF FINANCIAL POSITION

Years ended as of December 31, 2016 and 2015
Figures expressed in millions of Colombian pesos

| | Notes | December 2016 | December 2015 Restated | January 1, 2015 Restated |
|---|---|---|---|---|
| **Liabilities** | | | | |
| **Non-current liabilities** | | | | |
| Credits and loans | 19 | 9.532.101 | 7.012.001 | 7.711.595 |
| Trade and other payables | 20 | 30.275 | 31.574 | 15.102 |
| Other financial liabilities | 21 y 22 | 480.593 | 499.690 | 447.238 |
| Employee benefits | 23 | 254.884 | 203.880 | 193.206 |
| Deferred tax liabilities | 35 | 1.987.819 | 2.065.045 | 1.951.336 |
| Provisions | 25 | 209.296 | 375.265 | 372.724 |
| Other liabilities | 26 | 33.041 | 33.314 | 22.538 |
| **Non-current liabilities** | | **12.528.009** | **10.220.769** | **10.713.739** |
| **Current liabilities** | | | | |
| Credits and loans | 19 | 1.288.588 | 3.940.357 | 976.854 |
| Trade and other payables | 20 | 863.575 | 1.018.265 | 1.545.280 |
| Other financial liabilities | 21 y 22 | 304.518 | 181.661 | 235.788 |
| Employee benefits | 23 | 116.625 | 101.179 | 89.637 |
| Income tax payable | 35 | 55.665 | - | 154.359 |
| Taxes contributions and rates payable | 24 | 97.472 | 88.044 | 83.444 |
| Provisions | 25 | 220.762 | 50.613 | 37.011 |
| Other liabilities | 26 | 140.714 | 166.328 | 78.476 |
| **Total current liabilities** | | **3.087.919** | **5.546.447** | **3.200.849** |
| Total liabilities | | 15.615.928 | 15.767.216 | 13.914.588 |
| Total liabilities and equity | | 35.900.110 | 34.985.371 | 31.405.335 |

* The financial statements from January 1 through December 31, 2015 have been restated as described in note 2.25.2.
The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
Chief Executive Officer

Jorge Andrés Tabares Ángel
Chief Financial Officer

John Jaime Rodríguez Sosa
Accountant
T.P. 144842-T

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

## SEPARATE STATEMENT OF COMPREHENSIVE INCOME

For the period from January 1 to December 31, 2016 and 2015

Figures expressed in millions of Colombian pesos

| | Notes | 2016 | 2015 Restated |
|---|---|---|---|
| **Continued operations** | | | |
| Rendering of services | 27 | 7.000.077 | 6.649.461 |
| Leases | 27 | 35.907 | 32.435 |
| Other income | 28 | 1.388.223 | 146.533 |
| **Income from ordinary activities** | | **8.424.207** | **6.828.429** |
| Profit in sale of assets | 27 | 38.750 | 17.902 |
| **Total income** | | **8.462.957** | **6.846.331** |
| Costs for rendering services | 29 | (5.316.727) | (4.223.433) |
| Administration expenses | 30 | (910.811) | (856.316) |
| Impairment loss recognised on trade receivables | 11 | (63.196) | (7.009) |
| Other expenses | 31 | (82.333) | (43.695) |
| Financial income | 32 | 267.457 | 248.630 |
| Financial expenses | 32 | (680.980) | (588.958) |
| Net exchange difference | 33 | 227.779 | (230.458) |
| Participation in the profit or loss of subsidiaries * | | 299.737 | 120.386 |
| Equity method in associates and joint business * | 34 | 32.457 | 325.686 |
| **Profit before tax** | | **2.236.340** | **1.591.163** |
| Income tax | 35 | (401.548) | (221.490) |
| Profit for the year after taxes of continued operations | | 1.834.792 | 1.369.673 |
| Profit for the year | | 1.834.792 | 1.369.673 |
| ***Other comprehensive income*** | | | |
| **Items that will not be reclassified subsequently to the result of the year:** | | | |
| New measurements of defined benefit plans | 18 y 35 | (36.268) | 247 |
| Equity investments measured at fair value through equity | 18 y 35 | 554.390 | 15.058 |
| Reclassification of properties, plant and equipment to investment properties | 18 y 35 | 9.700 | 3.731 |
| Income tax related to components that will not be reclassified | 18 y 35 | (91.167) | (97.706) |
| Equity method in subsidiaries * | 18 y 35 | (93.153) | 8.153 |
| | | 343.502 | (70.517) |
| **Items that may be reclassified subsequently to the result of the year:** | | | |
| **Cash flow hedging** | **18 y 35** | **(23.738)** | **(7.790)** |
| Result recognized of the year | | (70.669) | 31.434 |
| Reclassification adjustment | | 46.931 | (39.224) |
| **Income tax related to the components that can be reclassified** | **18 y 35** | **11.834** | **18.785** |
| Result recognized of the period | | 11.834 | 18.785 |
| **Equity method insubsidiaries *** | 18 y 35 | (137.331) | 473.396 |
| Result recognized of the period | | (137.437) | 478.816 |
| Reclassification adjustment | | 106 | (5.420) |
| | | (149.235) | 484.392 |
| Other comprehensive income, net of taxes | | 194.267 | 413.874 |
| Total comprehensive income for the year | | 2.029.059 | 1.783.547 |

* The financial statements ended as of December 31, 2015 have been restated as described in note 2.25.2.
The accompanying notes are an integral part of the financial statements

| | | |
|---|---|---|
| Jorge Londoño De la Cuesta | Jorge Andrés Tabares Ángel | John Jaime Rodríguez Sosa |
| Chief Executive Officer | Chief Financial Officer | Accountant |
| | | T.P. 144842-T |

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EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

## SEPARATE STATEMENTS OF CHANGES IN THE EQUITY

Years ended on December 31, 2016 and 2015

Figures expressed in millions of Colombian pesos

| | Capital issued (Note 17) | Reserves (Note 17) | Retained earnings * (Note 17) | Other components of equity * | Other comprehensive income: Equity Investment (Note 18) | Other comprehensive income: Defined benefit plans (Note 18) | Other comprehensive income: Cash flow hedging (Note 18) | Other comprehensive income: Reclassification of properties, plant and equipment to investment properties (Note 18) | Other comprehensive income: Result of the year in other comprehensive income of subsidiaries (Note 18) * | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Balance as of January 1, 2015 | 67 | 3.093.359 | 12.646.413 | - | 1.840.662 | 25.087 | (10.995) | 5 | - | 17.594.597 |
| Retroactive application of changes in accounting policies | - | - | (544.104) | 58.312 | - | - | - | - | 381.942 | (103.850) |
| **Balance as of January 1, 2015 Restated** | 67 | 3.093.359 | 12.102.309 | 58.312 | 1.840.662 | 25.087 | (10.995) | 5 | 381.942 | 17.490.747 |
| Profit for the year | - | - | 1.369.673 | - | - | - | - | - | - | 1.369.673 |
| Other comprehensive income of the year net of income tax | - | - | - | - | (78.146) | (3.854) | 10.995 | 3.330 | 481.549 | 413.874 |
| **Comprehensive income for the year** | - | - | 1.369.673 | - | (78.146) | (3.854) | 10.995 | 3.330 | 481.549 | 1.783.547 |
| Surplusses and dividends declared | - | - | (56.139) | - | - | - | - | - | - | (56.139) |
| Movement of reserves | - | 359.140 | (359.140) | - | - | - | - | - | - | - |
| Balance as of December 31, 2015 | 67 | 3.452.499 | 13.056.702 | 58.312 | 1.762.516 | 21.233 | - | 3.335 | 863.491 | 19.218.155 |
| | | | | | | | | | | |
| Balance as of January 1, 2016 | 67 | 3.452.499 | 13.056.702 | 58.312 | 1.762.516 | 21.233 | - | 3.335 | 863.491 | 19.218.155 |
| Impact of adoption IFRS 9 as of January 1, 2016 (Note 11) | - | - | (69.278) | - | - | - | - | - | - | (69.278) |
| **Balance as of January 1, 2016 Restated** | 67 | 3.452.499 | 12.987.424 | 58.312 | 1.762.516 | 21.233 | - | 3.335 | 863.491 | 19.148.877 |
| Profit for the year | - | - | 1.834.792 | - | - | - | - | - | - | 1.834.792 |
| Other comprehensive income of the year net of income tax | - | - | - | - | 446.408 | (18.497) | (11.904) | 8.744 | (230.485) | 194.266 |
| **Comprehensive income for the year** | - | - | 1.834.792 | - | 446.408 | (18.497) | (11.904) | 8.744 | (230.485) | 2.029.058 |
| Surplusses and dividends declared | - | - | (816.521) | - | - | - | - | - | - | (816.521) |
| Movement of reserves | - | (365.292) | 365.292 | - | - | - | - | - | - | - |
| Transfers to accumulated results | - | - | 466.447 | - | (466.447) | - | - | - | - | - |
| Participation in other components of equity of subsidiaries | - | - | (70.448) | (6.686) | - | - | - | - | (98) | (77.232) |
| Balance as of December 31, 2016 | 67 | 3.087.207 | 14.766.986 | 51.626 | 1.742.477 | 2.736 | (11.904) | 12.079 | 632.908 | 20.284.182 |

* The financial statements from January 1 through December 31, 2015 have been restated as described in note 2.25.2.

The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
Chief Executive Officer

Jorge Andrés Tabares Ángel
Chief Financial Officer

John Jaime Rodríguez Sosa
Accountant
T.P. 144842-T

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EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

## SEPARATE STATEMENTS OF CASH FLOWS

For the period from January 1 to December 31, 2016 and 2015

Figures expressed in millions of Colombian pesos

| | Notes | 2016 | 2015 Restated |
|---|---|---|---|
| **Cash flows for operating activities:** | | | |
| Profit of the year * | | 1.834.792 | 1.369.673 |
| **Adjustments to reconcile the net profit for the year to the net cash flows used in operating activities: *** | | 1.141.376 | 1.396.471 |
| Depreciation and amortization of properties, plant and equipment and intangible assets | 29 y 30 | 466.975 | 448.845 |
| Impairment of property, plant and equipment and intangibles | 29 | 628.519 | - |
| Impairment of financial instruments | 11 | 63.196 | 7.009 |
| Impairment of investments in subsidiaries, associates and joint business | 7 | - | 1.641 |
| Reversal of loss of impairment of property, plant and equipment and intangible assets | 28 | (711.214) | - |
| Reversal of loss for impairment of financial instruments | 11 | (4.681) | (17.642) |
| (Profit) loss for exchange difference | | (118.034) | 608.193 |
| (Profit) loss for valuation of investment properties | 5 | 12.484 | (8.652) |
| (Profit) loss for valuation of financial instruments and hedge accounting | | 694.598 | 350.365 |
| Provisions, post-employment and long term defined benefit plans | | 118.596 | 55.728 |
| Deferred income tax | 35 | (4.956) | 34.788 |
| Current income tax | 35 | 406.504 | 186.702 |
| (Income) or interest expense | | - | 137.080 |
| (Profit) loss for disposal of properties, plant and equipment, intangibles and investment properties | 27 y 31 | (23.493) | - |
| Dividends from investments * | 12 | (32.433) | (327.327) |
| (Profit) loss for equity method * | | (299.737) | (120.386) |
| Other income and expenses not effective | | (54.948) | 40.127 |
| | | 2.976.168 | 2.766.145 |
| **Movements in working capital:** | | | |
| (Increase)/decrease in inventories | | (17.678) | 9.087 |
| (Increase)/decrease in debtors and other accounts receivable | | (221.520) | 1.378.269 |
| (Increase)/decrease in other assets | | (151.631) | (199.818) |
| Increase/(decrease) in creditors and other accounts payable | | 135.619 | 378.590 |
| Increase/(decrease) in labor obligations | | 39.017 | 2.910 |
| Increase/(decrease) in provisions | | (63.400) | (32.554) |
| Increase/(decrease) in other liabilities | | 3.783 | 106.522 |
| | | (275.810) | 1.643.006 |
| Interest paid | | (853.292) | (647.855) |
| Income taxes paid | | (301.063) | (341.061) |
| Net cash flows originated by operating activities | | 1.546.003 | 3.420.234 |
| **Cash flows for investment activities:** | | | |
| Acquisition of subsidiaries or business, net of cash acquired | 8 | (101.743) | (1.159.056) |
| Restitution of capital and premium on placement of shares | | 168.195 | - |
| Acquisition of property, plant and equipment | | (2.505.905) | (2.165.887) |
| Disposal of property, plant and equipment | | 36.737 | - |
| Acquisition of intangible assets | | (47.599) | (26.906) |
| Acquisition of investments in financial instruments | | (417.417) | (18.308) |
| Disposal of investments in financial instruments | | 1.479.911 | 1.791.909 |
| Dividends received from subsidiaries, associates and joint business | | 331.851 | 351.778 |
| Other dividends received | | 32.433 | 93.457 |
| Loans to related parties | | 55.829 | (2.422.236) |
| Other cash flows from investment activities | | 48.606 | 10.448 |
| Net cash flows used by investment activities | | (919.102) | (3.544.801) |
| **Cash flows for financing activities:** | | | |
| Obtaining of public credit and treasury | | 2.158.104 | 2.111.637 |
| Payments of public credit and treasury | | (1.916.059) | (860.599) |
| Payments of liabilities for financial leasing | | (831) | (762) |
| Dividends or surpluses paid | 17 | (816.521) | (991.139) |
| Other cash flows from financial activities | | (20.175) | - |
| Net cash flows (used) / originated by financial activities | | (595.482) | 259.137 |
| **Net cash and cash equivalents increase** | | 31.419 | 134.571 |
| Effects of variations in exchange rates in the cash and cash equivalents | | 477 | 67.688 |
| Cash and cash equivalent at the beginning of year | | 487.182 | 284.923 |
| Cash and cash equivalent at the end of the year | 16 | 519.078 | 487.182 |
| Restricted resources | 16 | 130.059 | 145.323 |

* The financial statements ended as of December 31, 2015 have been restated as described in note 2.25.2.

The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
Chief Executive Officer

Jorge Andrés Tabares Ángel
Chief Financial Officer

John Jaime Rodríguez Sosa
Accountant
T.P. 144842-T

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Notes to the separate financial statements of the Empresas Públicas de Medellín E.S.P. for the periods ended on December 31, 2016 and 2015.

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

# Note 1. Reporting entity

Empresas Públicas de Medellin E.S.P. (hereinafter, "EPM") is the holding company of a multi-Latin enterprise group that according to the International Financial Reporting Standards has as of December 31, 2016 a consolidation perimeter consisting of 45 companies and one structured entity, that have presence in the provision of public utilities in Colombia, Chile, El Salvador, Guatemala, Mexico and Panama.

EPM is a municipal decentralized entity created in Colombia through Decision 58 dated August 6, 1955 issued by the Administrative Council of Medellín, as an autonomous public institution. It was transformed into an industrial and commercial government company through Decision 069 of December 10, 1997 of the Medellín Council. Due to its juridical nature, EPM has administrative, and financial autonomy and its own equity according to Article 85 of Law 489 of 1998. The capital stock with which the company was constituted and operates with, as well as its equity, is of a public nature, and it's only owner is the Municipality of Medellín. Its main corporate domicile is located at Carrera 58 No. 42-125 in Medellín, Colombia. It has not established a term of duration.

EPM provides domiciliary public services of aqueduct, sewage and gas distribution. It also can provide the domiciliary public utilities of cleaning, waste treatment and utilization, as well as the supplementary activities that are related to abovementioned public utility services. Also, the Company participates in the telecommunications business, a segment in which since august 2014 the Company has significant influence, 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 y Colombia Móvil S.A.; Inversiones Telco S.A.S. And its affiliate Emtelco S.A.; provides voice, data, Internet, professional services, and data center services, among others. As of December 31, 2016 Empresa de Telecomunicaciones de Pereira S.A. – ETP was merged with UNE EPM Telecomunicaciones S.A. (absorbing entity) and Orbitel Comunicaciones Latinoamericanas S.A. – OCL was liquidated.

The consolidated financial statements of EPM corresponding to the year ended as of December 31, 2016 and 2015, were authorized by the Board of Directors to be published on march 14, 2017.

### 1.1 Translation of financial statements

These financial statements have been translated into English for the convenience of English-speaking readers. The financial statements are the English translation of those originally prepared by the Company in Spanish and presented in accordance with International Financial Reporting Standards.

### 1.2 Legal and regulatory framework

The activity that EPM carries out, i.e., domiciliary public utility services, is regulated in Colombia mainly by Law 142, Public Utilities Act, and Law 143 of 1994, the 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).

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 Attorney General's Office of the Nation.

### 1.3 Regulation commissions

Decree 1524 of 1994 delegates in the regulation commissions the presidential function of stating general policies of administration 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 Basic Sanitation (CRA, for its Spanish initials), regulates the rates of aqueduct, sewage and waste management, a technical body attached to the Ministry of Housing, City and Territory.

**1.3.1 Regulation by sector**

**1.3.1.1 Activities of the aqueduct, sewage and waste management sector**

Law 142, Public Utilities Act, defined the aqueduct, sewage and cleaning services:

**Aqueduct:** 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, utilization, and final disposal of such waste.

**1.3.1.2 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 (STN, for its Spanish initials). It encompasses the set of lines, with its corresponding connection equipment that operate in tensions that are 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 tensions that are 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.

Law 143 of 1994 prohibits the vertical integration between generators and distributors, but allows both agents to be able to carry out the commercialization activity. For transmission, it defined that companies that carry out this activity must have it as their exclusive object. However, the companies that as of the passing of Law 143 of 1994 were vertically integrated could continue doing it, provided that they have separate accountings for the different activities.

#### 1.3.1.3 Activities of the natural gas sector

Law 142 of 1994 defined the legal framework for the provision of domiciliary public utilities, an environment 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.

### 1.4 External Audit

As included in the Code of Good Corporate Governance, the external audit is established as a control mechanism with the purpose of auditing the financial statements and the accounting policies in accordance with International Financing Reporting Standards, as well as the provision of an independent opinion with respect to the reasonableness with which those financial statements indicate the company's financial position as of the report date of each accounting exercise.

# Note 2. Significant accounting policies

### 2. 1 Bases for preparation of the financial statements

The separate financial statements of EPM are prepared in conformity with the International Financial Reporting Standards (hereinafter, IFRS) and the International Accounting Standards (hereinafter, IAS) issued by the International Accounting Standards Board (hereinafter, IASB), as well as the interpretations issued by the Interpretations Committee (hereinafter, IFRIC). Said financial statements are harmonized with the accounting principles generally accepted in Colombia set forth in the Annex to decree 2784 and its subsequent modifications adopted by the General Accounting Office of the Nation by means of Resolution 743 of 2013 and its modifications.

The presentation of financial statements in conformity with IFRS require 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 those estimates. The estimates and assumptions are constantly revised. The review of accounting estimates is recognized in the period where the estimates are revised if the review affects such period or in the review period and future periods, if it affects both the current and the future periods. The estimates made by Management, in applying the IFRS, 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 for uncertainty in the preparation of the financial statements.

EPM and each subsidiary present separate financial statements for compliance before the controlling entities and for internal administrative follow-up purposes and provide information to the investors. Likewise, EPM as main parent company, presents consolidated financial statements under IFRS.

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. The financial assets and liabilities measured at fair value correspond to those that are classified in the category of fair value assets and liabilities through profit and loss, and for some equity investments at fair value through equity, all the financial derivatives, assets and liabilities recognized that are designated as hedged items in a fair value hedging through other comprehensive income and those that do not comply with hedging accounting through profit or loss, the carrying value of which is adjusted with the changes in far value attributed to the risks subject matter of the hedging. The separate 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 to exceed one year after the period being reported, or it is cash and cash equivalents that is not subject to restrictions for exchange or for being used in the cancellation of a liability over a term not to exceed one year after the period being reported. All other assets are classified as non-current assets.

A liability is classified as current liability when it is mainly kept for negotiation purposes or it is expected to be liquidated over a term not to exceed one year after the period being reported or when EPM does not have an unconditional right to postpone its liquidation for at least one year after the period being reported. All other liabilities are classified as non-current liabilities. Derivative instruments for which the hedging accounting does not apply are classified as current or non-current, or they are separated into current and non-current portions, based upon the evaluation of the facts and circumstances (i.e., the underlying contractual cash flows):

- When EPM 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) so that it corresponds with the classification of the underlying item.
- Implicit derivatives that are not closely related to the host contract are classified coherently with the cash flows of the host contract.
- 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 assignment can be made reliably.

### 2. 3 Cash and cash equivalents

The 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 (3) months or less from their acquisition date. Callable bank overdrafts that are an integral part of the cash management of EPM 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 achieved when EPM controls the relevant activities of the subsidiary, which are generally the operating and financial activities, is exposed to or has a right to the variable returns of the subsidiary and has capacity to influence in those returns.

An associate is an entity on which EPM has significant influence over the financial and operation policy decisions, without getting to have their control or joint control.

A joint venture is a joint agreement that EPM controls jointly with other participants, where the latter keep a contractual agreement that establishes the joint control and are entitled to the net assets of the agreement. On the acquisition date, EPM recognizes as goodwill the excess of the acquisition cost over the share of the net fair value of the identifiable assets, liabilities and contingent liabilities assumed of the associate or joint venture, is recognized as goodwill. Goodwill is included in the carrying value of the investment, and is neither amortized nor individually subject to impairment tests of its value.

Investments in subsidiaries are measured in the separate financial statements by 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 recorded initially at cost and is subsequently adjusted in terms of the changes experienced by it, after the acquisition, the portion of the net assets of the entity that corresponds to the investor. EPM's income statement includes its participation in the income statement of the participated entity and the other comprehensive income includes its participation in the other comprehensive income of the participated entity. When any variations take place in the percentages of participation in the subsidiary that do not imply a loss of control, the effect of these changes is recognized directly in equity. When the participation of the company in the losses of a subsidiary exceeds the participation of the company therein (which includes any long term participation that, in substance, forms part of the net investment of the company in the subsidiary), the company ceases to recognize its participation in future losses. The additional losses are recognized provided that the company has acquired any legal or implied obligation or had made payments in the name of the subsidiary. When the subsidiary subsequently has profits, the company resumes the recognition of its participation therein only after its participation in such profits is equal to the participation in the losses not recognized.

The investments in subsidiaries are accounted for using equity method from the date on which the participated entity becomes a subsidiary.

Investments in associates and joint businesses are maintained at cost in the separated financial statements.

The dividends received from the subsidiary, are recognized as lower value of the investment, and those received from the associate or joint ventures are recognized directly in the profit and loss of the period when the right by EPM to receive the payment is established.

The Company analyzes periodically the existence of impairment indicators and if necessary, recognizes losses for impairment in the investment of the subsidiary, associate or joint venture. Impairment losses are recognized in the Profit and Loss for the period and are calculated as the difference between the recoverable value of the subsidiary, associate or joint venture, the latter being the higher between the value in use and its fair value less the costs necessary for its sale and its carrying value.

When the control of the subsidiary is lost, or the significant influence on the associate or the joint control on the joint ventures is lost, EPM measures and recognizes any residual investment that it maintains in it at its fair value. The difference between the carrying value of the subsidiary, associated or joint ventures and the fair value of the residual investment retained, with the applicable sale value, is recognized in profit and loss for the period.

### 2. 5 Joint Operations

A joint operation is a joint agreement whereby the parties that have joint control of the agreement, have the right to the assets and obligations with respect to the liabilities, related to the agreement.

In joint operations, EPM, recognizes its share as follows: its assets, including its share in the assets jointly held; its liabilities, including its share in the liabilities jointly incurred in; its revenues from ordinary activities coming from the sale of its share in the product that arises from the joint operation; its share in the 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. EPM records the assets, liabilities, revenues from ordinary activities, and expenses related to its participation in a joint operation according to the guidelines applicable in particular to the assets, liabilities, revenues from ordinary activities, and expenses.

### 2. 6 Functional Currency and Foreign Currency

The functional currency of EPM, is the Colombian peso, because it is the currency of the main economic environment where it operates, i.e., in the one that it generates and uses cash.

The operations denominated 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 as of the date of the original transactions.

All exchange differences are recognized in the statement of comprehensive income in the section "statement of income" except for the monetary items that provide an effective hedging for a net investment in a foreign business. These items and their tax effects are recognized in the other comprehensive income until the disposal of the net investment, at which moment they are recognized in the result for the period, as well as the exchange differences coming from foreign-currency loans to the extent that they are considered as adjustments of interest costs.

**2. 7 Ordinary Income**

Ordinary income corresponds basically to the result of the company's main activity that is the rendering of domiciliary public utilities of waterworks, sewerage, electric power and distribution of fuel gas; these are recognized when the service is provided or at the time of the delivery of the goods, to the extent that it is probable that the economic benefits enter the company and that the income may be reliably measured. The income is measured at the fair value of the consideration received or to be received, excluding taxes or other obligations. Discounts granted are recorded as adjustment of the income.

The company assesses its income agreements based on specific criteria to determine when it acts in a capacity of principal or of agent. The Group acts in a capacity of agent in some contracts.

The most representative revenues of the energy business are the following:

Reliability charge: remuneration that is paid to a generating agent for the availability of generation assets with the characteristics and parameters declared for the calculation of the firm energy for the reliability charge – ENFICC (Firm Energy for Reliability Charge, for its initials in Spanish), that guarantees the fulfillment of the Firm Energy Obligation – OEF (for its initials in Spanish) that was assigned to it in an auction for the assignment of firm energy obligations or in the mechanism that may replace this.

Long term agreements: power purchase and sale agreements entered into between commercialization agents and generators that is settled in the power exchange, under this modality of energy contract the generators and the commercialization agents freely agree quantities and prices for the purchase and sale of electric power at terms in excess of 1 day.

For the case of the long term power purchase agreements that have prices lower than those of the market and which intention is not using the power purchased in the operation but reselling it in a market to obtain benefits, it is considered that it does not meet the exception of own use.

Secondary market of firm energy or secondary market: bilateral market in which generators negotiate among themselves a backup agreement to guarantee, during a determined period of time, the partial or total fulfillment of the obligations of firm energy acquired by one of them.

Sale of energy non regulated market: It is the energy that is sold in the market to customers which maximum demand is higher than a value in MW (megawatts) or than a minimum monthly consumption of energy in MWh (megawatts per hour), defined by the regulating entity, by legalized installation, for which the customers does not use public power transportation networks and use it in the same property or in adjacent properties. Their purchases of electricity are made at prices freely agreed between buyer and seller.

Sale of energy regulated market: It is the energy that is sold to customers whose monthly consumption is lower than a predetermined value and do not have the power to negotiate the price paid for it, given that both items are established by the regulations; usually the customer uses the energy for its own consumption or as input for its manufacturing processes and not to carry out commercialization activities thereof.

Automatic generation control – AGC: it is a system for the control of secondary generation, used to accompany the changes in the load through the generation, controlling the frequency within a range of operation and the scheduled interchanges. The AGC may be programmed in a centralized, decentralized or hierarchical manner.

Firm energy: it is the incremental contribution by generation plants of a company to the interconnected system, which is made with a 95% reliability and is calculated based on the methodology approved by the Commission and in the operating planning models used in the national interconnected system.

The gas revenues result from the distribution and sale of natural gas to the regulated and non-regulated markets.

In the water business the revenues come from the provision of water and sewage services.

At the time of the revenue recognition the company assesses, based on specific criteria, when it acts as principal or as commission agent, and thus be able to determine if the revenues should be recognized gross or net for the commercialization activities.

The revenues and costs from contracts are recognized as a function of the stage of completion, which is measured as a function of the costs incurred to date as a percentage of total estimated costs for each contract. When the result of a contract cannot be reliably measured, the revenues are recognized only up to the point where the expense incurred in meets all the conditions to be recovered; expected losses are immediately recognized. For the financial instruments measured at amortized cost, the interest gained or lost is recorded using the effective interest rate method, which is the interest rate that accurately discounts the future flows of cash payments and collections throughout the financial instrument's expected life, or a lower duration period, as applicable, with respect to the net carrying value of the financial asset or liability. Interest earned is included in financial revenues in the statement of comprehensive income within the result-for-the-period section. Dividend revenues are recognized when the right of the company to receive such payment is established.

Revenues coming from operating leases over investment properties are recorded on a linear fashion throughout the lease term.

## 2. 8 Construction Contracts

When contract results can be reliably measured, EPM recognizes the revenues and expenses associated to construction contracts using the advance-level method, as a function of the proportion represented by the costs earned by the work conducted to that date and the estimated total costs up to its completion.

The cost incurred in includes the costs, including borrowing costs directly related to the contract, until the work has been completed. Administrative costs are recognized in the result for the period.

When the result of a contract under course cannot be reasonably estimated, the revenues thereof are recognized to the extent that it is probable to recover the costs incurred in. In those projects where it is probable that costs are greater than revenues, the expected losses are immediately recognized.
The payments received from the customer before the corresponding work has been carried out, are recognized as a liability in the Statement of Financial Position as other financial liabilities.

The difference between the revenues recognized in the income statement and the billing is presented as asset in the statement of financial position denominated "Trade Debtors and other receivables", or as liability denominated "Other financial liabilities".

## 2. 9 Government grants

Government's subsidies are recognized at fair value when there is reasonable assurance that the subsidies will be received and that all conditions connected to them will be met. The grants that pretend to offset costs and expenses already incurred in, without subsequent related costs, are recognized in the income statement when they become enforceable. When the grants related to an asset, it is recorded as deferred income and is recognized in the result for the period on a systematic basis throughout the estimated useful life of the corresponding asset. The benefit of a government loan at an interest rate below market is treated as a government subsidy, measured as the difference between the amounts received and the fair value of the loan based upon the market interest rate.

## 2.10 Taxes

In the country's fiscal structure, the regulatory framework and the plurality of operations make the company to be taxpayer of taxes, rates and contributions of the national and territorial levels. These are obligations that are originated by the central government, the departments, the municipal entities and other tax collector entities, once the conditions provided in the corresponding regulations issued are fulfilled.

Amongst the most relevant taxes, we detail the income tax and the Value Added Tax:

**Income tax**

**Current income tax:** The current income tax assets and liabilities for the period are measured by the amounts that are expected to be recovered or paid to the fiscal authorities. The income tax expense is recognized in the current tax according to the cleaning made between the fiscal income and the book profit or loss affected by the income tax rate of the current year and pursuant to the provisions of the tax norms in each country. The tax rates and norms used for computing those values are those that are approved at the end of the period being reported, in the countries where EPM operates and generates taxable profits.
The fiscal profit differs from the profit reported 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 there is the intention to liquidate them for the net value or to realize the asset and liquidate the liability simultaneously.

**Deferred income tax**

The deferred income tax is recognized using the liability method calculated on the temporary differences between the fiscal bases of the assets and liabilities and their carrying values. The deferred tax liability is generally recognized for all imposable temporary differences and the deferred tax asset is recognized for all deductible temporary differences and for the future offsetting of fiscal credits and unused fiscal losses to the extent that it is probable the availability of future tax gains against which they can be imputed. Deferred taxes are not discounted.

The deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition of an asset or a liability in a transaction that is not a business combination and that, at the moment of the transaction, affected neither the book gain nor the fiscal gain or loss; and for the deferred tax liability case, whenever it arises the initial recognition of goodwill.

The deferred tax liabilities related to investments made in subsidiaries, associates and participations in joint ventures, are not recognized if the timing of the reversal of temporary differences can be controlled and it is probable that those differences will not be reversed in the near future and the deferred tax assets related to investments made in subsidiaries, associates and participations in joint ventures shall revert in the near future and it is probable the availability of future taxable profits against which these deductible differences will be imputed.

The carrying value of the deferred tax assets is reviewed in each presentation date and they are reduced to the extent that it is no longer probable that there is enough taxable profits to use for the entire or one part of the deferred tax asset. The deferred tax assets that are not recognized are reassessed on each report date and are recognized to the extent that it is probable that future taxable 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 cancelled, based upon the fiscal rates and norms that were approved on the presentation date, or the approval procedure of which is about to be completed for such date. The measurement of the assets and liabilities for deferred taxes will reflect the tax consequences that would derive from the manner in which the company expects, at the end of the reporting period, to recover or settle the carrying 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 that and are related to the same tax authority.

The deferred tax is recognized in the result for the period, except that related to items that are recognized outside the results; in this latter case, it will be presented in the other comprehensive income or directly in equity.

In order to measure the liabilities for deferred taxes and the assets for deferred taxes for investment properties that are measured using the fair value model, the book value of those properties is presumed that will be recovered entirely through the sale, unless the presumption is refuted. The presumption is refuted when the investment property is depreciable and is maintained within a business model which objective is to consume substantially all economic benefits generated by the investment property in the time, and not through the sale. The management reviewed the company's investment properties portfolio and concluded that none of the investment properties of the company is maintained under a business model which objective is to consume substantially all the economic benefits generated by the investment properties in time and not through the sale. Therefore, the management has determined that the presumption of "sale" established in the modifications to IAS 12 Income tax, is not refuted.

When the current tax or deferred tax arises from the initial accounting of the business combination, the tax effect is considered within the accounting of the business combination.

**Value Added Tax – VAT**

The company belongs to the common regime because it sells goods and renders services that are taxed and obtains exempt income for exports. Currently in Colombia the power, waterworks, sewerage and domiciliary gas are excluded from this tax.
In Colombia the general rate of this tax is 16% existing special rates in accordance with the corresponding good or service, which range from 1.6% to 10% and for sumptuary consumptions, differential rates range from 20 to 35 percent.
In Colombia, in the generation of income excluded in the particular case of domiciliary public utilities, the VAT paid in the purchases forms part of a higher value of the cost. In addition, when taxed income is generated, that is when goods or services taxed are sold, the VAT paid in the purchase of acquisition of inputs for these sales will be discountable from the value payable of the tax. When the company generates income that are excluded from the VAT, but at the same time generates income that are exempt and/or taxed, it is necessary to make a pro rata adjustment of the VAT paid in order to determine what is the percentage of VAT to be discounted.

**Wealth tax**

The wealth tax is calculated in accordance with the legal tax regulations in effect. The calculation is made for each year while said tax is in effect and is recorded in the comprehensive income statement as expense.

### 2.11 Non-current assets held for sale and discontinued operations

Non-current assets and the groups of assets for disposal purposes are classified as held for sale if their carrying value will be recovered through a sales transaction, instead of by their continued use; these assets or groups of assets are presented separately in the statement of financial position as current assets and liabilities at their carrying value or their fair value less costs of sale, whichever is lower, and are neither depreciated nor amortized as from the date of their classification.

This condition is met if the asset or group of assets is available, in their current conditions, for immediate sale, the sales transaction is highly probable and is expected to be done within the year subsequent to the classification date.

Income, costs and expenses from a discontinued operation are presented separately from those from continued operations, in a single item after the income tax, in the comprehensive income statement of the current period and of the comparative period of the previous year, even though EPM retains an interest that does not grant control over the subsidiary after the sale.

### 2.12 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 place and condition necessary to operate in the way foreseen by EPM; the costs corresponding to loans of the construction projects that take a substantial period to be completed, if the requirements of recognition 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 loss for impairment recognized and includes those disbursements that are indispensable and that are 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. Those constructions in progress are classified in the proper categories of properties, 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.

In EPM, all additions or improvements made on the assets are capitalized as a greater value thereof, provided that any of the following conditions is met: a) They increase their useful life; 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 recognized in the statement of comprehensive income as incurred.

Inventories of spare parts for specific projects, which it is expected that will not have rotation in one year and that meet the criteria to be capitalized, known as replacement assets, are presented in properties, plant and equipment.

The depreciation initiates when the asset is available to be used and is calculated linearly through the estimated useful life of the asset as follows:

| | |
|---|---|
| Plants, ducts and tunnels | 50 to 100 years |
| Construction | 10 to 100 years |
| Equipment | |
| Networks, lines and cables | |
| Electrical transmission network | 30 to 40 years |
| Electrical distribution network | 30 to 40 years |
| Aqueduct network | 40 to 80 years |
| Residual waters network | 30 to 80 years |
| Gas network | 60 to 80 years |
| Buildings | 50 to 100 years |
| Communications and computing equipment | 5 to 40 years |
| Machinery and equipment | 7 to 40 years |
| Furniture, fixtures and office equipment | 10 to 15 years |
| Land | Not depreciate |

These are determined considering, among others, the manufacturer's technical specifications, and the knowledge of the technicians that operate and maintain the assets, the geographical location and the conditions to which it is exposed.

EPM calculates the depreciation by components, which implies depreciating individually the parts of the asset that should have useful lives different from that of the asset. The depreciation of assets is calculated for all asset classes (except for land); the depreciation method used is the straight line and it is calculated taking into account the residual value for the assets (vehicles), which is not part of the depreciable amount.

A component of property, plant and equipment and any significant part initially recognized, is written-off once disposed of or when it is not expected to obtain future economic benefits from its use or disposal. The gain or loss at the moment of writing the asset off, calculated as the difference between the net value of the disposal and the carrying value of the asset, is included in the statement of comprehensive income.

Any residual values, useful lives, and depreciation methods for the assets are revised and adjusted prospectively every exercise closing, if required.

### 2.13 Leases

The determination of whether an agreement constitutes or contains a lease is based upon the essence of the agreement at its initial date, if compliance with the agreement depends upon the use of a specific asset(s), or if the agreement grants a right of use of the asset.

Leases are classified into financial and operating leases. A lease is classified as financial lease whenever it substantially transfers all the risks and benefits inherent to toe ownership of the asset leased to the lessee; otherwise, it is classified as an operating lease.

**EPM as a lessee**

The assets leased under financial leases are recognized and presented as assets in the statement of financial position at the beginning of the lease, for the fair value of the asset leased or the present value of the minimum lease payments, whichever is lower. The corresponding liability is included in the statement of financial position as a financial lease liability. These assets are not legally owned by the company, and for this reason, until it exercises the purchase option, it cannot freely dispose of them. They are presented in each kind of assets to which they belong.

The assets leased under financial leases are depreciated throughout the useful life of the asset using the straight-line method. However, if there were no reasonable certainty that EPM shall get the ownership upon the lease term termination, the asset is depreciated throughout its estimated useful life or over the lease term, whichever is lower. Lease payments are divided between financial expenses, and debt reduction. The financial cost in recognized in the statement of comprehensive income of the period, unless they could be directly attributable to qualifying assets, in which case they are capitalized in conformity with the entity's policy for borrowing costs. Contingent lease installments are recognized as expenses in the period where incurred.

All payments for operating leases, including the incentives received, are recognized as expenses in the statement of comprehensive income, on a linear basis throughout the lease term, except when another systematic basis for distribution results being more representative because it reflects more adequately the timing pattern of the benefits of the lease for the user.

**EPM as a lessor**

Assets rented under financial leases are not presented as property, plant and equipment given that the risks associated to the ownership have been transferred to the lessee; rather, a financial asset is recognized.

Land and buildings rented under operating leases are presented as investment properties, and the other assets given under operating lease are presented as property, plant and equipment. Initial direct costs incurred in the negotiation of an operating lease are added to the carrying value of the asset leased, and are recognized as expenses throughout the lease term on the same basis as the revenues from the lease. Financial lease revenues are distributed during the lease term in order to reflect a constant yield rate in the net investment. Contingent leases are recognized in the period when obtained.

### 2.14 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. The 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 EPM with respect 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 to the disbursements made in that asset.

The capitalization of borrowing costs is initiated on the date on which the following conditions are met:

– Disbursements are incurred in respect to the asset.

– Costs are incurred for loans, and

– The necessary activities to prepare the asset for the use to which it is intended or for its sale are carried out.

The capitalization of the borrowing costs is suspended during the periods in which the performance of activities of a qualified asset is interrupted for periods in excess of one year. However, the capitalization of the borrowing costs is not interrupted during a period if important technical or administrative actions are being carried out. The capitalization of borrowing costs is not suspended either when a temporary delay is necessary as part of the process of preparation of a qualified asset for its use or its sale.

The capitalization of borrowing costs is ended when all activities necessary to prepare the qualified asset for its use or sale have been substantially completed. When the asset has component that can be used separately while the construction is in progress, the capitalization of the borrowing costs is suspended on such components.

### 2.15 Investment properties

Investment properties are those held to obtain rentals and/or capital revaluations (including the investment properties under construction for those purposes). Investment properties are initially measured at cost, including transaction costs. The carrying value includes de 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 the initial recognition, investment properties are measured at the fair value reflected by market conditions on the presentation date. All gains and losses arising from changes in the fair values of the investment properties are included in the statement of comprehensive income in the section “result for the period” in the period when they arise.

Investment properties are derecognized, either at the moment they are disposed, 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 carrying value of the asset is recognized in the statement of comprehensive income in the section “result for the period” in the period when it was written-off.

Transfers to or from investment properties are conducted only when there is a change in their use. In the case of a transfer from an investment property to a property, plant and equipment, the cost taken into account for its subsequent posting is the fair value on the date of the change in use. 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 carrying value shall be recorded as revaluation surplus applying the International Accounting Standard (IAS) 16.

### 2.16 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 accounted for 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, the disbursements must be reflected in the Comprehensive income statement in the period in which they incur. The useful lives of intangible assets are determined as finite or undefined.

Intangible assets with finite useful lives are amortized throughout their economic useful life on a linear basis and are evaluated to determine whether they had any impairment in carrying amount, provided that there are indications that the intangible asset could have suffered such impairment. The amortization period and the amortization method for an intangible asset with a finite useful life are revised at least at every period's closing. Any changes in the expected useful life or the expected consumption pattern of the future economic beneficiaries of the asset are recorded when changing the amortization period or method, as the case may be, and are treated as changes in the accounting estimates. The amortization expense of intangible assets with finite useful lives is recognized in the statement of comprehensive income in the section "result for the period" in the category of expenses that shall result being coherent with the intangible asset's function.

Intangibles assets with undefined useful lives are not amortized, but they are subject to annual tests to determine whether they suffer a value impairment, either individually or at the cash-generating unit level. The evaluation of the undefined useful life is revised on an annual basis to determine whether such undefined life continues to be valid. If that is not the case, the change of useful life from undefined to finite is made prospectively.

An intangible asset is written-off upon disposal, or whenever future economic benefits are not expected from their use or disposal. The gains or losses arising when an intangible asset is written-off are measured as the difference between the value obtained in the disposal and the carrying value of the asset, and it is recognized in the statement of comprehensive income in the "result for the period" section.

- ***Research and Development Costs***

Research costs are recorded as expenses as incurred. Development outlays in an individual project are recognized as intangible assets whenever EPM can demonstrate:

- The technical feasibility of finalizing the intangible asset so that it is available for use or sale;
- Their 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 the production that generates an intangible asset for the asset itself, or the profit of the asset for the entity.
- The availability of resources to finalize the asset; and
- The capacity of reliably measuring the disbursement during the development.

In the statement of financial position the development disbursements asset is recognized from the moment the element meets the aforementioned conditions for its recognition, and it is recorded at cost less accrued amortization and the value impairment accrued losses.

When the development of an intangible asset related to a power generation project is initiated, the costs are accumulated as constructions in progress.

Amortization of the asset starts when the development has been completed and the asset is available to be used. 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 or not there is impairment of its value.

- Research costs and development costs that do not qualify to capitalization are recorded as expenses in results for the period. **Other intangible assets**

Other intangible assets such as concession of services, licenses, software, exploitation rights, trademarks and similar rights acquired by EPM are measured at cost less the accumulated amortization and any loss for impairment.

**2.17 Financial instruments**

Financial assets and liabilities are recognized in the statement of financial position when EPM becomes a party according to the contractual conditions of the instrument.

Financial assets and liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issuance of financial assets and liabilities (other than the financial assets and liabilities designated at fair value with change in operations) are added to or deducted from the fair value of the financial assets or liabilities, whenever appropriate, at the moment of the initial recognition. All transaction costs directly attributable to the acquisition of financial assets or liabilities designated at fair value with change in operations are immediately recognized in the results for the period. Section result of the period.

- **Financial assets**

At the moment of initial recognition, EPM classifies its financial assets for subsequent measurement at amortized cost or fair value (through other comprehensive income or through profit and loss) depending upon the business model of EPM to manage financial assets and the characteristics of the contractual cash flows of the instrument.

A financial asset is subsequently measured at amortized cost or at fair value with changes in other comprehensive income, using the effective interest rate if the asset is maintained within a business model the objective of which is to keep them to obtain contractual cash flows and the contractual terms thereof grant, in specific dates, cash flows that are only payments of the principal and interest on the pending principal amount. Without detriment to the foregoing, EPM can designate a financial asset as measured at fair value with changes in operations irrevocably.

All other financial assets different from those at amortized cost are subsequently measured at fair value with changes recognized in the results for the period. However, for the investments made on capital instruments that are not maintained for negotiation purposes, EPM may elect in the initial recognition and irrevocably to present the gains or losses for the measurement at fair value in other comprehensive income. In the disposal of investments at fair value through the other comprehensive income, the accrued value of the gains or losses is directly transferred to the withheld gains; they are not reclassified to results for the period. The dividends received from these investments are recognized in the statement of comprehensive income, in the "result for the period" section. EPM has selected to measure some of its investments in capital instruments at fair value through the other comprehensive income.

The fair value through results category includes the investments that are made to optimize liquidity surpluses, i.e., all those resources that are not immediately devoted to the development of the activities that form the company's corporate purpose. The investment of the liquidity surpluses is made under the criteria of transparency, security, liquidity and profitability, under the guidelines of an adequate control and in market conditions without speculative purposes. (Decree from the General Manager of EPM N° 2015-DECGGL-2059 of February 6, 2015).

- **Impairment of financial assets**

On each date of presentation the company recognizes correction of value for expected credit losses on the financial assets that are measured at amortized cost or at fair value with changes in other comprehensive income, including the accounts receivables for leasing, assets of contracts or loan commitments and financial guarantee contracts to which the requirements of impairment are applied during the life of the asset.

The expected credit losses are estimated considering the probability that a loss for uncollectibility may or may not occur and are recognized as a profit or loss in the comprehensive income statement, section of profit and loss of the period against a lower value of the financial asset.

The company evaluates collectively the expected losses for financial assets that are not individually significant. When the collective evaluation of expected losses is done, the accounts receivable are grouped by similar credit risks characteristics that permit to identify the debtor's payment capacity, in accordance with the contractual terms of negotiation of the account receivable.

The company considers the following as an event of default for the internal management of the credit risk, since the historic experience shows that the credits that meet any of the following criteria generally are not recoverable: when there is a default of the financial agreements by the counterparty; or the information developed internally from external sources indicates that it is improbable that the debtor will pay his creditors, in their entirety, without taking into account the guarantees maintained.

The company writes off a financial asset when there is information that indicates that the counterparty is having severe financial difficulties and there is not realistic expectations of recovery, for example, when the counterparty has been placed in liquidation or has initiated a bankruptcy process or, in the case of accounts receivable, when the amounts are over two years past due, whichever first occurs. Amortized financial assets may continue being subject to enforcement activities under the company's recovery procedures, taking into account the legal collection whenever applicable. Recoveries made are recognized in the profit and loss.

- **Classification as debt or equity**

Debt and equity instruments are classified as financial liabilities or equity in conformity with the substance of the contractual agreement and the definitions of financial liability and equity instrument.

- **Financial liabilities**

At the moment of the initial recognition, EPM classifies financial liabilities for a subsequent measurement at amortized cost or at fair value with changes in results.

The financial liabilities at fair value with changes in results include those liabilities held to negotiate, the financial liabilities designated at the moment of their initial recognition like at fair value with changes in results and the derivatives. The gains or losses for liabilities held to negotiate are recognized in the statement of comprehensive income in the "statement of income" section. In the initial recognition, EPM designated financial liabilities as at fair value with changes in results.

Liabilities at amortized cost are measured using the effective interest rate. All gains and losses are recognized in the statement of comprehensive income in the "Statement of income" section whenever the liabilities are written-off, as well as through the amortization process under the effective interest rate method, that is included as financial cost in the Statement of comprehensive income in the "statement of income" section.

- **Financial guarantee contracts**

The financial guarantee contracts issued by EPM are those contracts that require the making of a specific payment to reimburse the holder of the loss incurred in when a specified debtor does not meet their payment obligation, according to the conditions of a debt instrument. The financial guarantee contracts are initially recognized as a liability at fair value, adjusted by the transaction costs that are directly attributable to the issuance of the collateral. Subsequently, the liability is measured at: (i) the best estimate of the disbursement required to settle the current obligation as of the presentation date; and (ii) the amount initially recognized less the accrued amortization, whichever is greater.

- **Write-off of financial assets and liabilities**

A financial asset, or part of it, is derecognized from the statement of financial position whenever it is sold, transferred, expire or EPM losses control on the contractual rights or on the cash flows of the instrument.

If the entity does not transfer or retains substantially all risks and advantages inherent to the property and continues retaining the control of the transferred asset, the entity will recognize its participation in the asset and the associated obligation by the amounts that it would have to pay. If the company retains substantially all the risks and advantages inherent to the property of a financial asset transferred, the entity will continue recognizing the financial asset and it will also recognize a loan guarantee collaterally by the income received.

In the total derecognition in the accounts of a financial asset measured at fair value with changes in profit and loss, the difference between carrying amount of the asset and the sum of the consideration received and to be received, is recognized in the comprehensive income statement, section of profit and loss of the period. In case of financial assets measured at fair value with changes in equity, the difference between the carrying value of the asset and the sum of the consideration received or to be received is recognized in the comprehensive income statement, profit and loss of the period section, and the profit or loss that had been recognized in other comprehensive income will be reclassified to accumulated profit and loss.

A financial liability or part of it is written-off from the statement of financial position when the contractual obligation has been settled or has expired. If the entity does not transfer or substantially retains all risks and advantages inherent to the ownership and continues to retain the control of the asset transferred, the entity shall recognize its participation in the asset and the associated obligation for the amounts that it would have to pay. If EPM substantially retains all the risks and advantages inherent to the ownership of a financial asset transferred, the entity shall continue to recognized the financial asset and also recognize a guaranteed loan on a collateral way for the revenues received.

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 decrease of the original liability and the recognition of a new liability, and the difference in the respective carrying values is recognized in the statement of comprehensive income in the "statement of income" section.

- **Compensation of financial instruments**

Financial assets and financial liabilities are subject to offset in such a way as to report the net value in the separate statement of financial position, only if (i) at the current moment, there is a legally enforceable right of compensating the amounts recognized; and (ii) there is the intention of settling them at their net value, or of realizing the assets and cancelling the liabilities simultaneously.

- **Derivative financial instruments**

EPM used derivative financial instruments, like term contracts ("Forward"), futures, financial barters ("Swaps") and options to hedge several financial risks, mainly the interest rate, exchange rate and commodities price risks. Such derivative financial instruments are initially recognized at their fair values on the date when the derivative contract is entered into, and subsequently they are measured again at their fair value. Derivatives are recorded as financial assets in the statement of financial position when their fair value is positive, and as financial liabilities when their fair value is negative.

The fair value of the commodity contracts that meet the definition of a derivative, but that are entered into in conformity with the expected purchase requirements of EPM, are recognized in the statement of comprehensive income as cost of sales.

Any gain or loss that arises from the changes in derivatives' fair value is directly recognized in the statement of comprehensive income in the "profit and loss of the period" section, except for those that are under hedge accounting. The derivatives implicit in main 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 results."

- **Hedge accounting**

At the beginning of a hedging transaction, EPM designates and formally documents the hedging transaction to which they want to apply the 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 item or transaction hedged, the nature of the risk being hedged and how EPM shall evaluate the effectiveness of the changes in fair value of the hedging instrument when offsetting the exposure before changes in the fair value of the hedged item or in the cash flows, attributable to the risk hedged. It is expected that the hedging is expected to be highly efficient in achieving the offsetting of changes in the fair value or in the cash flows, and they are permanently evaluated to determine whether that was actually so throughout the information periods for which they were designated.

For hedging accounting purposes, the hedging is classified and recorded as follows, once the stringent criteria for their recording are complied with: **Fair value hedging**, when they hedge the exposure to fair value changes of assets or liabilities recognized or non-recognized firm commitments. A change in the fair value of a derivative that is a hedging instrument is recognized in the statement of comprehensive income, in the "statement of income" section as financial cost or revenue. A change in the fair value of the item hedged attributable to the risk hedged is recorded as part of the carrying value of the hedged item, and also is recognized in the statement of comprehensive income in the "statement of income" section as financial cost or revenue. For the fair value hedging that related to items recorded at amortized cost, the adjustments to the carrying value are amortized through the statement of comprehensive income in the "statement of income" section during the remaining term until their expiration. Amortization of the effective interest rate may begin as soon as there is an adjustment to the carrying 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 attributable to the risk being hedged. Amortization of carrying value adjustments is based upon the effective interest rate recalculated on the amortization's start date. If the hedged item is written-off, the non-amortized fair value is immediately recognized in the statement of comprehensive income in the "statement of income" section.

When a non-recognized firm commitment is designated as a hedged item, the subsequent accrued change in the fair value of the firm commitment attributable to the hedged risk shall be recognized as an asset or liability with their corresponding gain or loss recognized in the statement of comprehensive income in the "statement of income" section.

**Cash flow hedging**, when they cover the hedging to the attributed cash flow variations exposure, either to a particular risk associated to a recognized asset or liability or to a highly probable foreseen transaction, or to the exchange rate risk in a non-recognized firm commitment. The purpose of cash flows hedging accounting is to recognize in the other comprehensive income the fair value variations of the hedging instrument to apply them to the income statement accounts when, and the rhythm that, the hedged item affects the same. Only the derivative inefficiencies shall be recognized in the income statement as they are produced.

The effective portion of the gain or loss for the measurement of the hedging instrument is immediately recognized in the other comprehensive income, whereas the ineffective portion is immediately recognized in the statement of comprehensive income in the "statement of income" section as financial expense.

The values recognized in the other comprehensive income are classified into the statement of comprehensive income in the "statement of income" section when the hedged transaction affects the result, as well as when the financial revenue or financial expense hedged is recognized, or when the transaction foreseen takes place. When the hedged item constitutes the cost of a non-financial asset or liability, the values recognized in the other comprehensive income are reclassified at the initial carrying value of the no-financial asset or liability. If the foreseen transaction or the firm commitment is no longer expected to happen, the accrued gain or loss previously recognized in the other comprehensive income is reclassified into the statement of comprehensive income in the "statement of income" section.

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 gain or loss previously recognized in the other comprehensive income remains in the other comprehensive income until the operation foreseen or the firm commitment affects the result.

– **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 EPM, 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 of 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.

  The gains or losses of the hedging instrument related to the effective portion of the hedging are recognized in other comprehensive income, whereas any other gain or loss related to the ineffective portion is recognized in the statement of comprehensive income in the "statement of income" section. Before the disposal of the business abroad, the accrued value of the gains or losses recorded in the other comprehensive income are reclassified in the statement of comprehensive income in the "statement of income" section.

- **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 EPM are recognized at the revenues received, net of direct issuance costs.

The repurchase of the Company's own equity instruments is recognized and directly deducted in equity. No gain or loss is recognized in operations, coming from the purchase, sale, issuance, or cancellation of the Company's own equity instruments.

### 2.18 Inventories

The 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 sales price estimated 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 energy, gas and water meters, communication equipment, telephone sets, 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 by using the weighted average method and their cost includes the costs directly related to the acquisition and those incurred in to give them their current conditions and location.

### 2.19 Impairment value of non-financial assets

As of every presentation date, EPM evaluates whether they have any indication that a tangible or intangible asset may be impaired. EPM estimates the recoverable value of the asset or cash-generating unit at the moment it detects an indication of impairment, or annually (as of November 30 and a review is made if there are any relevant or significant events that have occurred in the month of December that are worth analyzing and including in the calculation of impairment) intangible assets with undefined useful life and those that are still being used.

The recoverable value of an asset is the fair value less costs of sale, either of an asset or a cash-generating unit, and its value in use, whichever is greater, and it is determined for an individual asset, except that the asset does not generate cash flows that are substantially independent from the other assets or group of assets; in this case, the asset should be grouped into a Cash Generating Unit ("Unidad Generadora de Efectivo – UGE"). When a reasonable and consistent base of distribution is identified, common/corporate assets are also assigned to the individual Unidades Generadoras de Efectivo - UGE, when a reasonable and consistent distribution base is identified, the common/corporate assets are also assigned to the individual cash generating units, or distributed to the smallest group of cash generating units for which it is possible to identify a reasonable and consistent distribution base. When the carrying value of an asset or of a cash-generating unit exceeds its recoverable value, the asset is considered impaired and the value is reduced to its recoverable amount.

When calculating the value of use, either for an asset or a cash-generating unit, the estimated cash flows are discounted at their present 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 valuation model is used for determining the reasonable value less the costs of sale.

Losses for impairment of continued operations are recognized in the comprehensive income statement in the section income statement in those expense categories that correspond to the function of the impaired asset. Losses for impairment attributable to a Cash Generating Unit are assigned proportionately based in the book value of each asset to the non-current assets of the Cash Generating Unit after extinguishing the goodwill. The CGU is the smallest group of identifiable assets that generates cash inflows in favor of the company, which to a good extent, regardless foo the cash flows derived from other assets or groups of assets. In the Company the CGU were defined considering: 1) the existence of income and costs for each group of assets, 2) the existence of an active market for the generation of cash flows, and 3) the manner how operations are administered and monitored.

The impairment value for goodwill is determined by evaluating the recoverable value of each cash-generating unit (or group of cash-generating units) to which the goodwill relates. The value impairment losses related to goodwill may not be reverted in future periods.

For assets in general, excluding the goodwill, on each presentation date an evaluation is conducted about whether there is any indication that the impairment losses previously recognized no longer exist or have decreased. If such indication exists, EPM makes an estimate of the asset's or the cash-generating unit's recoverable value. An impairment loss previously recognized only can be reverted if there was a change in the assumptions used for determining the recoverable value of an asset since the last time when it was recognized the last impairment loss. The reversal is limited in such a way that the carrying value of the asset neither exceeds its recoverable amount, nor exceeds the carrying value that would have been determined, net of depreciation, if no impairment loss had been recognized for the asset in the previous years. Such reversal is recognized in the comprehensive income statement in the section profit and loss of the period.

### 2.20 Provisions

Provisions are recorded when EPM has a present, legal or implicit obligation, as a result of a past event; it is probable that EPM have to give off resources that incorporate economic benefit to cancel out the obligation, and a reliable estimate can be made of the value of the obligation. In those cases in which EPM expects that the provision be reimbursed in whole or in part, the reimbursement is recognized as a separate asset, but only in the cases when such reimbursement is practically certain and the asset amount can be reliably measured.

Provisions are measured with the best estimate from Management of the disbursements necessary to cancel the present obligation, at the end of the period being reported, taking into account the risks and the corresponding uncertainties. When a provision is measured using the estimated cash flow to cancel the current obligation, its carrying value corresponds to the present value of such cash flow, using for the discount a rate calculated with reference to market yields for the bonds issued by the National Government. In Colombia, it must be used the yield of TES Bonds (Public Debt Securities issued by the General treasury of the Nation) at the end of the period being reported. The expense corresponding to any provision is reported net of every reimbursement in the comprehensive income statement in the section other expenses. The increase in the provisions due to the passing of time is recognized as a financial expense.

The expense corresponding to any provision is presented in the comprehensive income statement in the section of profit and loss of the period, net of every reimbursement. The increase of the provision due to the passing of time is recognized as a financial expense.

- **Dismantlement reserve**

To the extent that there is a legal or implicit obligation of dismantling or restoring, EPM recognizes as part of the cost of a fixed asset in particular, the estimation of the future costs EPM expects to incur in to perform the dismantlement or restoring and its balancing entry is recognized 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 recognized at the present value of the expected costs of cancelling out the obligation using estimated cash flows. Cash flows are discounted at a particular rate before taxes, which should be determined by taking as a reference the market yields of the bonds issued by the National Government. In Colombia, regarding risk-free rate, it must be used the yield of TES Bonds (Public Debt Securities issued by the General Treasury of the Nation).

Future estimated dismantlement or restoration costs are annually revised. Changes in the future estimated costs, in the dates estimated for the disbursements, or in the discount rate applied are added or deducted from the asset cost, without exceeding the carrying value of the asset; any surpluses are immediately recognized in results for the period. The change in the provision value associated to the time elapsed is recognized as financial expense in the statement of comprehensive income in the “result for the period” section.

- **Onerous Contracts**

The company recognizes present obligations that derive from onerous contracts, as provisions and their offsetting entry is in the comprehensive income statement. 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 only be confirmed by the occurrence or non-occurrence of one or more uncertain future events that are not entirely under EPM’s control or the current obligations that arise from past events, but that it is not probable, but possible, that on outlay of resources including economic benefits be required to liquidate the obligation or the amount of the obligation cannot be measured with enough reliability, are not recognized in the statement of financial position, they are rather disclosed as contingent liabilities. Contingent liabilities generated in a business combination are recognized at fair value on the acquisition date; subsequently they are measured at the value that should be recognized according to IAS 37 Provisions, Contingent Liabilities and Contingent Assets, or the value initially recognized less, the accrued amortization recognized according to IAS 18 Revenues from Ordinary Activities, whichever is greater.

- **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 EPM control, are not recognized in the statement of financial position; rather, they are disclosed as contingent assets when their occurrence is probable. Whenever the contingent fact is true, the asset and the revenue associated are recognized in operations. Contingent liabilities 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 amount it would have been recognized and the amount initially recognized less the accrued amortization recognized, whichever is greater.

## 2.21 Employee benefits

### *2.21.1. Post-employment benefits*

***Defined contribution plans***

The contributions to the defined contribution plans are recognized as expenses in the statement of comprehensive income in the "result for the period" section 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 EPM has the legal or implicit obligation to respond for the payments of the benefits that were left to their charge.

For the defined benefit plans, the difference between the fair value of the plan assets and the present value of the plan obligation is recognized as asset or liability in the statement of financial position. The cost of giving benefits under the defined benefit plans is determined separately for each plan, through the actuarial valuation 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 gains or losses, the yield of plan assets and the changes in the asset ceiling effect, excluding the securities included in the net interest on the net defined benefits liabilities (assets), are recognized in the other comprehensive income, in the case of post-employment benefits; and if it is long-term benefits they are recognized in the statement of comprehensive income in the "statement of income" section in the period where they arise. The actuarial gains or losses include the effects of changes in the actuarial assumptions as well as adjustments due to experience.

The net interest on the 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.

The current service cost, the past service cost, any settlement or reduction of the plan are immediately recognized in the statement of comprehensive income in the "statement of income" section in the period when they arise.

### *2.21.2. Short-term employee benefits*

EPM classifies as short-term employee benefits those obligations with the employees that it expects to liquidate during the twelve (12) month period following the closing of the accounting period where the obligation has been generated or the service has been 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.

EPM recognizes the short-term benefits at the moment the employee has rendered their services, as the following:

A liability for an amount that shall be repaid to the employee, deducting the amounts already paid before, and its balancing entry as expense for the period, unless another chapter obliges or allows including the payments in the cost of an asset or inventory, for instance, if the payment corresponds to employees the services of whom are directly related to the construction of a work, they shall be capitalized to that asset.

The amounts values already paid before correspond, for instance, to advanced payments of salaries, advanced payments of per diems, among others. If they exceed the corresponding liability, the Company will have to recognize the difference as an asset in the prepaid expenses account, to the extent that the advanced payment gives place to a reduction in the payments to be made in the future or to a cash reimbursement.

According to the foregoing, the accounting recognition of short-term benefits is made upon occurrence of the transactions, regardless of when they are paid to the employee or to the third parties to which the Company has entrusted the provision of certain services.

#### *2.21.3.* Long-term employee benefits

EPM classifies as long-term employee benefits those obligations that it expects to settle after the twelve (12) months following the closing of the accounting exercise or the period where employees provide the related services, i.e., from the month thirteen forward; they are different from the short-term benefits, post-employment benefits, and contract termination benefits.

EPM measures long-term benefits in the same fashion 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.

The benefits that employees receive year after year throughout their labor life should not be considered "long term" if at the accounting exercise closing each year, the Company has fully delivered them.

#### *2.21.4.* Benefits for termination

The company recognizes as benefits for termination, 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 those benefits.

### 2.22 Service concession agreements

EPM recognizes the service concession agreements pursuant to the interpretation requirements of the IFRIC 12 Service Concession Agreements.

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; and
- The grantor controls, through the ownership, the right of use, or otherwise, any significant residual participation in the infrastructure at the end of the term of the agreement.

EPM does not recognize these infrastructures as property, plant and equipment; it recognizes the consideration received in the contracts that meet the above conditions at its fair value, as an intangible asset to the extent that EPM receives a right to make charges to users of the service, provided that these rights 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 EPM 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 agreements are recognized in the separate statement of financial position as financial assets and are measured later at amortized cost, using the effective interest rate. The evaluation of impairment of these financial assets is made pursuant to the value impairment policy of the financial assets.

Intangible assets of service concession agreements are recognized in the consolidated 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.

Revenues from ordinary activities and costs related to the operating services are recognized according to the accounting policy of ordinary revenues and the services related to construction or improvement services according to the accounting policy of construction contracts. Contractual obligations assumed by EPM for maintenance of the infrastructure during its operation, or for its return to the assignor at the end of the concession agreement in the conditions specified therein, to the extent that it does not assume a revenue-generating activity, it is recognized following the provisions accounting policy.

**2.23 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 valuation technique. In estimating the fair value of an asset or liability, EPM takes into account the characteristics of the asset or liability if the market participants take into account these characteristics when valuing the asset or liability on the measurement date. Fair value for measurement and/or disclosure purposes in these financial statements is determined on that basis, except for the transactions of stock-based payments, lease transactions, and the measurements that have certain similarities with the fair value but that are not fair value, such as the 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.

The fair value is determined:

Based upon prices quoted in active or passive markets identical to those the Company can access on the measurement date (level 1).Level 2 inputs are inputs different of quoted prices included in Level 1, that are observable for the assets or liabilities, directly or indirectly.

Based upon internal valuation techniques of cash flow discounts or other valuation models, using variables estimated by EPM non-observable for the asset or liability, in the absence of variables observed in the market (level 3). Note 39 Measurement of Fair Value provides an analysis of the fair values of the financial instruments and non-financial assets and liabilities and greater details of their measurement.

**2.24 Cash dividends distributed to the owner of the company**

The company recognizes a liability to make the distributions to the owner of the company in cash when the distribution is authorized and it is no longer at the discretion of the company. The corresponding amount is recognized directly in the net equity.

**2.25 Changes in estimates, accounting policies and errors**

**2.25.1 Changes in accounting**

As of December 31 2016, there are no significant changes in accounting estimates, except for the following changes:

- Changes in the discount rate used for the impairment of assets. The company has established the methodology to estimate the cost of capital of its different businesses (CAPM –Capital Asset Pricing Model- methodology adjusted for country risk), variable that when observing the results of 2016 in respect to those obtained in 2015, in average had a rising behavior as a result of a higher devaluation implied (for change in the estimates of the macroeconomic variables), for a higher estimated debt cost for the company and for a higher perception of country risk, measured by the EMBI+ (JP Morgan Emerging Markets Bond Index), parameters that form a part of the estimated of this variable.
- Changes in the estimates of the estimated values to be paid for litigations. Some of the claims were adjusted by the legal area of the company to the maximum amount ordered by Law in respect to moral damages. Additionally, the model of valuation of litigation was adjusted using a CPI projected for each year, according to the estimated payment date of the obligation.

### 2.25.2 Changes in accounting policies:

The new standards and modifications to the IFRS, as well as the interpretations (IFRIC), that have been implemented by the company are detailed next:

IAS 27 Separate financial statements, modification issued in August 2014. As of December 31, 2015, the Group made the change in the subsequent measurement of investments in subsidiaries by passing from the cost method to equity method for the separate financial statements of the Group companies that have investments in subsidiaries, given that this policy reflects more faithfully the financial information and is more consistent with the practice of the industry in which the company operates.

The following adjustments were made to the separate financial statements as result of the restatement:

| Effect of changes | 2016 | 2015 | | | January 1, 2015 Restated |
|---|---|---|---|---|---|
| | | Issue | Adjustment | Restated | |
| **Statement of financial position** | | | | | |
| Investments in subsidiaries | 6,043,104 | 5,937,844 | 262,789 | 6,200,633 | 4,682,660 |
| Other accumulated comprehensive income | 2,378,296 | 1,787,083 | 863,492 | 2,650,575 | 2,236,701 |
| Accumulated results | 12,932,194 | 12,231,134 | (544,104) | 11,687,030 | 9,629,888 |
| Net result of the period * | 1,834,792 | 1,484,584 | (114,911) | 1,369,673 | 2,472,421 |
| Other components of equity | 51,626 | - | 58,312 | 58,312 | 58,312 |

*- Figures expressed in millions of Colombian pesos -*

| Effect of changes | 2016 | 2015 | | |
|---|---|---|---|---|
| | | Issue | Adjustment | Restated |
| **Statement of comprehensive income** | | | | |
| Equity method in associates and joint business | 32,457 | 626,300 | (300,614) | 325,686 |
| Participation in the profit or loss of subsidiaries | 299,737 | - | 120,386 | 120,386 |
| Net exchange difference | 227,779 | (295,775) | 65,317 | (230,458) |
| Other comprehensive income - Items that will not be reclassified subsequently to the result of the period - Participation in the profit or loss of subsidiaries | (93,153) | - | 8,153 | 8,153 |
| Other comprehensive income - Items that may be reclassified subsequently to the result of the period - Participation in the profit or loss of subsidiaries | (137,331) | - | 473,396 | 473,396 |

*- Figures expressed in millions of Colombian pesos -*

| Effect of changes | 2016 | 2015 | | |
|---|---|---|---|---|
| | | Issue | Adjustment | Restated |
| **Statement of changes in the equity** | | | | |
| Accumulated results | 14,766,986 | 13,715,718 | (659,016) | 13,056,702 |
| Other accumulated comprehensive income | 2,378,296 | 1,787,084 | 863,492 | 2,650,575 |
| Other components of equity | 51,626 | - | 58,312 | 58,312 |

*- Figures expressed in millions of Colombian pesos -*

| Effect of changes | 2016 | 2015 | | |
|---|---|---|---|---|
| | | Issue | Adjustment | Restated |
| **Statements of cash flow** | | | | |
| Results of the period | 1,834,792 | 1,484,584 | (114,911) | 1,369,673 |
| Adjustments to reconcile the net result of the period to the net cash flows used in operating activities | 1,141,376 | 1,281,560 | 114,911 | 1,396,471 |
| Dividends from investments | (32,433) | (641,523) | 314,196 | (327,327) |
| (Profit) loss for equity method | (299,737) | - | (120,386) | (120,386) |
| Impairment of investments in subsidiaries, associates and joint business | - | 15,223 | (13,583) | 1,640 |
| (Profit) loss for exchange difference | (118,034) | 673,510 | (65,317) | 608,193 |

*- Figures expressed in millions of Colombian pesos -*

- Except for the above change of policies, the company did not make other voluntary changes in accounting policies that required retroactive adjustments to the separate financial statements in accordance with the provisions of IAS 8 Accounting policies, changes in the accounting estimates and errors. However, it applied new and modified standards, as follows: IFRS 9 Financial Instrument (revised in July 2014) and the corresponding amendments to other IFRS before their effective date. In 2016 the company has applied IFRS 9 that introduces new requirements for the classification and measurement of financial assets, impairment of financial assets and hedge accounting. The detail of this new requirements, as well as their impact on the financial statements are described below:

    - Classification and measurement of financial assets: the standard introduces a measurement category for debt instruments denominated “Fair value with changes in other comprehensive income”. The debt instruments that are maintained within a business model, which object is to collect contractual cash flows and sell debt instruments and that have contractual cash flows that are only payment of principal and interest on the outstanding principal, are measured at their fair value through other comprehensive income. This measurement category recognizes the information in the income statement as if the financial asset were measured at the amortized cost, at the same time that it is measured in the statement of financial position at fair value. The profits or losses, different from those recognized in the income statement are recognized in the other comprehensive income except the profits or losses for impairment and the profits or losses for exchange difference, until the financial asset is deregistered or reclassified. When these financial assets are deregistered, the profits or losses previously accumulated recognized in the other comprehensive income are reclassified from equity to the result of the period. This reflects the profit or loss that would have been recognized in the result of the period at the moment of the derecognition if the financial asset had been measured at amortized cost. The company reviewed and evaluated the financial assets existing as of January 1, 2015 on the basis of the facts and circumstances that existed on that date and concluded that the initial application of the IFRS 9 does not have any impact.

- Impairment of financial assets: In respect to the impairment of financial assets, the IFRS 9 requires a model of expected credit loss as opposed to the model of credit loss incurred according to IAS 39. The model of expected credit loss requires that the company will quantify the credit losses expected on each reporting date to reflect the changes in the credit risk from the initial recognition of the financial assets. In other words, it is no longer necessary that a credit event had occurred before the recognition of the credit losses.

  Specifically, IFRS 9 requires that the company will recognize a provision for expected credit losses in: debt investments subsequently valued at amortized cost or at fair value with change in the other comprehensive income; lease debtors, contract assets, loan commitments and financial guarantee contracts to which the impairment requirements are applied.

  In particular, the IFRS 9 requires that the company will measure the impairment for the financial instruments during the life of the asset for which significant increases take place in the credit risk from the initial recognition or if the financial instrument is acquired with credit impairment. On the other hand, if the credit risk of a financial instrument has not been significantly increased since the initial recognition, the company measures the provision of the financial instrument taking as a basis the 12 months following their acquisition. The IFRS 9 also provides a simplified approach to measure the profit for losses for an amount equivalent to the life of the asset under certain circumstances.

  The changes of accounting policies resulting from the adoption of IFRS 9 have not been restated, in which case the accumulated difference in the provision for losses that are recognized in application of the standard is charged against accumulated results as of January 1, 2016. Consequently, the information presented for 2015 does not reflect the requirements of IFRS 9 and, therefore, is not comparable to the information presented for 2016.

  The provision for additional provision for credit losses of $108,932 as of January 1, 2016 has been recognized against retained earnings on the respective dates, net of their related deferred tax impact of $39,654, resulting in a net decrease in the retained earnings of $69,278 as of January 1st. The application of the impairment requirements of IFRS 9 has given as result a provision for losses of $58,540 to be recognized in the current year. (See Note 11 Trade Debtors and other accounts receivables for more financial details of the adjustments). The consequent modifications to IFRS 7 have also given rise to more extensive disclosures on the credit risk exposure (see Note 38. Objectives and management policies of financial risks.

- Hedge accounting: the standard introduces a substantially reform approach for the hedge accounting that is more closely aligned with the risk management. The Company did not have impacts for this new approach.

– According to the modification to IAS 1 Presentation of financial statements, issued in December 2014, in the section of other comprehensive income, of the comprehensive income statement, the following items are presented in separate lines:

  - The proportion of other comprehensive income of subsidiaries accounted for using equity method that will not be reclassified subsequently to the income statement.

  - The proportion of other comprehensive income of subsidiaries accounted for using equity method that is subsequently reclassified to the income statement.

– IAS 19 Employee benefits, modification issued in September 2014. The returns to be used as discount rate are no longer referred to a country market, but to a currency market, which “overflows” local borders. The discount rate is determined under two alternatives, the first one under high quality business bonds (if any in the market) or government bonds by default (as second option). The focus is to look if in that currency it exists in the first option, even if not found in the local market. No impact in this respect is generated for the company because it applies the second option (resorting to government funds in local currency).

### 2.25.3 Application of new and revised standards

The new standards and modifications to the IFRS, as well as the interpretations (IFRIC) that have been published in the period, but that have not been yet implemented by the company and those that will be adopted as of the date of the mandatory application, are detailed below:

| Standard | Date of mandatory application | Type of change |
|---|---|---|
| IFRS 16 - Leases | January 1, 2019 | New |
| IFRS 15 - Revenue from contracts with customers | January 1, 2018 | New |
| IFRIC 22 - Foreign currency transactions and advance consideration | January 1, 2018 | New |
| IFRS 4 - Insurance contracts | January 1, 2018 | Modification |
| IAS 28 - Investments in associates and joint ventures | January 1, 2018 | Modification |
| IAS 40 - Investment property | January 1, 2017 | Modification |
| IFRS 12 - Disclosure of interests in other entities | January 1, 2017 | Modification |
| IAS 7 - Cash Flow Statements | January 1, 2017 | Modification |
| IAS 12 - Income taxes | January 1, 2017 | Modification |
| IFRS 10 - Consolidated financial statements | Postponed | Modification |

**IFRS 15 Revenue from contracts with customers:** issued in May 2014, is a new standard applicable to all contracts with customers, except leases, financial instruments and insurance contracts. This is a joint project with the Financial Accounting Standards Board – FASB to eliminate differences in the recognition of income between IFRS and US GAAP.

The modifications made in April 2016 to IFRS 15 includes the following aspects:

A. Identification of condition as principal or as agent

When a third party is involved in providing goods or services to a customer, the company will determine if the nature of its commitment is either a performance obligation consisting in providing specified goods or services by itself (that is, it acts as principal) or organizing for the third party the supply of those goods or services (that is, acts as agent).

The company acts as principal if it controls a good or service committed before it is transferred to a customer. However, the company is not necessarily acting as principal if it obtains the legal right on a product only momentaneously before the right is transferred to the customer. The company, acting as principal in a contract may fulfill a performance obligation by itself or it may contract a third party (for example, a subcontractor) to fulfill all or part of a performance obligation on its behalf. When the company, acting as principal, fulfills a performance obligations, it recognizes the revenues from ordinary activities for the gross value of the consideration to which it expects to be entitled in exchange for the goods or services transferred.

The Company acts as agent if the performance obligation consists in the organization of the supply of goods or services on behalf of another company. When the Company, acting as an agent, fulfills a performance obligation, it recognizes revenues of ordinary activities for the value of any payment or commission to which it expects to be entitled in exchange for organizing for the other party the provision of its goods or services. The payment or commission may be the net value of the consideration that the entity keeps after paying to the other party the consideration received in exchange for the goods or services to be provided by that party.

**b. Variable consideration**

It is any amount that is variable according to the contract. The variable consideration will only be included in the price of the transaction when the entity expects that it will be 'highly probable' that the resolution of the associated uncertainty would not result in a major reversal of ordinary income. This valuation takes into account both the probability of a change in the estimate and the extension of any reversal of ordinary income that would result. If the Company is not capable of including its complete estimate of the variable consideration, given that it could give rise to a major reversal of ordinary income, it must recognize the amount of the variable consideration that would be highly probable of not resulting in a major reversal of ordinary income. There is one exception to this when the entity earns sales or use based on ordinary income for royalties resulting from licenses of its intellectual property. Under these circumstances, the entity would typically include only the ordinary income from those licenses when the subsequent sale or use occurs.

Likewise, the standard also introduces a specific restriction for the payment of royalties related to intellectual property licenses. If the payment of royalties is based on the subsequent use or sale, the entities are restricted to recognizing the associated ordinary income until the subsequent use or sale has occurred, even if based on historic evidence it is possible to make a reliable estimate of this amount.

**c. Application Methods**

The standard allows the utilization of two methods for the initial application of the standard as follows:

**Full retrospective approach**

It is possible to apply the standard retrospectively to all comparative periods presented. According to this option, the comparatives of the previous year are restated, with the resulting adjustment to equity opening balance in the first comparative period. When this option is selected, the standard provides a series of optional practical expedients. These include the following:

- For completed contracts, entities are not required to restate the contracts that begin and end within the same annual reporting period.
- For contracts completed that have variable consideration, the entity may use the transaction price at the date on which the contract was completed rather than estimate the amounts of the variable consideration in the comparative reporting periods.

- For all the periods presented before the initial application rate, the entity does not need to disclose the amount of the transaction price allocated to the remaining performance obligations and any explanation of when the entity expects to recognize those amounts as ordinary income.

**Modified approach**

According to the modified approach it is possible to apply the standard only as of the date of the initial application. If this option is chosen, it will be necessary to adjust equity opening balance at the date of initial application (i.e. January 1, 2017) but the entity is not required to adjust the comparatives of the previous year. This means that it does not need to consider the contracts that have been completed before the initial application date. Broadly, the figures reported from the initial application date will be the same as if the standard had always been applied, but the figures for the comparative periods will remain with the previous base.

If this option is used, disclosure is required of the amount by which each item of the line of the financial statement is affected in the current period as result of the application of the guidance and an explanation should be given of the important changes between the results reported according to IFRS 15 and the previous guidance on ordinary income.

The amendments have an effective date of January 1, 2018, which is the effective date of IFRS 15. Entities have the obligation to apply these amendments retroactively. The amendments are intended to clarify the requirements of IFRS 15, not to change the standard.

This new standard intends to improve the inconsistencies and weaknesses of IAS 18 and provide a model that will facilitate the comparability of companies of different industries and regions. It provides a new model for revenue recognition and more detailed requirements for contracts with multiple elements. In addition it requires more detailed disclosures.

The basic principle of IFRS 15 is that an entity recognizes the revenues from ordinary activities in a way that they represent the transfer of goods or services committed with the customers in exchange for an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity recognizes the revenues from ordinary activities in accordance with this basic principle through the application of the following phases:

Phase 1: Identifying the contract (or contracts) with the customer

Phase 2: Identifying the performance obligations in the contract

Phase 3: Determining the transaction price

Phase 4: Assigning the transaction price among the performance obligations of the contract

Phase 5: Recognizing the revenues from ordinary activities when (or as) the entity fulfills a performance obligation.

Under IFRS 15, an entity recognizes the revenues when an obligation is fulfilled, for example, when the "control" of the goods or services underlying the performance of the obligation in particular is transferred to the customer. More specific guidance have been added to the standard to manage specific scenarios. Additionally, more disclosures are required.

It would replace the standards IAS 18, Revenues and IAS 11 Construction Contracts, IFRIC 13 Customer loyalty programs, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of assets from customers and SIC 31 Barter Transactions Involving Advertising Services. The company assessed the impacts generated by the application of this new standard, and concluded that there are no material impacts on the financial statements.

The modifications will be of mandatory application for the annual periods that start from January 1, 2018. Their advance application is permitted.

**IFRIC 22 Foreign currency operations and advance consideration:** issued in December 2016, this interpretation deals with how to determine the transaction date, in order to define the exchange rate to be used in the initial recognition of the asset, expense or revenue (or part thereof), in the derecognition of a non-monetary asset or non-monetary liability resulting from the payment or receipt of advance consideration in foreign currency. In this respect the Interpretation Committee reached the following conclusion: the date of the transaction, for the purposes of determining the exchange rate, is the date of initial recognition of the non-monetary prepayment asset or deferred income liability. If there are multiple payments or receipts in advance, a date of transaction is established for each payment or receipt. Not applied when an entity measures the related asset, expense or revenue in the initial recognition at its fair value or at the fair value of the consideration paid or received on a date different from the initial recognition date of the non-monetary asset or non-monetary liability derived from the advance consideration (for example, the measurement of the goodwill according to IFRS 3 Business Combinations). It is not applied either for the income tax and insurance contracts.

The Company is assessing the impacts that the new application of this interpretation could generate. The modifications will be of mandatory application for the annual periods beginning on or after January 1, 2018. Its earlier application is permitted.

**IFRS 16 Leases: issued in January** 2016, this new standards introduce an integral model for the identification of leases and accounting treatment for lessors and lessees. It will replace the current standards for the accounting treatment of leases included in IAS 17 Leases and the related interpretations.

The distinction between leases and service agreements is based on the control by customers on the asset identified. For the lessee the distinction of operating leases (off balance sheet) and financial leases (in the balance sheet) is eliminated and is substituted by a model in which it is required to recognize an asset (right of use) and its corresponding liability for all leases (that is, everything in the balance sheet), except the short term leases and the leases of low value assets.

The asset (right of use) is initially measured at cost and subsequently it is measured at cost (with certain exceptions) less accumulated depreciation and impairment losses, adjusted for any reassessment of the lease liability. The lease liability is initially measured for the present value of future lease payments. Subsequently, the lease liability is adjusted to the payments of interest and leases, as well as the impact of lease modifications, among others. In addition, the classification of the cash flows will also be affected since the operating lease payments according to IAS 17 are presented as operating cash flows; while in the IFRS 16 model the lease payment will be divided into capital amortization and a portion of interest that will be presented as cash flow of financing and operation, respectively.

In contrast with the lessee accounting, IFRS 16 includes as accounting requirements for the lessor the same ones provided by IAS 17, that is, it continues to require the lessor to classify a lease as operating or financial lease.

This new standard requires further detail in the disclosures.

The company is assessing the impacts that the application of this new standard could generate, given that it has been planned that in 2017 technical guidelines and definitions will be prepared in this respect and to identify the impacts for the implementation in 2018.

The modifications will be of mandatory application for the annual periods commencing on January 1, 2019. The advance anticipation is permitted if IFRS 15 – Revenues from contracts with customers.

**IFRS 10 consolidated financial statements and IAS 28 Investments in associates and joint ventures.** IFRS 10 has been modified to reflect the following: profits or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that are accounted for using equity method are recognized in the parent's profit and loss to the extent of the participation of the non-related investors in that associate or joint venture. Similarly, the profits and losses resulting from the appreciation of accumulated investment in a previous subsidiary (that has become an associate or a joint venture that is accounted for using equity method) at fair value, are recognized in the profit and loss of the previous controlling entity only to the extent of the participation of the unrelated investors in the new associate or joint venture. Additionally, the amendment to IFRS 10 and IAS 18 address the accounting requirements in conflict on the sale or contribution of assets between an investor and its associate or joint venture. To this effect it establishes that in order to determine if the assets that are sold or contribute constitute a business, it is necessary to consider if the sale or contribution of those assets is part of multiple agreement that must be accounted for as a sole transaction.

Modifications are applied prospectively to the transactions that take place in the annual periods that start as of January 1, 2016 with early application permitted. In the meeting of June 2015 the IASB decided tentatively to postpone the mandatory effective date of these amendments. No draft has been issued at the time of preparation of this document.

These modifications do not have any impact on the financial statements.

**Note:** In respect to "*IFRS 10, IFRS 12 IAS 28 Investment Entities: Applying the Consolidation Exception - Amendments to IFRS 10, IFRS 12 and IAS 28*", the change in the standard does not apply in any of the companies of the EPM Group, since the exemption applies to investment entities; however, this modification was included in the technical definitions.

**IFRS 12 – Disclosure of interests in other entities:** the modification to IFRS 12 that forms part of the annual improvements to IFRS Standards Cycle 2014-2016 issued in December 2016, clarifies the scope of the standard, adding the indication that the requirements of this IFRS are applied to the interests of the subsidiaries, joint arrangements, associates and unconsolidated structured entities, that are classified (or to be classified) as held for sale or discontinued operations in accordance with IFRS 5 Noncurrent assets held for sale and discontinued operations, but the exception of disclosing information on them is maintained according to paragraph B17 of the standard.

The modifications will be mandatorily applied for the annual periods that start on or after January 1, 2016. Their early application is allowed.

These modifications do not have any material impact on the financial statements.

**IAS 7 Cash flows**

The modification to IAS 7 issued in January 2016 defines the liabilities derives from financing activities as liabilities "for which the cash flows were or will be classified in the Statement of cash flows as cash flows for financing activities". It also make emphasis on the fact that the new disclosure requirements also related to the changes in the financial assets if they meet the same definition.

It requests new information to be disclosed on the changes in the liabilities derived from the financing activities, such as: changes in cash flows from financing activities, changes derived from the obtaining or loss of control of subsidiaries or other business, the effect of the changes in the foreign exchange rates, the changes in the fair value and other changes. It also establishes that the changes in the liabilities derived from financing activities must be disclosed separately from the changes in other assets and liabilities, and includes a reconciliation between the beginning and ending balances in the statement of financial position, for the liabilities derived from financing activities. Early adoption is permitted.

The company assessed the impacts that will be generated by the modification of the standard, concluding that it will have no material impact on the financial statements.

**IAS 12 Income Taxes:** the modification to IAS 12, issued in January 2016, does not change the underlying principles for the recognition of assets for deferred taxes, it presents the following clarifications:

- The clarifies that unrealized losses in debt instruments measured at fair value in the financial instruments but at cost for tax purposes may give rise to deductible temporary differences.
- When an entity assesses if the taxable profits against which a deductible temporary difference can be used will be available, it will consider if the tax legislation restricts the sources of the taxable profits against which the deductions can be made at the time of the reversal of that deductible temporary difference. If the tax legislation does not impose these restrictions, an entity will assess a deductible temporary difference in combination with all others. However, if the tax legislation restricts the use of losses to be deducted against income of a specific type, a difference.
- The entity must confirm if it has sufficient taxable profits in the future periods, comparing the deductible temporary differences to future taxable profits that exclude the tax deductions resulting from the reversal of those deductible temporary differences. This comparison shows the extent to which the taxable profit will be sufficient in order for the entity to deduct amounts resulting from the reversal of deductible temporary differences.
- The possible future taxable profits could include the recovery of some assets of the entity for an amount higher than its carrying value if there is sufficient evidence that it is probable that the entity will be able to comply with it. That is, in the case of an asset when it is measured at fair value, the entity must verify if it has the certainty that the recovery of the asset for a figure higher than the carrying value is probable, such as it could be the case of maintaining a debt instrument at a fixed rate and collect the contractual cash flows.

The modifications will be of mandatory application for the annual periods that start on or after January 1, 2017.

**IFRS 4 Insurance contracts: issued in March 2004, is a standard in process of formation by phases, for those who issue insurance and reinsurance contracts. The ascent to Phase II has been initiated, which has involved some exemptions on application of other standards, for example, an entity will apply these modifications that permit insurers that meet certain specific criteria the utilization of a temporary exemption of IFRS 9 for annual periods starting on or after January 1, 2018; it also permits insurers to reclassify under specified circumstances some or all their financial assets, in such a way that they are measured at fair value with changes in profit and loss but affecting the other comprehensive income.**

**The above implies that the modifications in the application of IFRS 9 "Financial Instruments" with IFRS 4 "Insurance Contracts" (Amendments to IFRS 4) offer two options for entities that issue insurance contracts within the scope of IFRS 4:**

* An option that permits entities to reclassify, from profit or loss to other comprehensive income, part of the income or expenses derived from designated financial assets; this is the so called overlay approach;

* An optional temporary exemption of the application of IFRS 9 for entities whose predominant activity is the issue of contracts within the scope of IFRS 4; this is the so called deferral approach.

The application of both approaches is optional and an entity is allowed to cease to apply them before applying the new insurance contract standard.

An entity would apply the overlay approach retrospectively to the financial assets that qualify when it applies first the IFRS 9. The application of the overlay approach requires the disclosure of sufficient information to permit users of financial statements to understand how the amount reclassified in the period effect of that reclassification in the financial statements is calculated.

An entity would apply the deferral approach for the annual periods that start on or after January 1, 2018. The application of the deferral approach must be disclosed together with the information that permits users of financial statements to understand how the insurer qualified for the temporary exemption and compare the insurers that apply the temporary exemption with the entities that apply IFRS 9. The deferral can only be used for the three years following January 1, 2018.

The company is assessing the impacts that could generate the application of this new standard.

**IAS 28 - Investments in associates and joint ventures:** the amendment to IAS 28 that forms part of the annual improvements to IFRS Standards Cycle 2014-2015 issued in December 2016, clarifies that when an investment in an associate or joint venture is maintained directly or indirectly by an entity that is a venture capital organization or a joint investment, trust fund or investment trust or another analogous entity, including insurance funds linked to investments, the entity may choose to measure those investments at fair value with changes in profit and loss according to IFRS 9. An entity shall make this election separately for each associate or joint venture at the initial recognition of the associate or joint business. It also makes clear that if an entity that is not in itself an investment entity has an interest in an associate or joint venture that is an investment entity, the entity when applying equity method may keep the measurement at fair value applied by that associate or joint business that is an investment entity to the participations of the associate or joint venture that is an investment entity in subsidiaries. This choice is made separately for each associate investment entity or joint venture, on the date subsequent to the date when: a) the investment in the associate or joint venture is initially recognized; b) the associated investment or joint venture becomes an investment entity; and c) the associated investment entity or joint venture becomes first a Parent.

These modifications will be of mandatory application for the annual periods that start on or after January 1, 2018. Their advance application is permitted.

**IAS 40 Investment properties:** The amendment made in December 2016 has effect on the transfers of investment properties (reclassifications) motivated by the "change in their use", detailing further the latter term: a change in the use occurs when the property meets or ceases to meet, the definition of investment property and there is evidence of the change in the use. In an isolated manner, a change in the intentions of the administration for the use of the property does not provide evidence of a change in the use. For this purpose, the examples included in the standard in paragraphs 57 and 58 continue to apply (not substantially modified). Paragraphs 84C to 84E and 85G were added to define the transitory provisions.

The company is assessing the impacts that could generate the application of this new standard.

The modifications will be of mandatory application for the annual periods that start on or after January 1, 2018.

### 2.25.4. Errors of previous periods

As of December 31, 2016 no adjustments were made to the separate financial statements by effect of errors of previous periods.

### 2.25.5. Changes in presentation

As of December 31, 2016 no changes were made in the presentation of the separate financial statements.

# Note 3. Significant accounting judgements, 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 EPM management used in the application of the accounting policies under IFRS, and that have significant effect on the values recognized in the separate financial statements.

Estimates are based upon historic experience and as a function of the best information available on the facts analyzed at the report date. These estimates are used for determining the value of the assets and liabilities in the separate financial statements, when it is not possible to obtain such value from other sources. EPM evaluates its estimates on a regular basis. Actual results may differ from these estimates.

The significant estimates and judgments made by EPM are described below:

- **Evaluation of the existence of impairment indicators for the assets, goodwill and valuation of assets for determining the existence of value impairment losses.**

  The condition of the assets is revised on each report presentation date. Recognized in order to determine whether there are indications that any of them has suffered an impairment loss, impairment indicators are revised. If there is impairment loss, the recoverable amount of the asset is affected; if the estimated recoverable amount is lower, it is reduced up to its fair value and an impairment loss is immediately recognized in operations.

  The evaluation of the existence of value impairment indicators is based on external and internal factors, and in turn on quantitative and qualitative factors. Evaluations are based on financial results, the legal, social and environmental settings, and the market conditions; significant changes in the scope or fashion in which it is used or expected to use the asset or cash-generating unit (UGE, for its Spanish initials) and evidence about obsolescence or physical deterioration of and asset or UGE (cash generating unit), among others.

  Determining whether goodwill has suffered impairment implies the calculation of the value at use of the cash generating units to which it has been assigned. The calculation of the value at use requires that the entity determines the future cash flows that should arise from the cash-generating units 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.

- **Hypothesis used in the actuarial estimate of the post-employment obligations with employees.**

  The assumptions and hypothesis 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.

- **Useful life and residual values of property, plant and equipment, and intangibles**

  In the assumptions and hypothesis used for determining the useful lives, 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 the calculation of the fair value of financial instruments including credit risk.**

The company discloses the fair value corresponding to each type of financial instrument in such a way as to permit the comparison with the carrying values. Macroeconomic projects calculated within the company are used. The investment portfolio is valued at market prices. In the absence of the latter, a similar one is looked for in the market and if not found the assumptions are used.

Macroeconomic rate projected at cash flow methodology. Derivatives are estimated at fair value. In accounts receivable an estimate is made at the market rate in effect for similar credits. Accounts receivable from employees are valued similarly to mass debtors, except for home loans.

For equity investments, the methodology is the cash flow; it is estimated at market price for those that are listed in the stock exchange; the rest are valued at historic cost.

- **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 areas professionals, the type of contingent liability, the possible legislative changes, and the existence of high-courts' jurisprudence 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 moment when the facts occur.

  The company discloses and does not recognize in the financial statements those obligations rated as possible; obligations rated as remote are not disclosed or recognized.

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

- In the assumptions and hypothesis used for determining future disbursements for asset dismantlement and retirement obligations, aspects such as the following were considered: estimate of future outlays in which EPM 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; sand the discount rates. **Determination of the existence of financial or operating leases in terms of the transfer of risks and benefits of leased assets.**

The significant assumptions that are considered for the determination of existence of a lease include the assessment of the conditions if the right to control the use of the asset for a period of time in exchange for a consideration is transmitted, that is, the existence of an identified asset is assessed; the right to obtain substantially all the economic benefits of the use of the asset throughout the period of use; the right to indicate how and for what purpose the asset used throughout the period of use; right to operate the asset throughout the period of use without the existence of changes in the operating instructions.

- **Recoverability of deferred tax assets**

  Deferred tax asset in EPM has been generated by the temporary differences that generate future fiscal consequences in the financial position of Croup Companies; these differences are essentially represented in fiscal assets that exceed the assets under IFRS; and in fiscal liabilities, lower than the liabilities under IFRS, such as it is the case of the pension liability components, the amortized cost of bonds, financial leasing, and other sundry provisions and contingencies provision.

The company deferred tax asset is recovered in the net income taxed on the current income tax generated.

– **The determination of whether a set of assets meets the conditions to be classified as discontinued operation.**

In the company the assumptions that are subject to disclosure were not taken into account for the determination of whether a set of assets meets the conditions to be classified as a discontinued operation since there were no transactions that would make assume the discontinuity of an operation.

**- Determination of receivables impairment**

For the calculation of the credit loss expected each obligation is assigned an individual probability of default that is calculated based on a probability model that involves sociodemographic variables, of the product and of behavior.

The model uses a 12-month range, so the probability that an obligation will have to be provisioned in a determined percentage in that same period is estimated. The model will be applied based not he scorecard developed taking into account the company's information. The models are defined in accordance with the information available and the characteristics of the population groups for each one. Although the methodology is applied to all accounts with balance, it is necessary to take into consideration some exclusions such as: written-off accounts; self-consumptions; contributions; public lighting and in general charges from third parties. For their calculation, the time form which it is considered that there was a default of the obligation and it will not be recovered is defined.

With this information the calculation of the expected loss is made as follows:

EL = PD x EB x LGD, where:

Probability of Default (PD): corresponds to the probability that, in a term of twelve months, the debtors of a determined segment and rating of receivables will be in default.

Exposed Balance of Asset (EB): corresponds to the balance of principal, balance of interest, and other charges in effect of the obligations.

Loss given the default (LGD): it is defined as the economic impairment that the entity would suffer in case that any of the situations of default materializes.

- **Estimates of revenue**

The company recognizes the income originated in the sale of goods in the period of transfer of the risks and benefits and those originated in the rendering of services when they are delivered to the customer, regardless of the date when the corresponding invoice is prepared. The information from the contracts or agreements with the customers is taken to make this estimate and the value to be recognized in the income is established in this manner.

For other items different from the rendering of public utilities, the Company estimates and recognizes the value of the income for sales of goods or rendering of services based on the terms or conditions of interest rate, term, among others, of each contract that originates the sale.

In the month following the recording of the estimates, their value is adjusted by the difference between the value of the actual revenues already known against the estimated revenues.

# Note 4. Property, plant and equipment, net

The following is the detail of the carrying value of properties, plant and equipment:

| Concept | 2016 | 2015 |
|---|---|---|
| Cost | 23,810,139 | 21,275,133 |
| Accumulated depreciation and impairment | (3,080,187) | (2,802,594) |
| **Total** | **20,729,952** | **18,472,539** |

*- Figures expressed in millions of Colombian pesos -*

The following is the detail of the carrying value of properties, plant and equipment that are temporarily out of service, mainly because some generation plants are undergoing a modernization process. These assets are expected to be incorporated to the operation in the medium term:

| Properties, plant and equipment that are temporarily out of service | 2016 | 2015 |
|---|---|---|
| Plants, ducts and tunnels | 25,529 | 26,153 |
| Land and buildings | 7,098 | 7,157 |
| Machinery & equipment | 41 | 49 |
| Other property, plant and equipment | 30 | 60 |
| **Total properties, plant and equipment that are temporarily out of service** | **32,698** | **33,419** |

*- Figures expressed in millions of Colombian pesos -*

This information refers to the components of the Power General Plants of: Rio Abajo, Dolores, Calera, El Limon and Piedras.

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

| 2016 | Network, lines and cables | Plants, ducts and tunnels | Constructions in progress[1] | Land and Buildings | Machinery & Equipment | Communication and Computer Equipment | Furniture & Fixtures & Office Equipment | Other property, plant and equipment[2] | Total |
|---|---|---|---|---|---|---|---|---|---|
| Cost as of January | 3,919,606 | 6,859,853 | 4,904,192 | 4,959,471 | 139,192 | 170,423 | 47,700 | 274,696 | 21,275,133 |
| Additions [3] | 30,057 | 14,027 | 2,626,508 | 5,449 | 9,640 | 12,492 | 659 | (29,106) | 2,669,726 |
| Advances payments (amortized) made to third parties | (7) | - | (27,743) | - | - | - | - | - | (27,750) |
| Transfers (-/+) | 488,255 | 227,921 | (836,544) | 48,829 | 17,371 | 1,602 | 5,346 | (11,157) | (58,377) |
| Disposals (-) | (319) | (16,116) | - | (1,879) | (1,184) | (23,082) | (569) | (2,016) | (45,165) |
| Other changes | (675) | 47,392 | (18,753) | 27,259 | 82 | (56) | (111) | (58,566) | (3,428) |
| **Cost in books as of December 31** | **4,436,917** | **7,133,077** | **6,647,660** | **5,039,129** | **165,101** | **161,379** | **53,025** | **173,851** | **23,810,139** |
| **Accumulated depreciation and impairment** | | | | | | | | | |
| Accumulated depreciation and impairment as of January 1 | (754,425) | (1,117,647) | - | (704,973) | (70,935) | (91,682) | (19,912) | (43,020) | (2,802,594) |
| Depreciation of the period | (130,976) | (191,207) | - | (55,817) | (10,221) | (28,589) | (3,847) | (9,668) | (430,325) |
| Impairment of the period (see notes 7 and 29) | (418,382) | (86,876) | - | (55,818) | (1,721) | (305) | (16) | (1,311) | (564,429) |
| Reversal of loss of impairment (-) (see notes 7 and 28) | 192,420 | 183,011 | - | 304,978 | 2,957 | 19 | 185 | 1,979 | 685,549 |
| Disposals (-) | 119 | 7,295 | - | 142 | 811 | 21,363 | 508 | 1,684 | 31,922 |
| Other changes | (273) | 147 | - | (36) | (69) | (52) | (161) | 134 | (310) |
| **Accumulated depreciation and impairment as of December 31** | **(1,111,517)** | **(1,205,277)** | **-** | **(511,524)** | **(79,178)** | **(99,246)** | **(23,243)** | **(50,202)** | **(3,080,187)** |
| **Property, plant & equipment as of December 31** | **3,325,400** | **5,927,800** | **6,647,660** | **4,527,605** | **85,923** | **62,133** | **29,782** | **123,649** | **20,729,952** |

| **Advances payments made to third parties** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Balance as of January 1, 2016 | 6 | - | 48,093 | - | - | - | - | - | 48,099 |
| Movement (+) | (7) | - | 22,262 | - | - | - | - | - | 22,255 |
| Movement (-) | 1 | - | (50,005) | - | - | - | - | - | (50,004) |
| **Balance December 31, 2016** | **-** | **-** | **20,350** | **-** | **-** | **-** | **-** | **-** | **20,350** |

*- Figures expressed in millions of Colombian pesos -*

| 2015 | Network, lines and cables | Plants, ducts and tunnels | Constructions in progress 1 | Land and Buildings | Machinery & Equipment | Communication and Computer Equipment | Furniture & Fixtures & Office Equipment | Other property, plant and equipment 2 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Cost as of January | 3,661,625 | 6,757,321 | 3,140,557 | 4,923,084 | 140,807 | 156,365 | 42,424 | 192,394 | 19,014,577 |
| Additions [3] | 29,027 | 21,448 | 2,089,230 | 24,279 | 5,192 | 27,747 | 4,781 | 95,957 | 2,297,661 |
| Advances payments (amortized) made to third parties | 6 | - | 16,732 | - | - | - | - | (137) | 16,601 |
| Transfers (-/+) | 215,755 | 78,706 | (304,107) | 21,458 | 2,927 | 760 | 489 | (18,074) | (2,086) |
| Disposals (-) | (140) | (10,678) | - | (3,206) | (922) | (14,451) | (82) | (1,934) | (31,413) |
| Other changes | 13,333 | 13,056 | (38,220) | (6,144) | (8,812) | 2 | 88 | 6,490 | (20,207) |
| **Cost in books as of December 31** | **3,919,606** | **6,859,853** | **4,904,192** | **4,959,471** | **139,192** | **170,423** | **47,700** | **274,696** | **21,275,133** |
| **Accumulated depreciation and impairment** | | | | | | | | | |
| Accumulated depreciation and impairment as of January 1 | (634,709) | (930,804) | - | (647,538) | (63,545) | (75,283) | (16,490) | (34,252) | (2,402,621) |
| Depreciation of the period6 | (119,642) | (190,310) | - | (54,841) | (10,102) | (29,193) | (3,324) | (10,353) | (417,765) |
| Disposals (-) | 16 | 5,232 | - | 353 | 452 | 12,944 | 61 | 1,310 | 20,368 |
| Transfers (-/+) | - | - | - | - | - | - | - | - | - |
| Other changes | (90) | (1,765) | - | (2,947) | 2,260 | (150) | (159) | 275 | (2,576) |
| **Accumulated depreciation and impairment as of December 31** | **(754,425)** | **(1,117,647)** | **-** | **(704,973)** | **(70,935)** | **(91,682)** | **(19,912)** | **(43,020)** | **(2,802,594)** |
| **Property, plant & equipment as of December 31** | **3,165,181** | **5,742,206** | **4,904,192** | **4,254,498** | **68,257** | **78,741** | **27,788** | **231,676** | **18,472,539** |

| **Advances payments made to third parties** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Balance as of January 1, 2015 | - | - | 31,361 | - | - | - | - | 137 | 31,498 |
| Movement (+) | 7 | - | 40,446 | - | - | - | - | - | 40,453 |
| Movement (-) | (1) | - | (23,714) | - | - | - | - | (137) | (23,852) |
| **Balance December 31, 2015** | **6** | **-** | **48,093** | **-** | **-** | **-** | **-** | **-** | **48,099** |

*- Figures expressed in millions of Colombian pesos -*

Properties, plant and equipment present a variation in respect to 2015, due mainly to the construction of infrastructure in different businesses of the company, of which, the most relevant one corresponds to the construction of the Ituango Hydroelectric project, which shows a variation in respect to 2015 of $1,721,054.

At the closing of the period, an impairment test made to the assets connected to the CGU which in turn have intangibles with an indefinite useful life, obtaining as result impairment of some components associated to the CGU of Sanitation and reversal thereof in the components of the assets of the CGU Water Provision; this implied their recognition in the financial statements (see Note 7 Impairment of assets).

[1]Includes capitalization of borrowing costs for $259,890 (2015: $148,375), the average weighted rate used to determine the amount of the borrowing costs was of 6.34%. (2015: 8.15%), which is the specific effective interest rate of this type of loan.

Includes transportation, traction and lifting equipment, replacement assets, property, plant and equipment in transit, property, plant and equipment in set up and medical and scientific equipment, Replacement assets and kitchen and dining equipment.

[3]Includes the purchases, capitalizable disbursements that meet the recognition criteria, the goods received from third parties and the costs for dismantling, removal and restoration of elements of property, plant and equipment. At the closing of periods 2016 and 2015 no grants were received from the government.

The main projects under construction are the following:

| Project | 2016 | 2015 |
|---|---|---|
| Ituango | 5,660,416 | 3,939,363 |
| Nueva Esperanza | 390,603 | 257,097 |
| Otros proyectos | 380,917 | 607,384 |
| Línea Bello Guayabal | 76,979 | 6,042 |
| Interconexión la ceja-Sonsón | 38,825 | 17,327 |
| Linea Caucasia- Cerromatoso | 25,331 | 9,493 |
| Distrito Frío | 25,257 | 33,686 |
| Confiabilidad Guayabal | 19,345 | 16,081 |
| Conducciones | 15,515 | 13,516 |
| San Lorenzo | 14,471 | 4,203 |
| **Total** | **6,647,660** | **4,904,192** |

*- Figures expressed in millions of Colombian pesos -*

The Ituango hydroelectric project shows a physical progress of 65%, where the current timetable is designed to have all works completed in the plant site, necessary for the first power generation, in the last quarter of 2018.

In order to guarantee the connection to the national interconnected system, the company Interconexión Electrica S.A. (ISA), among other actions, carries out the processes for obtaining the required environmental license with the national authority of environmental licenses ALNA and other departmental and municipal organizations. The initial target to meet in this process is to obtain the license at the latest in the first week of April 2017, in order that this front will be adequately synchronized with the needs of the works at the site of the plant. Any difficulty that may arise in this process, if no alternative strategies are established to recover the impact generated, may affect the current conditions of the entry in operation of the Project, provided for the last quarter of 2018.

As of December 31, 2016 there are restrictions on the realization of properties, plant and equipment associated to some equipment of the automotive park for a net carrying value of $15. These restrictions occur by theft, personal injuries and attachments and have been affected as guarantee for the compliance of obligations.

The most significant commitments of acquisition of property, plant and equipment of the Company as of the report date amount to $1,023,438 (2015: $2,522,876).

The Company obtained income for compensations from third parties for loss of property, plant and equipment for $404,340 corresponding to lost profits and $67,758 corresponding to consequential damage related to the loss in the Guatape Plant, recorded in other income for indemnifications (See note 28 Other income).

The following is the historic cost of properties, plant and equipment fully depreciated that continue in operation as of December 31 2016 and 2015:

| Group | 2016 | 2015 |
|---|---|---|
| Plants, ducts and tunnels | 14,091 | 9,702 |
| Networks, lines and cables | 4,830 | 2,025 |
| Machinery and equipment | 2,920 | 1,992 |
| Communication and Computer equipment | 1,443 | 3,957 |
| Other property, plant and equipment | 921 | 652 |
| Buildings | 221 | 48 |
| **Total** | **24,426** | **18,376** |

*- Figures expressed in millions of Colombian pesos -*

# Note 5. Investment property

The fair value of investment properties is determined by the Real Estate Asset Negotiation and Administration Unit of EPM. For the determination of the fair value of the investment properties the comparative or market value is used, which consists in deducting the price by comparison of transactions, demand and supply and appraisal of similar or comparable real estate, prior adjustments of time, conformation and location; the comparative or market method, which consists in deducing the price by comparison of transactions, supply and demand and appraisals of similar or comparable properties, prior adjustments of time, conformation, and location; and the residual method that is applied only to the buildings and is based on the determination of the updated cost of the construction, less the depreciation for age and conservation condition. And the income method, which is used to determine the possible value of a good according to its ability to generate income taking into account the probable monthly value of the lease that would be willing to pay tenants in the leases market. See note 39 Measurement of fair value on a recurring and non-recurring basis.

| Investment properties | 2016 | 2015 |
|---|---|---|
| **Book value as of January 1** | 157,213 | 138,212 |
| Net profit or loss for adjustment of fair value[1] | (12,484) | 12,383 |
| Disposals (-) | (1,105) | - |
| Transfers[2] (-/+) | (26,996) | 6,617 |
| **Book value as of December 31** | 116,628 | 157,213 |

*- Figures expressed in millions of Colombian pesos -*

[1] See note 18 Other accumulated comprehensive income, note 26 Total income and note 29 – Other expenses.

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

The revenues for leasing of investment properties of the period amounted $610 (2015: $584). As of December 31, 2016 and 2015 there were no direct expenses related to investment properties.

As of December 31, 2016 and 2015 there are no contractual obligations to acquire, construct or develop investment properties, or for repairs, maintenance or improvements thereof.

As of December 31, 2016 there are contractual restrictions on the investment property for $1,970 (2015: $16,970).

# Note 6. Other intangibles assets

The following is the detail of the book value of the intangible assets:

| Intangibles | 2016 | 2015 |
|---|---|---|
| Goodwill | 260,950 | 260,950 |
| **Total goodwill** | **260,950** | **260,950** |
| Other intangibles | 547,770 | 442,075 |
| Accumulated depreciation and impairment | (270,660) | (197,308) |
| **Total other intangibles** | **277,110** | **244,767** |
| **Total** | **538,060** | **505,717** |

*- Figures expressed in millions of Colombian pesos -*

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

| 2016 | Goodwill | Concessions and similar rights | Capitalized development expenses | Software & information technology applications | Licenses | Rights | Other intangible assets[1] | Total |
|---|---|---|---|---|---|---|---|---|
| Cost as of January | 260,950 | 237,897 | 20,600 | 75,568 | 39,119 | 54,244 | 14,647 | 703,025 |
| Additions [2] | - | 121 | 10,861 | 17,645 | 18,957 | - | 15 | 47,599 |
| Transfers (-/+) | - | 41,380 | - | 12,840 | 49 | - | 4,108 | 58,377 |
| Disposals (-) | - | - | - | (214) | (968) | - | - | (1,182) |
| Other changes | - | 3,760 | 1 | (1) | - | (6,813) | 3,954 | 901 |
| **Cost in books as of December 31** | **260,950** | **283,158** | **31,462** | **105,838** | **57,157** | **47,431** | **22,724** | **808,720** |
| Accumulated amortization and impairment as of January 1 | - | (129,416) | - | (43,605) | (21,360) | (496) | (2,431) | (197,308) |
| Amortization of period[3] | - | (18,923) | - | (10,555) | (5,652) | (308) | (1,211) | (36,649) |
| Impairment of the period (see notes 7 and 29) | - | (63,075) | - | (207) | (32) | - | (776) | (64,090) |
| Reversal of loss of impairment (-) (see notes 7 and 28) | - | 24,189 | - | 143 | 75 | - | 1,257 | 25,664 |
| Disposals (-) | - | - | - | 200 | 895 | - | - | 1,095 |
| Other changes | - | (254) | - | 15 | (24) | - | 891 | 628 |
| **Accumulated amortization and impairment as of December 31** | **-** | **(187,479)** | **-** | **(54,009)** | **(26,098)** | **(804)** | **(2,270)** | **(270,660)** |
| **Intangible assets as of December 31** | **260,950** | **95,679** | **31,462** | **51,829** | **31,059** | **46,627** | **20,454** | **538,060** |

*- Figures expressed in millions of Colombian pesos -*

| 2015 | Goodwill | Concessions and similar rights | Capitalized development expenses | Software & information technology applications | Licenses | Rights | Other intangible assets[1] | Total |
|---|---|---|---|---|---|---|---|---|
| Cost as of January | 260,950 | 243,203 | 20,600 | 77,980 | 30,013 | 40,062 | 11,924 | 684,732 |
| Additions [2] | - | 566 | - | 15,633 | 9,311 | 17 | 1,379 | 26,906 |
| Transfers (-/+) | - | 323 | - | 255 | - | - | 1,344 | 1,922 |
| Disposals (-) | - | (9,317) | - | (18,193) | (205) | - | - | (27,715) |
| Other changes | - | 3,123 | - | (107) | - | 14,164 | - | 17,180 |
| **Cost in books as of December 31** | **260,950** | **237,898** | **20,600** | **75,568** | **39,119** | **54,243** | **14,647** | **703,025** |
| Accumulated amortization and impairment as of January 1 | - | (114,893) | - | (54,075) | (17,877) | (188) | (2,173) | (189,206) |
| Amortization of period[3] | - | (18,635) | - | (7,722) | (3,663) | (308) | (753) | (31,081) |
| Disposals (-) | - | 3,967 | - | 18,193 | 188 | - | - | 22,348 |
| Transfers (-/+) | - | 128 | - | - | - | - | - | 128 |
| Other changes | - | 17 | - | (1) | (8) | - | 495 | 503 |
| **Accumulated amortization and impairment as of December 31** | **-** | **(129,416)** | **-** | **(43,605)** | **(21,360)** | **(496)** | **(2,431)** | **(197,308)** |
| **Intangible assets as of December 31** | **260,950** | **108,482** | **20,600** | **31,963** | **17,759** | **53,747** | **12,216** | **505,717** |

*- Figures expressed in millions of Colombian pesos -*

[1] Includes easements, intangibles related to customers and other intangibles corresponding to premiums in Gas Service Stations.

[2] Includes the purchases, capitalizable disbursements that meet the recognition criteria and the concessions. In 2016 the purchases associated to capitalized disbursements for development were intended to information technology projects: Asset management, commercial information system and productivity in the field. At the closing of 2016 and 2015 no Government grants were received.

[3] See note 29 Costs for rendering of services and note 30 Administration expenses. At the closing of the periods the impairment test was performed to the assets for those intangibles with indefinite useful life. The detail of the impairment recognized in the comprehensive income statement is in note 7.

The useful lives of the intangible assets are:

| | |
|---|---|
| Concessions and similar rights | As per the contract's effective term |
| Easements | Indefinite |
| Capitalized disbursement for development | Indefinite |
| Software and information technology applications | Indefinite/ definite 3 to 5 years |
| Licenses | Indefinite/ definite 3 to 5 years |
| Rights | As per the contract's effective term |
| Other intangible assets | Indefinite/ definite 7 to 15 years |

The amortization of intangibles is recognized as costs and expenses in the comprehensive income statement, section of profit and loss of the period, in the lines of costs for rendering services and administration expenses.

As of December 31, 2016 and 2015 no restrictions were identified on the realization of intangible assets and no contractual commitments for the acquisition of such assets were identified.

The book value as of the report date and the remaining amortization period for significant assets are:

| Significant intangible assets | Useful life | 2016 | 2015 |
|---|---|---|---|
| Goodwill Ituango Hydroelectric Project | Indefinite | 177,667 | 177,667 |
| Goodwill Espíritu Santo | Indefinite | 82,980 | 82,980 |

*- Figures expressed in millions of Colombian pesos -*

The following intangible assets have an indefinite useful life: goodwill and easements the latter are agreed perpetually. By definition an easement is the actual right, perpetual or temporary on someone else's real estate, by virtue of which the property can be used, or exercise certain disposal rights, or prevent the owner from exercising some of his property rights. In EPM the easements are not treated individually, since they are crated for public utility projects, where the general interest prevails over the private one, considering that the objective is to improve the quality of life of the community; the above-mentioned projects do not have a defined term and thus they are created perpetually supported in their use and in the civil code in its article 2970 and 3009. As of December 31, 2016 and 2015 they have a carrying value of $279,803 and $270,908 respectively.

| Intangible assets with indefinite useful life | 2016 | 2015 |
|---|---|---|
| **Goodwill** | | |
| Goodwill Ituango Hydroelectric Project | 177,667 | 177,667 |
| Goodwill Espíritu Santo | 82,980 | 82,980 |
| Goodwill Surtigas Necoclí | 303 | 303 |
| **Subtotal goodwill** | **260,950** | **260,950** |
| **Other intangibles** | | |
| Easements | 18,518 | 9,958 |
| **Subtotal other intangibles assets** | **18,518** | **9,958** |
| **Total intangible assets with indefinite useful life** | **279,468** | **270,908** |

*- Figures expressed in millions of Colombian pesos -*

# Note 7. Impairment of assets

### 7.1 Impairment of investments in subsidiaries, associates and Joint ventures

The net value of impairment losses recognized in the comprehensive income statement, related to the investments in subsidiaries and associates is as follows:

| Investments | Carrying value | | Impairment losses (reversal) | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| **Subsidiary** | | | | |
| Hidroecológica del Teribe S.A. HET | 86,963 | 86,963 | - | - |
| Aguas de Malambo S.A. E.S.P. | 1,641 | 1,641 | - | 1,641 |
| **Total subsidiaries** | **88,604** | **88,604** | **-** | **1,641** |

*- Figures expressed in millions of Colombian pesos -*

The key assumptions used by the company in the determination of the value in use are the following:

| Item | Key assumption |
|---|---|
| Business plan update | A general update of the business plan was made, which forms part of the strategy review process and of the company's management model, allowing to estimate new capital needs of the company. |
| Income | Rate aspects: the rate applied corresponds to one denominated by the regulation "reduced costs" that is not directly associated to the investments and actual costs of the company which generates an unbalance and causes income to be lower than expected. |
| | Commercial aspects: the improvement of the receivables has been difficult because of the poor payment culture in the region. |
| Costs and expenses | The purchase of water in block has become necessary from Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla S.A. E.S.P. - AA for longer time than estimated given that initially it was considered that the neighborhoods served through these means would be interconnected to the system. Likewise, by resolution from the Water Regulation Commission the price was increased by three times is initial value. |
| | The company paid obligations generated before the entry of EPM which by stockholders' agreement should cover the previous owner. The recovery of those costs and expenses is in process. |
| Investment | Master plan: for the performance of the major works of water words and waste water it is necessary to have a master plan, which makes a diagnosis of the current infrastructure, identifies the needs and sets out the solutions in time of a town both at the investment and operating levels. The contract for its preparation was added in time to include a greater scope of customers. Similarly, there were delays due to the existence of problems in the networks that did not permit to make the studies, and that the length thereof exceeded that estimated in the contract. The fact of not having had a final master plan but only in 2013 implied: delays in the investments plant, less new subscribers and the non improvement in the continuity of the service. |

### 7.2 Impairment of Cash Generating Units

The carrying value of goodwill and intangible assets with indefinite useful lives associated with each CGU is below:

| Cash Generating Unit | Carrying value | | Impairment losses (reversal) | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| **Power Generation Segment** | | | | |
| Goodwill | 260,647 | 260,647 | - | - |
| Easements | 444 | 444 | - | - |
| **CGU - Generation -** | **261,091** | **261,091** | **-** | **-** |
| **Power Transmission Segment** | | | | |
| Easements | 2,402 | 241 | - | - |
| **CGU - Transmission** | **2,402** | **241** | **-** | **-** |
| **Power Distribution Segment** | | | | |
| Easements | 9,220 | 3,320 | - | - |
| **CGU - Distribution -** | **9,220** | **3,320** | **-** | **-** |
| **Gas Segment** | | | | |
| Goodwill | 303 | 303 | - | - |
| Easements | 3,481 | 3,481 | - | - |
| **CGU - Gas -** | **3,784** | **3,784** | **-** | **-** |
| **Sanitation Segment** | | | | |
| Easements | 454 | 1,350 | 776 | - |
| Licenses | - | - | 32 | - |
| Software | - | - | 207 | - |
| Concessions | - | - | 63,076 | - |
| Lands | - | - | 55,404 | - |
| Replacement goods | - | - | 28 | - |
| Buildings | - | - | 413 | - |
| Plants, ducts and tunnels | - | - | 86,876 | - |
| Network, lines and cables | - | - | 418,382 | - |
| Machinery & Equipment | - | - | 1,693 | - |
| Furniture & Fixtures & Office Equipment | - | - | 16 | - |
| Communication and Computer Equipment | - | - | 305 | - |
| Traction and lifting equipment | - | - | 1,311 | - |
| **CGU - Sanitation (see note 29)** | **454** | **1,350** | **628,519** | **-** |

| Water Provision Segment | | | | - |
|---|---|---|---|---|
| Easements | 2,517 | 2,841 | (1,257) | - |
| Licenses | - | - | (75) | - |
| Software | - | - | (143) | - |
| Concessions | - | - | (24,189) | - |
| Lands | - | - | (191,596) | - |
| Replacement goods | - | - | (141) | - |
| Buildings | - | - | (113,382) | - |
| Plants, ducts and tunnels | - | - | (183,012) | - |
| Network, lines and cables | - | - | (192,420) | - |
| Machinery & Equipment | - | - | (2,957) | - |
| Furniture & Fixtures & Office Equipment | - | - | (185) | - |
| Communication and Computer Equipment | - | - | (19) | - |
| Traction and lifting equipment | - | - | (1,349) | - |
| Medical and scientific equipment | - | - | (489) | - |
| **CGU - Water Provision - (see note 28)** | **2,517** | **2,841** | **(711,214)** | **-** |

*- Figures expressed in millions of Colombian pesos -*

The goodwill is assigned mainly to the Generation segment/CGU, which showed a balance as of December 31, 2016 for $260,647 generated as a result of the liquidation of EPM affiliate Ituango S.A. E.S.P. and Espiritu Santo, which assets were transferred to EPM, additionally, a goodwill was generated in the Gas CGU resulting from the business combination with Surtidora de Gas del Caribe S.A. E.S.P. in the municipality of Necocli for $303.

The easement intangible with indefinite useful life is assigned to the CGUs: Generation, Transmission, Distribution, Gas, Water Supply and Sanitation, which report a balance in 2015 for 2016 for $18,518 and in 2015 for $9,959.

At the closing of periods 2016 y 2015 impairment tests were made to the CGUs that had associated intangible assets with indefinite useful life and that presented indication of impairment but this was not evidenced with the exception of the Water Segment that shows an impairment in the CGU of Sanitation and a reversal of the impairment in the CGU of Water Provision.

**Impairment of fixed assets and intangibles**

**CGU Sanitation**

The impairment of its assets was calculated based on IAS 36 Impairment of assets, seeking to make sure that the value of assets that is being accounted for with report date December 31, 2016 reflects their recoverable value through the their use or their sale.

**Value in use:** It was based on the most recent financial projections, estimating the cash flows that the Group expects to obtain from its assets for a period of 20 years[1].

The discount rate that was used for the valuation reflects the capital structure of the company, which considers the return that the owner would require from this type of investments, taking into account: the risk free rate, the corresponding economic sector, the market, the country where the investment is located and the indebtedness.

Based on the above criteria, the impairment value of the assets amounts as of December 31, 2016 to $628,519 and results from:

Value in use: $514,857.

Carrying value of the CGU: $1,143,376.

The key assumptions used by the company in the determination of the value in use of the CGU Sanitation are the following:

**Sanitation**

| Concept | Key assumption |
|---|---|
| Business plan update | The plan of the CGU was modified with the following facts; (I) rate change with Resolutions CRA 688 of 2014 and CRA 735 of 2015 dispatches by the Commission for Regulation of Drinking Water and Basic Sanitation -CRA, which force compliance with the indicators of quality and coverage and, therefore, the revision (Ii) review of demand projections and (iii) changes in the remuneration and start-up of the Aguas Claras Wastewater Treatment Plant |
| Income | In the income of the CGU the adjustments for the implementation of the new tariff framework are considered, which implies a decrease in the invoice of the CGU Sanitation of -8%, since the most significant investments were recognized in the previous tariff framework and Are now mostly reflected in investments for sustainability, in addition to a review of the projection of demand that showed a drop of approximately six million cubic meters by 2016, as a result of the penalties to high consumption set by the government , To mitigate the effects of the "El Niño" climate phenomenon, this saving behavior of users is maintained over time.<br>The invoice is also impacted by the indexation for inflation and the vegetative growth of the dumping.<br>In August 2017, the variable charge of waste water was increased by the start-up of the Aguas Claras Wastewater Treatment Plant. |
| Cost and expenses | The costs and expenses reflect from August 2017, the recognition to the subsidiary Aguas Nacionales for the operation and remuneration of the investment of the Aguas Claras plant, the other costs and expenses behave consistently with the operation of the business.<br>There was a shift in the start-up of the Aguas Claras Wastewater Treatment Plant from April to August 2017. With respect to the previous business plan, there was a decrease in the payments that should be recognized to the subsidiary National Waters for the remuneration of the PTAR Aguas Claras for review and reduction in the profitability required by the regulation. |
| Invesment | The investments respond to the needs of the market, the completion of the Aguas Claras plant and compliance with the new regulation. |

[1] The company uses 20 years for the financial projections taking into account that the financial theory states that when cash flows are being projected to perform valuations with them, it is required to project as many years as may be necessary until the cash flows stabilize. It is understood that a cash flow stabilized in the year in which there are not atypical growths of revenues, costs and expenses, and that no significant investments of the business are being made. In general, the public utility business is intensive in capital investments and its recovery period is higher than 20 years; for this reason the financial evaluation of the investments in the public utility sector must consider a period longer than 5 years, according to the provisions of IAS 36, where the actual revenues of the project can be observed and thus the recovery of the investment. In the case of the CGU of water provision and sanitation, the important investments are planned of up to 15 or 20 subsequent years because the cash flow of the companies of this sector is slow in the recovery of investments.

**CGU Water Provision**

The impairment of its assets was calculated based on IAS 36, seeking to make sure that the value of the assets that are being accounted for with closing as of December 31, 2016 reflects the recoverable value through their utilization or their sale.

**Value in use:** it was based on the most recent financial projections, estimating the cash flows that the Group expects to obtain from its assets in a period of 20 years[3].

The discount rate that was used for the valuation reflects the company's capital structure, which considers the return that the owner would require from this type of investments, taking into account: The risk-free rate, the corresponding economic sector, the market, the country where the investment is located and the indebtedness.

In the revenues of the CGU are considered the adjustments for implementation of the new rate framework, which implies an increase in the billings of the CGU Water Provision of 46%.

Based on the above criteria a reversal of impairment was identified in the CGU Water Provision for $711,214. The carrying value of each asset was increased considering the lower between the value in use of $1,991,982 and the carrying value that was determined (net of depreciation) for a value of $1,280,768 as if a loss for impairment had not been recognized in previous periods. This increase was recognized in the income statement immediately.

The key assumptions used by the company in the determination of the value in use of the CGU Water Provision are the following:

**Water Provision**

| Concept | Key assumption |
|---|---|
| Business plan update | The CGU plan had changes as a result of the tariff change with Resolutions CRA 688 of 2014 and CRA 735 of 2015 issued by the Commission of Regulation of Drinking Water and Basic Sanitation -CRA, which obligate the fulfillment of indicators of quality and coverage And therefore review of investments and operations and by revision in demand projections. |
| Income | In the income of the CGU the adjustments for the implementation of the new tariff framework are considered, which implies an increase in the invoice of the CGU Provision of 46%, since it recognizes a higher level of investments as a result of the exigencies as to quality and coverage, an increase that will be applied in a staggered way until the year 2022. A review of the projection of the demand that showed a fall of approximately six million cubic meters for the year 2016, product of the penalties to the high consumptions Established by the government, to mitigate the effects of the "El Niño" climate phenomenon, this saving behavior of users is maintained over time. The invoice is also impacted by the indexation for inflation and the vegetative growth of consumption. |
| Cost and expenses | The costs and expenses correspond to the needs of the operation of the business, taking into account also the expenses of the projects of prepaid water, massive change of meters and the connection of users of the Valley of San Nicolás |
| Invesment | Investments respond to the needs of the market and compliance with the new regulation. |

The value in use and the book value of the CGU at the closing of 2016 that present indefinite useful life is detailed below:

| UGE | Value in use | carrying value |
|---|---|---|
| Generation | 27,181,671 | 13,540,281 |
| Transmission | 7,585,702 | 3,543,490 |
| Distribution | 1,991,982 | 1,280,768 |
| Gas | 1,234,882 | 702,074 |
| Water Provision | 1,175,399 | 761,175 |
| Sanitation | 514,857 | 1,143,376 |
| **Total UGE** | **39,684,493** | **20,971,164** |

*- Figures expressed in millions of Colombian pesos -*

# Note 8. Investment in subsidiaries

The detail of the subsidiaries of EPM as of the date of the period reported is as follows:

| Name of subsidiary | Location (country) | Business | % Ownership and voting rights | | Date of creation |
|---|---|---|---|---|---|
| | | | 2016 | 2015 | |
| Empresa de energía del Quindío S.A. E.S.P. EDEQ | Colombia | Provides public utilities of electric power purchase and sale and distribution of electric power. | 19.26% | 19.26% | 12/22/1988 |
| Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC | Colombia | Provides public utilities of electric power, operation of electric power generation plants, transmission and subtransmission lines and distribution networks as well as the commercialization, import, distribution and sale of electric power. | 24.44% | 24.44% | 9/9/1950 |
| Electrificadora de Santander S.A. E.S.P. ESSA | Colombia | Provides public utilities of electric power purchase and sale, commercialization and distribution of electric power. | 0.28% | 0.28% | 9/16/1950 |
| Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS | Colombia | Provides public utilities of electric power, purchase, export, import, distribution and sale of electric power, construction and operation of generation plants, substation, transmission lines and distribution networks. | 12.54% | 12.54% | 10/16/1952 |
| Hidroecológica del Teribe S.A. HET | Panamá | Finances the construction of the Bonyic hydroelectric project required to meet the growing demand of energy of the Panama Isthmus. | 99.19% | 99.19% | 11/11/1994 |
| Gestión de Empresas Eléctricas S.A. GESA | Guatemala | Provides advisory and consultancy services to electric energy distribution, generation and transportation companies. | 99.98% | 99.98% | 12/17/2004 |
| Aguas Nacionales EPM S.A. E.S.P. [1] | Colombia | Provides public utilities of water, sewage and waste collection, treatment and utilization of waste, complementary activities and engineering services proper of these public utilities. | 99.97% | 99.97% | 11/29/2002 |
| Aguas de Urabá S.A. E.S.P. [2] | Colombia | Guarantee the rendering of domiciliary public utilities of water, sewage and waste collection and offset the infrastructure backlog of these utilities in the member municipalities. | 67.25% | 72.66% | 1/18/2006 |
| Empresas Públicas del Oriente S.A. E.S.P. En Liquidación [3] | Colombia | Provides water and sewage utilities to the rural and suburban zones of the municipalities of Envigado, Rionegro and El Retiro in the so-called San Nicolas Valley. | 0.00% | 56.00% | 11/12/2009 |

| | | | | | |
|---|---|---|---|---|---|
| Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. | Colombia | Provides domiciliary public utilities of water and sewage, as well as other complementary activities proper of each of these utilities. | 56.00% | 56.00% | 11/22/1999 |
| Regional de Occidente S.A. E.S.P. [2] | Colombia | Provides domiciliary public utilities of water, sewage and waste collection, as well as other complementary activities proper of each of these utilities and the treatment and utilization of waste. | 0.00% | 59.98% | 12/26/2006 |
| Aguas de Malambo S.A. E.S.P. | Colombia | Engaged in guaranteeing the rendering of domiciliary public utilities of water and waste collection in the jurisdiction of the Municipality of Malambo Department of Atlántico. | 94.98% | 84.99% | 11/20/2010 |
| Empresas Varias de Medellín S.A. E.S.P. [4] | Colombia | Subsidiary engaged in the rendering of the public utility of waste collection within the framework of the integral management of solid waste. | 64.98% | 64.98% | 1/11/1964 |
| EPM Inversiones S.A. | Colombia | Engaged in the investment of capital in national or foreign companies organized as public utilities. | 99.99% | 99.99% | 8/25/2003 |
| Maxseguros EPM Ltd [5] | Bermuda | Negotiation, contracting and management of reinsurance for the policies that cover the equity. | 100.00% | 100.00% | 4/23/2008 |
| Panamá Distribution Group S.A. PDG | Panamá | Capital investment in companies. | 100.00% | 100.00% | 10/30/1998 |
| Distribución Eléctrica Centroamericana DOS S.A. DECA II | Guatemala | It makes capital investments in companies engaged in the distribution and commercialization of electric power and to provide telecommunications services. | 99.99% | 99.99% | 3/12/1999 |
| EPM Capital México S.A. de CV | México | Develops infrastructure projects related to electric power, lighting, gas, telecommunications, sanitation, water treatment plants, sewage, wastewater treatment, buildings, as well as their operation, studies and services. | 38,53% | 42,50% | 5/4/2012 |
| EPM Chile S.A. [6] | Chile | Develops energy projects , lighting , gas , telecommunications , sanitation, water treatment plants , sewage and wastewater treatment , as well as the provision of such services and participation in all kinds of tenders. | 99.99% | 99.99% | 2/22/2013 |

1 Subsidiary liquidated, as per minutes No. 012 of the General Stockholders' Meeting of January 29, 2016, registered at the Chamber of Commerce of Eastern Antioquia on February 24, 2016 under number 33233 of book IX.

2 In March and December 2016, EPM capitalized Aguas de Malambo S.A. E.S.P. by $9,000 and $4,999, respectively.

3 In June 2016, EPM Inversiones S.A. reimbursed contributions to EPM for $165,000.

4 In October 2016, EPM capitalized EPM Chile S.A. for $87,744. In June and November 2015, EPM capitalized EPM Chile S.A. by $663,749 and $221,120, respectively.

5 In December 2015, EPM capitalized Aguas Nacionales EPM S.A. by $250,000.

6 On December 23, 2015, in accordance with public deed No. 4934 of Notary Third of Medellin, the approval of the merger for absorption was approved whereby Aguas de Urabá S.A. E.S.P. absorbs Regional de Occidente S.A. E.S.P., as evidenced in minutes 17 and 16 of the general stockholders' meetings of the companies, respectively, entered into on October 23, 2015. Based on the merger commitment, it was established that for accounting purposes, the final operation is formalized based on the figures resulting from accounting of the two companies, as of the last day of the month when the solemnization of the respective deed takes place, that is as of December 31, 2015. Consequently, the operations of the Regional

de Occidente S.A. E.S.P. (absorbed company) are made by Aguas de Urabá S.A. E.S.P. (absorbing company) as of January 1, 2016.

7 In December 2015, EPM capitalized Empresas Varias de Medellin S.A. E.S.P. by $18.

8 In May 2015 EPM capitalized Maxseguros EPM Ltd. by $24,170.

9 The value of the investments in subsidiaries as of the report date was:

| Subsidiary | 2016 | | | | | 2015 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Value of investment | | | | Total | Value of investment | | | | Total |
| | Cost | Equity method | Impairment | Dividends | | Cost | Equity method | Impairment | Dividends | |
| Empresa de Energía del Quindío S.A. E.S.P. EDEQ | 28,878 | 8,095 | - | (2,615) | 34,358 | 28,878 | 4,955 | - | (3,388) | 30,445 |
| Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC | 140,663 | 2,609 | - | (5,128) | 138,144 | 140,663 | (10,045) | - | (3,485) | 127,133 |
| Electrificadora de Santander S.A. E.S.P. ESSA | 2,514 | (235) | - | (196) | 2,082 | 2,514 | (277) | - | (168) | 2,069 |
| Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS | 57,052 | (21,672) | - | (3,359) | 32,021 | 57,052 | (17,152) | - | (4,750) | 35,150 |
| Hidroecológica del Teribe S.A. HET | 346,067 | (259,104) | (86,963) | - | - | 346,067 | (209,172) | (86,963) | - | 49,932 |
| Gestión de Empresas Eléctricas S.A. GESA | 25,782 | 15,803 | - | (5,717) | 35,868 | 25,782 | 18,671 | - | (7,464) | 36,989 |
| Aguas Nacionales EPM S.A. E.S.P. | 1,292,115 | (16,855) | - | (2,819) | 1,272,441 | 1,292,115 | (23,756) | - | (3,700) | 1,264,659 |
| Aguas Regionales EPM S.A. E.S.P. (antes Aguas de Urabá S.A. E.S.P.) | 47,228 | 4,177 | - | - | 51,405 | 40,443 | 5,478 | - | - | 45,921 |
| Empresas Públicas del Oriente S.A. E.S.P. | - | - | - | - | - | 3,015 | 180 | - | - | 3,195 |
| Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. | 1,564 | 586 | - | - | 2,150 | 1,564 | 455 | - | - | 2,019 |
| Regional de Occidente S.A. E.S.P. | - | - | - | - | - | 6,785 | 2,085 | - | - | 8,870 |
| Aguas de Malambo S.A. E.S.P. | 38,218 | (23,568) | (1,641) | - | 13,009 | 24,218 | (18,246) | (1,641) | - | 4,331 |
| Empresas Varias de Medellín S.A. E.S.P. | 32,967 | 70,518 | - | - | 103,485 | 32,967 | 61,828 | - | - | 94,795 |
| EPM Inversiones S.A. | 1,561,331 | (267,197) | - | - | 1,294,134 | 1,726,331 | (289,690) | - | (97,041) | 1,339,600 |
| Maxseguros EPM Ltd | 63,784 | 63,845 | - | - | 127,629 | 63,784 | 65,883 | - | - | 129,667 |
| Panamá Distribution Group S.A. PDG | 238,117 | 222,398 | - | - | 460,515 | 238,117 | 245,562 | - | (32,000) | 451,678 |
| Distribución Eléctrica Centroamericana DOS SA DECA II | 1,009,257 | 727,153 | - | (71,699) | 1,664,712 | 1,009,257 | 712,082 | - | (102,303) | 1,619,036 |
| EPM Capital México S.A. de CV | 98,719 | (54,725) | - | - | 43,994 | 98,719 | 1,743 | - | - | 100,462 |
| Patrimonio Autónomo Financiación Social | 84,414 | 36,761 | - | - | 121,175 | 84,414 | 16,719 | - | - | 101,133 |
| EPM Chile S.A. | 1,031,779 | (385,798) | - | - | 645,981 | 944,035 | (190,486) | - | - | 753,549 |
| **Total** | **6,100,449** | **122,793** | **(88,604)** | **(91,533)** | **6,043,104** | **6,166,720** | **376,817** | **(88,604)** | **(254,300)** | **6,200,633** |

*- Figures expressed in millions of Colombian pesos -*

The financial information of the subsidiaries of the company as of the reporting period date is the following. All subsidiaries are accounted for by equity method in the separate financial statements:

| 2016 | Current assets | Non-current assets | Current liabilities | Non-current liabilities | Rendering of services | Result for the period Continuing operations | Other comprehensive income | Total comprehensive income |
|---|---|---|---|---|---|---|---|---|
| Empresa de energía del Quindío S.A. E.S.P. EDEQ | 58,814 | 181,259 | 37,713 | 36,883 | 230,078 | 35,550 | (1,651) | 230,078 |
| Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC | 214,039 | 809,952 | 127,844 | 392,748 | 673,293 | 70,585 | (1,926) | 673,293 |
| Electrificadora de Santander S.A. E.S.P. ESSA | 226,040 | 1,123,487 | 279,694 | 501,626 | 1,053,030 | 87,327 | (9,876) | 1,053,030 |
| Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS | 164,812 | 715,492 | 182,738 | 473,573 | 614,046 | 29,887 | (23,608) | 614,046 |
| Hidroecológica del Teribe S.A. HET | 24,431 | 466,699 | 38,342 | 349,803 | 46,277 | (50,545) | (7,374) | 46,277 |
| Gestión de Empresas Eléctricas S.A. GESA | 13,240 | - | 110 | - | 6,089 | 5,817 | (3,307) | 6,089 |
| Aguas Nacionales EPM S.A. E.S.P. | 209,955 | 1,161,370 | 85,134 | 14,625 | 759 | 10,992 | - | 759 |
| Aguas Regionales EPM S.A. E.S.P. (antes Aguas de Urabá S.A. E.S.P.) | 20,338 | 97,236 | 18,029 | 23,109 | 42,047 | 2,561 | - | 42,047 |
| Empresas Públicas del Oriente S.A. E.S.P. En Liquidación (EPO) | - | - | - | - | - | - | - | - |
| Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. | 877 | 3,250 | 159 | 129 | 1,540 | 273 | (39) | 1,540 |
| Regional de Occidente S.A. E.S.P. | - | - | - | - | - | - | - | - |
| Aguas de Malambo S.A. E.S.P. | 12,634 | 12,813 | 2,713 | 5,614 | 7,935 | (2,660) | - | 7,935 |
| Empresas Varias de Medellín S.A. E.S.P. | 160,705 | 127,129 | 47,798 | 199,306 | 185,950 | 17,213 | (3,731) | 185,950 |
| EPM Inversiones S.A. | 4,124 | 1,234,166 | 19 | 1,602 | 5 | 151,418 | (20,789) | 5 |
| Maxseguros EPM Ltd | 208,696 | - | 10,695 | 70,372 | 9,498 | 4,278 | (6,341) | 9,498 |
| Panamá Distribution Group S.A. PDG | 28,648 | 309,741 | 12 | - | - | 46,763 | (34,370) | - |
| Distribución Eléctrica Centroamericana DOS S.A. DECA II | 10,017 | 1,307,395 | 43 | - | - | 245,772 | 110,322 | - |
| EPM Capital México S.A. de CV | 4,908 | 98,258 | 44 | - | 128 | (70,411) | (79,349) | 128 |
| EPM Chile S.A. | 10,979 | 976,760 | 3,467 | 285,913 | 2,169 | (146,982) | 731,147 | 2,169 |

*- Figures expressed in millions of Colombian pesos -*

| 2015 | Current assets | Non-current assets | Current liabilities | Non-current liabilities | Rendering of services | Result for the period Continuing operations | Other comprehensive income | Total comprehensive income |
|---|---|---|---|---|---|---|---|---|
| Empresa de energía del Quindío S.A. E.S.P. EDEQ | 41,940 | 181,912 | 36,420 | 42,274 | 184,923 | 17,708 | 367 | 18,075 |
| Central Hidroeléctrica de Caldas S.A. E.S.P. CHEC | 188,213 | 803,748 | 195,519 | 338,099 | 615,138 | 42,671 | 2,718 | 45,389 |
| Electrificadora de Santander S.A. E.S.P. ESSA | 174,645 | 1,027,022 | 220,227 | 418,281 | 926,372 | 82,145 | 3,040 | 85,185 |
| Centrales Eléctricas del Norte de Santander S.A. E.S.P. CENS | 127,821 | 638,506 | 156,018 | 361,353 | 551,167 | 25,896 | 1,763 | 27,659 |
| Hidroecológica del Teribe S.A. HET | 34,188 | 547,658 | 24,604 | 396,332 | 47,885 | 5,112 | 39,126 | 44,238 |
| Gestión de Empresas Eléctricas S.A. GESA | 14,374 | - | 123 | - | 6,972 | 6,699 | 3,219 | 9,918 |
| Aguas Nacionales EPM S.A. E.S.P. | 473,809 | 860,850 | 65,106 | 6,159 | 555 | (1,313) | - | (1,313) |
| Aguas Regionales EPM S.A. E.S.P. (antes Aguas de Urabá S.A. E.S.P.) | 30,933 | 66,078 | 14,405 | 19,410 | 27,650 | 519 | - | 519 |
| Empresas Públicas del Oriente S.A. E.S.P. En Liquidación (EPO) | 6,050 | - | 178 | - | 1,328 | 279 | - | 279 |
| Empresa de Aguas del Oriente Antioqueño S.A. E.S.P. | 830 | 3,061 | 146 | 139 | 1,556 | 264 | (21) | 243 |
| Regional de Occidente S.A. E.S.P. | 3,694 | 22,997 | 3,320 | 8,582 | 7,953 | 1,275 | - | 1,275 |
| Aguas de Malambo S.A. E.S.P. | 5,156 | 10,233 | 2,506 | 5,857 | 8,170 | (11,069) | - | (11,069) |
| Empresas Varias de Medellín S.A. E.S.P. | 138,052 | 125,355 | 98,367 | 137,904 | 174,454 | 18,801 | 6,813 | 25,614 |
| EPM Inversiones S.A. | 60,923 | 1,568,195 | 1,732 | 392 | 2,916 | 99,037 | 1,367 | 100,404 |
| Maxseguros EPM Ltd | 194,796 | - | 1,788 | 63,342 | 7,171 | 7,612 | 29,913 | 37,525 |
| Panamá Distribution Group S.A. PDG | 1,204 | 329,562 | 11 | - | - | 92,866 | 47,882 | 140,748 |
| Distribución Eléctrica Centroamericana DOS S.A. DECA II | 10,444 | 731,354 | 27 | - | - | 90 | 175,638 | 175,728 |
| EPM Capital México S.A. de CV | 3,840 | 283,250 | 3,421 | 46,207 | - | (22,838) | 5,340 | (17,498) |
| EPM Chile S.A. | 66,207 | 1,484,272 | 63,357 | 357,780 | 1,949 | (13,759) | 186,670 | 172,911 |

*- Figures expressed in millions of Colombian pesos -*

### 8.1 Changes in the interest held in subsidiaries that did not give rise to a loss of control

During the year 2016 there were changes in the interest held in the following subsidiaries:

The percentage of the interest in Aguas de Malambo S.A. E.S.P. increased to 94.98% by capitalization by EPM. This variation had an effect on the application of equity method, reducing the investment by $370 recognized directly in equity.

The percentage of the participation in Aguas Regionales EPM S.A. E.S.P. decreased to 67.25% by effect of the merger by absorption of Aguas de Uraba S.A. E.S.P. and Regional de Occidente S.A. E.S.P. This variation had effect on the application of equity method, reducing the investment by $5,745, recognized directly in equity.

The percentage of the participation in EPM Capital Mexico SA de CV decreased to 38.53% by effect of the capitalization of EPM Latam S.A., which acquired 6.10% for a total participation held of 40.59% in equity. This variation had effect on the application of equity method, reducing the investment by $3, recognized directly in equity.

During 2015 there were changes in the participation of the following subsidiaries:

The participation percentage in Empresas Varias de Medellin S.A. E.S.P. decreased to 64.98%, by the effect of the capitalization of EPM Inversiones S.A. that acquired 34.95%.This variation had effect on the application of equity method, increasing the investment by $34,880, recognized directly in the equitize The Interest percentage in EPM Capital Mexico SA de CV decreased to 42.50% by the effect of the capitalization of EPM Latam S.A. that acquired 34.49% and PDG – Panama Distribution Group S.A. that acquired 18.29%.

This variation had effect on the application of equity method, increasing the investment by $20,535, recognized directly in equity.

The percentage of participation in Aguas Nacionales EPM S.A. E.S.P. increased to 99.97%, by capitalization by EPM. This variation had effect on the application of equity method, decreasing the investment by $15, recognized directly in equity.

The percentage of participation in EPM Chile S.A. increased to 99.99%, by capitalization of EPM. This variation had effect on the application of equity method, decreasing the investment by $575, recognized directly in equity.

# Note 9. Investments in associates

The detail of the associates of EPM as of the date of the period reported is as follows:

| Name of Associate | Location (country ) | Type of business | % participation 2016 | % participation 2015 | Creation date |
|---|---|---|---|---|---|
| Hidroeléctrica Ituango S.A. E.S.P. | Colombia | Promotion, design, construction, operation, maintenance and commercialization of energy nationally and internationally of the Central Hidroeléctrica Pescadero Ituango | 46.33% | 46.33% | 12/29/1997 |
| Hidroeléctrica del Río Aures S.A. E.S.P. | Colombia | Generation and commercialization of electric power through a hydroelectric plant, located in the jurisdiction of the municipalities of Abejorral and Sonsón of the Department of Antioquia | 42.04% | 42.04% | 5/14/1997 |
| UNE EPM Telecomunicaciones S.A. | Colombia | Provision of telecommunications, information and communications technology services, information services and complementary activities. | 50.00% | 50.00% | 6/29/2006 |
| Inversiones Telco S.A.S. | Colombia | Investing in companies which corporate objects are based on the rendering of business process outsourcing (BPO) for companies, especially but not limited to telecommunications services. | 50.00% | 50.00% | 11/5/2013 |

The value of investments in associates as of the report date was:

| Name of Associate | 2016 | | | | 2015 | | | |
|---|---|---|---|---|---|---|---|---|
| | Value of Investment | | | Dividends | Value of Investment | | | Dividends |
| | 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 | - | - | - | - | - |
| UNE EPM Telecomunicaciones S.A. | 2,342,488 | - | 2,342,488 | - | 2,342,488 | - | 2,342,488 | 233,870 |
| Inversiones Telco S.A.S. | 55,224 | - | 55,224 | - | 55,224 | - | 55,224 | - |
| **Total investments in associates** | **2,434,417** | **-** | **2,434,417** | **-** | **2,431,939** | **-** | **2,431,939** | **233,870** |

*- Figures expressed in millions of Colombian pesos -*

Associate

Total investments in associates

# Note 10. Investments in joint ventures

The detail of joint ventures of EPM as of the date of the period reported is the following:

| Name of joint venture | Location (country) | Type of business | Percentage ownership | | Creation date |
|---|---|---|---|---|---|
| | | | 2016 | 2015 | |
| Parques del Río S.A.S. [1] | Medellín | Construction, operation and support of project Parques del Rio Medellin, as well as acting as urban manager of project. | 33% | 33% | 12/26/2015 |

1 Joint venture incorporated on November 26, 2015, with the participation of the municipality of Medellin, Interconexión Electrica S.A. E.S.P. (ISA), Empresa de Transporte Masivo del Valle de Aburra Ltda. (Metro) and EPM. The entity seeks to be the manager of the next urbanistic developments of the city, the department and the country, taking advantage of the synergies on the subject of infrastructure, mobility, environment and social, among others.

The financial information of the significant joint ventures of the company as of the date of the reporting period is the following:

| Name of joint venture | 2016 | | | | 2015 | | | |
|---|---|---|---|---|---|---|---|---|
| | Value of Investment | | | Dividends | Value of Investment | | | Dividends |
| | Cost | Impariment | Total | | Cost | Impariment | Total | |
| Parques del Río S.A.S. | 99 | - | 99 | - | 99 | - | 99 | - |
| **Total investments in joint ventures** | **99** | **-** | **99** | **-** | **99** | **-** | **99** | **-** |

*- Figures expressed in millions of Colombian pesos -*

# Note 11. Trade debtors and other accounts receivable

Details of trade debtors and other accounts receivables at the date of reporting periods are as follows:

| Trade debtors and other accounts receivable | 2016 | 2015 |
|---|---|---|
| **Non current** | | |
| Public utilities debtors | 290,587 | 255,089 |
| Public utilities impairment | (72,212) | - |
| Dividens and participations receivable | - | 196,288 |
| Related parties | 1,662,265 | 1,598,769 |
| Employee loans | 59,001 | 48,332 |
| Other loans | 21,745 | 24,818 |
| **Total non current** | **1,961,386** | **2,123,296** |
| **Current** | | |
| Public utilities debtors | 1,249,723 | 1,196,921 |
| Public utilities impairment | (184,099) | (124,552) |
| Related parties | 58,884 | 316,265 |
| Employee loans | 20,750 | 17,729 |
| Impairment of employees loans | (136) | (1) |
| Construction contracts | - | 274 |
| Other loans | 267,435 | 274,149 |
| Impairment of other loans | (46,731) | (13,624) |
| **Total current** | **1,365,826** | **1,667,161** |
| **Total** | **3,327,212** | **3,790,457** |

*- Figures expressed in millions of Colombian pesos -*

The non-current portion of trade debtors and other accounts receivable reflects a decrease by $161,910, corresponding to dividends receivable to Une Telecomunicaciones for $196,288 paid in 2016.

In the current portion the balance shows a decrease by $301,335, mainly in related parties by $257,381 for the payments received from EPM Mexico and the capitalization of interest of EPM Chile.

A percentage of 52% of the total balance corresponds to related parties: Inversiones y Asesoría South Water for $1,047,759 (2015: $1,056,291), Hidroecológica del Teribe for $384,282 (2015: $395,797) and EPM Chile for $289,109 (2015: $415,202). At the closing of 2015 EPM Mexico did not have accounts receivable (2015: $31,431).

The company measures the correction of value for expected losses during the life of the asset using the simplified approach, which consists in taking the current value of the credit losses that arise from all possible events of “default” at any time during the life of the operation.

This alternative is taken given that the value of customers managed by the company is very high and the risk measurement and control by phases may lead to errors and an undervaluation of the impairment.

The expected loss model corresponds to a forecast tool that projects the probability of default (nonpayment) in a period of one year. Each obligation is assigned an individual probability of non-payment that is calculated based on a probability model that involves sociodemographic, product and behavior variables.

As of the report date the age analysis of financial assets at the end of the reporting period that are in default and impaired is:

| | 2016 | | 2015 | | | |
|---|---|---|---|---|---|---|
| | | | | Value expected credit losses over the life time | | |
| | Gross accounting value | Value expected credit losses over the life time | Gross accounting value | Issue | Adjustment | Restated |
| **Public utilities debtors** | | | | | | |
| Not past due nor impaird | 1,196,204 | (96,352) | 1,245,199 | (1,467) | (76,735) | (78,202) |
| Less than 30 days | 150,655 | (18,398) | 53,390 | (49) | (1,948) | (1,997) |
| 30 - 60 days | 46,580 | (14,441) | 24,321 | (26) | (11,313) | (11,339) |
| 61-90 days | 7,071 | (966) | 3,559 | (3,943) | 2,958 | (985) |
| 91-120 days | 5,910 | (1,426) | 2,914 | (1,548) | (722) | (2,270) |
| 121-180 days | 7,442 | (3,074) | 3,621 | (2,205) | 531 | (1,674) |
| 181-360 days | 10,788 | (8,131) | 6,977 | (5,547) | (1,359) | (6,906) |
| Greater than 360 days | 115,660 | (112,356) | 112,033 | (109,768) | (4,769) | (114,537) |
| **Total public utilities debtors** | **1,540,309** | **(255,145)** | **1,452,015** | **(124,552)** | **(93,358)** | **(217,910)** |
| **Other debtors** | | | | | | |
| Not past due nor impaird | 1,999,643 | (2,342) | 2,456,827 | (18) | (3,917) | (3,935) |
| Less than 30 days | 11,521 | (1,411) | 7,628 | (1) | (187) | (189) |
| 30 - 60 days | 7,670 | (2,477) | 1,145 | (10) | (420) | (431) |
| 61-90 days | 1,517 | (412) | 381 | (12) | (95) | (107) |
| 91-120 days | 5,373 | (3,387) | 1,792 | (30) | (12) | (42) |
| 121-180 days | 11,021 | (10,224) | 402 | (45) | (137) | (183) |
| 181-360 days | 25,894 | (1,933) | 1,211 | (328) | (709) | (1,037) |
| Greater than 360 days | 27,443 | (25,846) | 7,233 | (13,181) | (10,097) | (23,278) |
| **Total other debtors** | **2,090,081** | **(48,032)** | **2,476,620** | **(13,626)** | **(15,575)** | **(29,200)** |
| **Total debtors** | **3,630,390** | **(303,178)** | **3,928,634** | **(138,178)** | **(108,932)** | **(247,110)** |

*- Figures expressed in millions of Colombian pesos -*

The variation in the impairment of accounts receivable is due to the determination of the impairment of receivables through the calculation of the expected loss. See detail in note 3 significant accounting judgments, estimates and causes of uncertainty in the preparation of the financial statements, and the inclusion of the prepayment receivables[2] of energy and water in the provision.

[2] According to Internal Decree 2046 of December 16, 2014 and 2078 of June 18, 2015, as prepayment energy and water is understood the following:

Prepayment energy: is the program whereby the company seeks to supply prepaid electric energy to the users of the regulated market, which at the time of requesting the service have at least five (5) consecutive months or not, in suspension or cut off in the period of the past 12 months and the remaining characteristics defined by the company.

Prepayment water: is the program designed by the company for the rendering of water and sewage utilities under the advance payment modality, through the supply of drinking water in quantities limited by the amount of a recharge that is made by users, within which the rates of the water and sewage utilities, the subsidies or contributions and the partial repayment of the debt that the subscriber has with the company are charged.

| Movement expected credit losses | 2016 | 2015 |
|---|---|---|
| **Book value as of January 1** | (138,178) | (151,728) |
| Expected credit losses recognized during the period[1] | (63,196) | (7,009) |
| Utilizations during the period | 2,447 | 2,918 |
| Reversal of expected credit losses during the period | 4,681 | 17,642 |
| Expected credit losses as of January 1 | (108,932) | - |
| **Book value as of December 31** | (303,178) | (138,177) |

*- Figures expressed in millions of Colombian pesos -*

[1] Includes 100% of receivables from Electricaribe for $33,431 and Termocandelaria for $4,940.

[2] Corresponds to the accumulated calculation of receivables impairment at January 1, 2016, using the expected credit loss approach that was recognized affecting the retained profits account.

The utilizations correspond to the receivables write-offs made during the year.

The company writes off, against the impairment recognized in a corrective account, the values of the financial assets impaired when it is evidenced that there are obligations that cannot be recovered by civil proceedings, coercive collection or ordinary channels, actions to which it is necessary to attach the supports of the records where the request of the write off is requested.

The causes to request the approval of the receivables write off in EPM are the following:

- The accounts receivable recorded do not represent rights, goods or obligations for EPM.
- The rights or obligations do not have proper documents and support that permit to carry out the relevant procedures for their collection or payment.
- It is not possible to make the collection of the right or obligation, by coercive or legal collection, once the pre-legal collection phase has been extinguished.
- When there is impossibility to identify or individualized natural or legal person, to make the collection of the receivables.
- Upon evaluation and establishment of the cost/benefit ratio, it becomes more onerous to carry out the collection process than the value of the obligation.
- In case that the security or the title granting the right of execution can no longer be enforced or the right expires.
- That, having carried out court proceedings, there are no goods to enforce the payment of the obligations.
- When having carried out the liquidation process of natural or legal person in terms of the law, the goods received as payment are not sufficient to cover the total debt, the unpaid balance will be written off.

**Responsible Instances for the write off**

The write off in EPM is approved by the receivables Comprehensive Management Committee, which is chaired by the Accounting and Financial Services Manager, and the assistance of the Director of Financial Transactions, and the Head of the Credit and Receivables Management Unit. The Committee meets at the request of the Credit and Receivables Management Unit or when any situation in particular warrants it.

# Note 12. Other financial assets

The breakdown of other financial assets at the end of the period is:

| Other financial assets | 2016 | 2015 |
|---|---|---|
| **Non current** | | |
| **Financial assets measured at fair value with changes in profit and loss for the period** | | |
| Variable income securities | 37,958 | 22,198 |
| Trust rights | 354,170 | 312,668 |
| **Total financial assets measured at fair value with changes in profit and loss for the period** | **392,128** | **334,866** |
| **Financial assets designated at fair value with changes through other comprehensive income** | | |
| Equity instruments | 1,130,682 | 2,056,204 |
| **Total financial assets measured at fair value with changes through other comprehensive income** | **1,130,682** | **2,056,204** |
| **Other non current financial assets** | **1,522,810** | **2,391,070** |
| **Current** | | |
| **Derivatives designed as hedge instruments under hedge accounting** | | |
| Swap contracts | 18 | - |
| **Total derivatives designed as hedge instruments under hedge accounting** | **18** | **-** |
| **Financial assets measured at fair value with changes in profit and loss for the period** | | |
| Derivatives that are not under hedge accounting | - | 11,776 |
| Fixed income securities | 374,621 | 43,823 |
| Pledged investments | 4,361 | - |
| **Total financial assets measured at fair value with changes in profit and loss for the period** | **378,982** | **55,599** |
| **Total other current financial assets** | **379,000** | **55,599** |
| **Total other financial assets** | **1,901,810** | **2,446,669** |

*- Figures expressed in millions of Colombian pesos -*

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

### 12.1 Financial assets designated at fair value through the other comprehensive income:

The detail of equity investments designated at fair value through other comprehensive income is:

| Equity investment | 2016 | 2015 |
|---|---|---|
| ISAGEN S.A. E.S.P. [1] | - | 1,218,329 |
| Interconexión Eléctrica S.A. E.S.P. [2] | 1,123,803 | 831,029 |
| Other investment | 6,879 | 6,846 |
| **Total** | 1,130,682 | 2,056,204 |
| Ganancia acumulada por cambios en el valor razonable transferidas a las utilidades acumuladas durante el periodo[1] | 578,395 | - |
| Dividends recognized during the period related to investments that are maintained recognized at the end of the period | 32,433 | 93,457 |

*- Figures expressed in millions of Colombian pesos -*

[1] On September 6, 2016 EPM disposed of the investment in ISAGEN S.A. E.S.P. for $1,479,911: cost $901,516 and valuation at fair value $578,395, without effects on the Comprehensive Income Statement section of result of the period (profit or loss); the above as per authorization by means of Agreement No. 002 of March 15, 2016. With this transaction, EPM received $4,130 pesos for each share and owned 358,332,000 shares, which were acquired by Brookfield through a Public Offering (PO). Additionally, due to the transaction a legal expense was incurred for $46,040 detailed in Note 30. Administration expenses and the associated income tax was $111,948 detailed in Note 35, Income Tax.

[2] At December 31, 2016 the stock market price of ISA closed at $9,980 (2015 $7,380.

Equity investments indicated in the preceding table are not maintained for negotiation purposes, instead, they are maintained with strategic medium and long term purposes. The Administration of EPM considers that this classification for these strategic investments provides more reliable financial information, which reflects immediately changes in their fair value in the result of the period.

## Note 13. Guarantees

The company has not granted guarantees in which the third party is authorized to sell or encumber without the occurrence of a default by the company

The Company has not received guarantees which it is authorized to sell or encumber without the occurrence of a default by the owner of the guarantee.

## Note 14. Other assets

The detail of other assets at the end of the period is:

| Concept | 2016 | 2015 |
|---|---|---|
| **Non Current** | | |
| Payments made in advance[1] | 36,360 | 34,474 |
| Employee benefits | 26,437 | 21,949 |
| Deferred loss for operation of lease back[2] | 23,634 | 24,309 |
| Goods received as dation in payment | 1,286 | 1,288 |
| **Total other non current assets** | **87,717** | **82,020** |
| **Current** | | |
| Payments made in advance[1] | 51,391 | 75,240 |
| Advances delivered to suppliers | 33,840 | 77,145 |
| Sales tax | 1,722 | 38,559 |
| **Total other current assets** | **86,953** | **190,944** |
| **Total other assets** | **174,670** | **272,964** |

*- Figures expressed in millions of Colombian pesos -*

[1]The non-current portion of the payments made in advance includes payments for the all risk insurance policies of the Ituango Hydroelectric Project for $24,550 (2015: $21,432) and third party liability for $418 (2015: $609), both effective until March 15, 2010, which are being amortized the premium in legal stability agreements for $10,033 (2015: $10,925) and leases for $1,359 (2015: $1,508).

The current portion corresponds to insurance for $50,025 ($75,225), consisting mainly in all risk policies for $27,271 (2015: $24,159), of which $9,496 (2015: $6,616) are of the Ituango Hydroelectric Project, and other insurance $17,099 (2015: $46,842) of which $14,866 correspond to the climatic change insurance; goods and services for $1,321 (2015: $-) and leases for $45 (2015: $15).

[2]See detail of agreements for leasing in note 21. other financial liabilities.

## Note 15. Inventories

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

| Inventories | 2016 | 2015 |
|---|---|---|
| Materials for the rendering of services 1 | 112,531 | 93,605 |
| Merchandise in stock 2 | 1,943 | 1,629 |
| Goods in transit | 606 | 2,168 |
| **Total inventories** | **115,080** | **97,402** |

*- Figures expressed in millions of Colombian pesos -*

[1] Includes the materials for the rendering of services held by third parties. That are those delivered to the contractors that carry out the activities related to the rendering of the services.

[2] Includes merchandise in stock that does not require transformation, such as power, gas and water meters, communication equipment, telephones and Supply goods, as well as those held by third parties.

Inventories for $85,934 (2015: $81,378) were recognized as cost for the rendering of the service during the period. There was loss by the retirement of inventories for during the period amounted to $1,151 (2015: $1,029). No losses of value were generated in the company by comparing the net realizable value to the average cost of inventories.

## Note 16. Cash and cash equivalents

The composition of cash and cash equivalents as of December 31, 2015 and 2014 is as follows:

| Cash and cash equivalents | 2016 | 2015 |
|---|---|---|
| Cash on hand and in banks | 333,321 | 320,808 |
| Other cash equivalents | 185,757 | 166,374 |
| **Total cash and cash equivalents reported in the statement of financial position** | **519,078** | **487,182** |
| **Cash and cash equivalents reported in the statement of cash flows** | **519,078** | **487,182** |
| **Restricted cash** | **130,059** | **145,324** |

*- Figures expressed in millions of Colombian pesos -*

Treasury investments expire in a term equal or lower than three months from their acquisition date and earn market interest rates for this type of investments.

The Company has restrictions on cash and cash equivalents detailed as follows. As of December 31 2016 The fair value of restricted cash equivalents is $130,059 (2015: $145,324).

| Fund | Destination | 2016 | 2015 |
|---|---|---|---|
| Bogota Agreement Parques del Rio | Transfer of public utilities networks for the development of the project called Parques del Rio Medellin. | 26,521 | 25,472 |
| Sintraemdes Housing Fund | Contribute to the acquisition of housing and improvement thereof, of workers beneficiaries of the bargaining agreement executed between EPM and the Unions. | 16,426 | 22,622 |
| Bogota Bolivar Gallery | Adapt carrera 51 (Bolivar) between 44 street (San Juan) and 57 street (La Paz) and convert that road sector in what will be called the Bolivar Gallery. | 16,167 | 6,753 |
| Banco Bogota INCODER | Join forces 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 Uraba region of Antioquia" with multipurpose scope. | 11,194 | 10,641 |
| International Energy Transactions | Guarantee corresponding to the "compensation that must be made between the invoice of pool transactions and the advance payments, seeking that the actual payment is made to XM. | 10,907 | 167 |
| Sinpro Housing Fund | Contribute to the acquisition of housing and improvement thereof, of workers beneficiaries of the bargaining agreement executed between EPM and the Unions. | 10,675 | 17,455 |

*- Figures expressed in millions of Colombian pesos -*

| Fondo o convenio | Destinación | 2016 | 2015 |
|---|---|---|---|
| Master Agreement Municipality of Medellin No. 4600049285 | Construction by EPM of sidewalks and other roadway elements in the center of the city, taking advantage of the Centro Parrilla project, that is, the renewal of water and sewage networks. | 7,677 | 22,189 |
| Health Adapted Entity Fund and Fosyga Fund | Control and follow up mechanism of the collection of contributions of the Contributive Regime of the General Social Security System in Health. | 5,480 | 861 |
| Ministry of Mines and Energy – Special Fund Development Quota | Co-financing agreement for the construction of distribution and connection infrastructure 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 of Don Matias, Entrerrios, San Pedro, Santa Rosa and Yarumal. Agreement No. 106: construction of the infrastructure of connection to users of Valle de Aburrá, La Ceja, La Unión and El Retiro. Agreement 179: includes municipality of Sonsón. | 5,003 | 4,781 |
| Municipality of Medellín - Water | Integral management of water for human consumption of the inhabitants of the municipality of Medellín. | 3,124 | 6,038 |
| Municipality of Guatapé and Cornare | To join efforts to improve the technical, economic and social conditions for the implementation of phase 1 of the project to improve the environmental and landscape infrastructure of the San Juan del Puerto Malecon, for the development of sustainable tourism in the Municipality of Guatape. | 2,213 | - |
| Autonomous Corporation of Guatapé | To join efforts to improve the technical, economic and social conditions for the implementation of phase 1 of the project to improve the environmental and landscape infrastructure of the San Juan del Puerto Malecon, for the development of sustainable tourism in the Municipality of Guatape. | 2,011 | - |
| Sinpro Education Fund | Promote the wellbeing of the workers to take care of the needs of payment of tuition, texts and supplies that are required to carry out owns studies and those of the family group. | 1,956 | 1,419 |
| Sintraemdes Education Fund | Promote the wellbeing of the workers to take care of the needs of payment of tuition, texts and supplies that are required to carry out owns studies and those of the family group. | 1,905 | 1,448 |
| Sintraemdes Disaster Fund | Promote the wellbeing of its workers to take care of their urgent needs and unforeseen needs or those of their primary family group. | 1,454 | 1,210 |
| Sinpro Disaster Fund | Promote the wellbeing of its workers to take care of their urgent needs and unforeseen needs or those of their primary family group. | 1,131 | 1,021 |
| Aldeas Program | Usage of the wood that completes its maturing cycle in the forests planted by EPM around its reservoirs, to build social interest housing in the municipalities of Antioquia outside the Valle de Aburrá and deliver them to low income families, preferably in situation of forced or voluntary displacement. | 1,105 | 3,791 |
| Inter-administrative Agreement Plaza del Tomatero in the Municipality of Peñol | Combine efforts to improve the technical, economic, environmental and social conditions to boost development and counteract the impact generated by Peñol municipality, the level of the Peñol-Guatape reservoir | 1,052 | - |

*- Figures expressed in millions of Colombian pesos -*

| Fondo o convenio | Destinación | 2016 | 2015 |
|---|---|---|---|
| Agreements on public lighting and sanitation rates with municipalities | Agreement to manage the resources of territorial entities for the payment to the municipalities with collection agreements of the public lighting and sanitation rates; these resources are exempt from the payment of tax on financial transactions (4x1000). | 676 | 51 |
| Ministry of Mines and Energy | 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 | 643 | - |
| Convention points SOMOS | Provision of services for the operation of the key capabilities associated with the element Loyalty Points Program for Large Scale EPM Group . | 577 | - |
| Agreement Municipality of Itagüí Collector Ajizal | To manage and manage the resources destined by the Municipality of Itagui for the construction of the stabilization works of the channel of the creek the sesteadero for the collector Ajizal | 356 | - |
| Motorcycle Repair Fund | Promote the wellbeing of the official workers who work in the regional market and use motorcycles owned by them for the performance of their work. | 349 | 270 |
| Montreal Protocol Multilateral Fund | Cooperation agreement with the Ministry of the Environment and Sustainable Development for the performance of activities within the framework of the implementation in Colombian of the Montreal Protocol. | 298 | 283 |
| Thermal District | Agreement with the Ministry of Environment and Sustainable Development for the performance of activities of the Thermal District La Alpujarra. | 282 | 56 |
| National Royalties Fund - Gas | Construction of the compressed natural gas distribution infrastructure and subsidies for the connection to users of strata 1 and 2 of the municipalities of El Peñol and Guatapé. | 281 | 278 |
| BID 2120 Credit | Disbursement for construction of wastewater treatment plant (PTAR) Bello | 167 | 2,569 |
| Municipality of Caldas | Administrating the resources assigned by the municipality to the performance of the replacement and modernization project of the secondary water and sewage networks and their complementary works. | 163 | - |
| Municipality of Barbosa | Agreement to partially subsidize the connection of users in strata 1 and 2. | 56 | 54 |
| Espíritu Santo | EPM - Espírito Santo Liquidation | 56 | 55 |
| Deposits Law 820 | Guarantee required by the lessor to the tenant for the payment of public utilities. As per Article 15 of Law 820 of 2003 and Regulatory Decree 3130 of 2003. | 53 | 46 |
| Municipality of Medellin - Land | Acquisition of landed property identified and characterized within the zone of protection of the hydrographic basins that supply the water systems of the municipality of Medellín. | 53 | 49 |
| Cuenca Verde | Administer the resources assigned for fulfillment of the objective of Corporación Cuenca Verde. | 32 | 2,072 |
| Agreement UVA Poblado 037000657546 | Support the municipality of Medellin for the construction of the UVA - ARTICULATED LIFE UNIT POBLADO SECTOR. | 5 | 9,039 |
| Department of Antioquia, Construction Agreement via the Aro - Municipality of Ituango | Manage the resources provided by the Government of Antioquia to co-finance the construction of the Via El Aro - Connection Via Puerto Valdivia Dam site - Municipality of Ituango | 5 | - |

*- Figures expressed in millions of Colombian pesos -*

| Fondo o convenio | Destinación | 2016 | 2015 |
|---|---|---|---|
| Municipality of Medellin - Moravia | Construction, repair and replacement of water and sewage networks and the paving in the municipality of Medellin of the roadways affected by these works in the Moravia neighborhood. | 3 | 6 |
| IDEA agreement 4600003912 | Inter-administrative agreement to join forces for the design and construction of electric power generation and distribution systems in the rural zones in the department of Antioquia. | 2 | 2 |
| IDEA Agreement 4600003283 | Join forces for the construction of gas domiciliary service connections in the different subregions of the department of Antioquia under the framework of the program "Gas without Frontiers". | 1 | 1 |
| Encargo EPM-ECOP-70083600976-0 | Resource management EPM- Ecopetrol contract . | - | 3,742 |
| BBVA Enc Fiduc FAER GGC 315 | Contributions from the Ministry of Mines and Energy in accordance with the provisions of the contract FAER GGC 2014 315 bound for rural electrification works in the municipality of Anori . | - | 574 |
| Bogotá Agreement Anori Domiciliary | To cover the performance of the construction and supervision works in one hundred seventy-three (173) domiciliary facilities and internal electric power networks, for the electrification of homes in the villages of La Plancha, Chagualo Arriba, Chagualito, La Culebra and El Banco of the municipality of Anori. | - | 190 |
| IDEA Agreement 4600003541 | To cover the co-financing of up to 70% of the cost of domiciliary electric installations in the different subregions of the department of Antioquia. | - | 83 |
| Department of Antioquia Agreement | Join efforts for the institutional development, strengthening, transformation or creation of companies, in order to secure the rendering of public utilities of the municipalities of the department. | - | 36 |
| BBVA const network municipality San luis | Construction of electrical networks in the sidewalks of the Municipality of San Luis Antioquia. | - | 1 |
| **Total recursos restringidos** | | **130,059** | **145,324** |

*- Figures expressed in millions of Colombian pesos -*

# Note 17. Equity

## 17.1Capital

The company does not have capital divided into quotas/shares and has not had increases or reductions in the period reported.

## 17.2 Reserves

Of the accounts that make up equity, the reserves as of December 31, consisted of the following:

| Reserves | 2016 | 2015 |
|---|---|---|
| **Statutory reserves** | | |
| Beginning balance | 2,870,900 | 2,511,760 |
| Constitution | 182,774 | 686,435 |
| Appropriation | (548,066) | (327,295) |
| **Total legal reserves** | **2,505,608** | **2,870,900** |
| **Occasional reserves** | | |
| Beginning balance | 574,008 | 574,008 |
| **Total occasional reserves** | **574,008** | **574,008** |
| **Other reserves** | | |
| Beginning balance | 7,591 | 7,591 |
| **Total Other reserves** | **7,591** | **7,591** |
| **Total reserves** | **3,087,207** | **3,452,499** |

*- Figures expressed in millions of Colombian pesos -*

The nature and purpose of equity reserves of EPM are described below:

**Statutory reserves:** in accordance with Decree 2336 of 1995, for the profits incorporated in profit and loss in the application of equity method applied under local regulations, EPM have created these reserves to in order to comply with this Decree.

**Occasional reserves**: in compliance with Colombian tax provisions contained in Article 130 (reserve of 70% for excess of tax over accounting depreciation) and 211 of the Tax Code, EPM have created the required reserves in order to be benefited by a special tax treatment and obtain a rationalization in the payment of the income and complementary tax.

**Other reserves**

Includes equity funds (resources appropriated prior to 1999 to grant housing loans to the workers, Financing Plan, Self-insurance Fund, housing fund).

The Board of Directors, in its sessions of March 31, 2016 and March 17, 2015, approved:

- Creating a reserve for $182,774 (2015: $251,269) on the surpluses of 2015 y 2014, in order to comply with article 130 of the Tax Code.
- Release reserves created for $548,066 (2015: $327,295) of equity method by virtue of the dividends received from controlled and associated companies in 2015 and in 2014 by the surpluses realized.
- Creating a reserve in 2015 for $435,166 on the surpluses of 2014, in order to comply with Decree 2336 of 1995, for the profits incorporated to profit and loss in the application of equity method as per the previous GAAP.

### 17.3 Retained profits

The movement of retained profits during the period was:

| Retained results | 2016 | 2015 |
|---|---|---|
| Beginning balance | 13,056,702 | 12,646,413 |
| Retroactive application for changes in accounting policies | - | (544,104) |
| **Opening balance restated** | **13,056,702** | **12,102,309** |
| Reservation movement | 365,292 | (359,140) |
| Surpluses or dividends decreed | (816,521) | (56,139) |
| Transfer of other comprehensive income | 466,447 | - |
| Impact of adoption of IFRS 9 as of January 1, 2016 | (69,278) | - |
| Equity method for equity variations | (70,448) | - |
| **Total accumulated result** | **12,932,194** | **11,687,030** |
| **Net result of the period** | **1,834,792** | **1,369,673** |
| **Total results retained** | **14,766,986** | **13,056,702** |

*- Figures expressed in millions of Colombian pesos -*

Of the profits received during the year were $816,521 (2015: $991,139), $445,375 ordinary and $371,146 Additional.

# Note 18. Other accumulated comprehensive income

The detail of each component of the other comprehensive income of the separate statement of financial position and the corresponding tax effect is the following:

| Components of the other accumulated comprehensive income | 2016 | | | 2015 | | |
|---|---|---|---|---|---|---|
| | Gross | Tax Effect | Net | Gross | Tax Effect | Net |
| Non-current assets held for sale or for distribution to owners | - | - | - | - | - | - |
| Reclassification of properties, plant and equipment to investment properties | 13,439 | (1,360) | 12,079 | 3,736 | (401) | 3,335 |
| New measurements of defined benefit plans | 6,368 | (3,632) | 2,736 | 42,636 | (21,403) | 21,233 |
| Equity investments measured at fair value through equity | 1,829,877 | (87,400) | 1,742,477 | 1,853,883 | (91,367) | 1,762,516 |
| Credit risk of liabilities measured at fair value | - | - | - | - | - | - |
| Participation in other comprehensive income of subsidiaries | 627,045 | 5,863 | 632,908 | 881,190 | (17,698) | 863,492 |
| Cash flow hedges | (23,738) | 11,834 | (11,904) | - | - | - |
| **Total** | **2,452,991** | **(74,695)** | **2,378,296** | **2,781,445** | **(130,869)** | **2,650,575** |

*- Figures expressed in millions of Colombian pesos -*

During the period there was no reclassification of net losses previously recognized in other comprehensive income to the results of the period, in 2015 reclassifications for $39,224 we made.

Following is presented for each component of the comprehensive income, a reconciliation of the beginning and ending balances at the cut-off date:

**18.1 Component: reclassification of properties, plant and equipment to investment properties**

The component of reclassification of properties, plant and equipment to investment properties of other comprehensive income corresponds to transfers from properties, plant and equipment to investment properties, which are measured at fair value. The changes in the fair value do not reclassify to profit and loss for the period.

| Reclassification of properties, plant and equipment to investment properties | 2016 | 2015 |
|---|---|---|
| Beginning balance | 3,335 | 5 |
| Net gains or losses on changes in the fair value of investment property | 9,700 | 3,731 |
| Associated income tax (or equivalent) | (956) | (401) |
| **Total** | **12,079** | **3,335** |

*- Figures expressed in millions of Colombian pesos -*

### 18.2 Component of new measurements of defined benefit plans

The component of new measurements of the defined benefit plans represents the accumulated value of the actuarial profits or losses, the returns of the assets of the plan and the changes in the effect of the asset's ceiling, excluding the values included in the net interest over the liability (asset) of net defined benefits. The net value of the new measurements is transferred to the accumulated profits and not reclassified to the results of the period.

| Component of new measurements of defined benefit plans | 2016 | 2015 |
|---|---|---|
| Book value as of January 1 | 21,233 | 25,087 |
| Net profits (losses) for new net measurements of defined benefit plans | (36,268) | 247 |
| Associated income tax (or equivalent) | 17,771 | (4,101) |
| **Total** | **2,736** | **21,233** |

*- Figures expressed in millions of Colombian pesos -*

### 18.3 Component: Equity investments measured at fair value through equity

The component of the other comprehensive incomes of equity investments measures at fair value through equity represents the accumulated value of profits or losses by the valuation at fair value less the values transferred to the accumulated profits when these investments have been sold. The changes in the fair value do not reclassify to the profit and loss for the period.

| Equity investments measured at fair value through equity | 2016 | 2015 |
|---|---|---|
| Book value as of January 1 | 1,762,516 | 1,840,662 |
| Net profits or losses for changes in the fair value of equity investments | 554,390 | 15,058 |
| Associated income tax (or equivalent) | (107,982) | (93,204) |
| Cumulative gains (losses) transferred to cumulative gains / losses for the period | (578,395) | - |
| Associated income tax (or equivalent) | 111,948 | - |
| **Total** | **1,742,477** | **1,762,516** |

### 18.4 Interest in other comprehensive income of subsidiaries

The component of other comprehensive income of participation in other comprehensive income of subsidiaries represents the accumulated value of the application of equity method to profits and losses of the other comprehensive income of the subsidiaries. The accumulated value of the profits or losses will be reclassified to profit or loss for the period or to accumulated profits, depending on the entries that originated equity method, when these investments have been sold.

| Participation in other comprehensive income of subsidiaries | 2016 | 2015 |
|---|---|---|
| Book value as of January 1 | 863,491 | - |
| Retroactive application for changes in accounting policies | - | 381,942 |
| **Opening balance restated** | **863,491** | **381,942** |
| New measurements of defined benefit plans | (62,340) | 15,613 |
| Equity investments measured at fair value through equity | (54,811) | (7,795) |
| Cash flow hedges | 1,681 | - |
| Result for business conversion abroad | (138,508) | 473,396 |
| Associated income tax (or equivalent) | 23,493 | 335 |
| Accumulated gains (losses) transferred to retained earnings / losses for the period -New measures of defined benefit plans | (220) | - |
| Cumulative gains (losses) transferred to accumulated profits / losses for the period-Equity investments measured at fair value through equity | 54 | - |
| Cumulative gains (losses) transferred to accumulated profits / losses for the period -Result for conversion of business abroad | (1) | - |
| Associated income tax (or equivalent) - Cumulative gains (losses) transferred to accumulated profits / losses for the period | 69 | - |
| **Total** | **632,908** | **863,491** |

*- Figures expressed in millions of Colombian pesos -*

**18.5 Component: cash flows hedging**

The component of the other comprehensive income of cash flows hedging represents the accumulated value of the effective person of the profits or losses that arise from the changes in the fair value of entries hedged in a cash flows hedging. The accumulated value of profits or losses will be reclassified to the profit and loss of the period only when the transaction hedged affects the result of the profit and loss of the period or the highly probable transaction is not anticipated that it will occur, or is included, as part of its book value, in a non-financial hedged entry.

| Cash flow hedges | 2016 | 2015 |
|---|---|---|
| Book value as of January 1 | - | (10,995) |
| Gains or losses on changes in the fair value of hedging instruments | (23,738) | 31,434 |
| Associated income tax (or equivalent) | 11,834 | 18,785 |
| Gains (losses) accrued by changes in the fair value of hedging instruments reclassified to income for the period | - | (39,224) |
| **Total** | **(11,904)** | **-** |

*- Figures expressed in millions of Colombian pesos -*

# Note 19. Credits and loans

The following is the detail of the carrying value of credits and loans:

| Credits and loans | 2016 | 2015 |
|---|---|---|
| **Non-current** | | |
| Commercial banks loans | 1,746,276 | 407,771 |
| Multilateral banks loans | 1,094,218 | 640,451 |
| Development banks loans | 842,053 | - |
| Other bonds and securities issued | 5,849,554 | 5,963,779 |
| **Total Credits and loans non current** | **9,532,101** | **7,012,001** |
| **Current** | | |
| Commercial banks loans | 55,696 | 711,572 |
| Multilateral banks loans | 570,337 | 1,050,265 |
| Development banks loans | 121,058 | 1,082,093 |
| Bonds and securities issued | 255,780 | 318,653 |
| Other bonds and securities issued | 285,717 | 290,935 |
| Loans to related parties | - | 54,009 |
| Other loans | - | 432,830 |
| **Total Credits and loans current** | **1,288,588** | **3,940,357** |
| **Total credits and loans** | **10,820,689** | **10,952,358** |

*- Figures expressed in millions of Colombian pesos -*

On December 29, 2015, the company signed a credit agreement for USD $1,000 million with a group of seven international banks, which will be used for the financing of the budget and the company's 2016 investment plan. The credit was granted with a term of five years, with a single payment of principal at expiration, without any guarantee requirement, prepayable, with a rate Libor + 1.40% and it may be disbursed in a period of 12 months. The banks participating in this credit operation were Bank of America N.A., HSBC Securities (USA) Inc., Bank of Tokyo-Mitsubishi, Sumitomo Mitsui Banking Corporation, Citigroup Global Markets, JP Morgan Securities and Mizuho Bank. In 2016 disbursements of this loan were made for $1,745,425 (USD560 million).

During 2016 disbursements have been made of the loan IDB 2120 to finance the Bello PTAR for $238,010, equivalent to USD78 million (2015: $239,057).

On April 26, 2016 the company signed a loan agreement for USD111 with the Brazilian Development Bank – BNDES, which will be intended to the financing of the turbines and generators of the Ituango Hydroelectric project. The loan was granted with a term of twenty-tree point five years (23.5), a grade period of 5.5 years and an availability period of 9.5 years, with a fixed rate of 4.887% to be amortized biannually.

On May 26, 2016 a payment of principal was made of the Treasury loan with BNP Paribas for $582,384 (USD 190 million).

On August 4, 2016 EPM signed a loan agreement for USD 300 million with the Canadian export credit agency Export Development Canada (EDC). Forty-five percent (45%) of the loan proceeds, USD135 million will be intended to finance partially the investments required for the Ituango project and 55% of the resources of the loan, USD165 million, will be used to finance the investments plan 2016-2022. The loan was granted with a term of five years, with a single payment of principal at expiration, with an interest rate LIBOR – 1.40% and a disbursement period of 12 months. During 2015 there were no disbursement for this loan.

On October 3, 2016 EPM signed a loan agreement for USD200 million with CAF – Latin American Development Bank, which resources will be intended to finance partially the investment plan of the Company. During 2015 there were no disbursements for this loan.

In the third quarter of 2016 the company made the prepayment of transitory loans for $580,000 as follows: to Banco de Bogota for $300,000 and to BBVA for $280,000.

On December 14, 2016 the sum of $112,700 of principal was paid for expiration of the local CPI bonds trench 1 awarded on December 14, 2010.

On December 27, 2016 a prepayment was made of the capital of the local Credit Club Deal for $318,286 as follows: to Davivienda Bank for $154,286, to BBVA for $102,857, to Helm Bank for $20,000 and the Banco Corpbanca for $41,143.

**Conversion to pesos of loans denominated in US dollars:** some of the IDB loan have the currency conversion possibility, which permits the conversion to the Colombian peso of the balance in US dollars, thus eliminating the exchange risk of the outstanding balance. EPM made the following conversions in 2016:

On March 31 EPM applied a currency conversion to loan IDB 1664 for USD153.8 million.
On August 23, EPM applied a currency conversion to loan IDB 2120 for USD154.3 million.

The detail of the credits and loans by entity is the following:

| Entity / loan | Original Currency | Initial date | term | Nominal interest rate | 2016 | | | | 2015 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | IRR | Nominal value | Amortized cost value | Total Amount | IRR | Nominal value | Amortized cost value | Total Amount |
| 2015 CLUB DEAL BANK OF TOKYO | USD | 1/12/2016 | 5 | LIBOR + 1.4% | 2.83% | 1,680,398 | 5,833 | 1,686,231 | 0.00% | - | - | - |
| 1262 INTERNATIONAL BONDS | USD | 7/29/2009 | 10 | 7.63% | 8.16% | 1,500,355 | 35,420 | 1,535,775 | 8.16% | 1,574,735 | 32,297 | 1,607,032 |
| 1266 GLOBAL 2021 COP | COP | 1/31/2011 | 10 | 8.38% | 8.70% | 1,250,000 | 82,054 | 1,332,054 | 8.70% | 1,250,000 | 79,058 | 1,329,058 |
| 1273 GLOBAL 2024 COP | COP | 9/10/2014 | 10 | 7.63% | 7.73% | 965,745 | 16,169 | 981,914 | 7.73% | 965,745 | 15,502 | 981,247 |
| 1013 AFD | USD | 6/14/2013 | 14 | 4.37% | 4.47% | 930,256 | 14,959 | 945,216 | 4.47% | 1,065,135 | 16,958 | 1,082,093 |
| 1665 IDB-1664-1 | COP | 3/31/2016 | 10 | 7.8% | 9.57% | 427,154 | 3,134 | 430,288 | 0.00% | - | - | - |
| IDB 2120-2 | COP | 8/23/2016 | 18 | 7.5% | 7.89% | 438,172 | 8,324 | 446,496 | 0.00% | - | - | - |
| 2179 BANK OF TOKYO-MITSUB | USD | 1/16/2009 | 15 | LIBOR + 0.95% | 0.66% | 350,063 | 22,041 | 372,104 | 1.82% | 419,913 | 26,679 | 446,591 |
| 1265 BONDS IPC IV TRAM 3 | COP | 12/14/2010 | 20 | IPC + 4.94% | 11.33% | 267,400 | (788) | 266,612 | 8.33% | 267,400 | (722) | 266,678 |
| 1277 BONDS IPC VII TRAM III | COP | 3/20/2015 | 20 | IPC + 4.43% | 10.78% | 260,000 | (446) | 259,554 | 7.75% | 260,000 | (327) | 259,673 |
| 1272 BONDS IPC VI TRAM III | COP | 7/30/2014 | 20 | IPC + 4.5% | 11.01% | 250,000 | (723) | 249,277 | 7.94% | 250,000 | (208) | 249,792 |
| 1269 IPC V TRAM III BONDS | COP | 12/5/2013 | 20 | IPC + 5.03% | 11.55% | 229,190 | (2,393) | 226,797 | 8.50% | 229,190 | (1,788) | 227,402 |
| 1261 BONDS IPC III TRAMO | COP | 4/21/2009 | 15 | IPC + 6.24% | 12.60% | 198,400 | 4,399 | 202,799 | 9.50% | 198,400 | 4,823 | 203,223 |
| 2021 IDB 2120-1 | COP | 5/27/2014 | 9 | 6.27% | 6.85% | 190,295 | (725) | 189,570 | 6.65% | 190,295 | 1,122 | 191,417 |
| 1120 CLUB DEAL-DAVIVIENDA | COP | 11/17/2010 | 10 | DTF + 2.7% | 0.00% | - | - | - | 7.26% | 192,857 | 4,076 | 196,934 |
| 1254 IPC BONDS | COP | 11/20/2008 | 10 | IPC + 7.12% | 12.71% | 174,410 | 4,553 | 178,963 | 9.71% | 174,410 | 5,776 | 180,186 |
| 1257 BONDS IPC II TRAMO | COP | 1/22/2009 | 10 | IPC + 5.8% | 12.39% | 138,600 | 2,321 | 140,921 | 9.31% | 138,600 | 2,209 | 140,809 |
| 1274 BONDS IPC V TRAM IV | COP | 3/20/2015 | 10 | IPC + 4.52% | 10.94% | 130,000 | (175) | 129,825 | 7.93% | 130,000 | 90 | 130,090 |
| 1270 BONDS IPC VI TRAMO I | COP | 7/30/2014 | 6 | IPC + 3.57% | 10.31% | 125,000 | 57 | 125,057 | 7.25% | 125,000 | (127) | 124,873 |
| 1271 BONDS IPC VI TRAMO II | COP | 7/30/2014 | 12 | IPC + 4.17% | 10.73% | 125,000 | (290) | 124,710 | 7.66% | 125,000 | (129) | 124,871 |
| 1122 CLUB DEAL-BBVA | COP | 11/17/2010 | 10 | DTF + 2.7% | 0.00% | - | - | - | 7.47% | 128,571 | 2,111 | 130,682 |
| 5765 AGRARIO | COP | 6/24/2014 | 16 | IPC + 4.7% | 11.01% | 116,000 | (259) | 115,741 | 8.13% | 116,000 | (657) | 115,343 |
| 1276 BONDS IPC VII TRAM II | COP | 3/20/2015 | 12 | IPC + 3.92% | 10.22% | 120,000 | (356) | 119,644 | 7.27% | 120,000 | (336) | 119,664 |
| 1264 BONDS IPC IV TRAM 2 | COP | 12/14/2010 | 12 | IPC + 4.2% | 10.67% | 119,900 | (377) | 119,523 | 7.66% | 119,900 | (469) | 119,431 |
| 1275 BONDS IPC VII TRAM I | COP | 3/20/2015 | 5 | IPC + 2.72% | 9.12% | 120,000 | (519) | 119,481 | 6.26% | 120,000 | (759) | 119,241 |
| 1263 BONDS IPC IV TRAM 1 | COP | 12/14/2010 | 6 | IPC + 3.25% | 0.00% | - | - | - | 8.05% | 112,700 | (702) | 111,998 |
| 1268 BONDS IPC V TRAMO II | COP | 12/5/2013 | 10 | IPC + 4.52% | 11.12% | 96,210 | (881) | 95,329 | 8.09% | 96,210 | (750) | 95,460 |
| 1259 BONDS TF II TRAMO | COP | 1/22/2009 | 10 | 10.8% | 10.81% | 74,700 | 7,566 | 82,266 | 10.81% | 74,700 | 7,537 | 82,237 |
| 2218 IDB 800- RELICATED | USD | 12/14/1995 | 25 | LIBOR + 2.38% | 1.96% | 72,886 | 2,856 | 75,742 | 3.18% | 101,999 | 4,359 | 106,358 |
| 1256 BONDS FIXED RATE | COP | 11/20/2008 | 10 | 13.8% | 13.79% | 58,000 | 857 | 58,857 | 13.82% | 58,000 | 826 | 58,826 |
| 1121 CLUB DEAL-SANTANDER | COP | 11/17/2010 | 10 | DTF + 2.7% | 0.00% | - | - | - | 7.40% | 51,429 | 927 | 52,355 |
| 1267 BONDS IPC V TRAMO I | COP | 12/5/2013 | 5 | IPC + 3.82% | 10.71% | 41,880 | (186) | 41,694 | 7.73% | 41,880 | (306) | 41,574 |
| 1220 IDB 2120 | USD | 7/26/2011 | 25 | LIBOR + 0% | 2.06% | 159,408 | (15,419) | 143,989 | 3.79% | 421,106 | (7,931) | 413,175 |
| 1123 CLUB DEAL-HELM BANK | COP | 11/17/2010 | 10 | DTF + 2.7% | 0.00% | - | - | - | 7.60% | 25,000 | 336 | 25,336 |
| 3217 BID 2217 / OC-CO | USD | 5/31/2012 | 6 | 3.48% | 3.60% | 6,668 | 90 | 6,758 | 3.54% | 13,998 | 186 | 14,184 |
| BNDES | USD | 9/28/2016 | 24 | 4.89% | 5.23% | 24,042 | (2,235) | 21,807 | 0.00% | - | - | - |
| 1664 BID-1664 / OC-CO | USD | 6/5/2006 | 20 | LIBOR + 2% | 0.00% | - | - | - | 3.62% | 484,534 | 34,457 | 518,990 |
| 6012 BNP PARIBAS ANTOFAGA | USD | 5/29/2015 | 1 | LIBOR + 0.65% | 0.00% | - | - | - | 1.38% | 598,399 | 294 | 598,694 |
| 8853 BBVA | COP | 11/13/2015 | 1 | DTF + 1.7% | 0.00% | - | - | - | 6.63% | 280,000 | 2,376 | 282,376 |
| 8854 BOGOTA | COP | 12/18/2015 | 1 | DTF + 3.7% | 0.00% | - | - | - | 8.86% | 150,000 | 454 | 150,454 |
| 8855 EPM INVESTMENTS | COP | 12/29/2015 | 1 | 6.99% | 0.00% | - | - | - | 7.02% | 54,000 | 10 | 54,010 |
| **Total** | | | | | | **10,640,132** | **184,861** | **10,824,994** | **2.67** | **10,725,106** | **227,252** | **10,952,358** |

*- Figures expressed in millions of Colombian pesos -*

The costs of the transaction of loans acquired in 2016 that have not been disbursed were $4,305.
The interest paid by credit operations was for 2016 $873,4666 (2015: $649,384).
The net exchange difference assumed was for 2016 $268,545 (2015: $1,275,383).

The information of the bonds issued is the following:

| Subseries | Original Currency | Initial date | Term | Nominal interest rate | 2016 | | | | 2015 | | | | Awarded amount | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | IRR | Nominal value | Amortized cost value | Total Amount | IRR | Nominal value | Amortized cost value | Total Amount | 2016 | 2015 | 2014 | 2013 | 2012 |
| A10a | COP | 11/20/2008 | 10 | IPC + 7.12% | 12.71% | 174,410 | 4,553 | 178,963 | 9.71% | 174,410 | 5,776 | 180,186 | 174,410 | 174,410 | 174,410 | 174,410 | 174,410 |
| A10a | COP | 1/22/2009 | 10 | IPC + 5.8% | 12.39% | 138,600 | 2,321 | 140,921 | 9.31% | 138,600 | 2,209 | 140,809 | 138,600 | 138,600 | 138,600 | 138,600 | 138,600 |
| A10a | COP | 12/5/2013 | 10 | IPC + 4.52% | 11.12% | 96,210 | (881) | 95,329 | 8.09% | 96,210 | (750) | 95,460 | 96,210 | 96,210 | 96,210 | 96,210 | - |
| A10a | COP | 3/20/2015 | 10 | IPC + 4.52% | 10.94% | 130,000 | (175) | 129,825 | 7.93% | 130,000 | 90 | 130,090 | 130,000 | 130,000 | 130,000 | 130,000 | - |
| A12a | COP | 12/14/2010 | 12 | IPC + 4.2% | 10.67% | 119,900 | (377) | 119,523 | 7.66% | 119,900 | (469) | 119,431 | 119,900 | 119,900 | 119,900 | 119,900 | 119,900 |
| A12a | COP | 7/30/2014 | 12 | IPC + 4.17% | 10.73% | 125,000 | (290) | 124,710 | 7.66% | 125,000 | (129) | 124,871 | 125,000 | 125,000 | 125,000 | - | - |
| A12a | COP | 3/20/2015 | 12 | IPC + 3.92% | 10.22% | 120,000 | (356) | 119,644 | 7.27% | 120,000 | (336) | 119,664 | 120,000 | 120,000 | - | - | - |
| A15a | COP | 4/21/2009 | 15 | IPC + 6.24% | 12.60% | 198,400 | 4,399 | 202,799 | 9.50% | 198,400 | 4,823 | 203,223 | 198,400 | 198,400 | 198,400 | 198,400 | 198,400 |
| A20a | COP | 12/14/2010 | 20 | IPC + 4.94% | 11.33% | 267,400 | (788) | 266,612 | 8.33% | 267,400 | (722) | 266,678 | 267,400 | 267,400 | 267,400 | 267,400 | 267,400 |
| A20a | COP | 12/5/2013 | 20 | IPC + 5.03% | 11.55% | 229,190 | (2,393) | 226,797 | 8.50% | 229,190 | (1,788) | 227,402 | 229,190 | 229,190 | 229,190 | 229,190 | - |
| A20a | COP | 7/30/2014 | 20 | IPC + 4.5% | 11.01% | 250,000 | (723) | 249,277 | 7.94% | 250,000 | (208) | 249,792 | 250,000 | 250,000 | 250,000 | - | - |
| A20a | COP | 3/20/2015 | 20 | IPC + 4.43% | 10.78% | 260,000 | (446) | 259,554 | 7.75% | 260,000 | (327) | 259,673 | 260,000 | 260,000 | - | - | - |
| A5a | COP | 12/5/2013 | 5 | IPC + 3.82% | 10.71% | 41,880 | (186) | 41,694 | 7.73% | 41,880 | (306) | 41,574 | 41,880 | 41,880 | 41,880 | 41,880 | - |
| A5a | COP | 3/20/2015 | 5 | IPC + 2.72% | 9.12% | 120,000 | (519) | 119,481 | 6.26% | 120,000 | (759) | 119,241 | 120,000 | 120,000 | - | - | - |
| A6a | COP | 12/14/2010 | 6 | IPC + 3.25% | 0.00% | - | - | - | 8.05% | 112,700 | (702) | 111,998 | 112,700 | 112,700 | 112,700 | 112,700 | 112,700 |
| A6a | COP | 7/30/2014 | 6 | IPC + 3.57% | 10.31% | 125,000 | 57 | 125,057 | 7.25% | 125,000 | (127) | 124,873 | 125,000 | 125,000 | 125,000 | - | - |
| C10a | COP | 1/22/2009 | 10 | 10.8% | 10.81% | 74,700 | 7,566 | 82,266 | 10.81% | 74,700 | 7,537 | 82,237 | 74,700 | 74,700 | 74,700 | 74,700 | 74,700 |
| C10a | COP | 11/20/2008 | 10 | 13.8% | 13.79% | 58,000 | 857 | 58,857 | 13.82% | 58,000 | 826 | 58,826 | 58,000 | 58,000 | 58,000 | 58,000 | 58,000 |
| Bono internacional | USD | 7/29/2009 | 10 | 7.63% | 8.16% | 1,500,355 | 35,420 | 1,535,775 | 8.16% | 1,574,735 | 32,297 | 1,607,032 | 1,500,355 | 1,574,735 | 1,196,230 | 963,415 | 884,115 |
| Bono internacional | COP | 1/31/2011 | 10 | 8.38% | 8.70% | 1,250,000 | 82,054 | 1,332,054 | 8.70% | 1,250,000 | 79,058 | 1,329,058 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 |
| Bono internacional | COP | 9/10/2014 | 10 | 7.63% | 7.73% | 965,745 | 16,169 | 981,914 | 7.73% | 965,745 | 15,502 | 981,247 | 965,745 | 965,745 | 965,745 | - | - |
| TOTAL | | | | | | 6,244,790 | 146,262 | 6,391,052 | | 6,431,870 | 141,495 | 6,573,365 | 6,357,490 | 6,431,870 | 5,553,365 | 3,854,805 | 3,278,225 |

Figures expressed in millions of Colombian pesos, the exchange rate used was the closing TMR of each period

The detail of the national bonds issued by the company, is as follows:

| Subseries | Original Currency | Initial date | Term | Nominal interest rate | 2016 | | | | 2015 | | | | Awarded amount | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | IRR | Nominal value | Amortized cost value | Total Amount | IRR | Nominal value | Amortized cost value | Total Amount | 2016 | 2015 | 2014 | 2013 | 2012 |
| National bond | COP | 11/20/2008 | 10 | IPC + 7.12% | 12.71% | 174,410 | 4,553 | 178,963 | 9.71% | 174,410 | 5,776 | 180,186 | 174,410 | 174,410 | 174,410 | 174,410 | 174,410 |
| National bond | COP | 1/22/2009 | 10 | IPC + 5.8% | 12.39% | 138,600 | 2,321 | 140,921 | 9.31% | 138,600 | 2,209 | 140,809 | 138,600 | 138,600 | 138,600 | 138,600 | 138,600 |
| National bond | COP | 12/5/2013 | 10 | IPC + 4.52% | 11.12% | 96,210 | (881) | 95,329 | 8.09% | 96,210 | (750) | 95,460 | 96,210 | 96,210 | 96,210 | 96,210 | - |
| National bond | COP | 3/20/2015 | 10 | IPC + 4.52% | 10.94% | 130,000 | (175) | 129,825 | 7.93% | 130,000 | 90 | 130,090 | 130,000 | 130,000 | 130,000 | 130,000 | - |
| National bond | COP | 12/14/2010 | 12 | IPC + 4.2% | 10.67% | 119,900 | (377) | 119,523 | 7.66% | 119,900 | (469) | 119,431 | 119,900 | 119,900 | 119,900 | 119,900 | 119,900 |
| National bond | COP | 7/30/2014 | 12 | IPC + 4.17% | 10.73% | 125,000 | (290) | 124,710 | 7.66% | 125,000 | (129) | 124,871 | 125,000 | 125,000 | 125,000 | - | - |
| National bond | COP | 3/20/2015 | 12 | IPC + 3.92% | 10.22% | 120,000 | (356) | 119,644 | 7.27% | 120,000 | (336) | 119,664 | 120,000 | 120,000 | - | - | - |
| National bond | COP | 4/21/2009 | 15 | IPC + 6.24% | 12.60% | 198,400 | 4,399 | 202,799 | 9.50% | 198,400 | 4,823 | 203,223 | 198,400 | 198,400 | 198,400 | 198,400 | 198,400 |
| National bond | COP | 12/14/2010 | 20 | IPC + 4.94% | 11.33% | 267,400 | (788) | 266,612 | 8.33% | 267,400 | (722) | 266,678 | 267,400 | 267,400 | 267,400 | 267,400 | 267,400 |
| National bond | COP | 12/5/2013 | 20 | IPC + 5.03% | 11.55% | 229,190 | (2,393) | 226,797 | 8.50% | 229,190 | (1,788) | 227,402 | 229,190 | 229,190 | 229,190 | 229,190 | - |
| National bond | COP | 7/30/2014 | 20 | IPC + 4.5% | 11.01% | 250,000 | (723) | 249,277 | 7.94% | 250,000 | (208) | 249,792 | 250,000 | 250,000 | 250,000 | - | - |
| National bond | COP | 3/20/2015 | 20 | IPC + 4.43% | 10.78% | 260,000 | (446) | 259,554 | 7.75% | 260,000 | (327) | 259,673 | 260,000 | 260,000 | - | - | - |
| National bond | COP | 12/5/2013 | 5 | IPC + 3.82% | 10.71% | 41,880 | (186) | 41,694 | 7.73% | 41,880 | (306) | 41,574 | 41,880 | 41,880 | 41,880 | 41,880 | - |
| National bond | COP | 3/20/2015 | 5 | IPC + 2.72% | 9.12% | 120,000 | (519) | 119,481 | 6.26% | 120,000 | (759) | 119,241 | 120,000 | 120,000 | - | - | - |
| National bond | COP | 12/14/2010 | 6 | IPC + 3.25% | 0.00% | - | - | - | 8.05% | 112,700 | (702) | 111,998 | 112,700 | 112,700 | 112,700 | 112,700 | 112,700 |
| National bond | COP | 7/30/2014 | 6 | IPC + 3.57% | 10.31% | 125,000 | 57 | 125,057 | 7.25% | 125,000 | (127) | 124,873 | 125,000 | 125,000 | 125,000 | - | - |
| National bond | COP | 1/22/2009 | 10 | 10.8% | 10.81% | 74,700 | 7,566 | 82,266 | 10.81% | 74,700 | 7,537 | 82,237 | 74,700 | 74,700 | 74,700 | 74,700 | 74,700 |
| National bond | COP | 11/20/2008 | 10 | 13.8% | 13.79% | 58,000 | 857 | 58,857 | 13.82% | 58,000 | 826 | 58,826 | 58,000 | 58,000 | 58,000 | 58,000 | 58,000 |
| **TOTAL** | | | | | | **2,528,690** | **12,619** | **2,541,309** | | **2,641,390** | **14,638** | **2,656,028** | **2,641,390** | **2,641,390** | **2,141,390** | **1,641,390** | **1,144,110** |

*- Figures expressed in millions of Colombian pesos -*

The detail of the international bonds issued by the company, is as follows:

| Type of bond | Original Currency | Initial date | Term | Nominal interest rate | 2016 | | | | 2015 | | | | Awarded amount | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | IRR | Nominal value | Amortized cost value | Total Amount | IRR | Nominal value | Amortized cost value | Total Amount | 2016 | 2015 | 2014 | 2013 | 2012 |
| Bono internacional | USD | 7/29/2009 | 10 | 7.63% | 8.16% | 1,500,355 | 35,420 | 1,535,775 | 8.16% | 1,574,735 | 32,297 | 1,607,032 | 1,500,355 | 1,574,735 | 1,196,230 | 963,415 | 884,115 |
| Bono internacional | COP | 1/31/2011 | 10 | 8.38% | 8.70% | 1,250,000 | 82,054 | 1,332,054 | 8.70% | 1,250,000 | 79,058 | 1,329,058 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 |
| Bono internacional | COP | 9/10/2014 | 10 | 7.63% | 7.73% | 965,745 | 16,169 | 981,914 | 7.73% | 965,745 | 15,502 | 981,247 | 965,745 | 965,745 | 965,745 | - | - |
| **TOTAL** | | | | | | **3,716,100** | **133,643** | **3,849,743** | | **3,790,480** | **126,857** | **3,917,337** | **3,716,100** | **3,790,480** | **3,411,975** | **2,213,415** | **2,134,115** |

*- Figures expressed in millions of Colombian pesos -*

**Debt Covenant / EBITDA**

EPM has a financial covenant, measured in the ratio long term financial debt to EBITDA, calculated based on the consolidated figures of the EPM Group, of maximum 3.5 times, in the credit contracts: French Development Agency – AFD, Inter American Development Bank – BID 1664, and Guarantee from Japan Bank for International Cooperation –JBIC a credit with the Japanese commercial bank. In addition, it has agreed this credit, but inactive, to count with double degree of investment, in the international bond issue with expiration in 2019.

As of December 2016 the result of the indicator is of 3.69 times. Said result obeys to the appearance of the current circumstances that affected the EBITDA of the Power Generation line of business during the last quarter of 2015 and the first two quarters of 2016, by the materialization of the weather phenomenon "El Niño" in addition to macroeconomic aspects that affected the balance of the long-term debt denominated in U.S. dollars during 2015.

Contractually, one of the schemes to avoid that this fact will become a nonfulfillment is that the banks grants a waiver.

EPM must report the fulfillment of this indicator as follow: to Japan Bank for International Cooperation –JBIC- quarterly, to the French Development Agency –FDA- biannually and to the Inter-American Development Bank -IDB- annually. EPM has waiver from the three entities for the results of December 2016. Because of the periodicity of measurement the waivers from FDA and IDB cover the period of 2017, while the JBIC will review quarterly the fulfillment of that indicator. The latter explains the classification to current liability of the balance of the loan from the Japanese commercial banks with guarantee from JBIC for $372,104.

It should be noted that the fact that EPM exceeds the debt/EBITDA covenant agreed does not generate activation of the declaration of default by the banks, or the advance payment, since this is an action contractually subject to the decision of the bank(s) of exercising or not that declaration and additionally to the fact of having repair periods agreed in the contracts to take care of an eventual default.

**Defaults**

During the accounting period, EPM has not defaulted in the payment of the principal and/or interest of its loans.

# Note 20. Creditors and other accounts payable

Creditors and other accounts payable consist of the following:

| Creditors and other accounts payable | 2016 | 2015 |
|---|---|---|
| **Non current** | | |
| Acquisition of goods and services | 628 | 628 |
| Deposits received in guarantee | 39 | 33 |
| Resources received in administration | 21,606 | 22,710 |
| Construction contracts | 8,002 | 8,203 |
| **Total creditors and other accounts payable non current** | **30,275** | **31,574** |
| **Current** | | |
| Creditors | 277,123 | 307,118 |
| Acquisition of goods and services[1] | 512,288 | 659,212 |
| Assigned grants | 3,795 | 1,966 |
| Deposits received in guarantee | 311 | 311 |
| Advances and advances received | 507 | 507 |
| Resources received in administration | 17,963 | 16,483 |
| Other accounts payable | 24,670 | 616 |
| Construction contracts | 24,808 | 29,942 |
| Commissions payable | 2,110 | 2,110 |
| **Total creditors and other accounts payable current** | **863,575** | **1,018,265** |
| **Total creditors and other accounts payable** | **893,850** | **1,049,839** |

*- Figures expressed in millions of Colombian pesos -*

[1] The most relevant payments made in the period correspond to the purchase of power in the Generation and Distribution segments made at the end of 2015.

The term for the payment to suppliers is 30 calendar days, with exceptions that are documented in the processes and determined among others, by the type of obligation and contract.

**Defaults**

During the accounting period, the company has not been in default in the payment of the principal or interest of its credits and loans.

## Note 21. Other financial liabilities

Other financial liabilities consist of the following:

| Other financial liabilities | 2016 | 2015 |
|---|---|---|
| **Non current** | | |
| Financial leasing | 196,308 | 197,213 |
| Pension bonds[1] | 282,253 | 302,477 |
| Derivatives for cash flow hedge purposes (see note 22) | 2,032 | - |
| **Total other non-current financial liabilities** | **480,593** | **499,690** |
| **Current** | | |
| Financial leasing | 906 | 832 |
| Pension bonds[1] | 234,693 | 180,829 |
| Derivatives for cash flow hedge purposes (see note 22) | 68,919 | - |
| **Total other current financial liabilities** | **304,518** | **181,661** |
| **Total other financial liabilities** | **785,111** | **681,351** |

*- Figures expressed in millions of Colombian pesos -*

Conventional purchases and sales of financial liabilities are accounted for applying the negotiation date.

[1]The variation was explained by the amortized cost and the payments made during the period.

### 21.1 Defaults

During the accounting period the company has not been in default in the payment of the principal and interest of its loans.

### 21.2 Financial leases

As of the closing date the carrying value of properties, plant and equipment under financial leasing is the following:

| 2016 | Land and buildings | Communication and computer equipment | Machinery and equipment | Total Assets |
|---|---|---|---|---|
| Cost | 200,057 | 2,380 | 2,063 | 204,500 |
| Accumulated depreciation | (65,263) | (1,374) | (1,011) | (67,648) |
| **Total** | **134,794** | **1,006** | **1,052** | **136,852** |

*- Figures expressed in millions of Colombian pesos -*

| 2015 | Land and buildings | Communication and computer equipment | Machinery and equipment | Total Assets |
|---|---|---|---|---|
| Cost | 200,057 | 2,380 | 2,063 | 204,500 |
| Accumulated depreciation | (60,926) | (1,283) | (946) | (63,155) |
| **Total** | **139,131** | **1,097** | **1,117** | **141,345** |

*- Figures expressed in millions of Colombian pesos -*

The most significant financial leasing agreement is the real estate property called “Edificio Empresas Públicas de Medellín”. The agreement has a term of 50 years counted as of December 2001, automatically renewable for an equal term if none of the parties expresses otherwise. The value of the rent is $1,500 monthly, which will be adjusted each year by the Consumer Price Index (CPI).

As of the report date the minimum future payments and the present value of the minimum payments for financial leasing are distributed as follows:

| Financial leasing | 2016 | | 2015 | |
|---|---|---|---|---|
| | Minimum payments | Present value of minimum payments | Minimum payments | Present value of minimum payments |
| At one year | 18,000 | 17,181 | 18,000 | 17,181 |
| At more than one year and up to five years | 72,000 | 55,613 | 72,000 | 55,613 |
| More than five years | 540,000 | 124,420 | 558,000 | 125,251 |
| **Total leasing** | **630,000** | **197,214** | **648,000** | **198,045** |
| Less - value of interest not earned | 432,786 | - | 449,955 | - |
| **Present value of minimum payments for leasing** | **197,214** | **197,214** | **198,045** | **198,045** |

*- Figures expressed in millions of Colombian pesos -*

The expense for contingent leases recognized in the profit and loss of the period is $16,407 (2015: $15,115).

### 21.3 Defaults

During the accounting period the company has not been in default in the payment of the capital and interest of its loans.

# Note 22. Derivatives and hedging

| Classification of Hedging | Description | Risk covered | Trench | Hedged item | Carrying value of hedged item | Carrying value of hedging instrument | Changes in the fair value of hedging instrument in the period | Changes in the fair value of the hedged item in the period | Inefficacy of hedging recognized in profit and loss for the period | Efficacy of hedging recognized in profit & loss for the period | Reclassification of other comprehensive income to profit & loss for the period1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cash flow heding** | | | | | | | | | | | |
| Swaps | Cross Currency Swap | Exchange rate USD / COP and interest rate Libor /fixed of debt service | Total of Club Deal Credit | Credit in U.S. dollars | 1,686,230 | 70,951 | 70,951 | 5,833 | N.A | 70,951 | 498 |
| Futures | Derivex | Sale price in power exchange | N.A. | Sales of Energy highly probable item | N.A | 18 | 18 | N.A | N.A | 282 | 264 |

*- Figures expressed in millions of Colombian pesos -*

[1] The reclassification of other comprehensive income to the profit and loss of the period effected the exchange difference for swap instruments, corresponding to the exchange difference of the interest and principal of the right and for the instruments contracts of futures affected the sales of energy in the exchange. Additional $46,697 was capitalized such as borrowing costsmainly for the Ituango project.

**Cash flow hedging**

**The characteristics of the main cash flow hedging instruments that are under the hedge accounting are the following:**

Swaps:

| Characteristics | Section 1 | Section 2 | Section 3 | Section 4 | Section 5 | Section 6 |
|---|---|---|---|---|---|---|
| Credit | Club Deal | Club Deal | Club Deal | Club Deal | Club Deal | Club Deal |
| Date | 24-May-16 | 24-May-16 | 26-May-16 | 3-Jun-16 | 3-Jun-16 | 7-Jun-16 |
| Entity | Bank of America Merrill Lynch | JP Morgan | JP Morgan | Bank of America Merrill Lynch | JP Morgan | Bank of America Merrill Lynch |
| Nominal | USD 50,000,000 | USD 50,000,000 | USD 50,000,000 | USD 50,000,000 | USD 50,000,000 | USD 50,000,000 |
| Exchange rate | 3,058 | 3,058 | 3 | 3 | 2,997 | 2,945 |
| COP obligation | 152,900,000,000 | 152,900,000,000 | 152,650,000,000 | 151,250,000,000 | 149,850,000,000 | 147,250,000,000 |
| EPM pays | IBR + 2.1077 | IBR + 2.17 | IBR + 2.17 | IBR + 2.16 | IBR + 2.20 | IBR + 2.25 |
| 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 |
| Periodicity | Biannual | Biannual | Biannual | Biannual | Biannual | Biannual |
| Effective date | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 |
| Expiration date | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 |

| Characteristics | Section 7 | Section 8 | Section 9 | Section 10 | Section 11 | Tranche 12 |
|---|---|---|---|---|---|---|
| Credit | Club Deal | Club Deal | Club Deal | Club Deal | Club Deal | Club Deal |
| Date | 8-Jun-16 | 20-Jun-16 | 8-Jul-16 | 12-Jul-16 | 21-Jul-16 | 8-Aug-16 |
| Entity | JP Morgan | Bank of America Merrill Lynch | BNP Paribas | BNP Paribas | BNP Paribas | BNP Paribas |
| Nominal | USD 50,000,000 | USD 60,000,000 | USD 40,000,000 | USD 50,000,000 | USD 30,000,000 | USD 30,000,000 |
| Exchange rate | 2,907 | 2,976 | 2,965 | 2,907 | 2,924 | 2,990 |
| COP obligation | 145,350,000,000 | 178,560,000,000 | 118,600,000,000 | 145,350,000,000 | 87,720,000,000 | 89,700,000,000 |
| EPM pays | IBR + 2.19 | 9.30% | 8.42% | 8.55% | 8.48% | 8.44% |
| 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 |
| Periodicity | Biannual | Biannual | Biannual | Biannual | Biannual | Biannual |
| Effective date | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 | 12-Jul-16 |
| Expiration date | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 | 29-Dec-20 |

***Implicit derivatives***

The company has not entered into contracts containing embedded derivatives.

# Note 23. Employee benefits

The item of employee benefits recognized at the report date, present the following composition:

| Employee benefits | 2016 | 2015 |
|---|---|---|
| **Non-Current** | | |
| Post-employment benefits | 219,509 | 88,764 |
| Long Term Benefits | 35,375 | 115,116 |
| **Total non-current employee benefits** | **254,884** | **203,880** |
| **Current** | | |
| Short-term benefits | 72,166 | 62,927 |
| Post-employment benefits | 44,459 | 38,252 |
| **Total benefits to current employees** | **116,625** | **101,179** |
| **Total** | **371,509** | **305,059** |

*- Figures expressed in millions of Colombian pesos -*

## 23.1. Post-employment benefits

It covers plans of defined benefits and the defined contributions plans detailed below:

### 23.1.1. Defined benefits plans

| Defined Benefit Plans | Pensions[1] | | Retroactive benefits[2] | | Educational Assistance Plan[3] | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 |
| **Present value of defined benefit obligations** | | | | | | | | |
| Beginning balance | 410,899 | 429,463 | 84,275 | 85,493 | 151 | 169 | 495,325 | 515,125 |
| Cost of the present service | - | - | 3,264 | 3,435 | - | - | 3,264 | 3,435 |
| Interest income or (expense) | 30,274 | 27,681 | 6,025 | 5,287 | 7 | 9 | 36,306 | 32,977 |
| Assumptions by experience | 17,486 | 5,098 | 7,513 | 268 | (17) | 4 | 24,982 | 5,370 |
| Financial Assumptions | 22,634 | (14,383) | 1,672 | (1,666) | - | (1) | 24,306 | (16,050) |
| Payments made by the plan4 | (37,089) | (36,960) | (10,140) | (8,543) | (37) | (30) | (47,266) | (45,533) |
| Other changes | 339 | - | - | - | - | - | - | - |
| **Present value of obligations as of December 31** | **444,543** | **410,899** | **92,609** | **84,274** | **104** | **151** | **536,917** | **495,324** |
| **Fair value of plan assets** | | | | | | | | |
| Beginning balance | 284,322 | 315,438 | - | - | - | - | 284,322 | 315,438 |
| Payments made by the plan4 | (44,502) | (36,960) | - | - | - | - | (44,502) | (36,960) |
| Interest income | 20,654 | 19,674 | - | - | - | - | 20,654 | 19,674 |
| Actuarial gains or losses: | - | (9,035) | - | - | - | - | - | (9,035) |
| Expected return on plan (excluding interest income) | 12,814 | - | - | - | - | - | 12,814 | - |
| Other changes | - | (4,795) | - | - | - | - | - | (4,795) |
| **Fair value of plan assets December 31** | **273,288** | **284,322** | **-** | **-** | **-** | **-** | **273,288** | **284,322** |
| **Surplus or (deficit) of the defined benefit plan** | **171,255** | **126,577** | **92,609** | **84,274** | **104** | **151** | **263,968** | **211,002** |
| Adjustment to surplus by asset limit | | | | | | | | |
| **Net Asset or (liability) of the defined benefit plan** | **171,255** | **126,577** | **92,609** | **84,274** | **104** | **151** | **263,968** | **211,002** |
| Other defined benefit items | - | 288 | - | - | - | - | - | 288 |
| **Total defined benefits** | **171,255** | **126,865** | **92,609** | **84,274** | **104** | **151** | **263,968** | **211,290** |

*- Figures expressed in millions of Colombian pesos -*

[1]Includes a retirement pension plan for pensions recognized prior to the effectiveness of the General Pension System of Law 100 of 1993 with its respective substitutions, which are distributed in the actuarial calculation by groups differentiating the lifelong pensions, those shared with the Social Security Institute, the pension substitutions and those that generate retirement quota share. The plan is made up by EPM retirees and those that belong to the pension substitution by the liquidation of the Empresa Antioqueña De Energía EADE. It includes social security contributions and funeral allowance. Retirement pensions are 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 suffered any modifications, reductions or liquidations that represent a reduction of the present value of the obligation.

[2]Includes a plan corresponding to retroactive severance pay, it is a post-employment benefit that applies approxinmately to 10.6% of the employees of EPM, consisting in the recognition of an average monthly salary multiplied by the years of service, payable through advances and at the time of termination of the employment agreement. The sources that gives rise to the plan is “Law Sixth of 1945 whereby some provisions are issued on the labor agreements, professional associations, collective conflicts and special labor jurisdiction” and the National Decree 1160 of 1989, whereby Law 71 of 1988 is partially regulated, whereby rules are issued on pensions and other provisions are ordered. For the retroactive severance plan, no possible risks or significant modifications are identified during the period.

[3] Includes an educational allowance plan that is granted to each of the children of the retirees of EPM, entitled thereto; it consists of aids for high school, technical or college studies. It has its origin in article 9 of Law 4 of 1976, whereby rules are issued on the subject of pensions of the public, official, semiofficial and private sectors and provides that the companies or employers will grant scholarships or aids for high school, technical or college studies, to the children of its retired personnel, under the same conditions as those granted to established for the children of active workers.

The weighted average duration in years of the obligation for defined benefits plans to the court date is the following:

| Benefit | 2016 | | 2015 | |
|---|---|---|---|---|
| | From | To | From | To |
| EPM Pension | 8.7 | 11.4 | 8.5 | 10.9 |
| EPM Education Allowance | 1.6 | 1.6 | 1.9 | 1.9 |
| Retroactive severance | 7.1 | 7.1 | 7.6 | 7.6 |

[4]Includes $47,266 for 2016 and in 2015: $45,533, of values paid for liquidations of the plan.

The company does not have restrictions on the current realization of the excess of the defined benefit plan.

The company did not make contributions for defined benefits during 2016, and it does not expect to make contributions for the next annual period.

The fair value of plan assets is composed so:

| Assets that support the plan | 2016 | | 2015 | |
|---|---|---|---|---|
| | % Participation | Fair value | % Participation | Fair value |
| Cash and cash equivalents | 1.6% | 4,281 | 1.19% | 3,383 |
| Debt instruments | | | | |
| AAA | 88.5% | 241,894 | 87.99% | 250,175 |
| AA | 5.6% | 15,282 | 8.78% | 24,963 |
| A | 0.6% | 1,773 | - | - |
| Investment Funds[1] | 3.7% | 10,058 | 2.04% | 5,800 |
| **Total debt instruments** | **98.4%** | **269,007** | **98.81%** | **280,938** |
| **Total assets that support the plan** | **100.0%** | **273,288** | **100.00%** | **284,322** |

*- Figures expressed in millions of Colombian pesos -*

[1]Among the investment funds there are open collective investment funds without pact of permanence for a value of $3,747 and the funds traded (International Exchange Trade Fund - ETF) that replicates the Capitalization Share Index (COLCAP) for a value of $6,311.

The major actuarial assumptions used to determine the obligations for the defined benefit plans are the following:

| Assumption | Item | |
|---|---|---|
| | 2016 | 2015 |
| Discount rate (%) EPM | 5.80 - 7.30 | 6.00 - 7.80 |
| Annual salary increase rate (%) | 4.00 - 7.09 | 4.00 - 4.70 |
| Actual return rate of plan assets | 6.50 | 3.61 |
| Annual growth rate of futures | 3.50 - 5.89 | 3.50 |
| Annual inflation rate (%) | 3.50 - 5.89 | 3.50 |
| Survival rates | Valid Rentists 2008 | |

The following table details the effect of a variation of over 1% and less than 1% in the discount rate and in the increase in the benefit on the obligation for plans of defined post-employment benefits:

| Assumptions | Increase in discount rate by +1% | Decrease in discount rate by -1% | Increase in salary increase by + 1% | Decrease in salary increase by -1% |
|---|---|---|---|---|
| EPM Pension Benefit 1 | 307,788 | 362,038 | - | - |
| EPM Social Security Contributions Benefit 2 | 25,983 | 30,326 | - | - |
| EPM educational aid Benefit 3 | 102 | 105 | 105 | 102 |
| EADE Pension Beneft 4 | 73,264 | 91,019 | - | - |
| EADE Social Security Contribution | 1,837 | 2,158 | - | - |
| Benefit 6 Retroactive Cessation | 87,215 | 98,540 | 101,992 | 83,906 |
| **Total beneficios Post-empleo** | **496,189** | **584,186** | **102,097** | **84,008** |

*- Figures expressed in millions of Colombian pesos -*

The methods and assumptions used to prepare the sensitivity analysis of the Present Value of the Obligations (DBO – Defined Benefit Obligations) was made using the same methodology that for the actuarial calculation as of December 31, 2016: Projected Unit Credit (PUC) method. The sensibility does not present limitations, or changes in the methods and assumptions used to prepare the analysis of the current period.

### 23.1.2. Defined contribution plans

The Company made contributions to defined contribution plans recognized as expense in profit and loss for $13,253 (2015: $12,231), and cost for $23,938 (2015: $20,959) and in investment projects for $8,163 (2015: $5,967), for a total of $45,354 (2015: $39,157).

### 23.2. Long-term employee benefits

| Long-term employee benefits | Seniority bonus[1] | | Total | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| **Present value of obligations for other long term benefits** | | | | |
| Beginning balance | 30,841 | 29,937 | 30,841 | 29,937 |
| Cost of present service | 2,824 | 2,618 | 2,824 | 2,618 |
| Income or (expenses) for interest | 2,286 | 1,891 | 2,286 | 1,891 |
| Assumptions for experience | 2,449 | 740 | 2,449 | 740 |
| Financial assumption | 837 | (1,039) | 837 | (1,039) |
| Payments made by the Plan2 | (3,863) | (3,306) | (3,863) | (3,306) |
| **Present value of obligations as of December 31** | **35,374** | **30,841** | **35,374** | **30,841** |
| **Surplus or (deficit ) for long -term benefits** | **35,374** | **30,841** | **35,374** | **30,841** |
| **Asset or (liability) for long-term net benefits** | **35,374** | **30,841** | **35,374** | **30,841** |

*- Figures expressed in millions of Colombian pesos -*

For these benefits the company does not have assets that support the plan.

[1] Includes a plan corresponding to Seniority Bonus. It is a long-term benefit granted to the employees through the Collective Bargaining Agreement, in EPM is granted according to the years of continuous or discontinuous service. It is recognized and paid one time in the respective period and according to the terms established: every 5 years 12,12, 17, 23, 30, 35 and 40 days of basic salary will be paid, respectively. For the Seniority Bonus plan no possible risks are identified.

[3] It includes $3,863 for the current period and $3,306 for 2015 by the amounts paid to the settlement plan.

The weighted average duration in years, of the obligations for long-term benefit plans at the report date, is presented below:

| Benefit | 2016 | | 2015 | |
|---|---|---|---|---|
| | From | To | From | To |
| Seniority Premium | 6.5 | 6.5 | 6.4 | 6.4 |

The company does not expect to make contributions to the plan for the upcoming annual period.

The major actuarial assumptions used to determine the obligations for the long-term employee benefit plans - Seniority Bonus, are the following:

| Assumptions | Item | |
|---|---|---|
| | 2016 | 2015 |
| Discount rate (%) | 7.10 | 7.50 |
| Annual salary increase rate (%) | 4.70 | 4.70 |
| Annual inflation rate (%) | 5.89 | 3.50 |
| Survival rates | Valid Rentists 2008 | |

The following table shows the effect of a variation of more than 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 benefits:

| Assumption | Increase in the discount rate by +1% | Decrease in the discount rate by -1% | Increase in salary increase by +1% | Decrease in salary increase by -1% |
|---|---|---|---|---|
| Seniority Premium | 33,351 | 37,644 | 37,497 | 33,449 |
| **Total long term benefits** | **33,351** | **37,644** | **37,497** | **33,449** |

*- Figures expressed in millions of Colombian pesos -*

The methods and assumptions used to prepare the sensibility analysis of the Present Value of Obligations (DBO - Defined Benefit Obligations) was made using the same methodology as for the actuarial calculation as of December 31, 2016: Forecasted Credit Unit (FCU). The sensibility does not present any limitations, or changes in the methods and assumptions used to prepare the analysis of the current period.

### 23.3 Short-term benefits

The common of the short term benefits is as follows:

| Short-term benefits | 2016 | 2015 |
|---|---|---|
| Payroll payable | 8,060 | 5,989 |
| Savings | 25,998 | 22,833 |
| Interest on disposal | 3,046 | 2,685 |
| Holidays | 11,164 | 10,100 |
| Holiday bonus | 22,505 | 20,136 |
| Christmas bonus | 34 | 7 |
| Bonuses | 1,359 | 1,177 |
| **Total short-term benefits** | **72,166** | **62,927** |

*- Figures expressed in millions of Colombian pesos -*

# Note 24. Taxes, contributions and rates

The detail of taxes, contributions and rates, different from income tax, is the following:

| Taxes, contributions and rates | 2016 | 2015 |
|---|---|---|
| **Current** | | |
| Tax withholding and stamp tax | 55,591 | 52,016 |
| Industry and Commerce Tax | 20,287 | 19,486 |
| Customs tax and surcharges | 29 | - |
| Contributions | 3,565 | 741 |
| Rates | 14,329 | 12,602 |
| Other national taxes | 697 | 697 |
| Other municipal taxes | 4 | 24 |
| Value added tax | 2,970 | 2,478 |
| **Total Taxes, rates and contributions current** | **97,472** | **88,044** |
| **Total Taxes, contributions and rates** | **97,472** | **88,044** |

*- Figures expressed in millions of Colombian pesos -*

# Note 25. Provisions, contingent assets and liabilities

### 25.1 Provisions

The reconciliation of provisions is as follows:

| Item | Dismantling or restoration [1] | Onerous contracts | Litigations [2] | Business combinations | Subsidiary implied obligations | Other provisions[3] | Total |
|---|---|---|---|---|---|---|---|
| Beginning balance | 936 | 162,045 | 91,022 | 152,591 | - | 19,284 | 425,878 |
| Additions | 17,808 | - | 10,301 | - | 9,521 | 72,085 | 109,715 |
| Utilizations (-) | (1,560) | (20,851) | (959) | (333) | - | (39,697) | (63,400) |
| Reversals, amounts not used (-) | - | - | (25,331) | (416) | - | (3,519) | (29,266) |
| Adjustment for discount rate | 544 | (5,348) | (9,572) | 326 | - | (6,147) | (20,197) |
| Other changes | 383 | 5,338 | 5,125 | (4,755) | - | 1,237 | 7,328 |
| **Ending balance** | **18,111** | **141,184** | **70,586** | **147,413** | **9,521** | **43,243** | **430,058** |
| Non current | 9,066 | 105,144 | 54,784 | 18,647 | 9,521 | 12,134 | 209,296 |
| Current | 9,045 | 36,040 | 15,802 | 128,766 | - | 31,109 | 220,762 |
| **Total** | **18,111** | **141,184** | **70,586** | **147,413** | **9,521** | **43,243** | **430,058** |

*- Figures expressed in millions of Colombian pesos -*

[1]An increase is observed in the provision for dismantling for the new environmental provision generated as an environmental reforestation obligation regulated by the ANLA, the CAR and the MASD[3].

[2]The reduction of the provision for litigations was caused mainly by changes in the estimates of some claims which were adjusted by the Legal area to the maximum amount ordered by the legal system in respect to moral damages.

[3]The increase in the item of other provisions was explained mainly by the creation of the provision generated by the delay in the construction of the projects Bello – Guayabal – Ancon and Nueva Esperanza, for a value of $16,839 and $4,050 respective and by the obtaining of the employer policy for the term 2017-2018.

**25.1.1. Dismantling or restoration** EPM has the obligation to incur in costs of dismantling of restoration of its facilities and assets. Currently EPM has two provisions for dismantling, one of them related to the removal of transformers that contain PCB (polychlorinated biphenyls), EPM has agreed to the dismantling of these assets from 2014 to 2016 covered in Resolution 222 of December 15, 2011 from the Ministry of the Environment and Sustainable Development and to the Stockholm Convention of May 22, 2008. The provision is recognized for the present value of expected costs to pay off the obligation using estimated cash flows. The major assumptions considered in the calculation of the provision are: estimated costs, CPI and fixed TES (Treasury Bonds). As of this date there has been no evidence of any future events that could affect the calculation of the provision.

The Amaga Mine: with Resolution 130 AS-1106242 of October 21, 2011 issued by CORANTIOQUIA approval is given to the environmental component of the plan to close the coal mines of the mining title and for these purpose construction contracts are performed of various civil works, urbanism and monitoring in the coal mines of the mining title, code RPP 434 of the area of Amaga. EPM has committed to the dismantling of these assets from 2013 to 2016. The main assumptions considered in the calculation of the provision are: estimated costs, CPI, and TES fixed rate. As of this date no future events have been evidenced that could affect the calculation of the provision. Currently the company is in the final stretch of the actions contemplated in the mentioned resolution and is waiting for a pronouncement by Corantioquia to this effect, which could imply the performance of more monitoring. However, it is clear that regardless of this pronouncement, EPM must

[3] **ANLA:** National Authority of Environmental Licenses, CAR: Autonomous Regional Corporation and MADS: Ministry of the Environment and Sustainable Development.

carry out the necessary actions for the delivery of the title, which include legal and technical processes and the structuring of decisional schemes.

The environmental provision is required in the construction of infrastructure projects, it arises as a legal obligation derived from the granting of the environmental license to compensate the loss of biodiversity during the construction phase, as well as the compensation for the subtraction of reserve areas, affectation of preserved species and forest exploitation; obligations that are formalized through the resolutions of the ANDA - National Environmental License Authority, CAR Autonomous Regional Corporation and/or MADS – Ministry of the Environment and Sustainable Development. The performance of the biotic environmental compensations of the project extend beyond the tie in which the asset start to operate technically, and it becomes necessary to implement the provision in order that those disbursements will be considered as higher value of the construction in progress. The company has committed to compensate the loss of biodiversity, subtraction and preserved species from 2016 to 2019 according to the following resolutions: Res. 1313/2013 ANLA, Res. 519/2014 ANLA, Res LA. 0882/04/08/2014 ANLA, Res. 1166/2013 MADS, Res. 1852/2013 CAR, Res. 2135/2014 CAR, Resolution 1189/22/07/2104 MADS, Res. 1120907/17-03-2015 CORNARE, Res. 141011206/16-10-2014 CORANTIOQUIA, Res LA. EIA1-9872 21/04/2014 CVS, among others. The provision is recognized for the present value of the costs expected to pay the obligation using estimated cash flows. The main assumptions considered in the calculation of the provision are: estimated costs, CPI and fixed rate TES.

### 25.1.2. Contracts for valuable consideration

As of December 31, 2015 the Company has the agreement of supply and transportation of fuel for $162,046 signed with Transportadora de Gas Internacional S.A. E.S.P. (TGI) which object is to support the Termosierra plant and obtain the income of the charge for reliability established by the Energy and Gas Regulation Commission.

The major assumptions considered in the calculation of the provision are: costs associated to the agreement with the mentioned conditions, utilization factor or suspension of payments for maintenance of the agreement, Libor rate, discount rate calculated with reference to the market returns of the bonds issued by the National Government, the Market's Representative Exchange Rate and macroeconomic scenario projected.

The main hypothesis used on the future events are: from 2016 to 2020 the following assumptions are maintained: Suspension of the contract for 30 days every year and utilization of the contract only 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).

### 25.1.3. Litigations

With this provision the Company covers the estimated losses probable related to labor, civil, administrative and tax litigations (through administrative and government channels) that arise in the operations. The major assumptions considered in the calculation of the provision are: CPI average at actual data in previous years and projected data in future years, discount rate calculated with reference to the market returns of the bonds issued by the National Government, estimated value to be paid and the estimated payment date for those litigations Qualified as probable. As of this date no future events have been evidenced that may affect the calculation of the provision.

In the variations that the litigations show, it is worth mentioning the recovery of litigation 14001154 with the plaintiff German Guillermo Marquez Vargas caused by the decision favorable to the Company and litigation 14000735 with Ms. Carmen Maria Alzate Rivera for second instant decision that decreased the value of the claim initially made by the plaintiff.

In order to diminish the uncertainty conditions that may exist in respect to the estimated payment date and estimated value to be paid of a litigation rated as probable, the Company has business rules based on statistical studies that were used to obtain the average duration of the processes by action and also the application of the law to the maximum limits defined by it for the value immaterial claims when they exceed their amount as described below:

**Average duration of processes by action**

Administrative and tax action

**Administrative and fiscal**

| Action | Average Years |
|---|---|
| Abbreviated | 4 |
| Petition for Compliance | 4 |
| Group Action | 6 |
| Class Action | 4 |
| Pre-trial conciliation | 2 |
| Civil action within criminal proceedings | 4 |
| Contractual | 13 |
| Delimitation and Demarcation | 5 |
| Executory Process | 5 |
| Singular Executory Process | 3 |
| Expropriation | 4 |
| Comprehensive Repair Incident | 2 |
| Imposition of Easement | 4 |
| Nullity of Administrative Acts | 5 |
| Nullity and Reestablishment of Right | 10 |
| Nullity and Reestablishment of Labor Right | 11 |
| Ordinary Proceedings | 7 |
| Ordinary Ownership Proceedings | 5 |
| Accusatory Criminal (Law 906 of 2004) | 4 |
| Proceedings for Partition of Property | 4 |
| Protection of Consumer Rights | 6 |
| Complaint Filed With the Police | 3 |
| Recovery of Possession | 7 |
| Direct Repair | 12 |
| Verbal | 5 |

**Labor processes**

| Action | Average Years |
|---|---|
| Solidarity | 3.5 |
| Pension | 3.5 |
| Overtime | 3.5 |
| Reintegration | 4 |
| Salary Scale Leveling | 3.5 |
| Indemnification for termination without cause | 3.5 |
| Recalculation of Fringe Benefits | 3.5 |
| Indemnification for job related accident | 4 |
| Refund of Health-Pension Contributions | 4 |

**Application of the law**

**Typology: The values of the claims of indemnification for immaterial damages will be recorded in accordance with the following typology:**

- **Moral damage**
- Damage to health (physiological or biological damage), derived from a bodily or psychophysical injury.
- Damages to the life of the relationship
- Damages to constitutional and conventional goods.

The values of other immaterial claims not recognized by the law will not be recorded, save that from the complaint it may be inferred that, notwithstanding the being denominated in another way, corresponds to any of the typologies admitted. Claims for immaterial indemnifications for damages to goods will not be recorded either.

**Quantification**: The quantity of the immaterial claims will be recorded in uniform manner as follows, regardless of their typology:

| | |
|---|---|
| For Direct Victim | 100 Minimum legal monthly salaries in effect |
| For Indirect Victims | 50 Minimum legal monthly salaries in effect |

**The following are recognized litigation:**

| Third Party | Claim | Value |
|---|---|---|
| Consorcio Dragados Porce II | To pay to the plaintiffs, among others, the sums of money that result from the return of all the compensation illegally deducted by EPM in the contracting process No. CD002376. | 27,439 |
| Fiduciaria Colpatria S.A. | Free payment warrant against EPM and in favor of Fiduciaria Colpatria S.A. Acting as spokesperson for the Autonomous Heritage FC - Embedded. | 4,362 |
| VELPA SOLUCIONES INTEGRALES S.A. | Impossibility of contracting with the State for a period of 5 years, product of the decision taken in the contracting process No. 2009 - 0974. | 4,080 |
| Temporary Union Solar Energy S.A. And Estructuras Arbi Ltda. | That it be declared that the bid submitted by the applicants to tender No. ES-2043-GI convened by EPM was legally capable of being taken into account when awarding the respective contract of tender No. ES-2043-GI | 1,765 |
| Construcciones Pico y Pala Ltda. | To declare the nullity of Resolution 95070 of 04/05/1999, issued by EPM, by means of which the contract 1 / DJ-682/15 concluded between EPM and CONSORCIO TRAINCO S.A. was liquidated unilaterally. And 113701 of 03/15/2000, issued equally by EPM, by means of which the appeal for reinstatement filed against Resolution 95070 of 04/05/1999 was resolved negatively. | 1,626 |
| Francisco Arturo Muriel Palacio | Moral damages, and damage to the life of the relationship, caused to the plaintiffs on the occasion of the death of Claudia Patricia Cepeda Muriel, in events occurred on 05/27/2008 in race 49 between 16 South and 18 South. | 1,585 |
| Accesorios y Sistemas S.A. | Declare the nullity of Resolution 3077 of December 11, 2002, issued by the General Manager of EPM, through which it was resolved to declare the realization of the risk of quality and correct operation of the vehicles object of contract 090321557. | 957 |
| Didier De Jesús Restrepo Montoya | As a result of being declared jointly and severally liable for the damages caused, both material and immaterial and moral for the eviction of the place where they had built their houses, carried out on 04/15/2009, for the construction of the Porce III Hydroelectric Project. | 942 |
| TRAINCO S.A. | That Resolution 161052 of 05/03/2001, issued by EPM, be declared void, by means of which the contract 2101870 concluded between EPM and TRAINCO S.A. was unilaterally terminated. And 178702 of 07/06/2001, | 936 |
| Several administrative | Other processes of less than $ 936 million pesos. | 12,628 |
| Municipality of Nechí and others | Industry and commerce and street lighting | 306 |
| Jenifer Andrea Marcelo Jiménez | Compensation, solidarity | 2,251 |
| Luis Bernando Mora Meneses | Benefits of the Dept. Doctor | 740 |
| Bertha Luz Bustamante Salazar | Reimbursement | 710 |
| Various labor | Other processes of less than $ 710 million pesos. | 10,259 |
| **Total litigation recognized** | | **70,586** |

*- Figures expressed in millions of Colombian pesos -*

### 25.1.4. Business Combinations

It corresponds to the contingent considerations related to the acquisiton of the following group of assets that represent a business: subsidiary Espíritu Santo Energy S. de R.L. and subsidiary Empresas Varias de Medellín S.A E.S.P. – EMVARIAS, the balance at December 31, 2016 is $129,076 (2015: $135,123) and $18,337 (2015: $17,468), respectively.

The main assumptions considered in the calculation of the contingent consideration related to the acquisition of Espíritu Santo are: estimated date of occurrence of milestones associated to the contingent payment, probability of occurrence associated, and additionally the discount of the flows of payments was considered applying a discount rate (Libor Rate) in accordance with the risk of the liability. As of this date no future events have been evidenced that may affect the calculation of the provision

The main hypothesis used on these future events of the contingent consideration related to the acqusition of EMVARIAS are: for litigations in progress against that Company as of the date of the transaction, definition of the year of materialization of each one of them, definition of the related value and estimate of the future contingent disbursements, discount rate (fixed rate TES [Treasury Securities]) to discount the future contingent flows of disbursements. As of this date no future events have been evidenced that may affect the calculation of the provision.

### 25.1.5. Implied obligations of subsidiaries

It corresponds to the implied obligation of the Subsidiary Hidroecologica del Teribe S.A. HET) derived from the application of equity method.

### 25.1.6. Other provisions

EPM maintains other provisions intended to the wellbeing and quality of life of its employees and their family group, such as: employer policy, multiplying points, *Somos* program, technical reserve and provision for high cost and catastrophic diseases.

The main assumptions considered in the measurement of each type of provision are:

**Employer policy:** Granted to the employees of EPM as extralegal benefit. An aggregated deductible was contracted since november 1, 2016 up to december 31, 2018, of $5.500 million pesos. The main assumptions considered in the calculation for each type of provision are: discount rate TES (Treasury Securities) fixed rate, estimated value to be paid and estimated payment date. As of this date no future events have been evidenced that could affect the calculation of the provision.

**Multiplying points:** For every point 1.0% of the Minimum Monthly Legal Salary in Effect (MMLSE) will be recognized. One point for an immersion – study of foreign language – is equivalent to 3% of the MMLSE of the period to be provisioned. A percentage of 90% of the points corresponds to claim in cash at the time the points are earned. The remaining 10% is estimated for immersion.

**Program Somos:** The program operates under the modality of accumulation of points. According to the statistics' behavior the points are accounted for with a probability of 80% redemption.

**Technical reserve:** The base to calculate the reserve is that corresponding to all the authorization of services issued and that on the closing date in which the reserve is going to be calculated have not been collected, except those that correspond to authorizations with over twelve months of issue or those that after at least 4 months of having been issued, there is evidence that they have not been used.

**High cost and catastrophic diseases:** The base to calculate said provision is that corresponding to the analysis of the entire population served of affiliates and beneficiaries of Entidad Adaptada de Salud (EAS) of EPM, that suffer any of the authorized pathologies.

**Delay in transmission projects: This provisions is due to the payment of guarantees for the failure to enter operations of the projects Bello - Guayabal - Ancon and Nueva Esperanza.**

The assumptions used are: Their life expectancy is estimated, estimated payment date, estimated payment value, CPI rate of the macroeconomic scenario of EPM to project and the estimated TES fixed rate for discount. As of this date no future events that could affect the calculation of provisions have been evidenced.

### 25.1.7. Estimated payments

The estimate of the dates on which the Company considers that it will have to face the payments related to the provisions included in the individual statement of financial position as of the report date, is the following:

| Estimated Payments | Dismantling or restoration | Onerous contracts | Litigation | Business combination | Others | Total |
|---|---|---|---|---|---|---|
| 2017 | 10,083 | 36,040 | 16,646 | 119,583 | 32,396 | 214,748 |
| 2018 | 10,009 | 35,696 | 10,209 | 10,709 | 3,387 | 70,010 |
| 2019 | 2,688 | 35,047 | 2,065 | 11 | 2,870 | 42,681 |
| 2020 y otros | 1,644 | 34,400 | 55,079 | 6,629 | 5,282 | 103,034 |
| **Total** | **24,424** | **141,183** | **83,999** | **136,932** | **43,935** | **430,473** |

*- Figures expressed in millions of Colombian pesos -*

### 25.2 Contingent liabilities and assets

The composition of the contingent liabilities and assets is the following:

| Type of contingency | Contingent liabilities | Contingent assets | Net |
|---|---|---|---|
| Litigation | 383,474 | 198,454 | 185,021 |
| **Total** | **383,474** | **198,454** | **185,021** |

*- Figures expressed in millions of Colombian pesos -*

The Company has litigations or procedures that are currently in process with the legal, administrative and arbitration bodies. Taking into consideration the reports from the legal counsel it is reasonable to estimate that those litigations will not affect significantly the financial position or solvency, even assuming an unfavorable conclusion of any of them.

The main litigations pending resolution and legal and extralegal disputes to which the Company is part as of the report date, are indicated below:

## Contingent liabilities

**Part 1**

| Third Party | Claim | Value |
|---|---|---|
| National Federation of Coffee Growers | Recognition and payment of the investments made by the Federation of | 99,643 |
| Compañía Minera La Cuelga | Indemnification for all economic damages caused to Compañía Minera La Cuelga, which originate in the work of execution, filling of reservoir and start up of the Porce III hydroelectric project. | 32,284 |
| ALOS Transporte S.A. | EPM be ordered to enable and classify Alos Conveyors within the contracting process PC-2009-0480, provision of the ground transportation service. | 21,110 |
| Juan Carlos Cárdenas Arboleda | That EPM and other entities will be declared liable for the damages caused to the plaintiffs for landslide in Calle Vieja of the neighborhood La Gabriela de Bello on December 5, 2010 and that they will be ordered to pay the property damages. | 19,284 |
| Gas Conveyor International TGI S.A. E.S.P. - TGI S.A. E.S.P. | That the ESTF -026-2008 contract binding the parties is declared valid; That the charges will be those established in the contract and that they will be subject to the modifications established by CREG | 13,590 |
| Aura de Jesús Salazar Mazo | Violating and putting at risk the collective right, by destroying, interrupting and cutting the ancentral horse trails that lead to the village Alto Chiri of the municipality of Briceño in the township of Valle de Toledo. | 8,855 |

**Part 2**

| Third Party | Claim | Value |
|---|---|---|
| Oscar Antonio Giraldo Avendaño | EPM and other entities of damages caused to the plaintiffs by landslide in calle Vieja of the district La Gabriela Bello in dec 5/10 are declared responsible. | 6,194 |
| Industrias Lehner S.A. | It is stated that in the execution of contract No. SCN-3225E there was an economic imbalance between the benefits of the parties and to the detriment of the contractor. | 6,108 |
| CONINSA S.A. | It is declared that EPM failed to comply with Contract No. 2 / DJ-2183/43 and its additional agreements, for non-payment of damages suffered, causing an economic imbalance by failing to recognize in a timely manner the value of higher costs incurred by the Consortium . | 5,557 |
| Alba Nancy Madrigal Maya | EPM and other entities of damages caused to the plaintiffs by landslide in calle Vieja of the district La Gabriela Bello in dec 5/10 are declared responsible. | 5,463 |
| Doris Elena Quintero Cortés | EPM and other entities shall be held liable for damages caused to the claimants by landslides in calle Vieja in the neighborhood of La Gabriela de Bello on December 5, 2010 and be ordered to pay damages. | 5,218 |
| Several administrative staff: Velpa Soluciones S.A., Alejandra Betancur Giraldo, Mateo Aristizábal Tuberquia, among others | Processes of less than $ 5,218 million pesos. | 144,821 |
| Labor lawsuits | Reimbursements, salary levels, overtime, conventional benefits, among others. | 10,795 |
| Municipalities of Medellín and Yumbo | Industry and trade, special contributions. | 4,552 |
| **Total contingent liabilities** | | **383,474** |

*- Figures expressed in millions of Colombian pesos -*

In respect to the uncertainty about the estimated payment date and the estimated value payable, the same business rules indicated in note 32.1.3. Litigations for apply for the contingent liabilities.

EPM also has as contingent liability some Environemtal Penalization Procedures, with the following information:

| Third Party | Claim | Value |
|---|---|---|
| Metropolitan Area of the Valley of Aburrá | Non-compliance in the percentages of removal for BOD - Biochemical Oxygen Demand - and SST - Total Suspended Solids - at the San Fernando Wastewater Treatment Plant. | It is not possible to know the sanction to be imposed |
| Regional Autonomous Corporation of the Center of Antioquia -CORANTIOQUIA- | Environmental effects caused by the activities of indiscriminate logging of trees located in urban area of the Municipality of Yarumal, without permission, also affecting the natural resources flora, fauna and water sources. | It is not possible to know the sanction to be imposed |

## Contingent Assets

| Third Party | Claim | Value |
|---|---|---|
| Ministry of Environment and Territorial Development | Declaration of nullity invoked, declare that within the costs related to the construction and operation of the Porce III Hydroelectric Project, EPM may include costs related to readjustments and other concepts. | 4,295 |
| Electrical Interconnection S.A. E.S.P. ISA | It is civilly responsible for not recognizing EPM's share of the remuneration that ISA received between 1995 and 1999, for the line modules that correspond to assets of use of the STN in the substations Playas and Guatapé. | 2,846 |
| Poblado Club Campestre Ejecutivo S.A. | Responsibility for the damage of the EPM owned collector, which collects and transports wastewater from the sanitary basin of the La Honda stream in the municipality of Envigado. | 2,651 |
| Municipality of Envigado | Declare the inapplicability of Decree 259 of August 14, 2002 of the Municipality of Envigado, "By means of which urbanistic sanctions are established", as it is contrary to the Political Constitution, the Law and the Public Utilities Regime. | 768 |
| Seguros Generales Suramericana S.A. | Payment warrant is filed against Suramericana de Seguros S.A. And in favor of EPM, plus default interest since September 23, 2002. | 653 |
| Society Vélez Arango y Cía. SCA | Expropriation servitude of two farms: the tank the pines and the tank of pumping located a lot of greater extension identified M.I. 017-512 and 017-513 of the Vélez Arango Society required for the Valle San Nicolás aqueduct project. | 413 |
| Other administrative staff: Caridad Marín Vélez, Leonardo Ramírez Montoya, among others | Processes of less than $ 413 million pesos. | 533 |
| Municipality of Bello | Integral nullity of the complex administrative act contained in Resolutions 2717 of 2009 and 0531 of 2010. PTAR Bello. | 96,110 |
| Municipality of Bello | Reimbursement of monies paid by EPM for the purpose of determining and liquidating the goodwill effect, PTAR Bello. | 89,917 |
| SENA | Nullity in payment of contributions | 268 |
| **Total contingent assets** | | **198,454** |

*- Figures expressed in millions of Colombian pesos -*

As of December 31, 2016, the value determined by the experts to be indemnified is of $198,454 (2015: $213,131).

**Estimated payments and collections**
The estimate of the dates on which the Company considers that it will have to face the payments related to the contingent liabilities or will receive the collections for the contingent assets included in this note of the individual statement of financial condition as of December 31, 2016 is as follows:

| Year | Contingent liabilities | Contingent assets |
|---|---|---|
| 2017 | 125,770 | 1,107 |
| 2018 | 18,378 | 5,744 |
| 2019 | 7,617 | 83 |
| 2020 and others | 403,873 | 255,970 |
| **Total** | **555,638** | **262,904** |

*- Figures expressed in millions of Colombian pesos -*

# Note 26. Other liabilities

The composition of other liabilities is the following:

| Other Liabilities | 2016 | 2015 |
|---|---|---|
| **Non current** | | |
| Collections in favor of third parties | 3,485 | 3,602 |
| Income received in Advance | 8,248 | 8,334 |
| Assets received from customers or third parties | 21,298 | 21,368 |
| Other deferred credits | 10 | 10 |
| **Subtotal other non current liabilities** | **33,041** | **33,314** |
| **Current** | | |
| Collections in favor of third parties | 67,673 | 99,346 |
| Income received in Advance | 73,041 | 66,982 |
| **Subtotal other current liabilities** | **140,714** | **166,328** |
| **Total other Liabilities** | **173,755** | **199,642** |

*- Figures expressed in millions of Colombian pesos -*

**26.1** income received in advance

The detail of the income received in advance of EPM as of the reporting date is the following:

| Revenue received in advance | 2016 | 2015 |
|---|---|---|
| **Non-Current** | | |
| Leases | 2,728 | 2,811 |
| Sale of energy service | 757 | 791 |
| **Total income received in advance** | **3,485** | **3,602** |
| **Current** | | |
| Leases | 173 | 173 |
| Customer Service | 8,097 | 51,653 |
| Sale of energy service | 51,959 | 31,846 |
| Sale of fuel gas service | 8,746 | 9,530 |
| Other income received in advance | (1,302) | 6,144 |
| **Total income received in advance** | **67,673** | **99,346** |
| **Total revenue received in advance** | **71,158** | **102,948** |

*- Figures in millions of Colombian pesos -*

# Note 27. Income from ordinary activities

The detail of income from ordinary activities is as follows:

| Income | 2016 | 2015 |
|---|---|---|
| **Provision of services** | | |
| Power service[1] | 5,367,415 | 5,157,614 |
| Fuel Gas Service | 804,434 | 700,776 |
| Sanitation service[2] (see note 7) | 397,995 | 391,489 |
| Service of aqueduct[2] (see note 7) | 405,948 | 353,019 |
| Computer Services | 3,355 | 4,254 |
| Construction contracts | 13,347 | 5,559 |
| Other services | 40,697 | 36,750 |
| Returns[3] | (33,114) | - |
| **Total provision of services** | **7,000,077** | **6,649,461** |
| Leases | 35,907 | 32,435 |
| Income from sale of assets | 38,750 | 17,902 |
| **Total** | **7,074,734** | **6,699,798** |

*- Figures in millions of Colombian pesos -*

[1]During the year there were two relevant situations that affected the commercial operation of energy:

- El Niño event. During the year the flow volumes of the rivers that feed the EPM reservoirs were in average of 75% of the historic median. El Niño was stronger during the first half of the year, reducing the EPM flows to values close to 55% of the historic averages. As of September there is a recovery of the contributions that end the year under the effects of La Niña event.
- In the first half of the year the Guatape station was unavailable due to the fire of the power cables.

Given the above, the income in the Generation segment increased by the increase of the average exchange price of 2016 we up to 302 $/KWh, mainly from January to April (under the effects of El Niño) when the actual price was of 595 $/KWh, and the income form the AGC service increased by the increase of the remuneration price that is directly linked to the exchange price.

In the Distribution segment the income from commercialization were higher by the increase in the demand mainly in the regulated non-residential market and price increase.

[2]The was a change in rates with Resolutions CRA 688 of 2014 and CRA 735 of 2015 issued by the Potable Water and Basic Sanitation Regulation Commission – CRA, which make mandatory the compliance with quality and coverage indicators and therefore the review of investments and operations of the two segments.

[3]It includes the refund of the reliability charge tied to the lower generation of energy.

The company does not have income encumbered from ordinary activities , contingencies that have not been recognized affecting the income, or firm commitments with customers for the rendering of future servicesfrom which it is estimated that losses will be generated.

**27.1 *Construction contracts***

The Company recognized revenues from ordinary activities for asset construction agreements within the scope of IAS 11 Construction contracts as of December 31, 2016 for $13,347(2015: $5,559).

The method applied to determine the degree of progress of the previous construction contracts is the proportion of the costs of the contract incurred in the work already performed as of this date, in relation to the total estimated costs for the contract. The company recognized the following values in the period, for the agreements in effect at the cut-off date described in the previous paragraph:

| 2016 | Costs incurred plus profits recognized | Advances received from customers for construction contracts |
|---|---|---|
| Conventions Municipio de Medellín | 5,739 | - |
| Electrification Agreement of Santander | 3,545 | - |
| Agreement Ministry of Mines and Energy | 1,325 | - |
| Agreement Aguas 3 Municipality of Medellín | 1,321 | - |
| Agreement Water 7 Municipality of Medellín | 833 | 341 |
| Agreement Municipio de Caldas | 584 | 174 |
| Agreement Water 5 Municipality of Medellín | - | 2,385 |
| Agreement Water 6 Municipality of Medellín | - | 6,803 |
| Governor's Office Urabá | - | 1,000 |
| Agreement Municipality of El Peñol | - | 1,046 |
| Agreement Municipality of Guatapé | - | 3,118 |
| Cornare Agreement | - | 1,106 |
| Agreement Water 8 Municipality of Bolivar | - | 16,514 |
| Other Conventions | - | 323 |
| **Total** | **13,347** | **32,810** |

*- Figures in millions of Colombian pesos -*

| 2015 | Costs incurred plus profits recognized | Advances received from customers for construction contracts |
|---|---|---|
| Agreement Aguas 3 Municipality of Medellín | 1,486 | - |
| Agreement Aguas 5 Municipality of Medellín | - | 3,912 |
| Agreement Aguas 6 Municipality of Medellín | - | 11,269 |
| Agreement Aguas 7 Municipality of Medellín | 525 | 1,734 |
| Agreement Barbosa | 15 | 1 |
| Agreement CM Caldas | - | 381 |
| Agreement Electrificadora de Santander | 3,324 | - |
| Agreement Empresas Varias de Medellín | 209 | - |
| Agreement FAER 2 - Rural electrification | - | 646 |
| Agreement Municipality of El Peñol | - | 1,000 |
| Agreement Municipality of Guatapé | - | 1,000 |
| Agreement Cornare | - | 1,106 |
| Agreement Aguas 8 Municipality Bolívar | - | 16,850 |
| Other Agreements | - | 246 |
| **Total** | **5,559** | **38,145** |

*- Figures in millions of Colombian pesos -*

### 27.2 *Leasing as Lessor*

The most significant operating leasing agreements are the leasing of public lighting infrastructure for the installation of telecommunications networks by telecommunications operators. The contingent quotas of these leases are determined based on the update by the variables PPI and CPI as well as the update of lease payments and these contracts may be renewed

The value of non-cancellable payments for operating leases is:

| Leases | 2016 | 2015 |
|---|---|---|
| | Non-cancellable operating leases | Non-cancellable operating leases |
| One year | 40,250 | 36,125 |
| More than a year and up to five years | 10,470 | 8,439 |
| More than five years | 12,811 | 11,884 |
| **Total leases** | **63,531** | **56,448** |

*- Figures in millions of Colombian pesos -*

The income recognized as the total of contingent installments in the period is $3,849 (2015: $3,629

The Company as lessor, has contracts that adopt the legal form of a lease but that in essence do not correspond to it.

# Note 28. Other income

The detail of other income, which forms part of the income from ordinary activities, is the following:

| Other income | 2016 | 2015 |
|---|---|---|
| Reversal loss for property, plant and equipment[1] | 685,550 | - |
| Compensation[2] | 478,258 | 726 |
| Recoveries | 121,991 | 71,141 |
| commissions | 28,985 | 26,281 |
| Reversal impairment loss intangible assets1 | 25,664 | - |
| Other income | 24,095 | 2,161 |
| Valuation of Investment Property | 7,010 | 8,676 |
| Achievements | 6,302 | 6,693 |
| Reversal loss for impairment accounts receivable | 4,656 | 17,642 |
| Government Grants | 3,072 | 8,641 |
| Fee | 1,917 | 4,036 |
| Sale of sheets | 723 | 536 |
| **Total Other Income** | **1,388,223** | **146,533** |

*- Figures in millions of Colombian pesos -*

[1]It corresponds to the reversal of the impairment in the Water Provision segment deailed in Note 7 Impairment of assets.

[2]it includes $472,098 of the indemnification for loss profits and consequential damage related to the loss of the Guatape Station.

# Note 29. Costs for rendering of services

The detail of the Costs for rendering of services is as follows:

| Costs for rendering services | 2016 | 2015 |
|---|---|---|
| Cost of goods and public utilities for sale 1 | 2,707,261 | 2,514,629 |
| Impairment of property, plant and equipment[2] | 564,428 | - |
| Depreciations | 402,103 | 389,789 |
| Consumption of direct inputs [2] | 394,184 | 276,253 |
| Personal services | 366,004 | 324,138 |
| Orders and contracts for other services | 235,615 | 217,644 |
| Orders and contracts of maintenance and repairs | 137,503 | 124,132 |
| Licenses, contributions and royalties | 118,222 | 97,845 |
| Materials and other operating costs | 99,510 | 99,155 |
| Insurance | 65,520 | 32,242 |
| Impairment of intangible assets[2] | 64,091 | - |
| General | 52,611 | 45,251 |
| Fees | 36,362 | 28,950 |
| Taxes and Rates | 32,418 | 35,365 |
| Amortization | 27,837 | 25,490 |
| Public utilities | 7,147 | 8,126 |
| Leases | 5,911 | 4,424 |
| **Total cost for rendering services** | **5,316,727** | **4,223,433** |

*- Figures in millions of Colombian pesos -*

[1]Includes the value of the purchases of energy in block and in the exchange, connection cost, use of lines, networks and ducts, cost of commercialization and distribution of natural gas, among other costs. The increase in those costs in respect to the previous period is due mainly to the increase in the prices of energy purchased in the exchange, caused by the difficult climatic conditions (descent of water resources and low levels of reservoirs), especially during the first four months of the period, in which El Niño effect intensified as well as the lack of availability of the Guatape Hydroelectric Plant from February 15, 2016, notwithstanding its entry in operation between April and June.

[2]It corresponds to the impairment in the Sanitation segment detailed in Note 7 Impairment of assets.

[3]In includes the cost of production of chemicals, fuel gas, energy, ACPM and fuel oil, which experienced increase basically by the higher consumption of gas and ACPM for the generation of power in the thermal plant La Sierra the first four months of 2016 and by restrictions and deviations due to the generation of energy with liquid fuels in the entire system, associated to the market conditions because of El Niño phenomenon. lack of availability of the Guatape Plant.

# Note 30. Administration expenses

The detail of adminsitration expenses is:

| Administration expenses | 2016 | 2015 |
|---|---|---|
| **Personnel expenses** | | |
| Salaries and wages | 173,000 | 168,877 |
| Social security expenses | 70,548 | 72,062 |
| Pension expenses | 10,026 | 8,412 |
| Benefits in interest rates to the employees | 4,244 | 3,119 |
| Other long term benefits | 2,794 | 3,390 |
| Other post-employment plans different from pension | 1,425 | 10 |
| **Total personnel expenses** | **262,037** | **255,870** |
| **General expenses** | | |
| Taxes, contributions and rates [1] | 242,210 | 163,508 |
| Commissions, fees and services | 47,389 | 90,619 |
| Legal expenses[2] | 46,578 | 705 |
| Other general expenses | 45,697 | 41,654 |
| Maintenance | 43,795 | 42,004 |
| Other miscellaneous provisions | 36,143 | 8,118 |
| Corporate assets | 33,471 | 86,869 |
| Depreciation of properties, plant and equipment | 28,222 | 27,975 |
| Intangibles | 21,637 | 20,797 |
| Provision for contingencies | 21,104 | 28,902 |
| Studies and projects | 13,178 | 9,290 |
| Promotion and disclosure | 12,993 | 12,648 |
| Amortización de intangibles | 8,812 | 5,591 |
| Publiciy and advertising | 7,825 | 9,353 |
| Public services | 6,299 | 5,833 |
| Surveillance and security | 6,107 | 5,829 |
| Toilet, cafeteria, restaurant and laundry services | 5,080 | 4,336 |
| General Insurance | 4,693 | 4,074 |
| Provision for onerous contracts | 4,215 | 19,129 |
| Lease | 3,130 | 4,050 |
| Learning contracts | 2,582 | 2,396 |
| Communications and transportation | 2,338 | 1,325 |
| Cultural events | 1,869 | 2,233 |
| Information processing | 1,754 | 1,664 |
| Principles, publications, subscriptions and affiliations | 1,653 | 1,544 |
| **Total general expenses** | **648,774** | **600,446** |
| **Total administration expenses** | **910,811** | **856,316** |

*- Figures in millions of Colombian pesos -*

[1] Include the betterment levy for the rectification and pavement of the road El Limon-Anori, according to Resolution 201606000142 from the Government of Antioquia for $78,6906 and and the wealth tax for $69,782 taking as a base the net equity owned as of January 1, 2015 at a rate of 1%, which the Statement was submitted in May 2016 and its payment was made in two equal installments in May and September of the same year.

[2] It includes the expense corresponding to 10% of the net proceeds of the disposal of the shares of ISAGEN S.A. E.S.P as per Law 226 of 1995 for $46,040 detailed in Note 12 Other financial assets.

Leases as lessee. The most significant operating leasing agreements are the leasing of premises for customer service offices in the different municipalities of Antioquia and the metropolitan area, of spaces for the facilities and operating of the antennas in the meteorological stations, office equipment and accessories, user printer infrastructure, equipment for virtual meetings, among others, which do not have restrictions. The contingent installments of these leases are determined based on the Consumer Price Index (CPI), the agreements may be renewed without purchase option. Lease agreement payments are indexed by the CPI.

As of the report date minimum future payments for operating leases, non-cancellable are distributed as follows:

| Leases | 2016 | 2015 |
|---|---|---|
| | Non-cancellable operating leases | Non-cancellable operating leases |
| At one year | 12,557 | 10,044 |
| At more than one year and up to five year | 22,101 | 17,557 |
| **Total** | **34,658** | **27,601** |

*- Figures in millions of Colombian pesos -*

The total minimum future payments of non-cancellable subleasing of assets acquired under operating leases is $11 (2015: $116). The contingent leasing expense recognized in profit and loss of the period is $18, (2015: $15).

The operating leasing installments recognized as expenses of the period are $9,040 (2015: $8,473).

The company as lessee, does not have contracts that adopt the legal form of a lease but that in essence do not constitute it.

# Note 31. Other expenses

The detail of other expenses is:

| Other expenses | 2016 | 2015 |
|---|---|---|
| Loss for changes in the fair value of investment properties (see note 5) | 29,194 | 24 |
| Contributions in non corporate entities | 19,700 | 28,493 |
| Arbitration awards and out of court conciliations | 16,246 | 1,227 |
| Loss in retirement of assets | 15,257 | 12,384 |
| Other ordinary expenses | 1,887 | 1,567 |
| Loss in the sale of assets | 49 | - |
| **Total** | **82,333** | **43,695** |

*- Figures in millions of Colombian pesos -*

# Note 32. Financial income and expenses

### 32.1 Financial Income

The breakdown of financial income is as follows:

| Financial income | 2016 | 2015 |
|---|---|---|
| **Interest revenues** | | |
| Bank deposits | 31,074 | 10,626 |
| Interest income from financial assets at amortized cost | 2,830 | - |
| Interest of debtors and arrears | 183,666 | 150,531 |
| Valuation benefit of financial instruments at fair value | 8,492 | 67,146 |
| Usefulness in rights in trust | 38,392 | 18,303 |
| Other financial income | 3,003 | 2,024 |
| **Total Financial income** | **267,457** | **248,630** |

*- Figures in millions of Colombian pesos -*

### 32.2 Financial expenses

The breakdown of financial expenses is as follows:

| Financial expenses | 2016 | 2015 |
|---|---|---|
| **Interest expense:** | | |
| Interest for obligations under financial leasing | 33,576 | 32,353 |
| Other interest expense | 435 | 1,233 |
| **Total interest** | **34,011** | **33,586** |
| Total expense for interest of financial liabilities that are not measured at fair value with changes in profit and loss | 833,963 | 633,095 |
| Less interest capitalized on qualifying assets | (259,882) | (148,375) |
| **Other financial costs** | | |
| Commissions | 552 | 592 |
| Other financial expenses | 72,336 | 70,060 |
| **Total financial expenses** | **680,980** | **588,958** |

*- Figures in millions of Colombian pesos -*

# Note 33. Exchange difference, net

The effect of transactions in foreign currency is the following:

| Exchange difference, net | 2016 | 2015 |
|---|---|---|
| **Income for exchange difference** | | |
| **Own position** | | |
| For goods and services and others | 32,310 | 58,272 |
| By liquidity | 477 | 146,150 |
| Accounts Receivable | 109,008 | 1,292,525 |
| Other adjustments for difference in exchange | 6,669 | 5,420 |
| **Total Own Position** | **148,464** | **1,502,367** |
| **Financial Services** | | |
| Gross income | 275,607 | 328,939 |
| Debt coverage | - | (161,514) |
| **Total financial** | **275,607** | **167,425** |
| **Total income for difference in exchange** | **424,071** | **1,669,792** |
| **Expenses for difference in exchange** | | |
| **Own Position** | | |
| For goods and services and others | 9,646 | 78,109 |
| By liquidity | 24,995 | - |
| Accounts Receivable | 162,811 | 507,421 |
| Other adjustments for difference in exchange | 106 | 32,554 |
| **Total Own Position** | **197,558** | **618,084** |
| **Financial Services** | | |
| Gross expenditure | 7,052 | 1,282,166 |
| Debt coverage | (8,318) | - |
| **Total financial** | **(1,266)** | **1,282,166** |
| **Total expense per difference in exchange** | **196,292** | **1,900,250** |
| **Net change** | **227,779** | **(230,458)** |

*- Figures in millions of Colombian pesos -*

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

| Currency | Currency Type | Direct USD conversion at 31 December | | Closing exchange rate as of December 31 | | Average exchange rate | |
|---|---|---|---|---|---|---|---|
| | | 2016 | 2015 | 2016 | 2015 | 2016 | 2015 |
| United States Dollar | USD | 1.34 | 1.39 | 3,000.71 | 3,149.47 | 3,050.98 | 2,743.39 |
| Quetzal | GTQ | 7.52 | 7.63 | 398.84 | 412.58 | 401.30 | 358.28 |
| Mexican Peso | MXN | 20.60 | 17.27 | 145.65 | 182.35 | 163.64 | 173.30 |
| Chilean Peso | CLP | 669.79 | 708.60 | 4.48 | 4.44 | 4.51 | 4.21 |
| Euro | EUR | 0.95 | 0.92 | 3,165.00 | 3,421.27 | 3,375.96 | 3,045.08 |
| Yen | JPY | 116.64 | 120.30 | 25.73 | 26.17 | 28.13 | 22.67 |
| Libra | GBP | 0.81 | 0.68 | 3,707.83 | 4,642.00 | 4,133.64 | 4,192.60 |
| Franco Suizo | CHF | 1.02 | 1.00 | 2,952.44 | 3,146.32 | 3,097.64 | 2,853.91 |

# Note 34. Effect by Interest in equity investments

The effect by the Interest in equity investments is the following:

| Interest in equity invesment | 2016 | 2015 |
|---|---|---|
| Dividends and participacion [1] | 32,433 | 327,327 |
| Result in sale of equity invesment | 24 | - |
| Impairment of invesment of subsidiaries, associates and joint business (see note 7) | - | (1,641) |
| **Total** | 32,457 | 325,686 |

*- Figures in millions of Colombian pesos -*

[1] Includes dividends of financial instruments for $32,433 (2015 $93,457) (see note 12. Other financial assets) and in 2015 it corresponded to associates for $233,870 (see note 9. Investments)

# Note 35. Income tax

## 35.1 Tax provisions

Tax provisions applicable and in effect, establish the following:

– The nominal rate of the income tax was of 25%. The nominal rate of the income tax for equality

– CREE is of 9% and surtax of 6%.

  – In Colombia domiciliary public utility companies, are excluded from determining the income tax through the presumptive income system calculated based on the Net of tax for the year immediately preceding.

During 2016 the National Government presented to Congress a tax reform bill, which purpose according to the statement of reasons consists in establishing a more equitable, efficient and simple tax system.

The initiative is supported on the report presented by the Commission of Experts that was created to study the Colombian tax system and propose improvements to its structure, in addition to the economic pressures resulting from the decrease of the oil revenues, an uncertainty overview given by the increase in the volatility

of financial markets and the slowdown of the Chinese economy, that impacted negatively the nation's current income.
Under this scenario and after extinguishing the phases required by Colombian regulations for the creation of the Law, on December 29, 2016 Law 1819 of 1016 was enacted, "whereby a structural tax reform is adopted, the mechanisms for the fight against tax evasion and elusion are strengthened and other provisions are issued."

Accordingly, among the major modifications we can mention:

– **General Income and complementary tax rate**
The income tax and the income tax for equality – CREE- are unified, with the following income tax rates:

2017: 34% and surtax 6%
2018: 33% and surtax 4%
2019 and following: 33%, surtax disappears.

The surtax is subject to the advance mechanism and applies for the portion of the taxable base that exceeds eight hundred million pesos.

**Presumptive income**
The presumptive income in 2016 was of 3% and for 2017 and following will be 3.5%

The exoneration in the determination of the presumptive income for public utilities is maintained.

**Sales tax**
In 2016 the VAT rate was of 16% and as of 2017 the general VAT rate will be of 19%.
In the contracts entered into with Public Entities, the rate in effect as of the time of the award is maintained, for contracts executed before January 1, 2017, the rate is increased once they are added.
The right to claim as deduction the VAT paid in the acquisition or import of capital goods is incorporated.

Express references are made to the International Financial Reporting Systems for determination of the tax bases.

The general statute of limitations of tax returns is increased from two (2) to three (3) years. For taxpayers subject to the transfer-pricing regime it will be of six (6) years. The same term will apply when tax losses are offset.

Article 130 is derogated, whereby the appropriation of profits for reserve purposes is avoided.

New rules are established on the subject of depreciation related to the annual deduction rate.

The tax on carbon is created, the consequences of which will be evidenced in the prices of the goods acquired by the company subject to this tax.

The rules for withholding on dividends are defined:

- A limit of twelve (12) years is established for the offset of tax losses.
- Adoption of international mechanisms against erosion of the tax base and the transfer of benefits, incorporation of the Controlled Entities from Abroad (ECE) Regime, limitation to payments for royalties with related parties located abroad and free trade zone, implementation of the legal form of cooperating jurisdictions, of low or no taxation and preferential tax regimes, modifications to the transfer pricing regime and rules on effective beneficiary.

Rules are defined related to territoriality, taxable base, and single national form for the compliance with obligations on the subject of industry and commerce tax.

## 35.2 Reconciliation of effective rate

The reconciliation between the applicable tax rate and the effective rate and the composition of the income tax expense for periods 2015 and 2014 is the following:

| Income and complementary tax | 2016 | % | 2015 | % |
|---|---|---|---|---|
| **Result before taxes** | 2,236,340 | | 1,591,163 | |
| **Theoretical tax** | | | | |
| Plus entries that increase the income | 762,109 | 34% | 914,102 | 57% |
| Wealth / equity tax | 69,782 | | 78,917 | |
| Dividends effectively received from controlled entities | 331,851 | | 548,066 | |
| Other - Provisions and non-deductible expenses | 360,476 | | 287,119 | |
| | | | | |
| Less entries that decrease the income | 2,104,086 | 94% | 1,771,772 | 111% |
| Deduction real productive fixed assets | 725,851 | | 544,437 | |
| Dividends not taxed | 232,832 | | 425,142 | |
| Excess of tax depreciation and amortization | 365,753 | | 264,509 | |
| Remainder of companies liquidation | - | | 14,651 | |
| Non taxed recoveries | 63,752 | | 62,789 | |
| Differences IFRS vs. GAAP | (219,454) | | 389,264 | |
| Others[1] | 935,352 | | 70,980 | |
| | | | | |
| **Net ordinary income of period** | **894,363** | 40% | **733,493** | 46% |
| Less exempt income | 39,564 | | 21,613 | |
| **Net taxable income** | **854,799** | 38% | **711,880** | 45% |
| | | | | |
| Income tax rate (average) | 25% | | 25% | |
| CREE tax rate | 9% | | 9% | |
| CREE surtax rate | 6% | | 5% | |
| Capital gains tax rate | 10% | | 10% | |
| | | | | |
| Income tax | 213,700 | 10% | 177,970 | 11% |
| CREE tax | 142,430 | 6% | 113,319 | 7% |
| CREE surtax | 94,906 | 4% | 62,915 | 4% |
| Casual Income Tax | 2,583 | 0% | - | |
| Less tax discounts | (67,313) | -3% | (92,878) | -6% |
| Rent adjustment | 20,198 | 1% | (74,624) | -5% |
| **Current tax and CREE** | **406,504** | 18% | **186,702** | 12% |
| | | | | |
| **Detail of current and deferred expense** | | | | |
| Current tax, CREE and surtax | 406,504 | 18% | 186,702 | 12% |
| Deferred tax | (4,956) | 0% | 34,788 | 2% |
| **Income tax** | **401,548** | 18% | **221,490** | 14% |

*- Figures in millions of Colombian pesos -*

[1]The main entries are: profits in the sale of fixed assets for $735,709, the amortization of the goodwill for $105,706, indemnification for consequential damage related to the loss of the Guatape Plant for $71,030, payment of the betterment levy of the road El Limon – Anori for $11,227, deduction for hiring disable personnel for $2,108 and other entries less representative for a value of $9,572.

### 35.3 Income tax recognized in profit or loss

The most significant components of the income tax expense as of the report date are:

| Income tax | 2016 | 2015 |
|---|---|---|
| **Current income tax** | | |
| Expense (income) for current income tax | 453,619 | 354,204 |
| Adjustments recognized in the current period related to the current income tax of previous periods | 20,198 | (74,624) |
| Tax benefits of tax losses, tax credits or temporary differences used in the period | (67,313) | (92,877) |
| **Total current income tax** | **406,504** | **186,703** |
| **Deferred tax** | | |
| Net expense (income) for deferred tax related to the origin and reversal of temporary differences | 97,121 | 29,536 |
| Net expense (income) for deferred tax related to changes in tax rates or laws 1 | (101,829) | 5,252 |
| Reclassification of deferred taxes from equity to income statement | (248) | - |
| **Total deferred tax** | **(4,956)** | **34,788** |
| **Income tax** | **401,548** | **221,491** |

*- Figures in millions of Colombian pesos -*

[1] The expense (income) for deferred tax related to changes in the tax rates originated by the la modification brought by the Law 1819 on december 29, 2016, applicable rates As of January 2017. The rates used for determination of the deferred tax are:

40% for 2017 (34% income and 6% surtax), which varied in respect to the one used in the previous year, which was 42%, this for short-term entries that are reversed during 2017. For generation the rate of 39% is used considering the legal stability contract.

37% for 2018 (33% income and 4% surtax), which changed in respect to that used in the previous year, to 43%, this for the long term entries that are reversed during 2018.

33% para 2019, which varied in respect to the one used in the previous year, which was 34%, this for long-term items which revert during 2019 and following.

For property, plant and equipment, the rate in effect was used, considering the year in which it is expected to reverse the difference, taking as reference the remaining useful life of each asset.

The rates used for the determination of the deferred tax are:

| Year | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Income | 25% | 34% | 33% | 33% | 33% |
| CREE | 9% | - | - | - | - |
| Surtax | 6% | 6% | 4% | - | - |
| **Total Rate** | **40%** | **40%** | **37%** | **33%** | **33%** |

With the entry into force of Law 1819 of December 29, 2016, the CREE tax and the CREE Surtax are eliminated and an Income and Complementary Tax Surtax is created as of tax year 2017.

| Item | 2016 | 2015 |
|---|---|---|
| **Asset or liability for current income tax** | | |
| Income tax | (16,798) | - |
| CREE Tax or surtax | (38,867) | - |
| Balances in favor for income and tax CREE | - | 122,558 |
| **Total income tax asset (or liability)** | **(55,665)** | **122,558** |

*- Figures in millions of Colombian pesos -*

In 2015 the profits were affected by El Niño event and consequently the tax; additionally we had important tax discounts by the capitalization of Aguas Nacionales. In 2016 the impact of El Niño was lower, we did not have important capitalizations and there was a tax for the sale of the shares of ISAGEN for $111,948.

### 35.5 Income tax recognized in other comprehensive income

The detail of the tax effect corresponding to each component of "other comprehensive income" of the individual statement of comprehensive income is the following:

| Other comprehensive income of the Statement of comprehensive income | 2016 | | | 2015 | | |
|---|---|---|---|---|---|---|
| | Gross | Tax effect | Net | Gross | Tax effect | Net |
| **Items that will not be reclassified after the period result** | | | | | | |
| Appreciation of properties, plant and equipment and other assets | 9,700 | (956) | 8,744 | 3,731 | (401) | 3,330 |
| New measurements of defined benefit plans | (36,268) | 17,771 | (18,497) | 247 | (4,101) | (3,854) |
| Equity investments measured at fair value through equity | 554,390 | (107,982) | 446,408 | 15,058 | (93,204) | (78,146) |
| Participation in other comprehensive income of subsidiaries | (117,151) | 23,998 | (93,153) | 7,818 | 335 | 8,153 |
| **Partidas que pueden ser reclasificados posteriormente al resultado del periodo** | | | | | | |
| Cash flows hedging | (23,738) | 11,834 | (11,904) | (7,790) | 18,785 | 10,995 |
| Participation in other comprehensive income of subsidiaries | (136,827) | (505) | (137,332) | 473,396 | - | 473,396 |
| **Total** | **250,106** | **(55,840)** | **194,266** | **492,460** | **(78,586)** | **413,874** |

*- Cifras en millones de pesos colombianos -*

### 35.6 Deferred tax

The detail of the deferred tax is:

| Deferred tax | 2016 | 2015 |
|---|---|---|
| Deferred tax asset | 1,402,505 | 1,731,032 |
| Deferred tax liability | 3,390,324 | 3,796,078 |
| **Total net deferred tax** | **1,987,819** | **2,065,045** |

*- Figures in millions of Colombian pesos -*

## 35.6.1. Deferred tax assets

| Deferred tax assets | Beginnign balance | Net changes inclued in profit and loss | Recognized directly to equity | Changes inclued in OCI | Reclassified from equity to income | Ending balance |
|---|---|---|---|---|---|---|
| **Current assets** | **46,569** | **65,029** | **20,052** | **-** | **-** | **131,650** |
| Cash and cash equivalents | 9 | (9) | - | - | - | - |
| Accounts Receivable | 24,281 | 83,179 | 20,052 | - | - | 127,512 |
| Inventory | 1,833 | 1,825 | - | - | - | 3,658 |
| Others | 20,447 | (20,088) | - | - | - | 359 |
| Investments and derivative instruments | - | 122 | - | - | - | 122 |
| **Non-current assets** | **822,129** | **(317,980)** | **19,602** | **-** | **-** | **523,750** |
| Properties, plant and equipment | 246,912 | 61,382 | - | - | - | 308,294 |
| Intangibles | 2,481 | (931) | - | - | - | 1,550 |
| Accounts Receivable | 174,915 | (110,088) | 19,602 | - | - | 84,429 |
| Others | 75,711 | (42,293) | - | - | - | 33,419 |
| Investments and derivative instruments | 322,110 | (226,051) | - | - | - | 96,059 |
| **Current liabilities** | **353,771** | **123,412** | **-** | **-** | **-** | **477,183** |
| Credits and loans | 184,517 | 59,244 | - | - | - | 243,761 |
| Derivatives | 42,206 | (7,857) | - | - | - | 34,349 |
| Employee benefits | 42,389 | (19,681) | - | - | - | 22,709 |
| Provisions | 35,583 | 54,979 | - | - | - | 90,562 |
| Other passives | 27,360 | 22,298 | - | - | - | 49,657 |
| Debts to pay | 21,716 | 14,429 | - | - | - | 36,145 |
| **Non-current liabilities** | **508,564** | **(250,725)** | **-** | **11,835** | **248** | **269,922** |
| Derivatives | 110,391 | (144,741) | - | 11,835 | 248 | (22,267) |
| Employee benefits | 83,096 | (14,249) | - | - | - | 68,848 |
| Provisions | 150,827 | (79,116) | - | - | - | 71,710 |
| Other passives | 163,999 | (12,589) | - | - | - | 151,410 |
| Debts to pay | 251 | (30) | - | - | - | 221 |
| **Deferred tax assets** | **1,731,032** | **(380,264)** | **39,654** | **11,835** | **248** | **1,402,505** |

*- Figures in millions of Colombian pesos -*

### 35.6.2. Deferred tax liabilities

| Deferred tax liabilities | Beginnign balance | Provisions | Net changes inclued in profit and loss | Reconocidos directamente a patrimonio | Changes inclued in OCI | Reclassified from equity to income | Ending balance |
|---|---|---|---|---|---|---|---|
| **Current assets** | **180,397** | **-** | **(107,447)** | **-** | **-** | **-** | **72,950** |
| Cash and cash equivalents | 9 | - | (8) | - | - | - | 1 |
| Accounts Receivable | 130,409 | - | (63,504) | - | - | - | 66,905 |
| Inventory | 1,958 | - | 1,295 | - | - | - | 3,253 |
| Others | 43,310 | - | (40,642) | - | - | - | 2,669 |
| Investments and derivative instruments | 4,711 | - | (4,589) | - | - | - | 122 |
| **Non-current assets** | **2,988,840** | **(93,195)** | **(138,293)** | - | **90,184** | **-** | **2,847,536** |
| Investments in subsidiaries | - | - | 25,650 | - | - | - | 25,650 |
| Properties, plant and equipment | 2,558,358 | - | 70,588 | - | 956 | - | 2,629,902 |
| Intangibles | 72,896 | - | (45,923) | - | - | - | 26,973 |
| Accounts Receivable | 6,763 | - | 56,354 | - | - | - | 63,116 |
| Others | 38,800 | - | 990 | - | - | - | 39,790 |
| Investments and derivative instruments | 312,023 | (93,195) | (245,952) | - | 89,228 | - | 62,104 |
| **Current liabilities** | **234,372** | - | **(61,685)** | - | - | - | **172,686** |
| Credits and loans | 18,363 | - | (9,116) | - | - | - | 9,247 |
| Derivatives | 46,033 | - | (46,033) | - | - | - | - |
| Employee benefits | 44,451 | - | 10,685 | - | - | - | 55,136 |
| Provisions | | - | 2,688 | - | - | - | 2,688 |
| Other passives | 16,751 | - | (16,751) | - | - | - | - |
| Debts to pay | 108,774 | - | (3,159) | - | - | - | 105,615 |
| **Non-current liabilities** | **392,469** | - | **(77,546)** | - | **(17,771)** | **-** | **297,152** |
| Credits and loans | 54,371 | - | 57,796 | - | - | - | 112,167 |
| Derivatives | 103,740 | - | (103,740) | - | - | - | - |
| Employee benefits | 139,285 | - | (27,931) | - | (17,771) | - | 93,583 |
| Provisions | 4,147 | - | (1,043) | - | - | - | 3,104 |
| Other passives | 82,119 | - | (480) | - | - | - | 81,639 |
| Debts to pay | 8,807 | - | (2,149) | - | - | - | 6,659 |
| **Deferred tax liabilities** | **3,796,078** | **(93,195)** | **(384,972)** | **-** | **72,414** | **-** | **3,390,324** |
| **Total deferred tax assets / liabilities** | **2,065,045** | **(93,195)** | **(4,708)** | **(39,654)** | **60,579** | **(248)** | **1,987,819** |

*- Figures in millions of Colombian pesos -*

### 35.7 Temporary differences

Temporary differences associated to investments in subsidiaries, associates and joint ventures, for which no liabilities for deferred taxes have been recognized, amount to $511,827 (2015 $223,908

The most significant items on which temporary differences result are the following:

In current assets, the highest impact for deferred tax occurs in the accounts receivable in respect to receivables provisions due to the difference in the calculation of the receivables provision under the tax rules and the cascade method under the International Standard. It is important to emphasize that in 2016 there was an adjustment for impairment of the IFRS receivables using the expected credit loss approach, the calculation of this methodology accumulated at January 1, 2016 was recognized affecting the retained profits accounts, in the same manner the deferred tax associated to this entry was recognized. In addition, temporary differences occur by the effect of the valuation at amortized cost of the short term loans between related parties.In non-current assets the highest impacts on the deferred tax arise by the temporary differences in property, plant and equipment and by the valuation at amortized cost of the long-term accounts receivable.

In respect to current liabilities, the items that impact the calculation of the deferred tax is, mostly, the calculation of the provision corresponding to pension bond shares, to the actuarial calculation in pensions and the pension transfer of EADE. In addition, the credits and loans for valuation at amortized cost of bonds, securities issued and short term credits and loans.

In other non-current liabilities, the most significant amounts in the deferred tax were generated by the temporary differences in the valuation at amortized cost of the long term credits and loans, in addition, by the temporary differences of the loans for long term benefits to employees such as retirement pensions, pension bond shares and actuarial calculation of retroactive severance and interest on severance.

in the items that do not have future tax consequences, such as the case of liabilities for taxes and for financial returns generated in the plan assets, because they are exempt income., no deferred tax was generated.

The approval of dividends after the date of presentation and before the financial statements were authorized to be published, does not generate any consequences in the income tax since the policy established for national subsidiaries is that only profits and reserves not taxed are distributed. The tax effects that could be generated by the dividends decreed of the subsidiaries abroad, is offset by using the discounts for taxes paid abroad and amortization of the goodwill whenever applicable. A calculation is made of the deferred tax liability on the dividends that are expected to be received in the foreseeable future from the affiliates abroad, applying the rate corresponding to the differential of the rate of Colombia and the country from which the dividends are expected to be received.

# Note 36. Information to be disclosed on related parties

EPM is a decentralized entity of the municipal level, which sole owner is the Municipality of Medellin. The capital for its incorporation and operation, as well as its equity, is of a public nature. The Mayor of Medellin is the chairman of the Board of Directors of EPM.

As related parties EPM are considered the subsidiaries, associates, joint ventures, including the subsidiaries of the associates and joint ventures, key management personnel, as well as the entities on which the key management personnel may exercise control or joint control and the post-employment benefit plans for benefit of the employees.

Following is presented the total value of the transactions carried out by the Company with its associates and other related parties during the corresponding period:

| Transactions & balances with related parties | Income[1] | Costs/ Expenses[2] | Values receivable[3] | Values payable[4] | Guarantees & endorsements received[5] |
|---|---|---|---|---|---|
| **Subsidiary:** | | | | | |
| 2016 | 62,771 | 23,848 | 1,721,149 | 51,424 | - |
| 2015 | 263,333 | 153,202 | 1,915,034 | 122,031 | - |
| **Associates:** | | | | | |
| 2016 | 12,798 | 44,991 | 36,644 | 8,595 | - |
| 2015 | 247,120 | 46,017 | 200,329 | 14,415 | - |
| **Joint ventures in which the company participates** | | | | | |
| 2016 | - | - | - | - | - |
| 2015 | - | - | - | 99 | - |
| **Key management personnel clave of the Group:** | | | | | |
| 2016 | - | 6,075 | 165 | 530 | 274 |
| 2015 | - | 6,078 | 94 | 1,923 | 23 |
| **Other related parties:** | | | | | |
| 2016 | 11,075 | 124,401 | 155,248 | 3,600 | - |
| 2015 | 11,287 | 26,369 | 45,928 | 14,528 | - |

*- Figures in millions of Colombian pesos -*

The transactions between EPM and its related parties were made in conditions equivalent to those that exist in transactions between independent parties, as refers to their object and conditions.

1 Corresponds to income generated by transactions with subsidiaries and related parties associated to the sale of energy for $52,184 (2015 $226,663), sale of goods and services for $6,997 (2015 $17,139), financial income for $1,760 (2015 $5,288 and other income for $1,830 (2015 $14,243).

2 Corresponds to costs and expenses generated by transactions with subsidiaries and related parties associated to purchase of energy for 23,049 (2015 $72,499) and acquisition of goods and services for $799 (2015 $80,703).

3 Includes rendering of public utilities for $48,310 (2015 $27,567, rendering of services $2,033 (2015 $4,082), credits to related parties for $1,721,749 (2015 $1,988,349) and other debtors for 20,237 (2015 $41,466). EPM must rate the receivables under criteria that permit to prioritize the process of their recovery through the instrumentalities managed by it or collection entities. In respect to domiciliary public utilities the collection applies according to the billing cycle.

4 Includes acquisition of goods and services for $13,227 (2015 $80,077, collections in favor of third parties for $5,920 (2015 $15,009, loans from related parties $0 (2015 $54,009) and other liabilities for $32,277 (2015 $3,901. The payment policy for EPM is 30 days after presentation of the invoice.

**Transactions and balances with related entities of the Government**

The total financial surpluses paid to the municipality of Medellin as of December 2016 was $816,521 (2015 $991,139.

**Remuneration to the Board of Directors and key personnel of the Company:**

The remuneration of key personnel members of the Company for the years ended as of December 31, is as follows:

| Concept | 2016 | 2015 |
|---|---|---|
| Salaries and other short-term benefits to employees | 5,101 | 5,473 |
| Pensions and other post-employment benefits | 974 | 605 |
| **Remuneration to key management personnel** | **6,075** | **6,078** |

*- Figures in millions of Colombian pesos -*

The amounts disclosed are those recognized as cost or expense during the period report for compensation of key personnel of EPM.

# Note 37. Capital management

The capital of EPM includes indebtedness through the capital market, commercial bank, development banks, central bank and multilateral bank, at a national and international level.

EPM manages its capital in order to plan, manage and assess the obtaining of financial resources in the national and international financial markets, for strategic investments, investment projects, through the different options that optimize the cost, that guarantee the maintenance of adequate financial indicators and adequate credit rating and minimize the financial risk. For the above purposes EPM has defined the following capital management policies and processes:

**Financial management:** Financial management corresponds to 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, optimizing the financing costs.

The Company has not made changes in its capital financing management objectives, policies and processes during the period ended on December 31, 2015 and 2014, and has not been subject to external capital requirements.

In order to face the changes in the economic conditions the company implements proactive mechanisms to manage its financing, enabling up to the extent viable different financing alternatives, in such a way that at the time that any long term credit operation is required, it has access to the source that has availability at each time of competitive market conditions and at the time needed.

Following, we present the values that the company manages as capital:

| Item | 2016 | 2015 |
|---|---|---|
| Bonds and loans | | |
| Other bonds and securities issued | 6,135,271 | 6,254,714 |
| Commercial Banking Loans | 1,801,972 | 1,119,343 |
| Multilateral bank loans | 1,664,555 | 1,690,716 |
| Development bank loans | 963,111 | 1,082,093 |
| Bonds and securities issued | 255,780 | 318,653 |
| Other loans | - | 486,839 |
| **Total debt** | **10,820,689** | **10,952,358** |
| **Total capital** | **10,820,689** | **10,952,358** |

*- Figures in millions of Colombian pesos -*

# Note 38. Financial risk management objectives and policies

The company is exposed to the financial risk that is defined as the possibility of occurrence of an event that affects negatively the financial results, among which are the market risk, liquidity risk, credit risk and operating risk.

The market risk refers to the changes or volatility of the market variables that may generate economic losses. The market variables refer to exchange rates, interest rates, securities, commodities, among others; and their changes may impact, for example, the financial statements, the cash flow, the financial indicators, contracts, viability of projects and investments.

The credit risk refers to the possible default in the payment obligations by third parties derived from contracts or financial transactions entered into.

The liquidity risk is the funding shortage and incapacity to obtain the resources at the time they are required to fulfill contractual obligations and carry out investment strategies. The shortage of funds leads to the need to sell assets or contract financing operations under unfavorable market conditions.

Finally, the operating risk, from a financial perspective, is defined as deficiencies or failures in the processes, technology, infrastructure, human resources or occurrence of unforeseen external events.

The objective of the Integral Risk Management Office is to lead the definition and implementation of the strategy for an integral risk management, in order to achieve an adequate protection and assurance of the goods, resources and interest of EPM group.

The company has as policy to carry out the management of the risks that have an incidence on its activity and environment, by adopting the best practices and international standards of Integral Risk Management (IRM), as a way to facilitate the achievement of the purpose, strategy, objective and business goals, both of statutory and legal origin. It has an information system that facilitates the integral management of risks, guarantees confidentiality, availability and reliability of information and permits to make analysis and monitoring of risks and improvement plans. It has implemented an internal risk management system and has in place a methodology for the identification, analysis, evaluation, control and monitoring of risks, among which are those associated to money laundering and financing of terrorism, that permits to reduce vulnerability, and propose and implement efficient mechanism for the proper performance of business, processes, projects and contracts. As valuation criteria the Company has valuation tables of the consequences of the materialization of risks and of the probability tables, which are applicable in the different management levels defined in the methodological guide for integral risk management.

The integral risk management monitoring and review activity is aligned with the process of follow up of the management established in the Company, in order to propose and implement improvement actions. The monitoring and review scheme established assesses, among others, the following aspects:

- The implementation strategy of the integral risk management.
- The changes in the internal and external context that imply making adjustments in the treatment of risks identified or those that generate new risks.
- The variation of the risks in terms of frequency, probability and consequence.
- The valuation criteria of probability and consequence of risks.
- The establishment and efficacy of treatment plans.

The Company manages the financial risks associated to the different management levels, for which it identifies the risks within market, liquidity and credit congregators that are classified in the category of financial risks and quantifies their impact and implements strategy for their mitigation.

**38.1 Market risks**

The market risk is the risk that the fair value of future cash flows of a financial instrument may fluctuate by variations in the market prices. The Company has identified that the financial instruments affected by the market risk include:

- Cash and cash equivalents
- Other financial assets:

  - Through profit and loss
  - Trust rights
  - Derivative instruments

The sensitivity analyses included in the following sections correspond to the financial position at the report date of December 31 2016 and 2015. These sensitivity analyses were made under the assumption of maintaining constant balances exposed, the hedging contracted, as well as the mix of liabilities according to their indexation rates.

The methods and hypothesis used in preparing the sensitivity analysis consist of:

- For cash and cash equivalents and other financial assets, the methodology used for measuring the market risk is the Risk Value, consisting in the quantification of the maximum loss that could suffer the portfolio in one month with a reliability level of 95%. For the quantification of VaR the methodology used is that defined by the Financial Superintendency of Colombia, in Basic Accounting Financial Circular (CE100 of 1995). For derivative instruments, the sensitivity analysis was made under the assumption of maintaining constant the hedging operations contracted according to their indexation rates.

**38.2 Interest rate risk**

The interest rate risk is the risk that the fair value or the future cash flows of a financial instrument may fluctuate as consequence of the variations in the market interest rates. The Company has identified that financial instruments affected by the interest rate risk include:

- Cash and cash equivalents
- Other financial assets
  - Investments at fair value through profit and loss
  - Derivative instruments
- Credits and loans
- Accounts receivable in foreign currency

The concentration of the interest rate risk appears when there are great individual exposures and when there are significant exposures in respect to counterparts which probability of default is determined by factors such as the economic sector, foreign currency and credit ratings. The interest rate risk management seeks the conservation of the principal and the maintenance or increase of profitability. In the Company policies have been defined on the subject of interest rate risks, through the identification, determination of the position of rates and simulation of possible hedging strategies. The above supports the making of decisions, which are oriented to maintaining the position or hedge it and later an analysis is made of the results of the strategies carried out

***Interest rate sensibility analysis***

The following table indicates the sensibility in respect to a possible reasonable change of interest rates of the financial instruments exposed to this risk, not considering the effect of the hedge accounting. Maintaining the rest of the variables constant, the profit/loss before taxes and equity of EPM would be affected by changes in the variable interest rates as follows:

| | Increase/ decrease in basic points | Financial effect | |
|---|---|---|---|
| | | In profit or loss before taxes | In the equity |
| **2016** | | | |
| **Financial assets measured at fair value through profit or loss** | | | |
| Investments at fair value through profit or loss | 100 | 34,549 | 27,639 |
| | (100) | (31,089) | (24,871) |
| **Financial assets measured at amortized cost** | | | |
| Accounts receivable in foreign currency | 100 | 18,093 | 14,474 |
| | (100) | (18,093) | (14,474) |
| **Financial assets measured at fair value with changes in other comprehensive** | | | |
| Derivatives | - | - | - |
| | - | - | - |
| **Financial liabilities measured at amortized cost** | | | |
| Credits and loans | 100 | (71,190) | (56,952) |
| | (100) | 71,798 | 57,438 |
| **Financial liabilities measured at fair value with changes in other comprehensive** | | | |
| Derivatives | 100 | - | 104,821 |
| | (100) | - | (43,772) |

*- Figures in millions of Colombian pesos -*

The Company considers that the sensibility analysis is representative in respect to the exposure of the interest rate risk.

## 38.3. Exchange rate risk

The exchange rate risk is the risk that the fair value or the future cash flows of a financial instrument may fluctuate as consequence of the exchange rate variations.

The Company has identified that financial instruments affected by the exchange rate risk include:

- Cash and cash equivalents
- Other financial assets:
  - ✓ Derivative instruments
- Credits and loans
- Accounts receivable in foreign currency

The exchange risk exposure refers, first, to the financing activities in a currency different from the functional currency and with the hedging operations contracted. The Company manages its exchange rate risks through hedging operations in a medium term horizon. It is the Company policy not to close speculative hedging operations, and thus the conditions of the derivative hedging instrument reply the underlying conditions in order to maximize the efficacy of the hedging. EPM covers its exposure to fluctuations in the exchange rate using different hedging instruments among which are worth mentioning swaps, fowards and options at different terms.

During the current year, EPM has designated certain contracts on foreign currency as hedging, to cover up to 100% of the amount disbursed of the Club Deal International credit intended to the financing of the Ituango project and other projects of the investments plan.

*Sensitivity analysis to exchange rates*

The following table indicates the sensibility in respect to a possible reasonable change in exchange rates of $100 pesos in the currency against the United States dollar not considering the effect of the hedging accounting. The impact originates by the change in monetary and non-monetary assets. Maintaining the rest variables constant the profit/loss before taxes and equity of the Company would be affected by changes in the exchange rates as follows:

| | Increase/decrease in basic points | Financial effect | |
|---|---|---|---|
| | | In profit or loss before taxes | In the equity |
| **2016** | | | |
| **Investments at fair value through profit and loss** | | | |
| Cash and cash equivalents (USD) | 100 | 2.155 | 1.724 |
| | (100) | (2.155) | (1.724) |
| **Financial assets measured at amortized cost** | | | |
| Accounts receivable in foreign currency | 100 | 57.358 | 45.866 |
| | (100) | (57.358) | (45.866) |
| **Financial assets measured at fair value with changes in other comprehensive income** | | | |
| Derivative Instruments | - | - | - |
| | - | - | - |
| **Financial liabilities measured at amortized cost** | | | |
| Credits and loans | 100 | (68.600) | (54.880) |
| | (100) | 32.567 | 26.054 |
| **Financial liabilities measured at fair value with changes in other comprehensive income** | | | |
| Derivative Instruments | 100 | 191.085 | 152.868 |
| | (100) | 9.633 | 7.707 |
| **2015** | | | |
| **Investments at fair value through profit and loss** | | | |
| Cash and cash equivalents (USD) | 100 | 2.724 | 2.179 |
| | (100) | (2.724) | (2.179) |
| **Financial assets measured at amortized cost** | | | |
| Accounts receivable in foreign currency | 100 | 60.386 | 48.309 |
| | (100) | (60.386) | (48.309) |
| **Financial assets measured at fair value with changes in other comprehensive income** | | | |
| Derivative Instruments | 100 | 79.933 | 63.946 |
| | (100) | 27.807 | 22.246 |
| **Financial liabilities measured at amortized cost** | | | |
| Credits and loans | 100 | (147.548) | (118.038) |
| | (100) | 147.548 | 118.038 |
| **Financial liabilities measured at fair value with changes in other comprehensive income** | | | |
| Derivative Instruments | - | - | - |
| | - | - | - |

*- Figures in millions of Colombian pesos -*

The Company considers that the sensibility analysis is representative in respect to the exposure of the exchange rate risk.

### 38.4 Credit Risk

The credit risk is the risk that one of the counterparts does not comply with the obligations derived from a financial instrument or purchase contract and that this will translate in a financial loss. The Company has identified that the financial instruments affected by the credit risk include:

- Cash and cash equivalents
- Investments at fair value through profit and loss
- Accounts receivable at amortized cost
- Other accounts receivable

The credit risk management by type of financial instrument of EPM is detailed below:

**Cash and cash equivalents and investments at fair value through profit and loss**

For credit risk management, the Company assigns limits by issuer, by counterpart and by intermediary taking into account the financial, risk and fundamental analysis of the entities, emphasizing on equity support of shareholders. The methodology considers the characteristics proper of the investments portfolio and the regulations applicable. The credit risk concentration is limited since it is due to the provisions of the business rules manual for treasury operations. The description of the factors that define the risk concentration is detailed below:

- The limits are updated quarterly based on the latest financial statements available of the entities analyzed.
- When the value of the consolidated investment portfolio exceeds the equivalent of 10,000 minimum monthly legal salaries in effect (MMLSE), no more than 20% of this value should not be concentrated in a single issuer, counterpart or intermediary with the exception of securities issued by governments that comply with the regulations in effect.
- Stock market intermediaries, other than the monitored banking institutions, may act as counterparts to perform operations, but cannot be considered as admissible issuers.
- Stock broker companies that act as counterpart of the treasury operations must have at least the second risk rating in strength or quality in the portfolio administration.
- Stock broker companies supported by banks, that is, bancarized counterparts, must have a minimum equity of 30,000 MMLSE.

  Finally, the actions to avoid risk concentration are intended to establish, analyze, follow up and control the limits, for which they control the limits in effects and the status of utilization thererof. On the other hand, the justifications related to the need to override the limits temporarily are submitted to approval.

  The investments referred to are created with banking institutions that have the following risk rating, according to the term of the investment, as follows:

  - For investments with a term equal or lower than one (1) year, the banking establishment must have a rating in effect corresponding to the maximum category for the short term in accordance with the scales used by the rating companies that grant it and have minimum the second best rating in effect for the long term used by the respective companies;
    For investment with a term over one (1) year, the banking establishment must have the maximum rate in effect for the long term according to the scale used by the rating companies and the maximum rating for the short term in accordance with the scales used for this term.

**Accounts receivable measured at amortized cost and other accounts receivable:** EPM is exposed to the risk that customers/users of public utilities and others incur in default in the payment of the utilities. The accounts receivable from debtors of domiciliary public utilities are classified in two large groups: those originated by default in the payment and the other corresponds to financing or payment agreements with the customers that are made as strategy for recovery of receivables or for obtaining new customers.

EPM assesses at the end of each balance sheet period the performance and value of accounts receivable to determine if there is any objective evidence that the receivables are impaired and identify the possible impact on future cash flows. The criteria used to determine if there is objective evidence of a loss for impairment are:

- Default in the payment by customers two (2) or more accounts receivable.
- It is known or evidenced that the customer is initiating a business restructuration in insolvency or or liquidation process
- Events of a social, political public order or natural disaster types occur that according to the experience are directly correlated to the non payment of the accounts receivable.

In order to avoid an excessive concentration of risk EPM has put in operation various strategies that permit it to mitigate the risk of non payment of the receivables:

- Persuasive collection by making telephone calls and sending letters to the customers/users with the support of specialized collection agencies.
- Segmentation of customers that permits to identify those of higher risk, by their value, to carry out with them personalized collection activities.
- Possibility of making payment agreements or partial payments that lead to the recovery of the exposed capital.
- Offset of accounts receivable against accounts payable by EPM with customers suppliers.
- When the above strategies do not generate satisfactory results then changes in the customers' product portfolio are made to facilitate the payment of the debt.
- If the above strategies do not give satisfactory results the collection of the receivables is made through legal channels.
- Likewise, the company seeks to extend product portfolio to customers in such a way as to facilitate the payment of the debt; for example prepaid energy and water.

As already mentioned, EPM makes payment agreements or financing that are made as strategy for recovery of receivables or for attracting new customers. These give the right to fixed or determinable payments and are included in the current assets, except those with expirations over 12 months counted from the date of generation of the balance sheet, in which case they are classified as non-current assets.

In general terms, in order to guarantee the debts of customers blank promissory notes are prepared with letters of instructions, and when the value of the financing exceeds the amounts pre-established in the internal regulation, real or bank guarantees are requested, and in the cases in which the customer is a state entity, the resources that EPM collects for the customer are encumbered, prior agreement.

For the management of the credit risk of accounts receivable at their different stages (risk cycle), methodologies, procedures, guidelines and business rules are incorporated, in compliance with commercial and financial policies, in order to achieve a comprehensive and sustainable view of the customers.

To leverage the credit risk cycle, there are different statistical methodologies in place that permit to obtain an estimate of the behavior of the future payment of accounts. These methodologies are described below:

BURO: Permits to obtain the profile risk of a customer based on his payment behavior and own characteristics, which helps in the segmentation of the population, suggesting the optimal candidates for offers of assignment of basic and/or Value-added services.

- APPROVAL SCORING FOR VALUE ADDED PRODUCTS: It makes a profile of customers that apply for a value added credit, it assigns a risk level to the applicants and according to the business rules established contribute to make the final approval or denial decision.

- RECEIVABLES PORTFOLIO CLASSIFICATION MODEL: It assigns the probability of short-term default (2 months) of the services subscribed, in order to design collection prioritization strategies.

- MODEL FOR CALCULATION OF EXPECTED LOSS: It permits to find the probability that the services subscribed may be in payment default in a term of 12 months, which is used to calculate the expected loss of the accounts.

The company considers that the value that represents best its exposure to credit risk at the end of the period, not considering any guarantee taken or other credit improvements, is:

| Item | 2016 | 2015 |
|---|---|---|
| Deposits | | |
| Cash and cash equivalents | 519.078 | 487.182 |
| Investments in debt instruments | 378.982 | 66.021 |
| Investments in equity instruments | 1.130.682 | 2.056.204 |
| Accounts receivables | (256.311) | (124.552) |
| Other accounts receivable | (46.867) | (13.626) |
| **Maximum exposure to credit risk** | **1.725.565** | **2.471.229** |

*- Figures in millions of Colombian pesos -*

**38.5 Liquidity Risk**

It refers to the possibility that there would be insufficiency of resources for the timely payment of operations and commitments of the entity, and that because of this the Company 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 the portfolio securities.

EPM has identified that the financial instruments affected by the liquidity risk include: Cash and cash equivalents, other financial assets, derivative instruments and credits and loans. In order to control the liquidity risk comparisons of figures are made of benchmark indicators and of liquidity levels at different time horizons. As of that analysis, investment strategies are performed that do not affect the liquidity of the Company taking into account the cash budget and the market risk analyses to consider the diversification of the sources of funds, the capacity to sell assets and the creation of contingency plans.

In general, the main aspects that are taken into account in the analysis are:

- Liquidity of securities: the characteristics of the issuer, amount of the issue and negotiation volume are analyzed.
- Market liquidity: the market's general behavior is analyzed and forecasts of rates are made in order to infer their future behavior.
- Portfolio liquidity: cash flows are coordinated in order to determine investment strategies in accordance with the future requirements of liquidity and diversification is sought to avoid the concentration of securities by issuer, rates and/or terms.

The following table shows the analysis of contractual expirations remaining for financial liabilities and assets not derivative:

| | Average effective interest rate | Less than 1 year | From 1 to 2 years | From 2 to 3 years | From 3 to 4 years | More than 4 years | Total contractual obligation |
|---|---|---|---|---|---|---|---|
| 2016 | | | | | | | |
| Non-Derivative Financial Liabilities variable interest rate | 9,23% | 137.550 | 347.172 | 269.482 | 2.037.784 | 2.416.579 | 5.208.567 |
| Non-derivative financial liabilities fixed interest rate | 7,89% | 109.607 | 167.607 | 1.684.662 | 109.607 | 3.360.083 | 5.431.566 |
| Financial assets not derivatives | 5,61% | 344.277 | 12.000 | 4.000 | 4.000 | 10.000 | 374.277 |
| Financial assets not derivatives | 5,77% | 112.756 | 283.811 | 108.051 | 187.500 | 1.604.395 | 2.296.513 |
| Total | | 704.190 | 810.590 | 2.066.195 | 2.338.891 | 7.391.057 | 13.310.923 |
| 2015 | | | | | | | |
| Financial liabilities not derivatives | 7,00% | 1.365.499 | 235.781 | 445.072 | 367.382 | 3.078.760 | 5.492.496 |
| Financial liabilities not derivatives | 7,88% | 142.761 | 88.761 | 146.761 | 1.738.196 | 3.116.130 | 5.232.610 |
| Financial assets not derivatives | 5,81% | 41.100 | 1.141 | - | - | - | 42.241 |
| Financial assets not derivatives | 5,60% | 309.524 | 296.696 | 180.430 | 137.648 | 1.432.613 | 2.356.911 |
| Total | | 1.858.885 | 622.380 | 772.264 | 2.243.227 | 7.627.504 | 13.124.259 |

*- Figures in millions of Colombian pesos -*

The values included in the above tables for financial assets and liabilities not derivative may change in view of changes in the variable interest rate with respect to the interest rate estimated at the end of the reporting period. The Company considers that the cash flows cannot occur earlier than indicated above.

The following table shows the analysis of contractual expirations remaining for financial liabilities derivatives:

| | 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 |
|---|---|---|---|---|---|---|
| **2016** | | | | | | |
| Swap contracts | 106.902 | 69.509 | 69.563 | (185.020) | - | 60.955 |
| **Total** | 106.902 | 69.509 | 69.563 | (185.020) | - | **60.955** |
| **2015** | | | | | | |
| Swap contracts | (7.061) | - | - | - | - | (7.061) |
| **Total** | (7.061) | - | - | - | - | **(7.061)** |

- Figures in millions of Colombian pesos -

The main method for the measurement and follow up of the liquidity is the projection of the cash flow that is carried out in the company and is consolidated in the cash budget. Derived from this a daily follow up is made of its cash position and projections of the latter are continuously made in order to:

- Follow up the liquidity needs related to the operating and investment activities associated to the acquisition and disposal of long term assets.
- Pay, prepay, refinance and/or obtain new credits, in accordance with the cash flows generation capacity in EPM.

These projections take into account the debt financing plans of EPM, the compliance of rations, the compliance with the organizational objectives and the regulations applicable.

Finally and as part of the strategy of a cautious management of the liquidity risk, EPM seeks to guarantee the maintenance of sufficient cash through the availability of financing with committed credit alternatives. As respect to EPM, as of 2015 it has lines of credit duly approved and renewable with the local banks for approximately $2 trillion pesos, a limit available to place in the market local bonds for $1.5 trillion and signed a credit agreement for $1,000 million U.S. dollars with a group of 7 international banks, at a term of five years and to partially finance the 2016 budget.

# Note 39. 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 valuation 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 the prices quoted in active markets for assets or liabilities identical to those that EPM can access on the measurement date (level 1).
- Based on valuation techniques commonly used by market participants that use different variables of the prices quotes that are observable for assets or liabilities, directly or indirectly (level 2).
- Based on internal cash flow discount valuation techniques, using variables estimated by the company not observable for the assets or liabilities, in lieu of variables observed in the market; and in some cases, the cost is taken as an estimate of the fair value. This applies when recent information available is insufficient to measure it, or if a wide range of possible measures exists of the fair value and the cost represents the best estimate of the fair value within that range (level 3).

During 2016 and 2015 in EPM no transfers have been made between the fair values hierarchy levels, either for the transfers into and out of the levels.

**Valuation techniques and variables used by the Company in the measurement of the fair value for recognition and disclosure:**

**Cash and cash equivalents:** includes the cash on hand and in banks and the high liquidity investments, easily convertible into a determined amount of cash and subject to insignificant risk of changes in their value, with an expiration of three months or less from the date of their acquisition. EPM uses as valuation technique for this entry the market approach; these entries are classified in level 1 of the fair value hierarchy.

**Accounts receivable:** For disclosure purposes EPM values its accounts receivable at fair value, using the technique of cash flows discount at rates observable in similar markets. For the above, it calculates the net present value of the financial instruments classified in the long term, with the market rates in effect at the time of the closing of the period. For massive accounts receivables it uses the current bank interest certified by the Financial Superintendency; for accounts receivable from employees the latest average mortgage rate certified by the Financial Superintendency for credits not for priority interest housing (No V.I.P.); and for the credit to related parties in foreign currency, the effective interest rate (TIR or Return Interest Rate) of the credit, taking as a base that the contractual rate granted to credits is a rate with international market conditions.

**Investments at fair value through profit and loss and through equity:** includes the investments that are made to optimize the liquidity surpluses, that is, all those resources that are not immediately allocated to the performance of the activities that constitute the corporate object of the companies. EPM uses as valuation technique the market approach; these entries are classified in level 1 of the fair value hierarchy. Regarding the investments at fair value through equity the market approach is used for the investments listed in the stock market, classifying them in level 1 and for the rest equity investments the cost is taken as the best estimate of its fair value and they are classified in level 3.

**Derivative instruments – Swaps:** The Company uses derivative financial instruments, such forwards, futures, swaps and options to cover financial risks, mainly the risks of interest rate, exchange rate and commodities prices. Such derivative financial instruments are recognized initially at their fair value as of the date when the derivate agreement is executed, and subsequently they are again measured at their fair value. Derivatives are accounted for as financial assets when their fair value is positive and as financial liabilities when their fair value is negative, in the statement of financial position.

EPM uses as valuation technique for the swaps the cash flow discounted, in approach of the income. The variables used are: Interest rate swap curve for types denominated in U.S. dollars, to discount the flows in U.S. dollars; and the external interest rate swap curve for types denominated in Colombian pesos to discount the flows in Colombian pesos. These items are classified in the level 2 of the fair value hierarchy.

**Investment properties:** these are those held to obtain rent and/or appreciations of capital (including investment properties in construction for those purposes). The investment properties are measured initially at cost, including the transaction costs. The carrying value includes the replacement or substitution cost of one part of the investment property existing at the time in which the cost is incurred, if the recognition criteria are met; and it excludes the costs of the daily maintenance of the investment property.

Subsequently to the initial recognition, the investment properties are measured at the fair value that reflects the market conditions as of the date of presentation. EPM uses two valuation techniques for these entries. Within the market approach, it uses the comparative or market method, which consists in deducting the price by comparison of transactions, supply and demand and appraisals of similar or comparable properties, prior adjustments of time, conformation and location. Within the cost approach, the residual method is used, which is applied only to buildings, and is based on the determination of the construction cost updated, less the depreciation for age and conservation status. Within the income approach, the income method is used where the value of the good is determined according to its capacity to generate income, taking into account the probable value of the monthly rent that the lessees would be willing to day in the leasing market. These entries are classified in level 2 of the fair value hierarchy.

**Credits and loans:** For disclosure purposes EPM values its credits and loans at fair value, using the discounted cash flow technique at rates observable in the market. For the above, it calculates the net present value of credits classified in the long term, with the market rates in effect at the closing time of the period.

The following table shows for each of the fair value hierarchy levels, the assets and liabilities of EPM, measured at fair value on a recurring basis as of December 31, 2016 and 2015, as well as the total value of the transfers between level 1 and level 2 occurred during the period:

| Fair value measurement on a recurring basis as of December 31, 2016 | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Assets | | | | |
| Designated at fair value | | | | |
| Cash and cash equivalents | 519.078 | - | - | 519.078 |
| | 519.078 | - | - | 519.078 |
| Other equity investments | | | | |
| Fixed income securities | 374.621 | - | - | 374.621 |
| Equity instruments | 37.958 | - | - | 37.958 |
| Investments pledged or delivered under warranty | 4.361 | - | - | 4.361 |
| | 416.940 | - | - | 416.940 |
| Other equity investments | | | | |
| Equity instruments | 1.123.949 | - | 6.733 | 1.130.682 |
| | 1.123.949 | - | 6.733 | 1.130.682 |
| Trust rights | | | | |
| Trust in administration | 354.170 | - | - | 354.170 |
| | 354.170 | - | - | 354.170 |
| Derivatives | | | | |
| Swap Contracts | - | 18 | - | 18 |
| | - | 18 | - | 18 |
| investment properties | | | | |
| urban and rural lands | - | 108.851 | - | 108.851 |
| buildings and houses | - | 7.777 | - | 7.777 |
| | - | 116.628 | - | 116.628 |
| Derivatives | | | | |
| Swaps | - | 70.951 | - | 70.951 |
| | - | 70.951 | - | 70.951 |
| **Total** | **2.414.137** | **187.597** | **6.733** | **2.608.467** |
| | **93%** | **7%** | **0%** | |

- Figures in millions of Colombian pesos -

| Fair value measurement on a recurring basis as of December 31, 2015 | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Assets | | | | |
| Designated at fair value | | | | |
| Cash and cash equivalents | 487.182 | - | - | 487.182 |
| | 487.182 | - | - | 487.182 |
| Other equity investments | | | | |
| Fixed income securities | 43.823 | - | - | 43.823 |
| Equity instruments | 22.198 | - | - | 22.198 |
| | 66.021 | - | - | 66.021 |
| Other equity investments | | | | |
| Equity instruments | 2.049.471 | - | 6.733 | 2.056.204 |
| | 2.049.471 | - | 6.733 | 2.056.204 |
| Derivatives | | | | |
| Swaps | - | 11.776 | - | 11.776 |
| | - | 11.776 | - | 11.776 |
| Investment properties | | | | |
| Urban and rural lands | - | 141.236 | - | 141.236 |
| Buildings and houses | - | 15.977 | - | 15.977 |
| | - | 157.213 | - | 157.213 |
| **Total** | **2.602.674** | **168.989** | **6.733** | **2.778.396** |
| | **94%** | **6%** | **0%** | |

*- Figures in millions of Colombian pesos -*

As of 31 December 2016 and 2015 no transfers between levels occurred.

As of December 31, 2016 and 2015 there were no changes in the assets and liabilities of the company measured at fair value on a recurrent basis using unobservable variables, classified in level 3 of the fair value hierarchy.

The book value and the estimated fair value of assets and liabilities of the Company that are not recognized at fair value in the consolidated statement of financial condition, but require their disclosure at fair value, as of December 31, 2016 and 2015 is the following::

| Concepto | 2016 | | | 2015 | |
|---|---|---|---|---|---|
| | Book balance | Estimated fair value | | Estimated fair value | |
| | | Level 2 | Total | Level 2 | Total |
| **Assets** | | | | | |
| Public services | 1.540.309 | 1.527.234 | 1.527.234 | 1.455.888 | 1.455.888 |
| Employees | 79.751 | 76.810 | 76.810 | 67.352 | 67.352 |
| Related parties | 1.721.150 | 1.721.150 | 1.721.150 | 1.915.034 | 1.915.034 |
| **Other receivables** | (13.998) | (14.695) | (14.695) | 356.872 | 356.872 |
| **Total assets** | 3.327.212 | 3.310.499 | 3.310.499 | 3.795.146 | 3.795.146 |
| **Liabilities** | | | | | |
| Other bonds and securities issued | 6.135.271 | 6.135.271 | 6.135.271 | 6.254.714 | 6.254.714 |
| Commercial banks loans | 1.801.972 | 1.801.972 | 1.801.972 | 1.119.342 | 1.119.342 |
| Multilateral banks loans | 1.664.555 | 1.664.555 | 1.664.555 | 1.690.716 | 1.690.716 |
| Development banks loans | 963.111 | 963.111 | 963.111 | 1.082.093 | 1.082.093 |
| Bonds and securities issued | 255.780 | 255.780 | 255.780 | 318.653 | 318.653 |
| Loans with related parties | - | - | - | 54.009 | 54.009 |
| Other loans | - | - | - | 432.830 | 432.830 |
| **Total liabilities** | 10.820.689 | 10.820.689 | 10.820.689 | 10.952.357 | 10.952.357 |
| **Total** | **14.147.901** | **14.131.188** | **14.131.188** | **14.747.503** | **14.747.503** |
| | | **100%** | | **100%** | |

*- Figures in millions of Colombian pesos -*

As of 31 December 2016 and 2015 assets and liabilities not classified at level 1 and 3

# Note 40. Service concession contracts

At the report date the Company manages, as operator, various concessions that contain provisions for construction, operation and maintenance of facilities, as well as the rendering of public utilities such as water supply and water collection and treatment, in accordance with the application regulations.

Following is the detail of the remaining period of concessions where EPM act as operator:

| Company/agreement | Activity | County | Concession Period | Initial period remaining |
|---|---|---|---|---|
| EPM - municipality of Caldas | The municipality agrees to make available and facilitate the use of the networks and other infrastructure for the rendering of the water and sewerage services. | Colombia | 30 years (extendable) | 12 years |
| EPM - municipality of Sabaneta | The municipality agrees to make available and facilitate the use of the networks and other infrastructure for the rendering of the water and sewerage services. | Colombia | 10 years (extendable) | 8 years |
| EPM - municipality of La Estrella | Execution of work and rendering of services of potable water supply and sewerage | Colombia | 10 years (extendable) | 8 years |
| EPM - municipality of Envigado | Rendering of the water and sewerage service. | Colombia | 10 years (extendable) | 1 año |
| EPM - municipality of Itagüí | Construction of the water supply and sewerage networks for the rendering of the service in the neighborhoods assigned. | Colombia | 30 years (extendable) | 1 año |
| EPM - municipality of Bello | Execution of work and rendering of services of water supply and sewerage. | Colombia | 10 years (extendable) | 6 years |
| EPM - municipality of Copacabana | The municipality agrees to the execution of works for the supply of potable water, sewerage and rendering of such services. | Colombia | 20 years (extendable) | 14 years |
| EPM - municipality of Girardota | Rendering of the service of water supply and sewerage. | Colombia | 20 years (extendable) | 16 years |
| EPM - municipality of Barbosa | The municipality agrees to make available and facilitate the use of the networks and other infrastructure for the rendering of the services of water supply and sewerage. | Colombia | 30 years (extendable) | 11 years |

At the cut-off date, no income and costs incurred by the construction services exchanged for a financial asset or an intangible asset have been recognized.

***Service concession agreements for the rendering of the water and sewage service***

The concession agreements between EPM and the municipalities provide the conditions under which the water and sewage networks are manage, operated and maintained for the provision of the potable water and wastewater treatment services to its inhabitants, in the terms, conditions and rates established by the Potable Water and Water Sanitation Regulation Commission – CRA (for its initials in Spanish).

The agreements indicate the following rights and obligations for EPM as operator in the service concession agreement:

- Right to receive from the Municipality the total water and sewer networks and to have exclusiveness as operator of the system.
- Obligation to make the exclusive use of the water and sewage networks for the purposes for which they were intended, maintain them and return them in the conditions of use they were received.
- Some concession agreements have the option to be automatically renewed for equal periods unless an of the parties expresses the intention not to continue with it.
- Concession agreements do not establish the obligation of construction of property, plant and equipment elements.

Upon termination of the concession, EPM shall return the water and sewage networks without any consideration to the Municipalities. There have been no changes in the terms of the concession agreements during the period.

For this agreement, the Intangible asset model is applicable (See Note 6 Intangibles Assets).

## Note 41. Facts occurred after the period being reported

After the date of presentation of the separate financial statements and prior to the date of authorization of its publication, no relevant facts were presented that imply adjustments to the figures.