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April 3, 2019

20190130041130

Ms. Sandra Patricia Perea Díaz
Delegate Superintendent for Issuers and Other Agents
Financial Superintendence of Colombia
Calle 7ª. No. 4 – 49
Bogotá D.C.

Reference:	**260-033**	**Empresas Públicas de Medellín E.S.P.**
	16	**Year-end financial statements.**
	29	**Consolidated financial statements - Parent company**
	31	**Letter of transmittal**
		With annexes.

Pursuant to the provisions of the annex 1 of the circular letter 038 of 2015, Empresas Públicas de Medellín E.S.P. provides the following information:

1. Certification of the secretary of the Board of Directors of Empresas Públicas de Medellín E.S.P., dated March 27, 2019, stating that the board of directors, at its meeting held on March 26, 2019, Minutes 1664, unanimously approved:

   (i) Basic financial statements of Empresas Públicas de Medellín E.S.P. and consolidated financial statements of Grupo EPM, as well as their respective notes for the year 2018.
   (ii) Release of reserves of the equity method.

   Annex 1.

2. CEO's Management Report for the year 2018 and certification of the secretary of the board of directors stating that it was approved by the board at its meeting held on March 26, 2019, Minutes No. 1664. Annex 2.

3. Separate financial statements of EPM and consolidated financial statements of Grupo EPM as of December 31, 2018, as well as their respective notes; certifications of the legal representative and the accountant of the company and reports of the external auditor. Annex 3.

estamos ahí.

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4. Certification of the legal representative, pursuant to Article 46 of Act 964 of 2005. Annex 4.

5. Report on the internal accounting control system of EPM for the year 2018, signed by the Vice President of Corporate Auditing Oscar Alberto Cano Castrillón. Annex 5.

6. Certification of the general secretary of Empresas Públicas de Medellín E.S.P. on the existence of the legal entity and its legal representative. Annex 6.

Sincerely,

Jorge Londoño De la Cuesta
CEO

Annexes: The abovementioned

Prepared by John Jaime Rodríguez Sosa Director of Accounting and Costs	Revised by Diana Rúa Jaramillo (I) Accounting and Financial Services Manager	Approved by Jorge Andrés Tabares Ángel VP of Corpo. Finance, Risk Man., and Invest.

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ATTACHED 1

Medellín March 27, 2019

20190130043810

The undersigned secretary of the Board of Directors of Empresas Públicas de Medellín E.S.P.

CERTIFIES

That the board of directors, during the session held on March 26, 2019, minutes 1664, unanimously approved:

1. The separate and consolidated financial statements of Empresas Públicas de Medellín E.S.P. and their respective disclosures (notes) for 2018, as follows:

- *Separate and consolidated statement of financial position*
- *Separate and consolidated statement of comprehensive income*
- *Separate and consolidated statement of changes in equity*
- *Separate and consolidated statement of cash flow*
- *Disclosures (notes) to the separate and consolidated financial statements*

2. "*... the release of the balance of encumbered and unencumbered reserves of the equity method for COP 69,057, on account of the dividends received in 2018 from the controlled companies, and of reserves of Article 130 of the Colombian Tax Statute for COP 187,159, on account of the provisions of Article 290 of Act 1819 of 2016.* *

**The reserves constituted by excess in depreciation installments addressed in Article 130 of the Colombian Tax Statute may be released when the requested depreciation for tax purposes is less than the accounting amount in the statement of income."*

(Figures in millions of pesos).

The aforementioned minutes, along with its corresponding annexes, is subject to the board of directors' approval during the next meeting.

MARITZA ALZATE BUITRAGO
Vice President of Legal Affairs and General Secretary

jdhc

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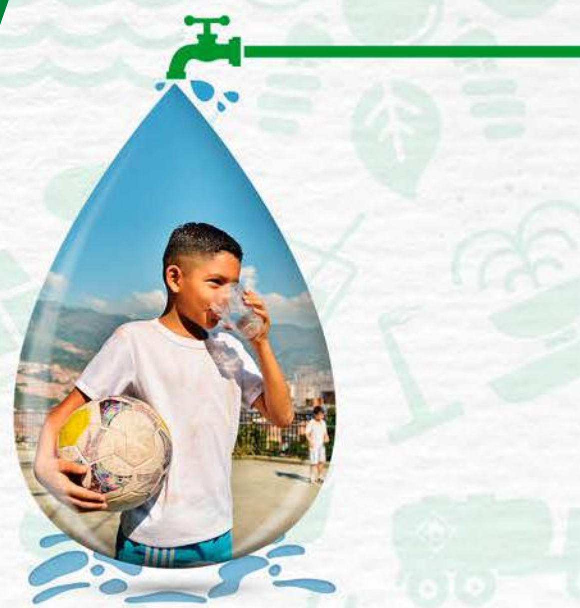
ATTACHED 2

Sustainability Report 2018



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Management Report 2018

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1. Letter from the CEO

Medellín. March 26, 2019

Dear Members of the EPM's Board of Directors
Medellín

In a few years, when this chapter of the history of EPM is written, words such as contingency and emergency will surely come out. A difficult situation for a company that at the beginning of 2018 was preparing to announce the completion of the works of the Ituango hydroelectric project.

Without underestimating the dimension of the facts occurred between April and May, when the auxiliary diversion tunnel (GAD) collapsed, I want to start the introduction of this management report with an optimistic view and with profound gratitude for the support of so many people and institutions, as well as for all the lessons that these difficulties have left to the organization and the country.

From the technical, environmental, and social perspectives, this is an experience that transforms us as a human team and leads us to feel much more committed to the values that have always given life to EPM.

We have faced this contingency with transparency, warmth, and responsibility, and today we can say that we have taken important steps to fulfill the greater purpose of this mission that we assumed: to safeguard the life of people.

All the activities that we have carried out comply with that code of ours in which, after the priority of protecting communities, we are committed to the environment and to the recovery of the project from the technical point of view.

We are getting ahead and we also continue making progress with the different projects of EPM and the business group.

This organization continues performing its daily task of providing its clients and users with the best public utilities, as well as developing important projects such as the sanitation of the Medellín river, with the setting in motion of Aguas Claras, the new wastewater treatment plant located in the northern area of Valle de Aburrá; the works of the Centro Parrilla project that contributes to the transformation of this vital zone of the capital city of Antioquia; the promotion of programs to facilitate access to drinking water in sectors with low economic resources; the rural electrification; the implementation of solar energy projects; the decisive contribution to sustainable mobility with the public charging eco-stations for electric vehicles; and the strengthening of the vehicular natural gas service.

EPM is a dynamic company that today honors its more than 63 years of constant effort for the development of the community. In consequence, innovation has always been part of its history. Grouping the different public utilities into one company was an innovative decision, as well as building the Guadalupe hydroelectric power stations that in the first half of the 20th century gave a definitive boost to the industrial development of Medellín, without leaving aside leading-edge works such as the multiple use of the Grande river with the Manantiales water purification plant and the Niquía and La Tasajera power generation plants.

There would be much more to tell about our trajectory, but the most important is that we keep growing in a sustainable way, because the purpose of Grupo EPM in the different regions of Colombia and in several Latin American countries is supporting the development, providing people with opportunities, improving the environment, and ensuring well-being and quality of life.

This is how, year after year, we keep the level of transfers to the municipality of Medellín for its development plan, in addition to complying with our different obligations related to taxes and contributions, complemented with the execution of social responsibility programs that respond to the genuine interest of transforming the society in which we live through our company.

Our work in the Ituango hydroelectric project, before, during, and after the contingency, has the same characteristics. We are present in those communities, traditionally abandoned, helping people live better. That is the meaning of what we do.

The cooperation and support of multiple sectors of the society that recognize the work of EPM and trust in our responsibility encourage us to keep working in order to give the country, by the year 2021, the good news that the Ituango project is beginning to generate the energy that Colombia needs for its development in the coming years.

We are really thankful for that support. To the members of the board of directors, and especially to the mayor of Medellín and chairman of the board, Federico Gutiérrez Zuluaga, we express all our gratitude for their dedication so that this company continues operating in favor of Medellín, Antioquia, Colombia, and the regions where the group is present.

We also thank the companies, institutions, guilds, the honorable Council of Medellin, the government of Colombia, and the state agencies that have accompanied this process.

The EPM people are the real heroes of the Ituango project. We have seen them facing the problem, offering technical solutions, providing transparent information, and working hand in hand with the communities. Workers of all organizational levels have moved to the territory to mitigate the contingency. We feel that we are a team that makes commitment a way of life.

These are the different facets of the company during 2018; above all, an expression of our conviction, values, sense of belonging, knowledge, and willingness to serve the communities where we are present.

More than figures, here you will find testimonies of willingness to serve, of closeness, of concern to do things well. These are facts that we share as a way of thanking and congratulating those who made them possible.

This report meets the requirements of the Communication on Progress to respond to the EPM's commitment to the Global Compact of informing on the disclosure and application of the principles in its strategy and operations. It should be noted that it was in 2014 when EPM reaffirmed its willingness to join the United Nations Global Compact and its commitment to the ten principles on human rights, labor, environment, and anti-corruption.

Jorge Londoño De la Cuesta
EPM's CEO

2. Business purpose

Grupo EPM seeks to remain through time by contributing to the development of sustainable and competitive territories, fostering well-being and equitable progress in the places where we operate. Therefore, the group focuses on executing infrastructure projects and offering our customers and users electricity, gas, water, and sanitation solutions complemented with business agreements with information and communication technology (ICT) services, comprising business activities that harmonize social, environmental, and financial results.

To achieve our business purpose and our short-, medium-, and long-term goals, and taking into account the contingency of the Ituango hydroelectric project, in the second half of 2018 an adjustment was made to the group's strategic planning, prioritizing five points:

1. Recovering the Ituango hydroelectric project.
2. Obtaining sources of liquidity.
3. Making businesses profitable.
4. Growing based on the 2025 vision initiatives.
5. Transforming the organizational culture.

These points are, in turn, framed in five grouping concepts defined as the "4C+1G," from which we focus on being **closer** to our customers and users, suppliers and contractors, and Grupo EPM people; we work on the improvement of our **coverage** in the territories where we operate; we take **care of the environment** through the protection of water basins and the search for a carbon neutral operation; we **consolidate** ourselves through projects that generate efficiency in processes and new capacities required by the organization; and we **grow** giving priority to the development of infrastructure projects, strengthening our presence in Urabá and Eastern Antioquia, and taking into account the business opportunities that may arise. With the "4C+1G" concepts, we explicitly articulate the strategy with the BHAG and this is what we are developing from that approach.

3. Closeness

3.1. Customers and users

During 2018, we managed to interact with more than 601,000 people from all over the country, thanks to the educational activities we conducted with the community.

Through the strategies **Por ti estamos ahí** (We are there for you), of EPM, and **Cercanías** (Closeness), of the national energy affiliated companies, 80 programs were developed in the country, in which we talked with 159,000 people about the provision of residential public services. As part of the **Lectura a tu medida** (Reading at your measure) program, we held conversations with 250,000 people, achieving a better understanding of our bill and rates.

Based on the social and educational work of the **Unidos por el agua** (United for water) program, we established bonds of trust with the leaders and communities of the benefited territories and interacted with more than 9,000 people. Within the **Cuidamundos** (World's protector in your school) program, we interacted with more than 72,000 students, seeking to encourage care for the environment and promote the proper use of public utilities, which implies inspiring closeness and trust with our future customers and users.

In order to improve the experience of our customers and users and provide them with more options, **self-service solutions and digital channels** were enhanced. Six spaces were enabled in strategic areas of the city of Medellín, called "Puntos fáciles" (Easy points). These self-service spaces are equipped with technological devices so that customers and users can use new technologies that improve their experience and interaction with the company, allowing them to perform up to 20 types of online transactions, such as paying public utilities in cash or by debit card, topping up prepaid energy cards, generating payment coupons, obtaining certificates of prepaid services and account statements of the Somos card, among others. More than 311,000 transactions were processed during the year. Additionally, 18 types of transactions were implemented in the online channel and some functionalities were improved. The **EPM mobile app** continues gaining strength—in 2018, it reached 26,500 active users and customers, 65% more than the previous year. In addition, during this year, more than 75,000 customers and users received their bill only via e-mail, and about 320,000 coupons were paid electronically, that is, 16.25% of the total coupons collected in the year.

The **Somos loyalty program** continues providing customers and users with benefits. There are currently 890,000 members in Antioquia and 31,866 new families benefited from the Somos housing credit, 88% of them belonging to the socioeconomic strata 1 to 3, with a predominance of strata 2 and 3. Since 2008, more than 214,000 families have been able to fulfill the dream of acquiring the products they need for their home thanks to Somos, thus contributing to their well-being and enjoyment of residential public utilities. During this year, more than COP 110,546 million have been granted in loans.

In addition, about 50,000 customers and users enjoyed additional benefits of the Somos program, such as discounts, experiences with soccer teams, contests, raffles, marathons, exchange of points as part of payment for public utilities, Metro's Cívica card credit, and products of the rewards catalog.

Also in 2018, the Somos credit by Grupo EPM benefited 4,688 new families in CHEC, for a total of 40,489, and 171 new families in EDEQ, for a total of 2,156, reaching sales that amounted to COP 10,400 million and COP 713 million, respectively.

Seeking to consolidate EPM as a strategic ally of its **corporate customers** and leverage commercial offers, business outreach programs were conducted, including meetings and academic and regulatory events that counted on the participation of more than 1,000 employees of 45 administrations or government institutions and about 5,000 employees of companies and large EPM customers. In addition, 300 industrial customers received academic advice and 586 small businesses participated in awareness campaigns on energy efficiency. In the construction sector, 1,841 projects were supported at the national level, managing to connect 23,117 new homes to the public utilities. Similarly, the company conducted 31 informative events on procedures and 43 training sessions on the linking and use of public utilities.

In the citizen perception survey "Medellín cómo vamos," 88% of the population has a favorable image of EPM and 77% rates their business management as good or very good.

3.2. Suppliers and contractors

In order to continue strengthening the relationship with these stakeholders, the **EPM contractors loyalty assessment** was performed, showing a result of 52.1% that represents an increase of 5.11% in relation to the previous year, which evidences a positive growth of the most loyal contractors, who are satisfied and refer in positive terms to EPM.

As part of the positioning and consolidation of the strategy for the development of suppliers and contractors called **Sustainable Ecosystem for Supplier Development**, the company continues promoting alliances with government institutions, guilds, clusters, among others, focused on creating opportunities for improvement based on the knowledge and understanding of the mutual needs and expectations, where EPM acts as a driver of development, enhancing capacities in suppliers and contractors. During 2018, progress was made in different initiatives aimed at promoting the development of skills:

- 131 new technicians graduated from the **School of Transmission Linemen**, for a total of 281, and 175 are still in the training stage.
- Within the framework of the **PARES Group**, led by Isagén, whose purpose is to promote external collaboration networks with companies from different economic sectors, EPM worked along with Éxito in a project for the development of suppliers on **energy efficiency**. The project was sponsored by the Municipality of Medellín and counted on the participation of 15 SMEs. Moreover, an event on **health and safety at work** was conducted with 252 suppliers and 304 attendees.
- **Escuela de Destrezas Aguas** (Water Skills School) was created with the purpose of improving the technical skills of employees and collaborators in charge of the maintenance of water supply and sewerage networks and, thus, increasing the supply of skilled labor.
- During 2018, 20 suppliers joined the **supplier development program**, conducted by INNPULSA, aiming at increasing by 15% the productivity of their processes. Under the same methodology followed by INNPULSA, EPM enrolled 10 additional suppliers, which are currently in the development stage.

In addition, with the objective of strengthening the **clear and continuous communication**, 14 events were held in EPM and 33 in national affiliated companies, positively impacting a total of 2,400 people from 1,200 companies. The subjects addressed included contracting, human rights, code of conduct, prevention of frauds to EPM, permanent information on the contingency of the Ituango hydroelectric project, health and safety at work, registration in the Ariba information system, Global Compact, among others.

The second meeting of technical and administrative managers also took place, in which topics such as the moments of truth in the administration of contracts, "contracting zero-day", health and safety at work and how to manage them, and updating of the corporate security manuals were discussed.

In the meeting with suppliers and contractors, EPM launched the **contractor recognition program**, which seeks to exalt the good practices implemented in favor of the sustainability. Additionally, engagement workshops were conducted with suppliers and contractors to discuss opportunities for improvement regarding the cycle of supply of goods and services.

It is worth highlighting that in the 2018 transparency assessment, EPM scored 100/100 in the contract management for the year 2017.

In order to strengthen the different **communication channels with suppliers and contractors**, the national hotline 018000515552 was enabled and the line 3807070 was unified with the line 3805556, option 4. Both lines offer support to suppliers and contractors for the cycle of supply of goods and services, nationally and locally.

3.3. EPM people

During 2018, EPM continued improving its work environment by fostering camaraderie, respect, and closeness inside the organization based on a new leadership style that allows employees to have a satisfactory experience in the development of their activities in the company, as well as emotional well-being, balance between family and work life and between professional contribution and recognition—all in line with its strategic goals. Although 2018 was a year of challenges, strong cohesion was exhibited around the organizational values and principles, as well as high levels of resilience and sense of belonging, which proves that EPM is an organization with a high sense of responsibility, transparency, and warmth when facing difficult situations.

The above is evidenced in the 2018 measurement of **quality of life and psychosocial risk**, in which 86% of the EPM population took part. The results show that 64.22% of the participants are at low risk or no risk, which means an improvement of 2.28% compared to the 2017 measurement and classifies EPM as a healthy company. These figures are the result of a work focused on variables such as characteristics of leadership, participation and change management, performance feedback, role clarity, and recognition and compensation.

Regarding the actions oriented toward the **development of leadership**, it is worth mentioning that 115 executives participated in the senior management program; 220, in the conversation circles; and 22, in the advanced leadership training program. In addition, 52 executives decided to deepen their knowledge and participated in the executive coaching program.

With respect to the **training plan**—one of the fundamental axes of development—EPM University was renewed with an innovative and powerful approach in virtual media. Moreover, 7,115 people received training and 54,642 attended events, with an average of 16.74 hours of training per employee.

Workshops and meetings were conducted in order to strengthen the **ability to converse** for better coordination in terms of the organizational purposes; they counted on the participation of 92% of the employees. Similarly, an ambitious **cultural transformation** process was started that will allow preparing this organization for future challenges and scenarios. This process is part of a novel approach that departs from the traditional way of intervening organizations, since it focuses on the reflective capacity of each of the individuals and appeals to the conscience, the presence, and the inner place from which employees observe and interact with their environment. In this way, it appeals to the capacity for change that all people have.

As part of the strategy to strengthen **organizational clarity**, six sessions of "El valor de lo que hacemos" (The value of what we do) were held in the company. These are spaces designed for the different areas to report on topics related to their activities and their main challenges, so that all members of the organization get to know firsthand what their colleagues do, thus achieving greater organizational clarity.

Relating to **recognitions and compensations**, 89% of the EPM's employees made use of at least one of the benefits granted by the company, which means a total of 50,086 benefits amounting to COP 26 billion. Among the corporate activities and events performed, we highlight:

- Resignification of celebrations such as the Family Day, the EPM Classic Day, and the Children's Day, with a message of gratitude and solidarity with the company, and the optimization of costs and expenses by using the creativity and skills of EPM's workers.
- 260 people benefited from housing loans amounting to COP 32 billion.

Regarding the **internal mobility** of the employees, it is worth mentioning:

- Admission of 190 new individuals to the organization.
- 36 promotions, 65 changes through selection processes, and 41 employees commissioned as project leaders.
- 301 transfers among departments, taking into account the development of the employees and the optimal location of resources.
- 293 employees enrolled in the teleworking program.

4. Coverage

In 2018, **universalization** reached coverages above 96% for the services of energy and water supply in Grupo EPM. Wastewater management reached 93.30% in the group and solid waste management reached 99.21% in Medellín, while gas supply reached 84.63% at the regional level.

As for the **connection of new customers and users**, there were **69,340** new connections to the EPM energy service, for a total of 2,437,797 customers. Specifically, the **Rural Electrification** program connected 15,839 new homes in 2018, for a total of 181,701 homes and 776,534 customers and users.

The gas service received 64,107 new customers and users, for a total of 1,196,467. The water supply and sewerage services reached **42,233** and **38,897** new customers and users respectively, for a total of 1,228,667 and 1,192,580.

EPM contributed to improving the quality of life of 25,268 families that lived in previously built homes without public utilities, including 11,742 homes in Bello Oriente, La Honda, La Cruz, Versalles 2, Nuevos Conquistadores, Manrique, Campo Valdés, Castilla, Popular, Santo Domingo, Robledo, López de Mesa, and 12 de octubre, which were connected through the **Unidos por el agua** (United for water) program, developed in conjunction with the Municipality of Medellín, the Social Institute for Housing and Habitat of Medellín (Isvimed), and the Enterprise of Urban Development (EDU). The program reached a total of 23,068 connections to the water supply and sewerage services.

Regarding the options and solutions available for clients and users to maintain the possibility of consuming the EPM's residential public utilities and thus satisfy their tastes, preferences, and needs, aligned with their capabilities and willingness, we highlight the **Paga a tu medida** (Pay according to your needs) offer, which in 2018 connected 42,375 customers and users in Antioquia, for an accumulated, since the beginning of the offer in 2014, of 163,083 customers and users, allowing them to pay their bill in up to 5 installments within a month. Additionally, CENS and ESSA connected 6,057 customers and users in 2018. As part of this offer, 164,833 accounts receivable equivalent to COP 90,573 million were financed, thus facilitating the payment of outstanding balances and allowing customers and users to continue enjoying their services.

The services provided through prepayment systems have also been very favorably received. 15,550 customers and users were connected to **prepaid energy** in Antioquia, for a total of 258,506 connections since 2007; that is, almost 10% of the total number of customers and users of the EPM energy service. In addition, CENS and ESSA connected 13,456 new customers and users, for a total of 32,365. The **prepaid water** service received 2,168 new customers and users in Valle de Aburrá, reaching 22,070 connections since 2015.

These solutions make it possible for people with economic difficulties to access services according to their economic capacity. To that end, non-conventional payment channels have been provided, such as the UNE public telephones network, through which 73,690 micro-payments or top-ups from COP 1,500 were carried out, contributing more than COP 134 million in revenues and 445,000 kWh in consumption. Also, in times of emergency, nearly 478,000 customers, by means of their cell phones, added COP 2,000 in advance to their accounts in order to access the service and pay for it later. This service amounted to 3 million kWh in consumption and COP 955 million in revenues. Finally, at the authorized points, customers and users of the water supply service carried out 3.67 top-ups per month, for an average amount of COP 7,496 and with an average consumption of 7.65 m^3 of water.

5. Care for the environment

The EPM Business Group is aware of its interdependence upon the environment and, therefore, it has committed itself, by means of its environmental policy, to perform a comprehensive environmental, economic, and social administration.

For that reason, it works for the conservation and management of natural resources, compliance with environmental regulations, and development of voluntary initiatives for the protection of the environment, among which **water care** and **carbon neutral operation** should be highlighted, thus contributing to sustainability, which is the business purpose of Grupo EPM.

5.1. Integrated water resources and biodiversity management strategy of Grupo EPM

In 2018, the integrated water resources and biodiversity management strategy: **Agua y biodiversidad para la vida y la sostenibilidad** (Water and biodiversity for life and sustainability) was approved by Grupo EPM with the aim of contributing to the sustainability of the group itself and the territories where it operates, through joint activities with different stakeholders and taking into account the land use plan, the characteristics of the territories, the conservation of ecosystems, the supply and demand, and the risks related to water and biodiversity. Likewise, the group defined the roadmap for its implementation.

5.1.1. Water protection

Grupo EPM implemented, directly and in coordination with other actors, a series of strategies such as f**orest conservation, restoration and reforestation, sustainable practices and uses, offset, and new protection areas, with the objective of protecting the water resources** in the hydrographic basins of Porce (Grande river, Aburrá river, and Porce-Alto Nechí), Nare (La Fe, Río Negro-Nare), Cauca (area of influence of the Ituango Project), Chinchiná, area of influence of Aguas Regionales in Urabá and of other affiliated companies such as EDEQ, CENS, CHEC, and ESSA, thus contributing to the protection of 21,282 hectares in 2018, for a total of 57,321 hectares from 2016 to 2018. These results were obtained thanks to the following initiatives:

- Alliances and agreements of CHEC with Corpocaldas, Carder, Municipality of Manizales, Caldas Governor's Office, National Natural Parks of Colombia (PNNC), to support programs such as BanCO2, Agreements for the Chinchiná River Basin, and Manizales Siembra (Manizales plants trees).
- Alliances and agreements of EDEQ, CENS, and ESSA with environmental authorities and other public and private actors to support programs such as BanCO2, which contribute to the protection of some basins in the territories where they operate.
- Agreement between EPM, Aguas Regionales, and Corpourabá for the conservation and restoration of forests through payment for environmental services in Serranía de Abibe, which supplies water to the municipalities served by Aguas Regionales.
- Forestry development program implemented by EPM in the hydrographic basins that supply its systems and reservoirs, and acquisition of protection and offset zones in compliance with the requirements of the Ituango hydroelectric project.

5.1.2. Aburrá river Sanitation and Wastewater Management Plan

As part of the Sanitation and Wastewater Management Plan (SWMP), Grupo EPM is constructing the **Aguas Claras Wastewater Treatment Plant Park** and, at the same time, is executing **modernization works in the water supply and sewerage networks** of Rodas - Piedras Blancas and El Salado, Otras Cuencas, La Iguaná - La García, and Castilla - Bello Potrerito. The purpose of these projects is contributing to the sanitation of the Aburrá river (Medellín).

Additionally, the **Environmental Education Program** was conducted, through the University of Antioquia, with 120 leaders from Bello, Copacabana, Girardota, and Medellín, in which a formal education process is being carried out to provide conceptual and methodological tools that allow participants to formulate and implement **Environmental Education Civic Projects** (abbreviated Proceda in Spanish). The Program also includes a monitoring and ex-post evaluation stage and has been considered by the communities and municipalities as a strategic tool to enhance the capacities of the communities, so that they can carry out environmental projects in their neighborhoods and improve their quality of life and well-being.

To complement this program, EPM signed an **interadministrative agreement with the municipalities of Bello**, **Copacabana, and Girardota** in order to join hands, ensure the participation of the administration in the training process, and be jointly responsible for the projects, thus guaranteeing that, at the end of the process, the strengthening, evaluation, and improvement of competences continue.

Likewise, for developing and designing the forest offset and environmental education programs and strategies, an **interinstitutional work** is carried out with the secretariats of environment of the municipalities covered by the SWMP. The group has also signed agreements and contracts with entities such as University of Antioquia, Santo Tomás University, Medellín Botanical Garden, Arví park, Corantioquia, Área Metropolitana del Valle de Aburrá (AMVA), among others, to achieve an articulated management in the territories.

Through the operation of the four lines of the **Aguas Claras Wastewater Treatment Plant Park** project, the group contributed to the protection of the environment, achieving optimal results of 76.1% in the removal of the Biochemical Oxygen Demand (BOD) and of 81.5% in the removal of Total Suspended Solids (TSS), thus improving the quality of the treated wastewater discharged to the Medellín river, as well as the continuity in the provision of the wastewater treatment service. In addition, the operation of the plant generates 47% of the energy necessary to satisfy the total demand of the San Fernando WWTP processes.

Other important activities carried out during 2018 include the **elimination of 63 direct effluents** to bodies of water, the plantation of 1,160 trees as forest offset, the protection of 176 trees that were going to be cut down, and the development of 41 environmental education workshops with the community and other 68 with the construction staff.

5.2. Climate strategy of Grupo EPM

Aware that climate change represents a significant challenge for humankind and the global economy, the group also approved its **climate strategy** during this period, whose purpose is the development of resilient and carbon-efficient businesses by 2050 through the implementation of its action plan and based on important management axes: energy efficiency, renewable energies, sustainable mobility, carbon footprint management, and adaptation measures implementation focused on knowledge, infrastructure, ecosystems, and communities. It also considers the articulated management for the comprehensive study and analysis, from the political, regulatory, normative, technological, financial, and cultural perspectives that allow its development.

5.2.1. Carbon neutral operation

In the search for a **carbon neutral operation by 2025**, Grupo EPM made progress in the following areas during **2018**:

Emissions inventory

The inventory of greenhouse gas (GHG) emissions in 2017[1] was estimated, including the national and international affiliated companies of Grupo EPM[2]. This inventory showed significant variations in relation to the two previous years, due to the fact that, in 2017, the La Sierra thermal station received a thorough maintenance that was required after its full operation to back up the sector and support EPM's generator park during the 2015-2016 El Niño.

Emissions inventory (scope 1 and 2) - Grupo EPM			
Scope	**Ton CO_2e 2015**	**Ton CO_2e 2016**	**Ton CO_2e 2017**
Scope 1	665,972	584.627	62,674
Scope 2	265,592	249,113	165,350
Total	**931,564**	**833,740**	**228,024**

Source: *https://www.sostenibilidadgrupoepm.com.co/gestion-social-y-ambiental/nuestra-gestion/temas-materiales/estrategia-climatica/mitigacion-al-cambio-climatico/*

Icontec verified the EPM emissions inventory for 2016 - base year for the carbon neutral operation of the group - and made some suggestions and adjustments that are being included in the calculation methodology.

[1] The annual inventory is calculated during the first semester of the following year. Estimations are made based on scopes 1 and 2, that is, those emissions under the organization's control.

[2] Except for Emvarias, Cururos, Ticsa, HET, and Adasa.

Carbon offset

- Certified emission reductions corresponding to 85,559 tCO_2e for the operation in 2017 of the La Vuelta and La Herradura small hydroelectric power stations and 266,814 tCO_2e for the operation in 2014 and 2015 of Los Cururos wind farm.
- Progress in the verification process for the reduction of emissions of the EPM REDD+ (Reducing Emissions from Deforestation and Forest Degradation) project.

5.2.2. Sustainable mobility

To mitigate air pollution, contribute to sustainable mobility in the region, and thus improve the quality of life of the community, EPM makes progress in public-private alliances that allow taking measures to strengthen electric mobility and vehicular natural gas as cleaner transport alternatives that benefit the environment and reduce noise and air pollution. In this sense, EPM developed the **Calidad del aire** (Air quality) program with the **sustainable mobility** strategy and with initiatives that include **vehicular natural gas (VNG)**, slow internal charging, and public charging **eco-stations** for electric vehicles, contributing to the reduction of CO_2 emissions, promoting a more rational use of energy, and opening new spaces to diversify and optimize the country's clean energy mix.

During 2018, 2,533 vehicles were converted to natural gas, for a total of 59,138. In these four years, 430 public transport vehicles and 63 waste collection vehicles of Emvarias have also started to operate with natural gas. There are currently 17 vehicular natural gas stations: 15 in Valle de Aburrá, one in Apartadó, and one in Rionegro. Of the 15 stations in Valle de aburrá, one is exclusive to the Metroplús mass transit system and another to the Emvarias trash compactor trucks. In EPM, 620 employees already have natural gas vehicles.

In the internal charging offer for **electric vehicles**, 120 visits and 43 installations were carried out and **9 eco-stations** were put into operation for a total of 19 in Valle de Aburrá, with 5 fast-charging and 14 slow-charging points. At the end of the year, there were 273 new electric vehicles on the roads of Valle de Aburrá, for a total of 482.

EPM formulated the **Sustainable Corporate Mobility Plan** (SCMP), which promotes telework. There are currently 128 executives enrolled in mobile telework programs, 106 in supplementary telework programs, 525 people in cycling-to-work campaigns, 221 bicycle parking lots in the EPM building, flexible staggered working hours (5 established schedules), and transport service for employees to the EPM building on the first electric bus.

The national and international affiliated companies continued structuring the electric mobility business model, acquiring chargers for the cities, and participating in the Calidad del Aire working groups. **EDEQ** acquired a 100% electric vehicle, put into operation the first eco-station of the coffee region, and will open two more in 2019. **CHEC** put into operation the first 100% electric bus. **ESSA** acquired one electric vehicle and will open one fast-charging and two slow-charging stations in 2019.

At the international level, both **Eegsa** and **ENSA** acquired the first vehicles to conduct tests and installed charging points in their administrative buildings.

6. Consolidation

6.1. In businesses

6.1.1. Power generation

The national energy demand grew by 3.3% in 2018 and was mostly covered by hydraulic generation. The thermal power plants contributed to the creation of security in the Atlantic coast and the coal-fired plants of the interior of the country generated by merit order during the first quarter of the year and in December.

The stock price was below the expected range during most of the year, due to the decrease in water inputs and, therefore, to the strong competition among hydroelectric power plants, which affected the income from energy sales in the Stock Market. To mitigate the impact of reduced income in the Energy Exchange, energy sales were increased in long-term contracts, which allowed a portion of the energy generated to be sold at a price much higher than that of the Stock Exchange.

Despite the competition among agents and the non-entry of a unit of the Ituango hydroelectric project in December, **the actual EPM generation** in 2018 was 15,020 GWh; 3% higher than that registered in 2017.

The energy sales portfolio for 2020 and 2021 included part of the generation expected from the Ituango hydroelectric project. Given the contingency, energy was purchased to cover those years, thus eliminating the risk of a possible exposure to stock prices. Gas was also purchased for the operation of Termosierra between 2020 and 2022. This generation complements the coverage of energy sales and improves income from the reliability charge.

Likewise, through the safety rings of the reliability charge, the company has sought to support the firm energy obligations of the Ituango project. The materialization of some alternatives will depend on the decisions made by CREG in the administrative action in progress.

In the technical context, some important events stand out, such as **major maintenance in Guatapé and La Sierra, recovery of the Playas power plant, coming into commercial operation of the Pajarito II power plant, and recovery of the operation of the Jepírachi wind farm**, among other milestones that account for the technical expertise and rigor of the business. In addition, those procedures were carried out without affecting the Grupo EPM's availability that reached 90.5% in 2018, which is in line with the expectations, taking into account maintenance plans and forced output rates below those projected.

In terms of **operational safety**, EPM defined a road map to close the gap between the current status and the proposed goal, in order to guarantee the reliability and continuity of the generator park. Additionally, important progress was made relating to the **action plan in the regions**, which solves pending issues and ensures the path towards cultural transformation, not only in the business but also in the company. Another important milestone was the formulation of operational risk management plans for each of the generation plants, thus identifying control activities for each of them.

As part of the **Alianzas para el Desarrollo** (Alliances for development) program, important achievements have been attained in the areas of influence of the generation centers: in the United Nations Development Programme (UNDP)-EPM agreement (Porce-Cauca basin), the Colombia Bio Anorí expedition was carried out, in which 14 new species were found; an alliance was achieved with **FINTRAC, USAID's** resource operator, and with **Olam** Agro Colombia, to strengthen productive start-ups and the commercialization process. In the Nare-Magdalena basin, through the agreement between EPM, the Associated Municipalities of the Subregion of Río Negro-Nare Reservoirs (abbreviated MASER in Spanish), ISAGEN, and seven municipalities of Eastern Antioquia for the strengthening of sustainable agricultural production systems, five revolving funds were implemented and the + CAMPO + SOSTENIBLE (+ COUNTRYSIDE + SUSTAINABLE) brand was formalized, which supports the commercialization of the products; finally, through the EPM-**Prodepaz** alliance, the community organizations were strengthened and the local development plans were formulated for five municipalities and seven regional development hubs of the east. Regarding the Jepírachi agenda, the company implemented handicrafts, fishing, and transport projects with 3 Wayuu communities and the profits were invested in their sustainability and community projects. The most important thing was to show that alliances generate processes of co-management and self-management in the communities and that it has a positive impact on local and regional development, since it allows joining (economic, human, etc.) resources from different organizations, thus enabling the environmental and social sustainability of the territories.

[3] PNUD: United Nations Development Programme

[4] MASER: Associated Municipalities of the Subregion of Río Negro - Nare Reservoirs (abbreviated MASER in Spanish)

As for the affiliated companies[5], **HET stands out** for obtaining the best results since the beginning of its commercial operation, thanks to its high levels of generation, availability of the plant, savings in costs, and energy prices higher than the expected. In **CHEC**, maintenance procedures performed in Dorada, Esmeralda, and San Francisco will improve the reliability levels of these assets for the coming years. La Cascada, of **ESSA**, was not available between May and September due to the Fonce river flood that affected the civil infrastructure of the plant. In **Cururos**, high prices and low generation levels due to light winds and restrictions in the transmission system in Chile implied lower revenues and greater purchases in the Stock Market to meet long-term contracts.

6.1.2. Power transmission and distribution

To strengthen the **management and control of energy losses**, EPM, along with the National Dispatch Center and other network operators, designed a calculation procedure, framed within the agreement 1063 of 2018 of the National Operation Council, for the proper implementation of the methodology for calculating technical losses found in the new regulatory framework in its chapter on losses.

Following the agreed procedure, it was possible to develop a tool within the *"DigSilent"* simulation software, which allowed to calculate the real value of the technical losses in voltage level 4 (systems with nominal voltage higher than or equal to 57.5 kV and lower than 220 kV), in order to validate and request the respective adjustments to the recognized loss index. In consequence, it is expected that the loss index (in voltage level 4) will have better recognition by the regulatory body, which translates into higher revenues for the business.

The **RIHANA** solution (revenue intelligence on the big data platform HANA), that currently allows addressing non-technical losses (locates the crews and the efforts) for the energy services in the national companies of Grupo EPM and ENSA Panamá, evolved in 2018 with the implementation of a new risk model and some changes in the data sources for the gas and water supply businesses of EPM.

At the national level, the energy recovered in the companies of Grupo EPM in 2018 was 297.94 GWh, equivalent to COP 120,927 million, for a total of 728.33 GWh, equivalent to COP 303,664 million, recovered from 2015 to date.

In terms of **operational safety**, this program is formally started with the formulation and implementation of an action plan in the processes for operating the Local Distribution System (LDS) and the Regional Transmission System (RTS), both in local and remote way, in substations and lines and in the support to operation technologies.

Framed within the consolidation of infrastructure projects to improve the continuity, quality, and coverage of services to customers and users, ESSA put into operation the Buena Vista substation in the department of Santander, whose purpose is improving the service, delivering greater capacity and reliability of the system, and meeting the future demand of its customers and users.

[5] National affiliates: CHEC (235 MW) and ESSA (18 MW) represent 7.1% of the generation capacity of the group. International affiliates: Cururos (109.6 MW) in Chile and HET (31.8 MW) in Panama represent 3.1% of the generation installed capacity of the group.

In CHEC, the Normalización Subestación Manzanares 115 kV (Normalization of the Manzanares 115-kV substation) project came into operation to ensure energy supply to the municipalities of Manzanares, Pensilvania, and Marquetalia, thus improving stability, security, and reliability of the regional transmission system that serves the Eastern Caldas. The company also put into operation two big infrastructure projects of the six included in the 2015-2018 expansion plan: the project for the connection of the La Enea 230-kV substation to the San Felipe - La Esmeralda 230-kV circuit, with which it returned to the power transmission business after 19 years, providing greater stability, security, and reliability in the electrical system; and the assembly and put into operation of the second bank of 230/115/13.8 kV single-phase autotransformers of 150 MVA in the Enea substation, approved by the Mining and Energy Planning Unit (abbreviated UPME in Spanish) on May 27, 2015, to be started on June 30, 2018.

CENS, with its new Buturama substation in Aguachica, put into operation a modern electrical complex that will supply energy to current users and will provide service to new projects coming to this area. It also modernized the Ayacucho substation, in the municipality of La Gloria, and built a new 115-kV line between Buturama and Ayacucho.

In Trelec, the first project of the National Transmission Expansion Plan (abbreviated PETNAC in Spanish), called "Iztapa – Taxisco", came into operation, which involved the construction of a 69-kV field in the Iztapa substation, a 69-kV transmission line between the Iztapa and Taxisco substations, and a 14 MVA 69/13.8 kV substation in Taxisco. This first project represents a historic milestone for Trelec, not only because of the magnitude and impact of the PETNAC in the Guatemalan electricity system, but also because it becomes another proof of the company's commitment to the development of infrastructure projects, all in congruence with the Corporate Environmental Policy and in harmony with the neighboring communities. Additionally, the La Vega – Barberena and Guanagazapa – Pasaco projects were also started.

6.1.3. Water and sanitation

EPM continues achieving favorable historic results in the integrated management of Non-Revenue Water (NRW), through strategies aimed at reducing technical and commercial losses, obtaining a score of 30.51% in the NRW index and a result of 6.05 m^3/billed user/month in the Index of Losses per Billed User, achieving in advance the regulatory goal for the year 2026.

In terms of **operational safety**, the action plan was structured, including priority actions, to be executed in 2019.

Aguas Nacionales improved the **water supply continuity** in the municipality of Quibdó, going from 67% to 90% (an average of 22 hours). Likewise, more than 3,500 new users were connected, which significantly leveraged the year-on-year income growth by more than 28%, closing 2018 with COP 4,319 million.

Thanks to the contract signed between EPM and the Ministry of Housing, City, and Territory, Aguas Nacionales performs the integral management of the Water Supply and Wastewater Management program in rural areas of Colombia, where six infrastructure projects amounting to COP 37 billion are being carried out.

Among those rural projects, it is worth highlighting the **pilot project for water distribution through public standpipes in the municipality of Manaure**, department of La Guajira, where the first users association was formed by and for the Wayuu community: PAINWAJIRAWA'A ASAA WUIN (United for water), which benefits 10,000 people from 131 indigenous communities. This project extends the water supply coverage in rural areas of La Guajira from 3% to 9%. Additionally, the project for the construction of toilet units in the municipality of Puerto Caicedo, department of Putumayo, was completed, benefiting about 3,000 people of rural areas and widening the sanitation and water supply coverage from 0% to 21%.

Aguas del Oriente, in its operational management, has one of the best rates of losses per user billed: 2.87 m^3/user billed.

In **Aguas de Malambo**, thanks to the strengthening of the commercial strategy through programs such as Paga a tu medida, the average collection from customers and users was improved. In addition, domestic metering was increased, reaching 86% at the end of the year, by articulating resources of Fondo Fuente de Vida, the Atlántico Governor's Office, and Aguas de Malambo. It is also important to mention that the company decreased the dump points and made progress in the construction of the WWTP. Moreover, it signed a contract with Postobon for the provision of treated water.

Emvarias acquired new mechanical and suction road sweepers of different dimensions, capacities, and technologies, which allow a more comprehensive and efficient service. It also implemented a new waste management model, whose main initiative is a containerization system in the city, which integrates other equipment such as self-compactor boxes, orange points, underground containers, and ampliroll system, and represents benefits not only for customers and users but also for the organization from the logistical and operational perspectives.

Thanks to its expertise, **Ticsa** completed the sludge treatment projects in Manantiales, La Ayurá, and Caldas, as well as the modernization of the San Fernando WWTP. In addition, it started the expansion projects in the San Fernando and El Retiro WWTPs and the designs in Valle San Nicolás. The company is also executing 14 projects in Mexico and Colombia that amount to USD 79 million.

6.1.4. Gas

Regarding gas commercialization and distribution, in 2018, 830 million m^3 of gas was sold, and the nonregulated market—which includes the sales of cubic meters for power generation—generated the most consumption, followed by the regulated market.

The efforts of this business focused on the increase in service coverage and access equity, which is reflected in the increase in customers and users connected of the regulated and nonregulated markets: 1,196,467 customers and users enjoying the service, which makes EPM the second gas distribution company in Colombia with a market share of 13%.

The expansion outside Valle de Aburrá continues in consolidation with the **Gas sin fronteras (Gas without borders)** program, which connected to the service the municipalities of Yalí and Vegachí and the small town of Palermo (in the municipality of Támesis) and built the corresponding infrastructure in the municipality of Remedios and in the small town of Versalles (in the municipality of Santa Bárbara). With this program, 12,621 new customers and users were connected and about 41,000 people from 115 towns of Antioquia were benefited.

As for the operation of the **Distrito térmico La Alpujarra (La Alpujarra district cooling)** - first of its kind in Latin America— the Empresa de Desarrollo Urbano (EDU) company building was connected in 2018. The district cooling has now then four customers: Antioquia Governor's Office, Directorate of National Taxes and Customs (abbreviated DIAN in Spanish), Municipality of Medellín, and EDU. With the operation of this district cooling, 100% of ozone-depleting substances (ODS) were eliminated in the year and the emission of CO_2 to the environment was reduced in 670 tons.

6.2. Corporate transformation projects

Throughout its history, Grupo EPM has been characterized by providing quality services based on the efficiency of its processes. In this sense, its efforts are focused on the implementation of corporate development projects whose purpose is to optimize processes. The following are among their most significant achievements:

In the **Productividad en campo (Field productivity)** project, COP 66,975 million was obtained in profits through the implementation of improvement actions in the processes of expansion and replacement, customer and user technical service, control of power losses in the Colombian power affiliated companies and of water losses in the water supply affiliated companies, wastewater management in EPM, and solid waste management in Emvarias. The Productividad en campo methodology is also being applied in international affiliated companies.

In the **Gestión de activos (Asset management)** project, COP 40,270 million was obtained in profits. Progress was made in the inclusion of asset management business rules in the EPM process model, as well as in the evolution of methodologies proposed in the project such as criticality, fault analysis, asset soundness, among others. In addition, EPM implemented the information system to manage the life cycle of centralized assets, which favors the availability of optimized maintenance plans and all the necessary information to make decisions related to the investments on the assets as part of the digital transformation.

With the **Conexión digital (Digital connection)** project, COP 72 million were obtained as savings in 2018. New platform capabilities were implemented such as the service to implement modern and innovative business solutions and the new requests, complaints, and claims (RCC) module with self-service for customers and users. Moreover, 70 servers were moved to the public cloud; they turn off during non-business hours and turn on on demand, generating significant savings for the company.

The **Centro de servicios compartidos (Shared services center)** project was successfully completed with the implementation of new transactional services in the financial, administrative, and human resource areas both in EPM and in national affiliated companies. These new services include the automation of the accounting close control, the provision of the service of selection to the Colombian power affiliates companies, and the improvements in extra voluntary contributions with integrations in the payroll service, obtaining benefits for COP 8,806 million. Currently, within the Vision 2025 program, the Global shared services center project, which seeks greater synergies among Grupo EPM's affiliated companies, is being executed.

The implementation of Grupo EPM's **Cadena de suministro (Supply chain)** project was completed with the entry into force of the contracting guidelines and the implementation and start-up of the tool for the management of strategic purchases in EPM and in the Colombian affiliated companies, obtaining profits for COP 382,534 million.

The interior building renovation project was completed in 2018 with the intervention of floors 7, 8, 11, and 12 with civil works, furnishing, and adaptation with information technology systems and infrastructure.

As a result of the contingency presented in the Ituango Hydroelectric Project, floors 0, 1, 2, 9, and 13 remain pending for intervention.

6.3. Information technology

Aware of the importance of **information technology (IT) in Grupo EPM's sustainability**, the organization revised and adjusted the respective strategy, orienting it to transform the group through technology and innovation, operating with excellence and empowering its people in skills and knowledge. The following are the main achievements in this matter.

- The strategy, structure, and project to accelerate and consolidate the **digital transformation** was defined, seeking a fundamental change in the way of operating and offering value to the different stakeholders, incorporating digital technology in all areas of the organization. During the first advances of this strategy, **a model of electrical network fault prediction** was implemented. **Self-service points were made available in different areas of Medellín** to print the payment voucher, divide accounts, and print certificates (prepaid energy, prepaid water, and financing), thus contributing to reduce the overflow of people at the customer service offices and making the procedures for customers and users easier. Additionally, **the self-management of the Information Technology Management customers** was enabled with the implementation of functionalities such as forms on the corporate website for the generation and monitoring of RCCs, the application for feasibility of the water service, and the application for water and sewerage services.
- Progress was made in the **consolidation of the data analytics capacity at EPM** to predict faults in elements of the local distribution system, analyze information of potential customers and users for the gas service, monitor key management variables in the Ituango Hydroelectric Project and the Environment Security System (abbreviated SIAE in Spanish), detect indicators for power transmission and distribution, and analyze revenues and commercial operation for generation, among others. The advance in terms of analytics and the data quality capabilities brought to the company in previous years allow EPM to develop increasingly more projects that support its operation and generate additional value from the data.
- Regarding infrastructure, the network in the metropolitan area was expanded to improve connectivity in customer and user service centers; unified communications were expanded; virtual desktops were implemented in the different Grupo EPM offices; Office 365 was implemented in E.P. Río; the mobile communications infrastructure was expanded and improved to reduce costs in mobile, national, and regional calls; and a new security operations center (SOC) covering operating technologies was launched.

According to the provisions of Article 1 of Act 603 of 2000, which modifies Article 47 of Act 222 of 1995, relating to intellectual property and copyright on the use of legal software, EPM develops and performs periodic controls of various kinds, implemented by the Information Technology Management and evaluated by the Vice Presidency of Corporate Auditing, in order to ensure compliance with the principles of legality in the use of software, in accordance with the provisions of Circular Letter 12 of 2007, modified by Circular Letter 017 of 2011, of the Special Administrative Unit, Colombian National Directorate of Copyright (DNDA).

El Centinela cybersecurity project

To ensure the operation of businesses with a high level of availability and to minimize in a sustained manner over time the critical strategic risks that may affect the information assets and cyber assets of key business processes, EPM started in January 2018 the **cybersecurity project** called El Centinela, within which the main achievements during 2018 were framed by the **security program and strategy** with the implementation of the following services:

- Operational center for security and cybersecurity.
- Monitoring and correlation of events, favoring greater visibility of possible attacks.
- Advanced internal analytics for internal atypical behaviors within our systems.
- Cyber intelligence services, to preventively investigate and analyze external threats that indicate possible attacks.
- Cyber defense services, to investigate the behavior of attackers and implement defensive controls.
- Solutions to handle confidential information through cloud tools and protection mechanisms to secure the information on mobile devices.
- Reduction of the risk indicator for cyber attacks in the areas and processes of the energy business with the implementation of intrusion detection systems and other control devices.

The Colombian affiliated companies started the risk analysis of the operation at the control centers, implemented controls to prevent and detect unauthorized staff on their systems, and formulated the digital security management process.

6.4. Corporate governance

The contingency of the Ituango Hydroelectric Project put EPM's corporate governance to the test, imposing huge challenges on its governing bodies to find ways that would allow the company to overcome the contingency in the best possible way and, at the same time, without affecting its normal operation.

Throughout the contingency, the chairman of the board of directors and the CEO have been at the forefront of the situation with the full support of the board of directors and the senior management, who have been permanently available for everything that has been required, in order to make the proper decisions. The **flow of clear, timely, and transparent information between the governing bodies and the different stakeholders** has been one of the main challenges.

As the main governing body, the board of directors adjusted internally to address the contingency. For that purpose, it made decisions on how to establish a specific follow-up and with greater frequency to the Ituango Hydroelectric Project, on appointing the member of the board of directors with greater technical knowledge as chairman of the specific sessions for monitoring, and on the authorization to hire, for the board of directors, an external advisor experienced in power generation projects, who also participates in the project monitoring.

As for the affiliated companies, during 2018, **Grupo EPM continued strengthening its corporate governance model** and developed activities framed within the plan of engagement with partners. The boards of directors and the managers were evaluated, the strengthening plans were implemented and executed throughout the year, and the **rules of procedure of the international affiliated companies' boards** were unified, which are in the process of adoption.

The contingency of the Ituango Hydroelectric Project also resulted in the need to make decisions that had an impact on the corporate structure of Grupo EPM. **EPM's Board of Directors thus authorized the CEO to carry out a divestment process** with the purpose of obtaining the necessary resources to ensure the required liquidity. As part of this process, it is decided to transfer the shareholdings in the Chilean affiliated companies (Aguas de Antofagasta and Los Cururos Wind Farm) and ISA.

7. Growth

As part of Grupo EPM's growth strategy, the following was achieved during 2018:

7.1. Expansion projects

7.1.1. EPM's Aguas Claras WWTP Park

As part of the Medellín River Sanitation and Wastewater Management Plan, progress was made in the construction of the Aguas Claras WWTP, designed to treat an average flow of 5 m^3/s with a capacity to remove 123 t/day of biochemical oxygen demand (BOD5) and 120 t/day of suspended solids. This **will remove over 80% of the polluting particles of the water.**

The project included the construction of a 7.7-km-long diversion tunnel that will transport the wastewater until the plant and 6.5-km pipe branches to splice the existing pipes to the tunnel. The plant also includes the biosolid drying system generated at the Bello and San Fernando WWTPs, with a capacity for 400 t/day, which guarantees the final disposal of biosolids according to the current regulations.

As part of the project's commitment to the environment and the communities, the Plaza del Agua (Water Square)—a space for the active interaction of the community—was built to go beyond the vision of river sanitation. Likewise, around **1,644** direct jobs have been generated.

In 2018, **COP 148,764 million** was invested, for an accumulated investment of **COP 1.5 trillion** and a total **progress of 98%** since the beginning of the works. The following stands out:

- 97% in the construction of the treatment plant.
- 96% in the construction of the biosolid drying system.
- 100% in the construction of Interceptor Norte (north diversion tunnel) and pipe branches.

During 2018, the project started operating per lines, as well as its stabilization. As of December 2018, the four lines were operational with an average flow of entrance to the plant of 3.5 m^3/s.

7.1.2. Valle de San Nicolás Project

The aim of this project is to provide the services of **drinking water supply and waste water sanitation** in the rural and suburban sectors of the center-western area of Valle de San Nicolás and the municipality of Envigado. (The municipalities benefited are El Retiro, Rionegro, and Envigado).

COP 31,186 million was invested in 2018 and **COP 177,022 million** has been invested since the beginning of the works, generating 236 direct jobs. The progress of the works is **61%** in the four stages.

The main achievements of the year include the termination of the contract associated with the El Retiro circuit for the La Fe tank and the networks; the completion of the designs of the El Retiro WWTP, Escobero WWTP, and Don Diego WWTP; and the first stages of construction of the El Retiro WWTP expansion. Likewise, progress was made by 83% in the construction of the Sancho Paisa-Escobero collector and by 100% in the Paraíso I - II and Alcaravanes collectors.

7.1.3. Water Provision Intervention Plan

With the purpose of ensuring continuity of the water supply service in the short and the medium terms, the **Water Provision Intervention Plan (abbreviated PIPA in Spanish)** was created by the end of 2017. This plan integrates critical interventions defined and a series of projects that will improve the continuity of the water supply service.

The PIPA came to life due to the water supply rationing problem presented during 2016 and 2017 impacting approximately 46,000 users, affecting their quality of life, and compromising the image and reputation of EPM.

This intervention plan is made up of six projects located in the upper part of the western sector of the city of Medellín (Pajarito, San Cristóbal, San Javier, among others), in the southern sector of the small town of San Antonio de Prado, and in the municipalities of Bello and Itagüí.

Its purpose is to guarantee the water supply service to more than 500,000 users in a reliable manner, considering the quick growth of Valle de Aburrá (expansion projects and vegetation growth) and the deterioration of water sources.

This plan estimates an investment of over **COP 530 billion.**

In 2018, **COP 14,183 million** was invested, for an accumulated investment of **COP 14,661 million** and a **progress of 12%** since the beginning of the works. The following stands out:

- Implementation of the Naranjitos system in the small town of San Antonio de Prado.
- Procedures before Área Metropolitana del Valle de Aburrá (AMVA) to obtain environmental permits.
- Procedures to ensure the lands and easements necessary to execute the works.
- Procedures before the Colombian Institute of Anthropology and History (abbreviated ICANH in Spanish) to approve and implement the archeological management plans.
- Progress in the designs of the Macarena-Calasanz and Cucaracho-Pajarito systems and the Robledo substation in the western area of Medellín.
- Progress by 61% in the installation of pipes corresponding to 390 m (including accessories and complementary works) in Aures I - Aures II.
- Reception of pipes for Porvenir-Aures and order to start the civil works contract.
- Designs of the Itagüí tank for the expansion of the primary infrastructure of the Itagüí-Manzanillo system.

7.1.4. Regional Transmission System - Urabá region

Interventions required by the transmission and distribution business to guarantee coverage, quality, and continuity of service in the Urabá region.

Currently, four expansion projects of the Regional Transmission System (abbreviated STR in Spanish) are taking place to:

- Provide reliability in the operation of the electrical system in the Urabá region of Antioquia.
- Guarantee energy supply and reliability in the service provision for the connection of Puerto Antioquia and the current users of the system in the Urabá region of Antioquia, and those expected with the dynamism that the port brings, which in turn strengthens the satisfaction of customers and users regarding the service provided.

The portfolio of projects has an investment of around **COP 76,894 million.**

In 2018, **COP 8,485 million** was invested, for an accumulated investment of **COP 9,492 million** and a **material progress of 36%** since the beginning of the works. The following stands out:

- Completion of the detailed designs of civil works for the Nueva Colonia substation in the municipality of Turbo.
- Completion of the detailed designs of civil works and the electromechanical and communications works for the Urabá substation expansion.
- Completion of the detailed designs of civil works and the electromechanical and communications works for the new Carepa substation construction and the discussion with the community to start the works.
- Completion of the detailed designs of civil works and the electromechanical and communications works for the Arboletes substation capacity.
- Redefinition of the line route in partnership with Corpourabá.

EPM is expected to generate an annual income of approximately **COP 7,500 million**, with the development of these projects.

7.2. In Eastern Antioquia

The integration stage after the acquisition by Grupo EPM of the affiliate company **E.P. Río** was completed, which favored the progress of homologation, stabilization of its different processes, and transfer of knowledge and best practices.

Three achievements are highlighted: (1) the **compliance with the drinking water quality** regarding its smell, color, and flavor to the end customer and user in the municipality, which meant an improvement in the Water Quality Risk Index (WQRI) that went from 0.72% in October 2017 to 0.34% in December 2018; (2) the progress in the formulation of the Water Supply and Sewerage Master Plan; and (3) the updating of mandatory reports to the Sole Information System (abbreviated SUI in Spanish) of the Superintendence of Public Utilities, achieving zero reports at present, when there were 390 pending issues, enabled and expired from three years ago, of which 247 had to do with water quality.

As for the operating results, there was a decrease of the loss ratio per user billed, from 4.9 m³/customer and user billed in 2017 to 2.58 m³/customer and user billed in 2018, doing actions such as replacement of 2,500 meters for technological renovation and management of technical and commercial losses. Thanks to strategies oriented to reduce the technical and commercial losses in the integrated management of non-revenue water (NRW), the NRW index went from 28.17% to 16.90%.

7.3. In Urabá

Grupo EPM obtained 28% of the **quota of the Superior Council of Fiscal Policy** (abbreviated CONFIS in Spanish) for **Works instead of Taxes**, with four projects for Antioquia, **three of which benefit Urabá** (13% of the country's quota) and were in process of bidding by the end of 2018. They are (1) the optimization of the water supply in Apartadó (replacement of 13 km of networks), (2) the construction of the La Lucila tank, and (3) the expansion of sewerage networks in the Obrero neighborhood in Turbo. The investment amounts to **COP 28,486 million** from taxes of EDEQ, EPM, and Aguas Regionales. Thus, the path to increase the continuity of water supply in Turbo will continue; in 2017 continuity was 8.16 hours and in 2018 it was possible to reach 11.5 hours. These projects will increase continuity to around 20 hours and sewerage coverage from 33.6% to 42%. In Apartadó, continuity will improve by reducing technical and commercial losses.

In addition, resources from the nation amounting to **COP 34,713 million**, currently invested with the supervision of Findeter and technically managed by Aguas Regionales EPM, add up to close the gap in water supply and sewerage in Turbo, through projects such as the construction of sewerage networks, Distrito Sur (Southern District), phase 1 of the La Yuquita wastewater pumping station, the optimization and expansion of secondary distribution networks of water supply, and the construction of a deep well and accessory works for the new source of groundwater catchment of the water supply system of Apartadó.

During 2018, in the water supply service, the affiliated company Aguas Regionales invested **COP 11,605 million** from its own resources in water and sanitation infrastructure, 87% in sewerage (COP 10,125 million) and 13% in water supply (COP 1,480 million), through the construction and maintenance of water supply and sewerage networks, the construction of collectors for the treatment system and designs of the Turbo, Carepa, and Apartadó WWTPs. These investments, plus the efforts with resources under condition that do not affect the fees, favored the connection of **3,189 new customers and users to water supply**, for a total of 74,865, and of **2,442 new customers and users to sewerage**, for a total of 54,502.

The initial phase of the aerial water piping pilot in Turbo was completed. An approximate budget of COP 1,500 million was invested in it, benefiting more than 350 families in the Pescador 1, Pescador 2, and El Progreso neighborhoods, where there was no access to the service for more than 20 years due to the conditions of the land.

The **Working Group of Development, Habitat, and Public Utilities of Apartadó** was created to review and manage the requirements in water supply and sanitation coverage during the implementation of the 16 partial plans approved and the six in progress; to develop the urban growth projects, the union of wills is key. Currently, alternatives are being generated following EPM models and with the possibilities offered by regulations in force, with the purpose of generating synergies for the growth of the region.

Thanks to the **Agua para la educación, educación para el agua (Water for education, education for water) program, Fundación EPM** has installed water purification solutions in 44 rural schools in Urabá, benefiting 13,054 students in 10 municipalities, with an investment of COP 1,738 million. In **2018** purification solutions were delivered **in three schools of Vigía del Fuerte** and, in the Más agua, más sonrisas (More water, more smiles) competition, the municipalities of San Pedro de Urabá and Arboletes won the solution for six more schools.

It is worth highlighting the progress of the affiliate company in the 2016-2025 sanitation route for Mutatá, Chigorodó, Carepa, Apartadó, and Turbo, municipalities that already have acquired lands and designs for WWTPs.

In the Urabá region, **5,311 new customers and users** were connected to the **energy** service, for a total of 176,711, of which 38% use prepaid energy, reaching 100% coverage in urban areas and 97.2% coverage in rural areas of the nine municipalities. As part of the strategies to increase coverage in rural areas, thanks to the management with Electrificación rural (Rural electrification), in 2018 EPM brought power to 73 new rural settlements in Urabá, including rural schools in Carmen del Darién, Turbo, and Carepa. Being able to refrigerate food, talk at night enjoying the lighting, and have access to new technologies is a new reality for 1,023 families.

In the 2018-2021 period, the investments in energy amount to COP 82,000 million corresponding to expansion, transfer, and construction of new infrastructure that will increase capacity in the substations of the region, incorporating the loads of future development with the start-up of the ports.

Regarding **natural gas**, COP 1,191 million was invested, for an accumulated amount of **COP 35,937 million** since 2012 with 738 km of networks. Social actions, liaison with mayors' offices for drilling permits, and clarifications from planning offices in neighborhoods with restrictions are also included. Thus, 2018 ends with 3,500 new customers and users and with the inclusion of three neighborhoods in Arboletes, Turbo, and San Pedro de Urabá, for a total of 650 stratum-1 families. As a result, today there are 58,243 customers and users in the region.

With the purpose of growing while generating reliability in the industry, progress is made in the negotiations with Unibán and the National Navy to start using gas at Zungo Embarcadero as well as in the negotiations in ports and the free trade zone, entities with which working groups are held to expand the company's portfolio in the region.

7.4. Growth and capacity development initiatives: vision 2025

During 2018, the business cases were prepared for the initiatives identified in the context of the strategic direction and in the definition of Grupo EPM's vision for 2025. The result of this task is 14 projects that can be grouped into three categories:

The first category refers to the **projects of growth**, which seek to incorporate new businesses or business lines such as the generation of energy from non-conventional renewable sources, the growth in small hydroelectric power stations, the management of special solid waste such as hazardous waste, debris from demolitions, or recyclable material, as well as additional services for homes and businesses and the strengthening of financing. The second category is the projects that seek to develop or **evolve key capacities for the development of the vision for 2025**, where the management of infrastructure projects and the digital transformation stand out. Finally, opportunities were found to make **the processes more efficient** in the generation business by improving the availability of plants, in the transmission and distribution business by improving the quality of the service to obtain incentives, in the gas business by making adjustments to the operation contracts, and in the solid waste business by optimizing street and public space cleaning processes and generating synergies among the affiliate companies, leveraging mainly the shared services center.

It is expected that from 2019 all the defined projects are in execution and some of them already generating the expected benefits in the business case.

7.5. Development and innovation

Within its growth strategy, EPM is constantly searching for new or better solutions for its customers and users. Therefore, it considers innovation as a tool for growth and sustainability to improve existing services and develop new scalable, replicable, and sustainable businesses.

In 2018, an **open innovation strategy**—Call for Innovative Initiatives 2018—was implemented to collect initiatives. It favored a better understanding of previously identified needs and opportunities, as well as a mapping of possible alternatives to address them.

Thanks to the EPM Ventures brand, which will support EPM's private equity fund and miscellaneous investments in entrepreneurships, the following was achieved:

- Three new investments that will leverage the energy distribution and water and sanitation businesses in solid waste management and engagement with customers and users: Kaptar, with a 33% share; Triciclos, with a 14% share; and **Hybrico** with an 11% share.
- A **collaboration agreement with Ruta N and Creame** for the development of the first group of enterprise acceleration aligned with the business strategy, as a mechanism to continue strengthening relationships with innovative entrepreneurs.

Moreover, EPM seeks to develop innovation capacities in the new generations with the **Jóvenes innovadores (Young innovators) program**, to provide solutions to the challenges of the future. This program strengthens scientific competences in young people of Medellín and other municipalities of Antioquia with projects that generate alternative solutions in five lines of interest: sustainable mobility, alternative sources of energy, water and life, solid waste management, and comprehensive solutions for agriculture. Thus, three events were held during 2018: Innóvate, EPM (Innovate yourself, EPM); Feria CT+i (Science, Technology, and Innovation Fair); and Circuito Solar (Solar Circuit).

In **Innóvate, EPM**, more than 100 projects associated with the thematic lines were presented, and in 2018 the program was expanded in Armenia. For the **Feria CT+i**, coverage was expanded in 2018 in three municipalities: **Andes, Ciudad Bolívar, and Jardín** for a total of 25 municipalities in Antioquia in which 120 educational institutions benefited from the program, 53 of them belonging to the rural sector. Of 74 projects that reached the final phase of the program in November, 40 were focused on solving challenges in the thematic lines defined by EPM. And for **Circuito Solar**, there were 60 teams made up of 175 young people from 43 educational institutions in 13 municipalities of Antioquia.

Finally, it is worth mentioning some initiatives that were developed during 2018 to **strengthen current businesses and promote new ones**. In order to promote generation with non-conventional renewable energies and to make the assets of the organization profitable, EPM worked on the pilot of **floating solar panels in the Peñol-Guatapé reservoir**, located in Eastern Antioquia; furthermore, the **intelligent integration project of non-conventional renewable energies** was executed, evaluating the combination of several sources as an alternative that is expected to ensure reliability, especially for the energy supply, in the medium term.

For the energy distribution business, in agreement with Comfama, a **pilot project of installing solar kits was executed in eight homes in Antioquia** to evaluate its performance and replicate it on a larger scale, with interesting results and lessons learned to improve the business. In the water business, progress was made in projects for **more efficient treatment of wastewater**, water desalination, use of water supply networks for power generation, and remote water metering in rural aqueducts.

To optimize the water and gas businesses, EPM worked on the formulation of a **circular economy project** that will make better use of the biogas generated in the San Fernando WWTP to convert it to biomethane quality and to inject it into the gas network.

Regarding new business options, notable advances are those associated with the formulation of the use and **valuation option of the biosolids** generated in the WWTPs for the production of fertilizers.

8. Ituango Hydroelectric Project

This project is not only a transcendental infrastructure work for Colombia, but also a **regional development** initiative that benefits 12 municipalities directly and over 160,000 people in its area of influence.

On April 28, 2018, a partial obstruction took place in the GAD, which, among other effects, led to the decision to enable the mechanical room as a channel for the discharge of the retained water, in order to give priority to the protection of human life and the environment.

As of the moment of the contingency in 2018, **COP 536,882 million** was invested, for a total investment, since the beginning, of **COP 8.48 trillion** in the construction of this work.

After estimating the new works to be undertaken to bring the project to the point of operation, the project presented a materialized advance in the following aspects:

- The filling of the dam, with a 97.9% progress, for a volume placed of 19,742,707 m^3.
- The excavation of the spillway and the concretes, with a 100% progress.
- The concretes in the immediate discharge, with a 99.8% progress.
- The closing operation of the headrace gates 1 and 2.

Thus, **COP 1.4 trillion** was invested during 2018, for a total investment of **COP 9.8 trillion** since the beginning of the works. Of this amount, **COP 489,965 million** corresponds to contingency works.

The environmental, social, and sustainability management amounts to **COP 1,084,989 million**, and **COP 640,071 million** has been invested as of December 2018, for an advance of 59%. The cost of lands and easements amounts to **COP 94,760 million**, and **COP 76,954 million** has been invested as of December 2018, for an **advance** of 81.2%.

The detail of all the social, environmental, and technical management of the Ituango Hydroelectric Project can be found on the Ituango Hydroelectric Project Report.

9. Financial results

9.1. Macroeconomic behavior

In 2018, the economic activity showed a recovery compared to the dynamics of the previous year, achieving a GDP growth of 2.7%. Externally, the better performance of the main trading partners and the increase in the prices of exported raw materials improved the terms of trade. Internally, the behavior of the economy was supported by the reactivation of domestic demand in the components of imports and final consumption expenditure of households and the government. Due to the offer approach, the sectors with the greatest contribution to growth were public administration and defense, education and health, wholesale and retail trade, transportation, accommodation and food services, and professional, scientific, and technical activities; only the mining and quarrying sector had a negative variation (-0.8%). In line with the increased dynamism of the economy, the demand for electric power grew at an annual rate of 3.3%, higher than that observed one year ago, when it was 1.3%.

At the macroeconomic level, the Colombian Financing Act is expected to boost investment in the short term and positively impact employment generation and GDP expansion. However, in fiscal matters, this act will not generate the expected tax collection. This would mean that the fiscal deficit would not be corrected in the coming years, which would be a risk factor in the compliance with the fiscal regulation and in maintaining the grade of investment. In the long term, the impact of the act is uncertain, given the recent transitory nature of tax reforms in Colombia.

Regarding inflation, the Producer Price Index (PPI) of domestic offer registered an annual growth of 3.09%, higher than that observed in 2017 (1.86%). Upward pressures were observed mainly in the mining components due to the rebound in the price of commodities, food, and imported goods, which would be related to the depreciation of the exchange rate. In turn, by the end of the year, the Consumer Price Index (CPI) increased 3.18%, compared to the increase registered in 2017 (4.09%). The reduction of prices was mainly due to the lower contribution of the food and tradable components, while the expenses that contributed the most to the rise in prices were the regulated and non-tradable items.

In the exchange field, during the first nine months of the year, the COP strengthened, compared to the end of 2017, reaching an average value of COP 2,886.38 per USD, in line with the rebound in the price of oil. Then, during the last quarter, the currency had a tendency to depreciation, when the exchange rate was above COP 3,000 per USD. This behavior was mainly associated with the greater dynamism of the US economy, the increases in the Fed's rates, the aversion to financial risk in emerging markets, and the trade tensions between the US and other economies such as China and the European Union. As a result, the COP was valued by the end of the year at COP 3,249.75 per USD, registering an annual depreciation of 9%.

In the other countries where Grupo EPM is present, the economic activity continued strengthening the recovery process, with moderate expansion. There was a significant decline in consumer price inflation, with the exception of Chile, where there was a slight increase compared to the inflation in 2017. The evolution of prices was influenced mainly by the dynamics of domestic demand, increases in the price of energy, and the disappearance of supply shocks that pushed up the prices of food and tradable goods. Regarding exchange, by the end of the year there was a tendency to depreciation of currencies in relation to the USD. This behavior was influenced by the evolution of the price of raw materials, the worldwide strengthening of the USD, the normalization of monetary policy in developed economies, the flow of remittances, and the global financial and commercial tensions.

The following are the main macroeconomic indicators of the countries where Grupo EPM operates:

Indicator	Colombia	México	Panamá	Chile	El Salvador	Guatemala
CPI	3.18%	4.83%	0.16%	2.57%	0.44%	2.31%
PPI / WPI	3.09%	6.42%	N.A.	0.95%	1.76%	N.A.
Exchange rate (end of the year)	3,249.75	19.65	N.A.	695.69	N.A.	7.74
Devaluation/revaluation (annual)	8.91%	-0.06%	N.A.	13.08%	N.A.	5.34%

CPI: Consumer Price Index PPI: Producer Price Index WPI: Wholesale Price Index

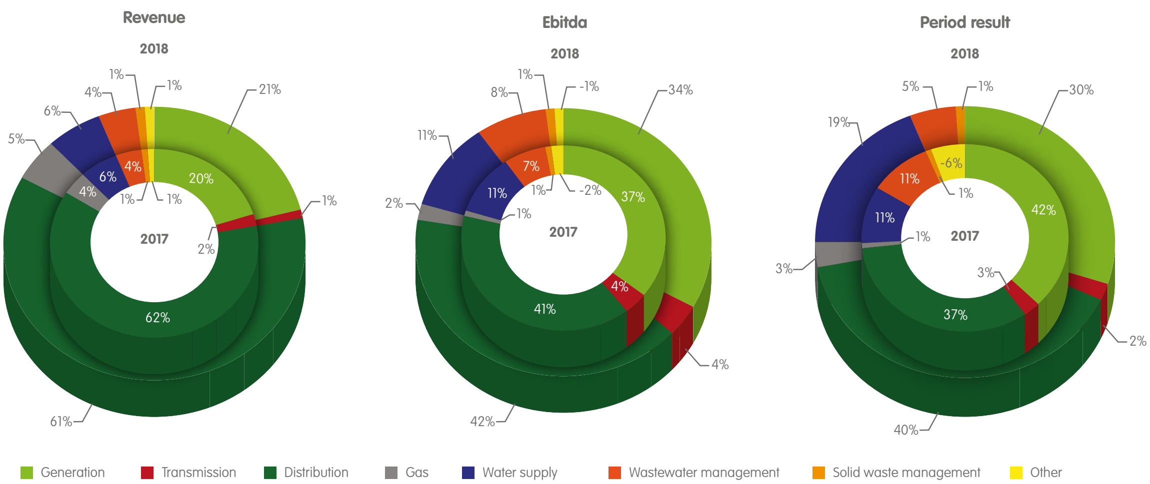
N/A: Not applicable

9.2. Grupo EPM's results

Grupo EPM has taken on important challenges and has made decisions regarding growth that have required the increase of its leverage, supported mainly in the performance of its business results. Given the contingency of the Ituango Hydroelectric Project, 2018 was particularly challenging. Decisions have been made to ensure the continuity of the operation of the businesses, to cover the needs generated by the contingency and the financial obligations of the company, and to guarantee the financial health using an optimal structure of sources, not only of the necessary resources in the short and medium term but also the sustainability of the group's companies in the long term.

During 2018, liquidity, financial indicators, and credit rating, among others, were taken care of. Through the businesses and affiliate companies, the group achieved revenues amounting to COP 16.3 trillion, with a 9% increase; an EBITDA amounting to COP 5.1 trillion, 8% higher than that of 2017; and a period result of COP 2.4 trillion, which means an increase of 4%.

In turn, the parent company, EPM, achieved revenues amounting to COP 8.2 trillion, with a 10% increase; an EBITDA amounting to COP 3.3 trillion, 7% higher than that of 2017; and a net profit of COP 2.3 trillion, which means an increase of 7%.



The group's generation segment achieved an EBITDA of COP 1.8 trillion, growing 2% compared to 2017. Although EPM's revenues increased thanks to higher energy sales to large customers and to the increase in sales to the long-term electricity sector, costs and expenses grew in greater proportion due to higher long-term energy purchases on the stock exchange and due to the expenses associated with the contingency of the Ituango Hydroelectric Project.

The distribution segment obtained an EBITDA of COP 2.2 trillion, with a positive variation compared to the 9% of 2017, mainly explained by increases in consumption and fees in EPM.

The higher sales to the secondary market and the greater demand in the thermal power plants of the coast, result of the maintenance in the networks of customers and users of the nonregulated market, made the results for the gas segment positive in 2018, with a variation of 89% compared to 2017, thus contributing COP 121,281 million to the EBITDA of the group.

The EBITDA of the water supply and wastewater management segments amounted to COP 570,820 million and COP 394,854 million, with positive variations of 11% and 14%, respectively, compared to 2017, an increase explained in EPM due to more users, consumption, and the increase in the fee, result of the application of the fee path (6%) and the CPI increase (3.37%); additionally, the increase in users was 3.6% and in consumption, of 1.46%.

The highest consumption in the nonregulated market in Adasa, affiliated company located in Chile, and the increase in operating and construction contracts in Ticsa, Mexican affiliated company, contributed to the good results of these segments.

The solid waste management segment of Emvarias obtained an EBITDA of COP 38,818 million, reflecting a very good result in relation to the previous year, as a result of the increase in revenues explained mainly by the increase of 21,539 new approved users and 14,785 users above expected. At the same time, Emvarias added 21,924 km more of street cleaning and 76% more in square meters of washing of critical points. Costs and expenses are optimized by having 130 compactor vehicles, of which 65 operate with vehicular natural gas; and finally there were optimizations in cutting and pruning contracts.

The international affiliated companies contributed COP 1 trillion to the group's consolidated EBITDA, and the national affiliated companies, COP 852,729 million.

The net profit was COP 2.4 trillion with a growth of 4%, equivalent to COP 90,434 million. This is explained by a positive variation of the EBITDA in COP 383,176 million, lower expense of income tax due to the application of the new rates of the Financing Act, the deferred tax, higher income from equity investments, higher costs and expenses due to the Ituango contingency, and higher expenses due to exchange differences.

The extraordinary expenses generated by the attention to the contingency of the Ituango project amount to COP 477,299 million, of which COP 329,665 million correspond to the estimates for the guarantee of the reliability charge, the connection guarantee, expenses associated with the attention to those affected and evacuated, and the provision for environmental contingency. COP 69,339 million have been disbursed as recognition of contingency expenses for the attention to the community, and lastly, assets for COP 78,295 million were discharged.

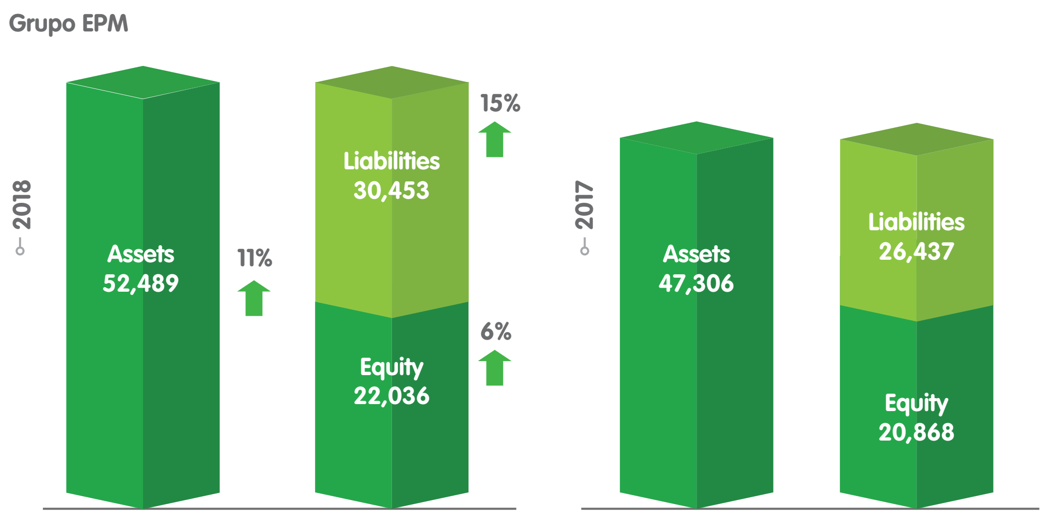
The expenses corresponding to the estimates did not affect the EBITDA indicator by the end of 2018.

Moreover, the performance of the market representative rate (abbreviated TRM in Spanish) resulted in a net expense from exchange difference higher than that obtained in 2017. This was caused by the increase in USD contract debt and by the financial derivatives with coverage purposes.

In turn, the net financial liabilities contracted in USD increased, which, together with the behavior of the domestic macroeconomic indicators (three-month reference bank indicator, fixed-term deposit, and consumer price index) and the international macroeconomic indicators (six-month LIBOR, interest rates that are used for the projection of the future flows of the debt and its subsequent valuation at amortized cost) explain the increase in financial expense that, between one year and another, grew by a percentage of approximately 11%.

9.2.1. Statement of financial position

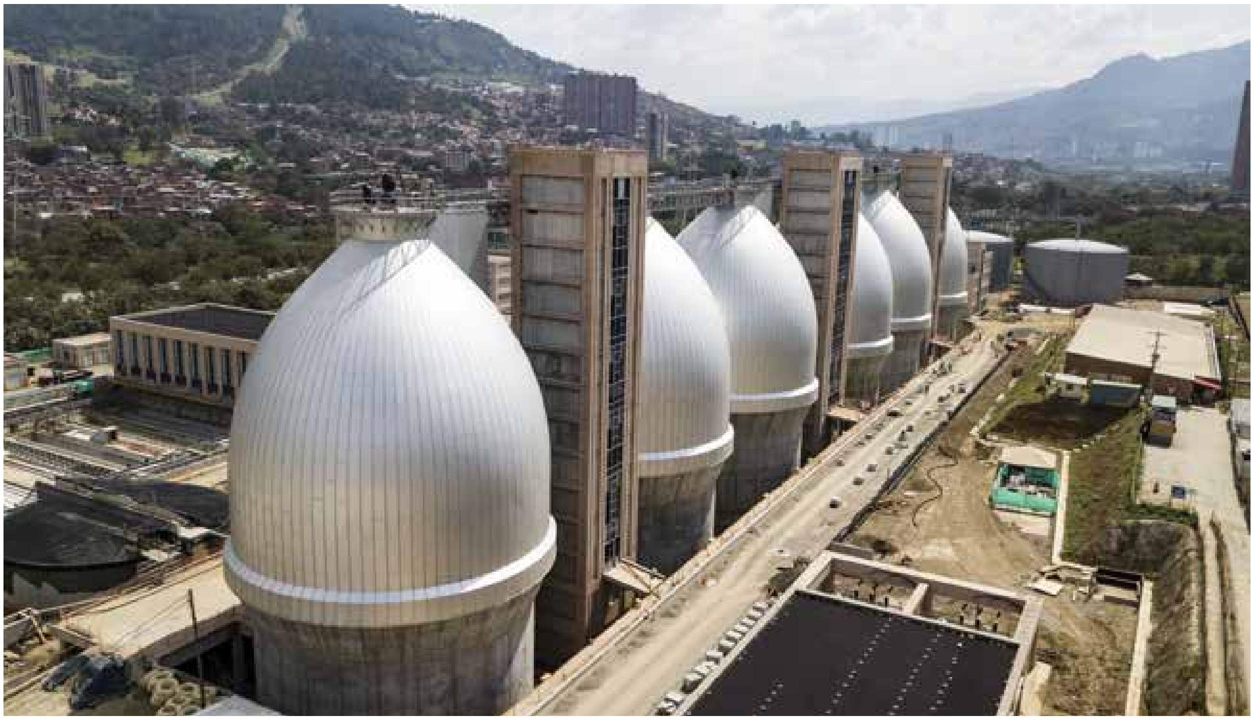
In Grupo EPM, increase in assets was 11%, going from COP 47.3 trillion to COP 52.5 trillion; liabilities reached a 15% increase, going from COP 26.4 trillion to COP 30.5 trillion; and equity increased by 6%, going from COP 20.9 trillion to COP 22 trillion. In EPM, increase in assets was 15%, going from COP 39.6 trillion to COP 45.6 trillion; liabilities reached a 27% increase, going from COP 18.1 trillion to COP 22.9 trillion; and equity increased by 5%, going from COP 21.5 trillion to COP 22.6 trillion.



The non-current assets of the group increased by 8%, mainly due to EPM's greater investments in infrastructure in the Ituango Hydroelectric Project and to projects associated with compliance with the service and efficiency standards required by the regulating entity in the water supply and power transmission businesses.

As for the national affiliated companies, we highlight the investments that contribute to the improvement of the service quality through the construction and modernization of substations and lines and through the system expansion and replacement plan. In Aguas Nacionales, the Aguas Claras WWTP started operating in December 2018. As for the international affiliated companies, ENSA had the highest level of investment in substation and line projects, reduction of losses, expansion of coverage, and quality in new customers and users. In Trelec, investments focused on projects associated with substations and lines.

The execution of investments was oriented to expand the systems and to maintain the conditions that favor the proper provision of the service.



EPM holds 93% of the group's total non-current assets. In 2018, investments in infrastructure amounted to COP 3.5 trillion, of which EPM, the parent company, executed COP 2.3 trillion; the national affiliated companies, COP 550,759 million; and the international affiliated companies, COP 619,647 million. Current assets show a 31% growth due to the cash available in EPM as a result of disbursements.

The group's total liabilities grew 15%, given the disbursements made during 2018 in EPM.

The debt/EBITDA indicator was placed above the value obtained in 2017, due to a greater increase in financial liabilities of 22% compared to that of EBITDA of 8%. The increase in financial liabilities is mainly explained by the disbursements of credits to finance the general investment plan, where the Ituango Hydroelectric Project stands out with an allocation of USD 585 million out of a total of disbursements of USD 950 million. Additionally, the devaluation presented in 2018 had an impact on the increase of the financial liability in approximately COP 503,317 million.

9.2.2. Transfers to the municipality of Medellín

In 2018, transfers to the municipality amounted to COP 1.5 trillion, of which COP 656,457 million corresponds to ordinary transfers and COP 547,047 million to extraordinary transfers, plus transfers made for the sale of Isagén shares which amounted to COP 300 billion. The variation, compared to the previous year, in terms of ordinary and extraordinary transfers is 15%, equivalent to COP 194,368 million.

9.2.3. Transfers from the electricity sector

In 2018, 53 municipalities in the Antioquia's sub-regions of Valle de Aburrá, Middle Magdalena, Northeastern Antioquia, Northern Antioquia, Western Antioquia, Eastern Antioquia, and Southwestern Antioquia and the regional autonomous corporations Corantioquia, Cornare, and Corpourabá received around COP 74,000 million, amount that substantially contributes to sustainability and protection of the environment in the regions.

9.2.4. Credit risk ratings

EPM kept the Moody's Baa3 (with negative outlook) and the Fitch Ratings BBB grades of international investment as well as the AAA national grade, which facilitated maintaining confidence to the investing public and the financial market in general. These ratings have become a key point for the financing strategy throughout 2018.

Considering the setback of the contingency at the Ituango Hydroelectric Project during 2018, EPM continued its practice of keeping constant communication with the risk rating firms, the investors, and the financial market in general, aiming to keep their confidence.

Additionally, the local energy affiliated companies and Adasa had positive behaviors as their ratings were maintained in AAA and AA-, respectively.

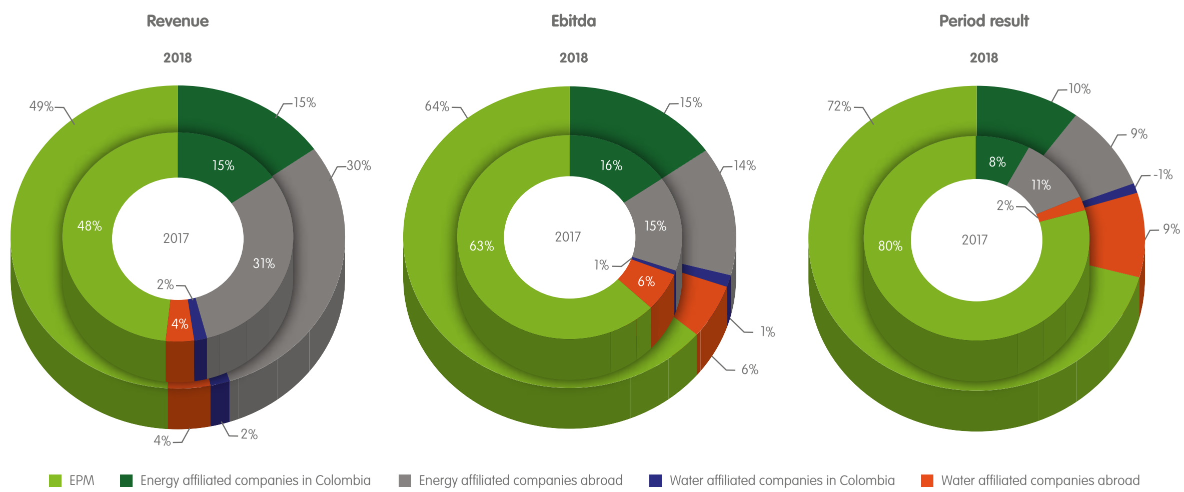
9.3. Performance and evolution of investments

EPM has been growing on a path derived from its traditional segments and a national and international portfolio that has allowed it to diversify its level of risk and thus transfer to its owner resources that have benefited the development of the city of Medellín.

Having a diversified portfolio of investments has allowed the organization to achieve the expected results, which shows its commitment to the social, environmental, and economic dynamics of the regions where it operates. The new strategy of the group's companies is focused on the efficient and profitable operation of existing segments and on new growth options, considering the financial constraints according to the new framework of action that demands increased prudence in the administration of resources.

EPM received, from its affiliated and subsidiary companies, dividends amounting to COP 474,509 million, of which COP 371,540 million were contributed by the controlled companies and COP 102,968 million by the non-controlled companies that correspond mainly to COP 61,032 million from ISA and COP 38,483 from UNE.

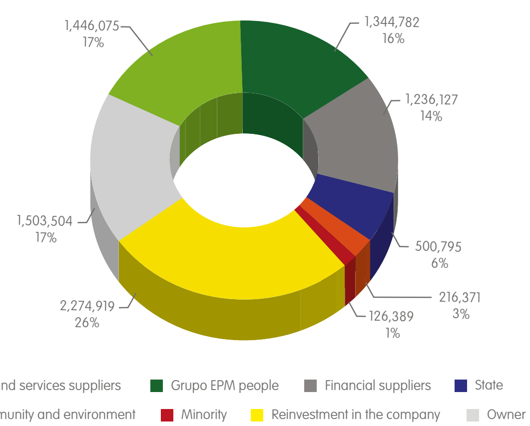
During 2018, EPM capitalized EPM Chile in COP 2,453 million for it to execute the works of the double sectioning of the La Cebada substation of its property, through its affiliated company EPM Transmisión. EPM also capitalized Aguas de Malambo in COP 8,000 million to finance its investment plan.



9.4. Value generated and distributed

Grupo EPM generated added value for COP 8.6 trillion, thus contributing to the development of the territories in which it operates. The suppliers of goods and services received COP 1.4 trillion, which reflects an important contribution to the generation of employment and economic growth. This same concept also includes the COP 216,371 million that was allocated to the communities and to the improvement of the environment. Learn more in Stakeholder engagement.

Grupo EPM's financial statement per stakeholders in 2018 (million COP)



10. Liquidity strategies

The liquidity strategy of Grupo EPM is focused on undertaking the following actions to guarantee the sources of resources that allow it to cover the needs derived from the normal operation of the businesses and to guarantee the execution of the infrastructure investment plan, in order to continue providing quality public utilities.

10.1. Insurance claim for the Ituango Hydroelectric Project incident

Once the contingency of the Ituango Hydroelectric Project happened, the incident was notified to the insurance company and a firm was appointed as adjuster, with which the communication channels and the guidelines for the handling of the incident were established. These include periodic visits to the project by the adjusters, reinsurers, and insurer; appointment of experts by EPM and by reinsurers who have visited the project to analyze the root cause; and periodic meetings on recovery plans, schedule, and costs associated with recovery. As for the noncontractual civil liability policy, the insurer and the reinsurers already confirmed coverage.

10.2. Disinvestments

At the request of EPM's Board of Directors, the investment portfolio (shareholdings) in Colombia and abroad was analyzed to determine those disinvestments that should eventually be made in order to generate resources for the company in the contingency context of the Ituango Hydroelectric Project and guarantee the correct provision of public utilities to current and new users.

For this analysis, different aspects were evaluated, including the strategic fit of the shareholding, the probability of materializing the transaction quickly and successfully, and the amount of the disinvestment and its contribution of resources to EPM.

In July 2018, EPM's Board of Directors authorized the initial necessary procedures, including the corresponding procedure before the Council of Medellin, to transfer the shares that Grupo EPM has in ISA, Gasoriente, Promioriente, Río Aures, Adasa, Los Cururos Wind Farm, and other minority shares.

Subsequently, the procedure before the Council of Medellin was carried out, which was completed, through Agreement 090 of 2018, with the approval of transfer of EPM's shareholding in the Colombian companies indicated. During the last quarter of 2018, the activities focused on the structuring of the sales processes of ISA, Gasoriente, Promioriente, and Río Aures.

In accordance with the foregoing, EPM contracted the investment banks that are supporting the structuring of the sale of the aforementioned assets. Concerning ISA, Gasoriente, and Promioriente, valuation models were prepared, the documents required by Act 226 were structured to carry out the transfer (transfer program, sales booklet, transfer regulations, warnings), and progress was made in the contracting analysis of the floor broker companies and the Colombian Stock Exchange.

As for the transfer of shares in Chile (Adasa and Los Cururos Wind Farm), the contracting of the investment banks required for the structuring of sales was also completed.

Additionally, progress has been made in the construction of the data rooms for the companies that require them, in the financial, administrative, labor, operational, commercial, technical, environmental, and legal matters, necessary for the valuation of these companies and thus for the transfer process.

10.3. Optimization of costs, expenses, and displacement of investments

Grupo EPM established a savings goal of 10% of the total costs and expenses, which for 2018 amounted to COP 420,792 million. This amount was reached according to plan and thanks to the implementation of new efficiencies in operating and support processes. It is important to note that these savings do not involve the commercial operation component, thus ensuring continuity in the provision of services in a timely manner and with the quality that characterizes EPM. Regarding investments for 2018, the lowest execution amounted to COP 983,846 million.

10.4. Credit disbursement

The confidence granted by the credit rating agencies, plus Grupo EPM's favorable track record in the credit market in general, allowed the group to obtain credit disbursements already agreed for around USD 950 million. Likewise, it was possible to obtain credits for approximately USD 750 million from the international financial sector and for COP 1 trillion from the local bank. These resources were allocated to the investment plan of EPM's base segments.

Additionally, Adasa, ENSA, and Grupo DECA, Grupo EPM's affiliated companies, executed financial liability management operations for a total amount of USD 688 million, which improved their debt profile. These operations did not increase the group's debt level and were conducted with the purpose of reducing cash requirements in the short term.

10.5. Risk coverage

As a strategy to minimize exchange risk, EPM made coverage transactions for USD 300 million during the year, decisions that neutralized the 10% impact of the COP devaluation in relation to the USD on the company's financial statements.

11. Integrated Model of Planning and Management

With regard to the progress in management through the evaluation of the achievement of results, performance is presented as established in the dimensions of the Integrated Model of Planning and Management (abbreviated MIPG in Spanish) and in Decrees 1499 and 648 of 2017 of the Administrative Department of Public Service (abbreviated DAFP in Spanish), for public entities.

Progress details on the MIPG can be found on Monitoring and evaluation of MIPG institutional performance

12. Awards and honors

These are the most notable awards and honors of Grupo EPM in 2018.

International recognition to EPM in the World Water Forum: This recognition was received thanks to the **Medellín River sanitation program**, which the company has developed for almost 50 years as a commitment to the environment. This was one of the five winning proposals of the call for good practices and experiences in water and sanitation for Latin America and the Caribbean of the Inter-American Development Bank (IDB).

Cocier-Asocodis award: As a result of the regional survey on residential customer satisfaction from the Regional Energy Integration Commission (abbreviated CIER in Spanish), conducted among South American and Central American users, with the participation of nearly 80 companies throughout the region, EPM obtained the highest index of satisfaction with perceived quality (ISPQ), which made it worthy of the award in this category.

Recognition of the Global Compact Network Colombia to EPM's good practices of sustainable development: EPM was chosen winner for its contribution to the **Sustainable Development Goal (SDG) 6** with its practice of **water resource and biodiversity management: water protection.** The recognition was awarded as part of the 8th Congress on Economy and Sustainability: the 2030 Agenda Wager, organized by the Global Compact in Bogotá.

Honor as reference company in the Andean region: The Andean Parliament recognized EPM's role in the development of Medellín and its constant contribution to the quality of life of millions of people, thanks to the coverage, quality, and continuity of its public utilities.

Recognition for the proper management of polychlorinated biphenyl (PCB) oils: During the International Environmental Trade Fair, the Colombian Ministry of Environment and Sustainable Development and the United Nations Development Program (UNDP) recognized EPM's effort, work, and contribution to the environmentally adequate management of PCB in Colombia.

Accenture Innovation Award: Important leaders from different sectors and the audience awarded this honor to EPM for the most innovative concepts at the business level in the country, promoting the generation of knowledge and best practices. On this occasion, the company participated in two categories: energy, with prepaid water, and social responsibility, with social contracting.

Seal of Excellence in Digital Governance: Thanks to its good practices in citizen participation, disclosure of information, and skills in IT management, the Colombian Ministry of Information and Communications Technologies awarded EPM several seals of excellence in digital governance. With this honor, entities of the Colombian state certify the high quality of procedures, services, and products provided by digital means, as well as a public entity's skills in the management of information technologies.

BBB- international credit rating and AAA- national credit rating granted by Fitch Ratings: This agency granted EPM a BBB international rating with investment level in negative observation from a stable outlook. Likewise, the national rating was AAA with negative observation from a stable outlook, which reflects the agency's perception of EPM's credit profile, considering it similar to that of the company's national peers. On this occasion Fitch Ratings highlights the geographic and business-line diversification, since around 66% of the company's revenues come from regulated and stable businesses, such as energy distribution and transmission, water supply, and gas distribution and commercialization.

Baa2 international risk rating by Moody's Investors Service: This risk rating agency placed EPM in the Baa2 investment grade with a stable outlook, thanks to its financial performance and the reasonable management of its finances.

Recognition to EDEQ for the proper management of PCB oils: On June 20, 2018, the Colombian Ministry of Environment and Sustainable Development and the UNDP recognized EDEQ's comprehensive management of PCBs in Colombia from 2013 to 2018.

Neutral carbon certification to EDEQ: The company received this certification for its management in the greenhouse gas emission offset and reduction in the region.

Andesco Sustainability Award to ESSA: the National Association of Utilities and Communications Companies (abbreviated Andesco in Spanish) rewarded ESSA, in the Market Environment category, for implementing corporate social responsibility actions aligned with the SDGs.

Innovation award to CHEC: During the 8th International Conference on Voltage Works held in Argentina, CHEC received recognition for the 3D Virtual Training Project in Electric Power Distribution Networks.

Recognition to CHEC for its environmentally proper management and disposal of PCBs: The Colombian Ministry of Environment and Sustainable Development recognized CHEC's commitment to and active and constructive participation in the Development of the Capacity for the Environmentally Proper Management and Disposal of PCB, project that defines the PCB-free Colombia policy.

Energy efficiency award to Delsur: Promoted by the National Energy Council (abbreviated CNE in Spanish), this award was given to Delsur in the Contribution to the Energy Efficiency Culture category with the Electromobility Innovation project.

Yo sí cumplo (I do keep my word) seal to Delsur: The Salvadorian Ministry of Labor and Social Welfare gave this award to Delsur for its good working practices in search of safe working spaces at the organization.

InnovaCiudad Award 2018 to Emvarias: The Ruta Recicla (Recycle Route), Emvarias' commitment to environmental sustainability in Medellín, was recognized by the InnovaCiudad Award 2018, which annually recognizes initiatives that contribute to the quality of life of communities and to the development of cities.

Recognition to Aguas Regionales for its innovation in the construction of the aerial water piping: The Antioquia Governor's Office awarded a recognition plaque to Aguas Regionales for its innovation to bring quality of life to the communities of Turbo with water supply through an aerial piping in the Pescador 1, Pescador 2, and El Progreso sectors.

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Annex

Institutional performance monitoring and evaluation Integrated Model of Planning and Management

Results

With regard to the progress in management through the evaluation of the achievement of results, performance is presented as established in the dimensions of the Integrated Model of Planning and Management (abbreviated MIPG in Spanish), in accordance with Decrees 1499 and 648 of 2017 of the Administrative Department of Public Service (abbreviated DAFP in Spanish), for EPM's public entities.

1. Human resource dimension

Human resource management in EPM is focused on the consolidation and articulation of organizational capabilities that enable the development of comprehensive solutions and support the achievement of the strategy.

We contribute to EPM's sustainability by helping reach the goal of reducing at least 10% the costs and expenses through the Creando-Ando (Creating-I am) initiative. Furthermore, this management is starting a process of cultural transformation that seeks to adapt the organization to current and future challenges and environments, which encompasses collaborative work, savings culture, digital transformation, and innovation.

In addition, 3.5% of the public servants telework (293 teleworkers out of a total EPM's population of 7,611).

2. Strategic planning dimension

As a result of the expected consequences of the Ituango Hydroelectric Project contingency, we adjusted the corporate strategic planning to focus on:

- Recovery of the Ituango Hydroelectric Project;
- Obtaining liquidity sources;
- Profitability of the businesses, especially power distribution and generation;
- Vision of growth for 2025; and
- Transformation of the organizational culture.

The abovementioned means new strategic objectives, indicators, and associated goals for the 2018-2022 period. Within this scope, Grupo EPM's businesses will be oriented towards efficient, profitable, and safe operation and towards the implementation of 2025-vision programs that drive the transformation of business.

We periodically manage the highest-level and highest-criticality risks. After the event that generated the contingency in the Ituango Hydroelectric Project, the company prepared a matrix oriented to manage the derived risks. At the same time, it implemented an intensive scheme to monitor and report to Senior Management and the board of directors the mitigation plans to ensure its effectiveness.

We highlight the management for the compensation of damages and loss of profits due to the fire at the Playas power station and the claims of the "all construction and assembly risk" and "noncontractual civil liability" policies of the Ituango Hydroelectric Project.

Furthermore, with the intervention of the captive affiliated company, Maxseguros, the company successfully renewed Grupo EPM's insurance program.

Integrated Model of Planning and Management (MIPG)

To implement the MIPG, EPM made progress mainly in:

- The formalization of the MIPG's institutionality (according to EPM's Management Committee, to ensure the inclusion of the roles corresponding to the Institutional Committee of Internal Control Coordination and the Institutional Committee of Management and Performance required by the DAFP, in accordance with Decree 2208 of 2018);
- The preparation of the self-diagnosis of the MIPG implementation in EPM to assess the degree of progress of the model in EPM and the group's affiliated companies;
- The definition of the plan to improve or close gaps; and
- The second progress assessment of the MIPG implementation.

Integrated Model of Planning and Management (abbreviated MIPG in Spanish)

With the tools provided by the DAFP to assess the progress of the MIPG implementation in EPM, both the self-assessment and the standard form of progress report to management (abbreviated FURAG in Spanish), the following global results were obtained and consolidated by dimension in the institutional performance index (abbreviated IDI in Spanish):

FURAG* diagnosis

IDI 77.9	Score	Level
	0 - 59	Low
	60 - 79	Medium
	80 - 100	High

**FURAG: Standard form of progress report to management*
Mandatory annual report
Evidence of the answers must be attached.

Self-diagnosis

IDI 91.6	Score	Level
	0 - 50	Initial
	61 - 80	Consolidation
	81 - 100	Improvement

Self-diagnosis: The MIPG has tools by policy to self-assess the MIPG implementation. Optional.

According to the self-assessment results for each dimension, the actions with scores lower than 60 were selected to define improvement plans during the MIPG implementation process. These actions are mainly delimited by the following matters, in five of the seven dimensions:

- **Human resources:** information management, training, welfare, and organizational culture and climate.
- **Strategic planning:** articulated with the improvement plan of the human resource dimension in the training component.
- **Result-oriented management with values:** online procedures and services, catalog of information components, traceability of information systems transactions, accountability, and citizen service.
- **Information and communication:** articulated with the results of the audit conducted by the General Archive of the Nation.
- **Internal control:** planning and assessment of audits to integrity strategies.

3. Result-oriented management with values dimension

There were no changes in EPM's administrative structure. The contingency derived from the Ituango Hydroelectric Project included an organized attention of the crisis and considered fronts for the continuity of the project and the operation and continuity of the EPM businesses.

During the year the company advanced in the modeling of the 78 processes of the EPM process model. The Enter information system included the complementary documentation of manuals, instructions, guides, and templates associated with the processes.

As part of the operational safety project, the documentation and controls of the operation and maintenance core processes were strengthened, with the purpose of mitigating business continuity risks.

The online governance program started the transition to the digital governance policy, with new aspects to develop a comprehensive view of the solutions that the company proposes to its stakeholders, based on the use of information and communication technologies (ICT). The seal of excellence was obtained in three categories: open governance, online services, and IT management capabilities.

4. Result assessment dimension

Balanced scorecard

- EPM achieved the goals associated with financial performance, revenues, EBITDA, EBITDA margin, and net profit. Although the EBITDA and EBITDA margin goals in the generation business and the revenue goal in the transmission business were not achieved, the results are very positive considering the operational and financial difficulties that arose due to the contingency of the Ituango Hydroelectric Project.

- The perspective of customers and markets ends with the fulfillment of most of the goals established for this strategic objective. It was possible to maintain the continuous growth of the businesses through the fulfillment of the goal of universalization of the services, physical units sold, and customers and users. In addition, the Unidos por el agua (United for water) program evidences the commitment acquired to the community by supplying 11,742 families during the year, for a total of 23,068.

  Notwithstanding the contingency of the Ituango Hydroelectric Project, the indicators associated with reputation were maintained at acceptable levels, while the customer and user service indicators and the service quality indicators showed positive results.

- The perspective of operations obtained sufficient sources of financing to ensure cash flow and guarantee operations during 2018. Although the company did not achieve the goals of investments and the physical progress in infrastructure projects, the good results of the business development projects stand out. In addition, the safety program road map for the generation business was completed, with progress in the level of maturity of asset management and the fulfillment of the goal in water protection.

  EPM conducted an internal quality audit program to inspect the ISO 9001 and ISO/IEC 17025 (Colombian technical standard) certified management systems and to determine how the MIPG requirements are met. The consolidated findings correspond to 76% compliances, 11% strengths, 10% opportunities for improvement, and 3% non-compliances.

  The efficiency and effectiveness of the management systems audited stand out thanks to the research and development of materials, the constant improvement, and the use of new technologies and controls in processes.

  With the purpose of strengthening constant improvement, EPM decided to change the information system to support the improvement plans. Thus, the Avanza (Advance) initiative was developed, which involves:

  - Migration of improvement programs;
  - Design of views (findings, formulation of actions and monitoring, and parameterization of controls);
  - Integration with information systems;
  - Training of 149 people at EPM and national affiliated companies; and
  - Awareness workshop on improvement for sustainability with EPM managers.

  As of December 31, 2018, the total shares from all origins registered since 2014 in the improvement plans in Avanza amount to 2,267; 1,202 are in finished status, of which 88% (1,061) are effective and 12% (141) are ineffective. As for the 14 origins, 79% of the plans are concentrated in work environment (34%) and internal audit (45%). There is a relevant participation of 59% between preventive and improvement actions, which shows an advance towards continuous improvement.

- The perspective of learning and development started an ambitious cultural transformation process that will prepare this organization for future challenges and environments, leveraging people's ability to change. Likewise, 86% of EPM's population participated in the assessment of the quality of life psychosocial risk.

5. Information and communication dimension

Regarding information management, the company developed data governance, conducted the diagnosis of commercial data quality, and advanced on technological aspects such as the data lake and the advanced analytical platform for the commercial year.

EPM has the transparency mechanisms that favor its interaction with citizens. We can emphasize on the publication on the website of the provisions of Act 1712 of 2014 and its Regulatory Decree 103 of 2015, as well as the policies on information security and personal data protection.

EPM considers transparency and access to information fundamental tools to prevent corruption and to improve democracy, accountability, and citizens' quality of life.

The organization participated in the Collective Agreement of the Electricity Sector on fighting corruption and promoting free competition, promoted by the National Operation Council (abbreviated CNO in Spanish) and XM S.A. E.S.P., with the supervision of the Transparency Secretariat of the Presidency of the Republic of Colombia, Transparencia por Colombia, and the United Nations Office on Drugs and Crime (UNODC). Moreover, the money laundering and terrorist financing (ML/TF) risk matrix was prepared and shared during the 6th Forum on Ethics of the Electricity Sector. This agreement was recognized as a good practice during the disclosure of results event of the Business Transparency Assessment 2018 organized by Transparencia por Colombia.

3 ONODC: United Nations Office on Drugs and Crime (UNODC).

6. Knowledge management dimension

EPM developed and applied the elements associated with knowledge management to increase organizational capabilities, thus aiming to promptly, efficiently, and responsibly respond to the demands of the stakeholders.

The company published relevant knowledge in the Revista EPM magazine, as well as the Porce III collection, the flora and fauna inventory of the Ituango Hydroelectric Project, the Mundo del agua (World of water) collection, the Letras Jurídicas magazine, and the Guía práctica de la propiedad intelectual (Practical guide to intellectual property). Likewise, the continuation of knowledge transfer took place through educational programs of Universidad EPM and a 40% advance was achieved in the identification of EPM key knowledge.

7. Internal control dimension

The result of the MIPG management self-diagnosis application for dimension seven, internal control, gave a final score of compliance with the internal control policy of 92.9 points out of 100, score obtained from the assessments of the control environment (94.8), institutional risk management (96.1), control activities (90.9), information and communication (92.5), and continuous monitoring or supervision (89.6) components.

As the assessment of this dimension encompasses the other MIPG dimensions, a first analysis was conducted for each component, where six activities in total were identified with scores below 60 points; two of these activities are the direct responsibility of the Vice Presidency of Corporate Auditing and are associated with the integrity strategy effectiveness assessment and with the global audit opinions.

The good score (92.9) of the internal control policy is in line with the good results obtained in the EPM's transparency rating, where it is classified as "a company with a low level of corruption risk."

Sustainability Report 2018

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Medellín March 27, 2019

20190130043815

The undersigned secretary of the Board of Directors of Empresas Públicas de Medellín E.S.P.

CERTIFIES

That the board of directors approved the CEO's Management Report for the year 2018 during the session held on March 26, 2019, Minutes 1664.

The aforementioned minutes, along with its corresponding annexes, is subject to the board of directors' approval during the next meeting.

This certificate is issued for the Financial Superintendence of Colombia at the request of the Accounting and Costs Office.

MARITZA ALZATE BUITRAGO
Vice President of Legal Affairs and General Secretary

jdhc

ATTACHED 3

Empresas Publicas de Medellin E.S.P.

Separate Financial Statements and Notes
December 31, 2018 and 2017

KPMG

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Carrera 43 A No. 16 A Sur – 38
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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Empresas Publicas de Medellin E.S.P.:

We have audited the separate financial statements of Empresas Publicas de Medellin E.S.P. (the Company), which comprise the separate statement of financial position as of December 31, 2018, and the separate statements of income and other comprehensive income, changes in equity and cash flows for the year ended on that date and their respective notes, which include significant accounting policies and other explanatory information.

Management's Responsibility for the Separate Financial Statements

Management is responsible for the preparation and fair presentation of these separate financial statements in accordance with Financial Reporting Standards approved by the General Accountancy of the Nation and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these separate financial statements based on our audit. We conduct our audit in accordance with International Standards on Auditing accepted in Colombia. Those standards require that we comply with ethical requirements and that we plan and perform the audit to obtain reasonable assurance about whether the separate financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the separate financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the separate financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the separate 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 accounting estimates made by management, as well as evaluating the overall presentation of the separate financial statements.

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

KPMG

Opinion

In our opinion, the accompanying separate financial statements referred above, present fairly, in all material respects, the separate financial position of the Company as of December 31, 2018, its separate financial performance and its separate cash flows for the year then ended, in accordance with Financial Reporting Standards approved by the General Accountancy of the Nation, applied in a consistent manner with the preceding year.

Emphasis of Matter

Without qualifying our opinion, we draw attention to:

a) In the year 2010, Hidroelactrica Ituango S.A. E.S.P. concluded with EPM Ituango S.A. E.S.P., a BOOMT (Build, Operate, Own, Maintenance and Transfer) Contract, for the construction of the Ituango Hydroelectric Project, which was assigned to Empresas Publicas de Medellin E.S.P. in 2013. Through this contract Empresas Publicas de Medellin E.S.P. is required to make the necessary investments for the financing, construction, operation, maintenance and commissioning of the hydroelectric power plant and then transfer it back to Hidroelectrica Ituango S.A. E.S.P. after 50 years. The Ituango Hydroelectric Project is located over the Cauca River, in the northwest area of the department, some 170 kilometers from the city of Medellin. It sits on property of the municipalities of Ituango and Briceno where the main works are being built, and of Santa Fe de Antioquia, Buritica, Peque, Liborina, Sabanalarga, Toledo, Olaya, San Andras de Cuerquia, Valdivia and Yarumal. This power plant will generate 2,400 MW, which represents 17% of the country's electricity demand. The dam will have a height of 225 meters, 20 million m3 of volume and a ridge of 550 meters in length; It is located at about 8 km downstream of the Pescadero bridge, on the Cauca river, on the road to Ituango, on the site of the Ituango river mouth at the Cauca river.

   As indicated in note 4 to the separate financial statements, a contingency was presented in the Ituango Hydroelectric Project; in chronological order the description of the main events:

   - April 28, 2018: due to a geological event that blocked the diversion tunnel of the Cauca River with approximately 160 thousand cubic meters of rock and soil, impoundment of water was generated upstream of the dam.

   - May 7, 2018: to protect the communities, the environment and the infrastructure of the project, the decision was made to release the impounded water through the power house of the Ituango Hydroelectric Project.

   - On January 16 and February 5, 2019: intake gates # 2 and # 1, respectively, were closed, with which the flow of water through the powerhouse was suspended, what caused a reduction of the water flow of the Cauca river.

KPMG

- February 8, 2019: began the recovery of the Cauca River flow through the water flow through the spillway.

- March 1, 2019: Skava Consulting delivers the results of the root cause analysis of the contingency.

The events described above are under evaluation by the Company and by control and surveillance bodies, therefore, at the date of issuing our opinion, not all the related financial and environmental effects, responsibilities, deterioration and costs are known, aside from those indicated in note 4, for this reason, the separate financial statements do not fully reflect the effects resulting from this situation.

b) Note 21 to the separate financial statements, which indicates that Empresas Publicas de Medellin E.S.P. obtained waivers from the Inter-American Development Bank (IDB) and the French Development Agency (FDA) related to the fulfillment of the financial covenant, in accordance with the provisions of the multilateral banking contracts, measured in relation to the financial indicators of long-term financial debt on EBITDA as of December 31, 2018 of the consolidated financial statements of Empresas Publicas de Medellin E.S.P and Subsidiaries. In relation to the obligation with the Bank of Tokyo-Mitsubishi financial institution for $ 285,154 million, which guarantor is the Japan Bank for International Cooperation (JBIC), the waiver has not been obtained, thus reclassification of the total financial long-term debt to short term was made, according to the provisions of the Financial Reporting Standards approved by the General Accountancy of the Nation given the breach of the covenant; The JBIC indicated that once the consolidated financial statements of Empresas Publicas de Medellin E.S.P and Subsidiaries are known, it will evaluate the possibility of modifying the contract or granting the waiver.

Other Matter

The separate financial statements at and for the year ended December 31, 2017 are presented for comparative purposes only, were audited by another independent auditor whose report dated March 20, 2018 expressed an unmodified opinion on those statements.

(Autograph signature of the partner) (Manually write: KPMG S.A.S.)
Gonzalo Alonso Ochoa Ruiz
Partner
March 26, 2019
Medellin

Certification of the legal representative and the accountant of EPM

March 26, 2019

Board of Directors
Empresas Públicas de Medellín E.S.P.

The undersigned legal representative and accountant of Empresas Públicas de Medellín E.S.P certify that the balances of the financial statements of Empresas Públicas de Medellín E.S.P as of December 31, 2018 and 2017, were faithfully taken from the accounting books, which were prepared in accordance with the International Financial Reporting Standards (IFRS)—published and applicable for the period and included in the Public Accounting System—and that the disclosed information reflects the financial, economic, social, and environmental situation and operation of Empresas Públicas de Medellín E.S.P and subsidiary companies in a reliable manner. Furthermore, they note that the information appearing on the aforementioned consolidated financial statements was verified, regarding:

a) All the transactions that have been made in the covered years have been accurately registered on the respective periods, pursuant to the appropriate acknowledgement of the proper quantities and accounts, measured by the reasonable costs, and appropriately revealed.

b) The transactions were disclosed pursuant to the provisions of the current IFRS issued by the International Accounting Standards Board (IASB) and to the interpretations issued by the IFRS Interpretations Committee. Such financial statements are aligned with the accounting principles generally accepted in Colombia, recorded in the annex of Decree 2420 of 2015 and its subsequent modifications adopted by the Colombian General Accounting Office through Ruling 037 of 2017.

c) All the assets, liabilities, and net equity of the financial statements reflect the existence of rights and obligations of Empresas Públicas de Medellín E.S.P.

d) The disclosures or accounting notes were prepared with clarity and in accordance with the IFRS.

The consolidated financial statements do not contain flaws, inaccuracies, or errors that may prevent the actual financial position and financial performance of the entity from being known.

Jorge Londoño De la Cuesta	**John Jaime Rodríguez Sosa**
CEO	**Director of Accounting and Costs**
	Professional license: 144842-T

EMPRESAS PUBLICAS DE MEDELLIN E.S.P.

SEPARATE STATEMENT OF FINANCIAL POSITION

As of December 31, 2018 and 2017

Amounts stated in millions of Colombian pesos

	Notes	2018	2017
Assets			
Non-current assets			
Property, plant and equipment, net	5	27,040,487	23,133,509
Investment property	6	77,829	116,823
Goodwill	7	260,950	260,950
Other intangible assets	7	477,315	401,980
Investments in subsidiaries	9	7,290,431	6,823,153
Investments in associates	10	2,434,417	2,434,417
Investments in joint ventures	11	99	99
Trade and Other Receivables	12	2,012,782	2,006,350
Other financial assets	13	2,221,695	2,029,035
Other assets	16	100,742	99,130
Total non-current assets		**41,916,747**	**37,305,446**
Current assets			
Inventories	17	117,334	116,484
Trade debtors and other accounts receivable	12	1,628,488	1,523,523
Assets for current income tax	38	2,037	237,389
Other financial assets	13	990,676	63,024
Other assets	16	104,483	100,568
Cash and cash equivalents	18	835,779	234,526
Total Current assets		**3,678,797**	**2,275,514**
Total assets		45,595,544	39,580,960
Liabilities and Equity			
Equity			
Issued capital		67	67
Reserves	19	1,961,034	2,951,644
Accumulated other comprehensive income	20	2,917,113	2,926,924
Accumulated profit	19	15,332,345	13,381,162
Net profit for the year	19	2,344,822	2,188,189
Other components of equity		49,944	49,995
Total equity		22,605,325	21,497,981

EMPRESAS PUBLICAS DE MEDELLIN E.S.P.

SEPARATE STATEMENT OF FINANCIAL POSITION

As of December 31, 2018 and 2017

Amounts stated in millions of Colombian pesos

	Notes	2018	2017
Liabilities			
Non current liabilities			
Credits and loans	21	12,050,033	10,462,487
Creditors and other accounts payable	22	4,483	15,953
Other financial liabilities	23	2,054,762	488,247
Employee benefits	26	305,695	282,697
Income tax payable	38	30,331	-
Net deferred tax liabilities	38	2,156,828	2,321,376
Provisions	28	360,917	279,922
Other liabilities	29	32,136	32,499
Total non current liabilities		16,995,185	13,883,181
Current liabilities			
Credits and loans	21	3,794,580	1,984,843
Creditors and other accounts payable	22	1,017,938	1,363,774
Other financial liabilities	23	285,867	308,881
Employee benefits	26	139,497	131,817
Income tax payable	38	25,697	-
Taxes contributions and rates payable	27	108,195	104,078
Provisions	28	489,052	172,173
Other liabilities	29	134,208	134,232
Total current liabilities		5,995,034	4,199,798
Total liabilities		22,990,219	18,082,979
Total liabilities and equity		45,595,544	39,580,960

The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
General Manager

Certification Attached

Jorge Andrés Tabares Ángel
Executive Vice-president of Corporate Finance, Risk Management and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
P.C. 144842-T

Certification Attached

EMPRESAS PUBLICAS DE MEDELLIN E.S.P.

SEPARATE STATEMENT OF COMPRENHENSIVE INCOME

For the period from January 1 to December 31, 2018 and 2017

Amounts stated in millions of Colombian pesos

	Notes	2018	2017
Continued operations			
Sale of goods		30	-
Rendering of services	30	7,849,388	7,097,643
Lease	30	47,536	48,277
Other income	31	236,655	248,130
Income from ordinary activities		**8,133,609**	**7,394,050**
Income for sale of assets	30	23,596	1,040
Total income		**8,157,205**	**7,395,090**
Costs of services rendered	32	(4,462,036)	(3,970,570)
Administrative expenses	33	(1,138,953)	(838,204)
Impairment loss on accounts receivable	12	(39,737)	(9,800)
Other expenses	34	(173,100)	(43,168)
Financial income	35.1	262,217	262,250
Financial expenses	35.2	(817,548)	(797,778)
Net exchange difference	36	(207,444)	64,671
Equity method in subsidiaries	9	809,606	532,059
Effect of participation on equity investment	37	102,968	76,846
Income for the period before tax		**2,493,178**	**2,671,396**
Income tax	38	(148,356)	(483,207)
Profit for the year after taxes from continued activities	19	2,344,822	2,188,189
Net profit for the year	19	2,344,822	2,188,189
Other comprehensive income			
Items that will not be reclassified after profit for the period:			
New measurements of defined benefit plans	20 y 38	372	(18,735)
Equity investments measured at fair value through equity	20 y 38	(24,810)	475,220
Income tax related to components that will not be reclassified	20 y 38	5,396	(35,160)
Equity method in subsidiaries	20 y 38	(41,274)	114,254
		(60,316)	**535,579**
Items that may be reclassified after profit for the period:			
Cash flow hedges	20 y 38	**2,777**	**(5,142)**
Recognized profit for the period		171,076	(93,080)
Reclassification adjustment		(168,299)	87,938
Income tax related to components that may be reclassified	20 y 38	**(67,764)**	**8,377**
Recognized profit for the period		(77,717)	8,377
Reclassification adjustment		9,953	-
Equity method in subsidiaries	20 y 38	**115,586**	**10,238**
Recognized profit for the period		115,586	10,238
		50,599	13,473
Other comprehensive income, net of taxes	38	(9,717)	549,052
Total comprehensive income for the period		2,335,105	2,737,241

The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
General Manager

Certification Attached

Jorge Andrés Tabares Ángel
Executive Vice-president of Corporate Finance,
Risk Management and Investments

John Jaime Rodriguez Sosa
Director of Accounting and Costs
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EMPRESAS PUBLICAS DE MEDELLIN E.S.P.

STATEMENT OF CHANGES IN SEPARATE EQUITY

Periods ended on December 31, 2018 and 2017

Amounts stated in millions of Colombian pesos

					Other comprehensive income					
	Issued capital	Reserves (note 19)	Accumulated earnings and profits (note 19)	Other components of equity	Equity investments measured at fair value through equity (note 20)	Defined benefit plans (note 20)	Cash flow hedge (note 20)	Reclassification of property, plant and equipment to investment property (note 20)	Accumulated Share in other comprehensive income of subsidiaries (note 20)	Total
Balance as of January 1, 2017	67	3,087,207	14,766,986	51,626	1,742,477	2,736	(11,904)	12,079	632,908	20,284,182
Profit for the period	-	-	2,188,189	-	-	-	-	-	-	2,188,189
Other comprehensive income for the period, net of income tax	-	-	-	-	431,418	(10,093)	3,235	-	124,492	549,052
Comprehensive income for the period	-	-	**2,188,189**	-	**431,418**	**(10,093)**	**3,235**	-	**124,492**	**2,737,241**
Surpluses or dividends decreed	-	-	(1,609,136)	-	-	-	-	-	-	(1,609,136)
Movement of reserves	-	(135,563)	135,563	-	-	-	-	-	-	-
Equity method on variations in equity	-	-	14,621	(1,631)	-	-	-	-	(424)	12,566
Other movement of the period	-	-	73,128	-	-	-	-	-	-	73,128
Balance as of December 31, 2017	67	2,951,644	15,569,351	49,995	2,173,895	(7,357)	(8,669)	12,079	756,976	21,497,981
Balance as of January 1, 2018	67	2,951,644	15,569,351	49,995	2,173,895	(7,357)	(8,669)	12,079	756,976	21,497,981
Profit for the period	-	-	2,344,822	-	-	-	-	-	-	2,344,822
Other comprehensive income for the period, net of income tax	-	-	-	-	(21,431)	2,389	(64,987)	-	74,312	(9,717)
Comprehensive income for the period	-	-	**2,344,822**	-	**(21,431)**	**2,389**	**(64,987)**	-	**74,312**	**2,335,105**
Surpluses or dividends decreed	-	-	(1,203,504)	-	-	-	-	-	-	(1,203,504)
Movement of reserves	-	(990,610)	990,610	-	-	-	-	-	-	-
Equity method on variations in equity	-	-	(24,111)	(51)	-	-	-	-	(95)	(24,257)
Balance as of December 31, 2018	67	1,961,034	17,677,168	49,944	2,152,464	(4,968)	(73,656)	12,079	831,193	22,605,325

The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
General Manager

Certification Attached

JORGE T

Jorge Andrés Tabares Ángel
Executive Vice-president of Corporate Finance, Risk Management and Investments

John Jaime Rodríguez Sosa
Director of Accounting and Costs
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EMPRESAS PUBLICAS DE MEDELLIN E.S.P.

SEPARATE STATEMENT OF CASH FLOWS

For the period from January 1 to December 31, 2018 and 2017

Amounts stated in millions of Colombian pesos

	Notes	2018	2017
Cash flows for operating activities:			
Net profit for the year		2,344,822	2,188,189
Adjustments to reconcile the net profit for the year to the net cash flow used in operation activities:		1,053,594	1,082,259
Depreciation and amortization of property, plant and equipment and intangible assets	32 & 33	503,178	490,335
Impairment loss of financial instruments	12	68,366	37,503
Reversal for impairment loss of financial instruments	12	(28,630)	(27,721)
Profit due to exchange difference		207,444	6,097
Profit due to valuation of investment property	6	(1,597)	(9,528)
Profit due to valuation of financial instruments and hedge accounting		21,033	50,213
Provisions, post-employment and long term defined benefit plans		483,518	177,087
Applied government subsidies		(1,146)	-
Deferred income tax	38	(226,916)	306,775
Current income tax	38	375,272	176,432
Profit due to equity method in subsidiaries	9	(809,606)	(532,059)
Profit due to business combination	37	-	(32,669)
Interest revenue		(220,889)	(207,010)
Interest expense		739,507	660,982
Profit due to disposal of property, plant and equipment, intangibles and investment property		(23,563)	17,375
Dividend from investments	37	(102,968)	(44,157)
Other revenues and expenses not effective		70,591	12,604
		3,398,416	3,270,448
Net changes in operational assets and liabilities:			
Change in inventories		(764)	(1,404)
Change in debtors and other receivables		(53,717)	(343,647)
Change in other assets		166,810	(440,420)
Change in creditors and other accounts payable		(108,872)	776,789
Change in labor obligations		15,593	11,779
Change in provisions		(70,189)	(117,206)
Change in other liabilities		97,319	(53,233)
		46,180	(167,342)
Interest paid		(1,004,667)	(853,437)
Income tax paid		(448,757)	(400,637)
Income tax refund		308,895	-
Net cash flows originated by operation activities		2,300,067	1,849,032
Cash flows for investment activities:			
Acquisition and capitalization of subsidiaries or businesses	9	(10,453)	(295,493)
Disposal of subsidiaries or businesses		15,000	-
Purchase of property, plant and equipment		(2,626,682)	(2,739,285)
Disposal of property, plant and equipment		116,245	-
Purchase of intangible assets		(49,372)	(48,691)
Disposal of intangible assets		154	-
Disposal of investment property		40,034	-
Purchase of investments in financial assets		(1,065,878)	-
Disposal of investments in financial assets		139,623	261,893
Dividends received from subsidiaries, associations and joint ventures		383,796	323,406
Other dividends received		64,486	44,157
Loans to economic associates		(51,654)	113,190
Other cash flows from investment activities		(8,906)	-
Net cash flows originated by investment activities		(3,073,607)	(2,340,823)
Cash flows by financing activities:			
Obtaining of public credit and treasury		3,763,343	4,262,524
Payments of public credit and treasury		(856,594)	(2,741,526)
Transaction costs for issuance of debt instruments		(60,866)	(8,363)
Payments of liabilities for financial leasing		(987)	(906)
Dividends or surpluses paid	19	(1,503,504)	(1,309,136)
Payment of derivative principal for means of cash flow hedge		-	(12,384)
Other cash flows from financing activities		7,322	-
Net cash flows from financing activities	25	1,348,714	190,209
Net cash and cash equivalent increase		575,174	(301,582)
Effects of variations in exchange rates on cash and cash equivalents		26,079	17,030
Cash and cash equivalent at the beginning of period		234,526	519,078
Cash and cash equivalent at the end of period	18	835,779	234,526
Restricted resources	18	79,823	116,250

The accompanying notes are an integral part of the financial statements

Jorge Londoño De la Cuesta
General Manager

Certification Attached

Jorge Andrés Tabares Ángel
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Notes to the Separate Financial Statements of Empresas Publicas de Medellin E.S.P. for the periods ended as December 31, 2018 and 2017.

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

Note 1. Reporting Entity

Empresas Publicas de Medellin E.S.P. (hereinafter, "EPM" or "the company") is the holding company of a multi-latin Enterprise group; which, in accordance with International Financial Reporting Standards, has as of December 31, 2018 a consolidation perimeter made up of 47 companies and a structured entity[1], that have presence in the provision of public utilities in Colombia, Chile, El Salvador, Guatemala, Mexico and Panama.

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

EPM provides residential public utilities of aqueduct, sewage, power and combustible gas distribution. It can also provide the domiciliary public utilities of cleaning, waste treatment and utilization, as well as the complementary activities related to each and every public utility service above mentioned. Likewise, it participates in the telecommunications business, segment in which from August 2014 has significant influence, through UNE EPM Telecomunicaciones S.A. and its subsidiaries: Edatel S.A. E.S.P., Orbitel Servicios Internacionales S.A. - OSI, Cinco Telecom Corporation CTC and Colombia Movil S.A.; and Inversiones Telco S.A.S. and its subsidiary Emtelco S.A.; offering voice, data, Internet, professional services, data center, among others.

The separate financial statements of EPM corresponding to the year ended as of December 31, 2018, were authorized by the Board of Directors to be published on March 26, 2019.

1.1 Legal and regulatory framework

The activity of EPM, i.e., providing residential public utilities, is regulated in Colombia mainly by Law 142, Public Utilities Act, and Law 143 of 1993, Electricity Act.

The functions of control, inspection and surveillance of the entities that provide residential public utilities, are exercised by the Superintendencia de Servicios Publicos Domiciliarios (SSPD).

For its status as municipal-order decentralized entity, EPM is subject to political control by the Medellín Council, to fiscal control by the Comptroller General of Medellín and to disciplinary control by the Attorney General's Office.

1.2 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 residential public utilities.

These entities are:

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

- The Power and Gas Regulatory Commission (CREG, for its Spanish initials), a technical body attached to the Ministry of Mines and Energy (MME), that regulates the sale rates for electric power and the aspects related to the operation of the Wholesale Energy Market (MEM, for its Spanish initials) and, more generally, to the provision of electric power and gas services.

- The Drinking Water and Basic Sanitation Regulatory Commission (CRA, for its Spanish initials), regulates the rates for aqueduct, sewage and cleaning, as well as their providing conditions in the market. It is a technical body attached to the Ministry of Housing, City and Territory.

1.2.1 Regulation by sector

1.2.1.1 Activities for 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 complementary 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 complementary activities of transportation, treatment, and final disposal of such waste.

Waste management: activity consisting of the municipal collection of waste, mainly solid waste. It includes the complementary activities of transportation, treatment, utilization, and final disposal of such waste.

For the first two utilities, the tariff framework is established in Resolutions CRA 688 of 2014 and CRA 735 of 2015. For the public waste management utility, in resolution CRA 720 of 2015. These standards establish indicators of quality and coverage, the achievement of goals is encouraged, and remuneration mechanisms are defined to guarantee the financial sufficiency of the company.

1.2.1.2 Electric power 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: consists of the production of electric power from different sources (conventional or non-conventional), undertaking this activity either exclusively or combined with another or other activities of the electric sector, regardless of which is the main activity.

Transmission: the national transmission activity is the transportation of energy in the National Transmission System (hereinafter STN). It encompasses the set of lines, with its corresponding connection equipment that operate in voltages equal to or greater than 220 kV. The National Transmitter is the legal entity that operates and transports electric power in the STN or has incorporated a company which purpose is the undertaking of such activity.

Distribution: consists of transporting electric power through a set of lines and substations, with the associated equipment, that operate at voltages lower than 220 kV.

Commercialization: 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, undertaking this activity either exclusively or combined with other activities of the electric sector, regardless of which of them is the main activity.

1.2.1.3 Activities of the natural gas sector

Law 142 of 1994 defined the legal framework for the provision of domiciliary public utilities, area in which natural gas is defined as a public utility.

Gas: It is the set of activities targeted to the distribution of combustible gas, 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 complementary 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.

1.3 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 consolidated financial statements and accounting policies in accordance with the International Financial Reporting Standards (IFRS), adopted in Colombia by the General Accountancy of the Nation (CGN, for its Spanish initials). as well as the provision of an independent opinion regarding the reasonableness with which they indicate the company’s financial position as of the cut-off date of each accounting year.

Note 2. Significant accounting policies

2.1 Bases for the preparation of financial statements

The separate financial statements of the company are prepared in accordance with the current International Financial Reporting Standards (hereinafter, IFRS) issued by the International Accounting Standards Board (hereinafter, IASB), as well as the interpretations issued by the Interpretations Committee (hereinafter, IFRIC). These financial statements are harmonized with generally accepted accounting principles in Colombia as set out in the Annex to Decree 2420 of 2015 and its subsequent amendments accepted by the General Accountancy of the Nation through Resolution 037 of 2017, this resolution has not accepted some changes to IFRS such as the amendment to IAS 23 of the 2015-2017 Cycle and the interpretation of IFRIC 22, which have already entered into force at the international level or that can be anticipated, however, these changes do not impact financial figures, since they refer more to clarification in the application of the standards, i.e., to treatments already established, reason why it is considered that this will not have a transcendental economic impact in the financial statements.

The presentation of financial statements in conformity with IFRS requires making estimates and assumptions that affect the amounts reported and disclosed in the financial statements, without undermining the reliability of the financial information. Actual results may differ from said estimates. Estimates and assumptions are constantly revised. Revision of accounting estimates is recognized for the period in which the estimates are revised if the revision affects such period or in the revision period and future periods, if it affects both the current and the future period. The estimates made by the 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 of uncertainty in the preparation of financial statements.

EPM presents 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 the main holding 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, some equity investments at fair value through equity, as well as all financial derivatives, assets and liabilities recognized that are designated as hedged items in a fair value hedging, which value in records is adjusted with the changes in fair value attributed to the risks subject matter of the hedging.

Separate financial statements are presented in their functional currency Colombian pesos and their figures are stated in millions of Colombian pesos.

2.2 Classification of assets and liabilities into current and non-current

An asset is classified as current asset when it is mainly maintained for negotiation purposes or it is expected to be realized over a term not exceeding one year, after the period being reported or it is cash and cash equivalents that is not subject to restrictions for exchange or use in the cancellation of a liability over a term not to exceed one year after the period being reported. All other assets are classified as noncurrent assets.

A liability is classified as current liability when it is mainly kept for negotiation purposes or when it is expected to be liquidated over a term not exceeding one year after the period being reported, or when the company does not have an unconditional right to postpone its liquidation for at least one year after the period being reported. All other liabilities are classified as non-current liabilities.

All derivative instruments for which the hedging accounting does not apply are classified as current or noncurrent, or are divided into current and non-current portions, based upon assessment of the facts and circumstances (i.e., the underlying contractual cash flows):

- When the company keeps a derivative, for which the hedging accounting is not applied, during a term exceeding twelve (12) months as from the presentation date, the derivative is classified as non-current (or divided into current and non-current portions) for it to correspond with the classification of the underlying item.
- Derivative instruments that are designated as hedging instruments and that are effective, are classified coherently with the classification of the underlying hedged item. The derivative instrument is divided into a current portion and another non-current only if such assignment can be made in a reliable manner.

2.3 Cash and cash equivalents

Cash and cash equivalents in the statement of financial position and in the statement of cash flows include the money in cash and banks and the high-liquidity investments, easily convertible in a determined amount of cash and subject to a non-significant risk of changes in their value, with maturity of three months or less from their acquisition date. Callable bank overdrafts that are an integral part of the cash management of the company, represent a cash and cash equivalents component in the statement of cash flows.

2.4 Investments in subsidiaries, associates and joint ventures

A subsidiary is an entity controlled by EPM. The control is obtained when EPM controls the relevant activities of the subsidiary and is exposed, or has the right, to the variable returns of the subsidiary and has the capacity to influence said returns.

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

A joint venture is an entity that EPM controls jointly with other participants, where the latter keep a contractual agreement that establishes the joint control over relevant activities of the entity.

On the acquisition date, goodwill is included in the recorded 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 the equity method, except if the investment or a portion thereof is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 Non-current assets held for sale and discontinued operations. Through this accounting methodology, the investment is initially recorded at cost and is later adjusted in terms of the changes undergone, after the acquisition, by the portion of the net assets of the entity that corresponds to the investor. Profit for the period for EPM includes its ownership in the profit for the period of its ownership and the other comprehensive income includes its ownership in the other comprehensive income of its ownership. When there are variations in the percentage of ownership in the subsidiary that do not imply a loss of control, the effect of these changes is recognized directly in equity. When ownership of the company in the loss of a subsidiary exceeds ownership of the company thereon (which includes any long-term ownership that, in substance, forms part of the net investment of the Group in the associate or joint venture), the company ceases to recognize its ownership in future losses. Additional losses are recognized provided that the company has contracted some legal or implied obligation or has made payments in the name of the subsidiary. When the subsidiary subsequently makes a profit, the company resumes recognition of its ownership therein only after its share in the aforementioned profit equals the share of unrecognized losses.

Investments in subsidiaries are accounted for using the equity method from the date when the entity in which the interest is held becomes a subsidiary.

Investments in associates and joint ventures are kept in the separate financial statements at cost.

Dividends received from the subsidiary, are recognized as lower value than the investment, and those received from associate or joint venture are directly recognized in the profit for the period when the right of the company to receive payment is reestablished.

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

When control over the subsidiary or significant influence over the associate or the joint control over the joint venture is lost, the company measures and recognizes any residual investment that may keep in it its fair value. The difference between the recorded value of the subsidiary, associate or joint venture and the fair value of the retained residual investment, with the value coming from its sale, is recognized in the result for the period.

The company discontinues the use of the equity method from the date on which the investment ceases to be a subsidiary, or the date on which the investment is classified as held for sale. Additionally, the company records all amounts previously recognized in other comprehensive income with relation to that subsidiary on the same basis that would have been required if said subsidiary had directly sold the financial assets or liabilities. Therefore, if a profit or loss previously recognized in other comprehensive income by the subsidiary had been reclassified into profits or losses at the moment of the sale of the related assets or liabilities, the company would reclassify the profit or loss from equity into profits or losses (as a reclassification adjustment) upon discontinuation of the usage of the equity method.

2.5 Joint operations

Is a joint agreement whereby the parties that have joint control of the agreement have the right to the assets and obligations related to the liabilities, related to the agreement.

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

2.6 Functional and foreign currency

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

Transactions in foreign currency are initially recorded at the exchange rates of the functional currency in force and effect on the transaction date. Subsequently, the foreign-currency denominated monetary assets and liabilities are translated using the exchange rate of the functional currency, in force and effect as of the period's closing date, the non-monetary items that are measured at their fair value are translated using the exchange rates as of the date when their fair value is determined and the non-monetary items that are measured at historic cost are translated using the exchange rates in force and effect on the date of the original transactions.

All exchange differences are recognized in the statement of comprehensive income in the section Profit for the period, except for adjustments arising from interest costs that are capitalizable and those arising from loans in foreign currency to the extent that they are considered as adjustments to interest costs and the exchange difference arising from the conversion of the financial statements of subsidiaries abroad for the application of the equity method, which is recognized in the other comprehensive income.

2.7 Ordinary income

The ordinary income basically corresponds to the result of the company's main activity, which is the rendering of residential public utilities of aqueduct, sewage, electric power and combustible gas distribution, and are recognized when the service is rendered or at the time of the delivery of the goods, to the extent that they comply to the performance requirements of the company. Income is measured at the value of the consideration received or to be received, excluding taxes and other obligations. Discounts, compensations to customers because of the quality of the service and financial components that are granted, are recorded as lower value of income. The financing component is only recognized when it is significant as a lower value of income, only if the contract with customers has a duration longer than one year.

The most representative incomes for the power business are as follows:

Reliability charge: remuneration paid to a generating agent for the availability of generation assets with the declared characteristics and parameters for the calculation of the steady power for reliability charge (ENFICC, for its Spanish initials), which guarantees compliance with the Steady Power Obligation (OEF, for its Spanish initials) assigned in auction for the assignment of steady power obligations or the mechanism replacing it.

Long-term contracts: a contract for the sale of power between traders and generators which is settled in the power exchange, under this modality of power contract generators and traders freely agree on quantities and prices for the purchase and sale of electric power for periods longer than one day.

For long-term power purchase contracts, with process lower than those of the market and whose intention is not to use the energy purchased in the operation but to resell it in a market to obtain revenue, it is considered that it does not comply with the Exception for own use

Secondary market of steady power or secondary market: A bilateral market in which generators negotiate among themselves a back-up contract to ensure, for a given period of time, partial or total compliance with the steady power obligations acquired by one of them.

Non-regulated market power sales: Is the power sold in the market to customers whose maximum demand exceeds a value in MW (megawatts) or a monthly minimum energy consumption in MWh (megawatt-hour), defined by the regulatory body, by legalized installation, from which it does not use public networks of electric power transport and uses it in the same property or in contiguous estates. Such electricity purchases are made at freely agreed prices between buyer and seller.

Regulated market power sales: Is the power sold to customers whose monthly consumption is less than a predetermined value and is not entitled to negotiate the price paid for it, since both concepts are regulated; usually uses power for its own consumption or as an input for its manufacturing processes and not to undertake marketing activities with it.

Automatic Generation Regulation - AGC: is a system for the control of the secondary regulation, used to accompany the variations of load through power generation, to control the frequency within a range of operation and the programmed exchanges. The AGC can be programmed in centralized, decentralized or hierarchical mode.

Steady Power (or Firm Energy): is the incremental contribution of a company's generation plants to the interconnected system, which is carried out with a 95% reliability and is calculated based on a methodology approved by the commission and the operational planning models used in the national interconnected system.

Gas revenues come from the distribution and sale of natural gas to the regulated and non-regulated market.

In the water business, revenues come from the provision of aqueduct and sewer services.

At the time of recognition of income, the company assesses based on specific criteria in order to identify when it acts as a principal or commission agent and thus determines whether gross or net income must be recognized for marketing activities.

2.8 Contracts with customers

When contract results can be reliably measured, the company recognizes the revenues and expenses associated to contracts with customers, measuring the advance level in the fulfilment of the performance requirements using the resource method, as a function of the ratio represented by the costs earned by the work conducted to that date and the estimated total costs up to its completion.

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

On the other hand, the incremental costs incurred by the company to obtain or fulfill contracts with customers are recognized as an asset in the statement of financial position within the Other assets item and are amortized on a lineal basis over the life of the contract, provided that the term of the contract is greater than one year. Otherwise, the company recognizes it directly in the profit for the period.

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

The difference between the revenues recognized in the statement of income for the period and the billing is presented as asset in the statement of financial position denominated Trade debtors and other accounts receivable, or as liability denominated Other liabilities.

For the initial recognition of an account receivable from a contract with a customer, the difference between the measurement of the account receivable and the value of the corresponding revenue is presented as an expense in the statement of comprehensive income called Impairment loss on accounts receivable.

2.9 Government grants

Government grants are recognized at fair value when there is reasonable security that those grants shall be received and that all conditions linked to them shall be met. Grants that pretend to offset costs and expenses already incurred in, without subsequent related costs, are recognized in the statement of profit for the period in which they become enforceable. When the grants related to an asset, it is recorded as deferred revenue and is recognized in the result for the period on a systematic basis throughout the estimated lifespan of the corresponding asset. The benefit of a government loan at an interest rate below market is treated as a government grant, measured as the difference between the amounts received and the fair value of the loan based upon the market interest rate.

2.10 Taxes

The fiscal structure of the country, the regulatory frameworks and the plurality of operations make the company a passive subject, i.e., a payer of taxes, rates and contributions on a national and territorial basis. Those are liabilities generated from the central government, the states/departments, municipal entities and other active subjects, once the conditions foreseen in the corresponding acts and laws issued are met

Amongst the most relevant taxes the income tax, the value-added tax and the wealth tax are detailed:

Income tax

Current: The current income tax assets and liabilities for the period are measured by the amounts that are expected to be recovered or paid to the fiscal authorities. The income tax expense is recognized in the current tax according to the cleaning made between the fiscal income and the recorded profit or loss affected by the income tax rate of the current year and pursuant to the provisions of the tax norms of the country. The tax rates and norms used for computing those values are those that are enacted or substantially approved at the end of the period being reported, in the countries where the company operates and generates taxable profits.

The fiscal profit differs from the gain 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 if there is the intention to liquidate them for the net value or to realize the asset and liquidate the liability simultaneously.

Deferred: 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 recorded values. The deferred tax liability is generally recognized for all imposable temporary differences, while the deferred tax asset is recognized for all deductible temporary differences and for the future offsetting of fiscal credits and unused fiscal losses to the extent that it is probable the availability of future tax gains against which they can be 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, did not affected neither the book gain nor the fiscal profit or loss; and for the deferred tax liability case whenever it arises from the initial recognition of goodwill.

The deferred tax liabilities related to investments made in subsidiaries, associates and ownership s in joint ventures, are not recognized when the revision opportunity of temporary differences can be controlled, and it is probable that those differences will not be reversed in the near future. Deferred tax assets related to investments made in subsidiaries, associates and ownership in joint ventures, shall be recognized only to the extent that it is probable that there will be a reversal in the temporary differences in the near future and that that the availability of future taxable profits against which those deductible differences will be imputed is probable.

The recorded value of the deferred tax assets is reviewed in each presentation date and are reduced to the extent that it is no longer probable that there are enough taxable gains profits to use for the entirety or one part of the deferred tax asset. The deferred tax assets that are not recognized are reassessed on each presentation report date and are recognized to the extent that it is probable that future taxable gains profits allow their recovery.

Deferred tax assets and liabilities are measured at the fiscal rates expected to be applied in the period when the asset is realized, or the liability is 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. Measurement of deferred tax assets and liabilities will reflect the fiscal consequences that would be derived from the manner in which the entity expects, at the end of the period being reported, to recover or liquidate the recorded value of its assets and liabilities.

The deferred tax assets and liabilities must be presented as non-current.

The deferred tax assets and liabilities are offset if there is a legally enforceable right for that and are related to the same tax authority.

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

With the purpose of measuring the deferred tax liabilities and the deferred tax assets for investment properties that are measured using the fair value model, the recorded value of those properties is presumed that will be fully recovered through their sale, unless the presumption is challenged. The presumption is challenged when the investment property is depreciable and is kept within a business model which object is to consume, substantially, all the economic benefits that are generated by the investment property through time, and not through sale. Management reviewed the company’s investment property portfolio and concluded that none of the company’s investment properties is kept under a business model which objective is to consume, substantially, all economic benefits generated by investment properties over time rather than through the sale. Therefore, the management have determined that the presumption of “sale” established in the modifications to IAS 12 Income tax, is not challenged.

Whenever the current tax or deferred tax arises from the initial recording of the business combination, the fiscal effect is considered within the recording of the business combination.

Value-Added Tax - VAT

The company is responsible for this tax in the common regime because it performs sales of movable assets and provides taxed services and obtains exempt revenue for imports. Currently, the power, aqueduct, sewage, and domiciliary gas utilities are excluded from this tax.

For Colombia the general rate is 19% and there is a differential rate of 5%.

In Colombia, the generation of revenue excluded in the particular case of residential public utilities, VAT paid on purchases is part of a higher cost value. Also, when taxable income is generated, that is to say when taxed goods or services are sold, VAT paid on the purchase or acquisition of inputs for these sales will be deductible from the payable tax value. When the company generates income that is excluded from VAT, but at the same time generates income that is exempt and taxed, in that case a proration of paid VAT must be performed to determine the percentage of VAT to be discounted.

Wealth tax

Wealth tax is calculated in accordance with current legal tax provisions. Calculation is made for each year while this tax is in force and is recorded in the statement of comprehensive income as an expense.

2.11 Property, plant and equipment

Property, plant and equipment are measured at cost, net of accrued depreciation and accrued impairment losses, if any. The cost includes the acquisition price; the costs directly related to putting the asset at the necessary place and conditions to operate in the way foreseen by the company, costs corresponding to loans of construction projects that take a substantial period to be completed, recognition requirements are complied with and the present value of the expected cost for the dismantlement of the asset after its use, if the criteria for recognition for a provision are met.

Constructions in progress are measured at cost less any loss for impairment recognized and includes indispensable expenditure 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 property, plant and equipment at the time of their completion and when they are ready to use. The depreciation of these assets starts when they are ready to use in accordance with the same basis as in the case of other elements of property, plant and equipment.

The company capitalizes as greater value of the assets, additions or improvements made thereof, provided that any of the following conditions is met: a) They increase their lifespan, b) They increase their productive capacity and operating efficiency thereof and c) They reduce costs to the Company. All other repair and maintenance costs are recognized in the statement of comprehensive income as incurred.

Inventory of spare parts for specific projects, which are expected to have no turnover in one year and meet the criteria to be capitalized, known as replacement assets, are presented in the other property, plant and equipment. They depreciate considering the permanence time in the warehouse and the technical lifespan of the asset once its use begins.

Depreciation begins when the asset is available for use and is calculated in a linear fashion throughout the estimated lifespan of the asset as follows:

Plants, pipelines and tunnels	
Civil work	50 to 100 years
Equipment	10 to 100 years
Networks, lines and cables	
Electric transmission network	30 to 40 years
Electric distribution network	30 to 40 years
Aqueduct network	40 to 80 years
Sewerage network	30 to 80 years
Gas network	60 to 80 years
Buildings	50 to 100 years
Communication and computer equipment	5 to 40 years
Machinery and equipment	7 to 40 years
Furniture, fixtures and office equipment	10 to 15 years

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

The company calculates the depreciation by components, which implies depreciating individually the parts of the asset that should have different lifespans. The depreciation method used is the straight-line; the residual value calculated for the assets is not part of the depreciable amount.

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

Assets temporarily classified as out-of-service continue to depreciate and are tested for impairment within the CGU to which they are assigned.

Any residual values, lifespans and depreciation methods for the assets are revised and adjusted prospectively at each year closing, if required.

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

EPM as a lessee

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.

The assets leased under financial leases are depreciated throughout the lifespan of the asset through the straight-line method. However, if there were no reasonable certainty that the company shall get the ownership upon the lease term termination, the asset is depreciated throughout its estimated lifespan 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 for 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 cost. Contingent lease installments, are recognized as expenses in the period where incurred.

Payments for operating leases, including 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, a financial asset is instead 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 recorded 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 return rate in the net investment. Contingent leases are recognized in the period when obtained.

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

2.13 Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset that necessarily takes substantial time to be prepared for their destined use or sale, are capitalized as part of the cost of the respective asset until the asset is ready for their intended use. 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 the company regarding to the loan of funds. To the extent that the funds derive from generic loans and are used to obtain a qualified asset, the value of the costs susceptible of capitalization is determined by applying a capitalization rate (Weighted average cost of loans applicable to general loans outstanding during the period) to expenditure made in that asset.

The capitalization of borrowing costs begins on the date that the following conditions are met:

– Expenditure made in relation to the asset.

– Loans costs are incurred, and

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

Capitalization of borrowing costs is suspended during periods in which the development of activities of a qualifying asset for periods of more than one year is interrupted. However, the capitalization of borrowing costs over a period is not interrupted if important technical or administrative actions are being undertaken. Neither is capitalization of borrowing costs suspended when a temporary delay is required as part of the process of preparing an asset qualified for its use or sale.

Capitalization of borrowing costs is terminated when all activities necessary to prepare the asset for its use or sale have been substantially completed. When the asset has components that can be used separately while construction continues, the capitalization of borrowing costs on such components is stopped.

2.14 Investment property

Investment property, are lands or buildings or part of a building or both, held to obtain rentals or capital revaluations (including the investment property under construction for said purposes). Investment properties are initially measured at cost, including transaction costs. The recorded value includes 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 initial recognition, investment properties are measured at the fair value reflected by market conditions on the presentation date. All profits and losses arising from changes in the fair values of the investment properties are included in the statement of comprehensive income in the section Profit for the period in the period when they arise.

Investment properties are derecognized, either at the moment of disposal, or when they are retired from use on a permanent basis, and no future economic benefit is expected. The difference between the net value of disposal and the recorded value of the asset is recognized in the statement of comprehensive income in the section Profit for the period in the period when it was derecognized.

Transfers to or from investment property are conducted only when there is a change in their use. In the case of a transfer from an investment property to property, plant and equipment, the cost considered for its subsequent posting is the fair value on the date of use change. If a property, plant and equipment become an investment property, it shall be recorded at its fair value, the difference between the fair value and the recorded value shall be recorded as revaluation surplus applying the IAS 16 Property, plant and equipment.

2.15 Intangible assets

Intangible assets acquired separately are measured initially at their cost. The cost of the intangible assets acquired in business combinations is their fair value at the acquisition date. After their initial recognition, the intangible assets are recorded at cost less any accumulated amortization and any accumulated loss for impairment. Intangible assets generated internally are capitalized provided that they meet the criteria for their recognition as asset and the generation of the asset must be classified as: research phase and development phase; if it is not possible to distinguish the research phase from the development phase, expenditure must be reflected in the statement of comprehensive income in the period in which they incurred.

Lifespan of intangible assets are determined as finite or indefinite.

Intangibles assets with finite lifespans are amortized throughout their economic lifespan in a linear fashion and assessed to determine if they presented any impairment, whenever there are indications that the intangible asset may have suffered such impairment. The amortization period and the amortization method for an intangible asset with a finite lifespan are reviewed at least at the end of each year. Changes in the expected lifespan or in the expected pattern of consumption of the future economic benefits of the asset are recorded if the amortization period or method changes, as applicable, and are treated as changes in accounting estimates. The amortization expense of intangible assets with finite lifespans is recognized in the statement of comprehensive income in the section Profit for the period in the expense category that is find consistent with the function of the intangible asset.

Intangibles assets with undefined lifespans are not amortized, but they are subject to annual tests to determine whether they suffer any impairment, either individually or at the cash-generating unit level (CGU). Assessment of the undefined lifespan is revised on an annual basis to determine whether such undefined lifespan continues to be valid. If that is not the case, the change of lifespan from undefined to finite is made prospectively.

An intangible asset is derecognized upon disposal, or whenever future economic benefits are not expected from their use or disposal. The profits or losses arising when an intangible asset is derecognized are measured as the difference between the value obtained in the disposal and the recorded value of the asset, and it is recognized in the statement of comprehensive income in the section Profit for the period.

Research and Development Costs

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

- The technical feasibility of finalizing the intangible asset so that it is available for use or sale.
- Its intention of finalizing the asset and its capacity to use or sell the asset.
- How the asset will generate future economic benefits, considering, among others, the existence of a market for production that generates an intangible asset for the asset itself, or the profit of the asset for the entity.
- The availability of technical and financial resources to complete the asset and to use and sell it.
- The capacity of reliably measuring the expenditure during development.

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

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

Amortization of the asset starts when the development has been completed and the asset is available for use. It is amortized throughout the period of the expected future economic benefit. During the development period the asset is subject to annual tests to determine whether there is impairment of its value.

Research costs and development costs that do not qualify to capitalization are recorded as expenses in the statement of comprehensive income, section Profit for the period.

Other intangible assets

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

2.16 Financial instruments

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

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 comprehensive income for the period, section Profit for the period.

Financial assets

The company classifies at the moment of initial recognition its financial assets for subsequent measurement at amortized cost or at fair value (through other comprehensive income or through profits) depending upon the business model of the company for managing 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[2] if the asset is maintained within a business with the objective keeping those to obtain contractual cash flows and the contractual terms the assets 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, the company can designate a financial asset as measured at fair value with changes in operations irrevocably.

Other financial assets different from those at amortized cost are subsequently measured at fair value with changes recognized in the Statement of comprehensive income, section Profit for the period. However, for the investments made on equity instruments that are not maintained for negotiating purposes, the company may choose in the initial recognition and irrevocably to present the profits or losses for the measurement at fair value in Other comprehensive income. In the disposal of investments at fair value through Other comprehensive income, the accrued value of the profits or losses is directly transferred to the withheld profit and is not reclassified to Profit for the period. The dividends received from these investments are recognized in the Statement of comprehensive income, in the section Profit for the period. The company has selected to measure some of its investments in capital instruments at fair value through Other comprehensive income.

In the fair value through profit category includes the investments that are made to optimize liquidity surpluses, i.e., all those resources that are not immediately devoted to the undertaking of those 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 of the General Manager of EPM No. 2015-DECGGL-2059 of February 6, 2015).

Dividend income is recognized when the company's entitlement to receive payment is established.

[2] The effective interest rate method is a method for calculating the amortized cost of a financial asset and allocation of income throughout the relevant period. The effective interest rate is the discount rate that exactly equals the future cash flows of a financial asset (including all fees, commissions and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums and discounts) through the instrument's expected lifespan, or if appropriate, a shorter period, at its recorded value or initial recognition.

Impairment of financial instruments

At each reporting date, the company recognizes a correction in value for expected credit losses on financial assets measured at amortized cost or at fair value through changes in Other comprehensive income, including receivables from leases, contract assets or loan commitments and financial guarantee contracts to which the impairment requirements are applied over the life of the asset.

Expected credit loss is estimated considering the probability that an impairment loss by uncollectability may or may not occur and are recognized as profit or loss in the Statement of comprehensive income, section Profit for the period against a lower value of the financial asset. The company assesses the credit risk of accounts receivable on a monthly basis at the time of presenting the reports in order to determine the value correction for expected credit loss on financial assets.

The company applies the impairment requirements for loss to all financial assets that are measured at fair value with changes in Other comprehensive income, which is recognized in Other comprehensive income and does not decrease the recorded value of the financial asset in the Statement of financial position.

The company assesses on a collective basis the expected losses for financial assets that are not individually relevant. When the collective assessment of expected losses is performed, the accounts receivable are gathered by similar credit risk characteristics, allowing the identification of the repayment capacity of the debtor, in accordance with the contractual terms of the accounts receivable.

The company determines that a customer's credit risk increases significantly when there is any default event in the financial agreements by the counterpart, or when information, be it internal or obtained from external sources indicates that debtor's payment unlikely, without considering held securities.

The default in the agreements is measured, in general when you have 2 past-due accounts, however, there are agreements or individual contracts that indicate default immediately when a payment or obligation is not met.

The company determines that a financial asset exhibits credit impairment when:

- Evidence of default in a customers' payment for two (2) or more accounts.
- It is known or there is evidence of the customer entering processes of corporate restructuring or in insolvency or liquidation.
- The rise of social turmoil, be it of public order or natural disasters, which according to experience are directly correlated with the default of accounts.

Credit risk is affected when there are changes in financial assets, the policy of the company to reassess the recognition of credit loss is basically supported on the customer or counterpart payment record. When there is evidence of an improvement in the historical record of a customer payments, a reduction in the risk is recorded and, if there is an increase in the default age of the portfolio, an increment in the impairment of the asset is recorded.

And the asset is derecognized when:

- Registered accounts receivable do not represent certain entitlements, goods or obligations for EPM.
- Entitlements or obligations lack documents and suitable support to allow advancing the due procedures for their collection or payment.
- It is not possible to collect the entitlement or obligation, by coercive or judicial collection, once the pre-judicial collection stage has been exhausted.
- When it is impossible to identify and individualize a natural or legal person, to collect the portfolio.
- When the cost-benefit ratio has been assessed and established and advancing the collection process is costlier than the value of the bond.
- When elapsed the period of limitations for bonds and enforcement orders or at forfeiture of entitlement.

- That, having advanced the executive process, there are no assets to make effective the payment of the obligation.
- When having advanced the liquidation process for natural or legal person in judicial terms, the assets received in lieu of payment are insufficient to cover the totality of the debt; the unpaid balance will be derecognized.

The company derecognizes a financial asset when:

- Possesses information indicating that the counterpart is in severe financial difficulties and there are no realistic prospects of recovery.
- The counterpart has been put into liquidation or has initiated a bankruptcy process or, in the case of accounts receivable.
- when the amounts exceed the two years due, whichever occurs earlier.

When the contractual cash flows of a financial asset are renegotiated or otherwise modified, and the renegotiation or modification does not result in derecognition of that financial asset in accordance with IFRS 9, the company recalculates the gross recorded value of the financial asset and recognizes a profit or loss due to modification in the Profit for the period. The gross recorded value of the financial asset is recalculated as the present value of the modified or renegotiated contractual cash flows that are discounted at the original effective interest rate of the financial asset (or effective interest rate adjusted for credit quality for financial assets with credit deterioration purchased or originated) or, when applicable, the revised effective interest rate. Any cost or commission incurred adjusts the recorded value of the modified financial asset and is amortized over the remaining term of the latter.

The amortized financial assets may still be subject to execution activities under the recovery procedures of the company, considering judicial collection when appropriate. Recoveries performed are recognized in the Profit for the period.

Classification as debt or equity

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

Financial liabilities

The company classifies financial liabilities at the moment of the initial recognition for a subsequent measurement at amortized cost or at fair value with changes in profit.

Financial liabilities at fair value with changes in profit include those liabilities held to negotiate, the financial liabilities designated at the moment of their initial recognition as at fair value with changes in profit and the derivatives. The profits or losses for liabilities held to negotiate are recognized in the Statement of comprehensive income in the section Statement of income. In the initial recognition, the company designated financial liabilities as at fair value with changes in profit.

Liabilities at amortized cost are measured using the effective interest rate. All profits and losses are recognized in the Statement of comprehensive income in the section Statement of income whenever the liabilities are derecognized, 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 section Statement of income.

Financial guarantee contracts

The financial guarantee contracts issued by the company are those contracts that require the making of a specific payment to reimburse the holder of the loss incurred in when a specified debtor defaults their payment obligation, according to the conditions of a debt instrument. The financial guarantee contracts are initially recognized as a liability at fair value, adjusted by the transaction costs that are directly ascribable to the issuance of the guarantee. Subsequently, the liability is measured at: (i) the amount of the adjustment in value for the expected losses and (ii) the amount initially recognized less, the accrued recognized income.

Derecognition 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, expires or the company losses control on the contractual rights or on the cash flows of the instrument.

If the entity does not transfer nor substantially retains all the risks and advantages inherent to that property and continues to retain the control of the asset transferred, the entity will recognize its share in the asset and the obligation associated for the amounts that it would have to pay. If the company substantially retains all risks and advantages inherent to the ownership of a financial asset transferred, the entity will continue to recognize the financial asset and will also recognize a loan guaranteed in a collateral fashion for the received revenues.

In the total writing-off of a financial asset measured at fair value with changes in profit, the difference between the recorded value of the assets and the sum of the consideration received and to be received, is recognized in the Statement of comprehensive income, section Profit for the period. In case of financial assets measured at fair value with change in equity, the difference between the recorded value of the asset and the sum of the consideration received and to be received is recognized in the Statement of comprehensive income, section Profit for the period, and the profit or loss that would have been recognized in the Other comprehensive income will be reclassified to accumulated profit.

A financial liability or part of it is derecognized from the Statement of financial position when the contractual obligation has been settled or has expired. If the entity does not transfer nor substantially retains all risks and advantages inherent to the ownership and continues to retain the control of the transferred asset, the entity will recognize its ownership in the asset and the associated obligation for the amounts that it would have to pay. If the group substantially retains all the risks and advantages inherent to the ownership of a financial asset transferred, the entity shall continue to recognize the financial asset and also recognize a guaranteed loan on a collateral way for the incomes 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 writing-off of the original liability and the recognition of a new liability and the difference in the respective recorded values is recognized in the Statement of comprehensive income in the section Profit for the period. In the event that the changes are not substantial the company recalculates the gross recorded value of the financial liability and recognizes a profit or loss from changes in the Profit for the period. The gross recorded value of the financial liability is recalculated as the current value of the modified or renegotiated contractual cash flows that are discounted at the original effective interest rate of the financial liability or, when applicable, the revised effective interest rate. Any cost or commission incurred adjusts the recorded value of the modified financial liability and is amortized over its remaining term.

Compensation of financial instruments

Financial assets and financial liabilities are subject to compensation in order to inform the net value in the Statement of financial position, only if (i) at the current time, there is a legally enforceable entitlement of 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

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

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 the company, are recognized in the Statement of comprehensive income as cost of sales.

Any gain or loss that arises from the changes in derivatives' fair value is directly recognized in the Statement of comprehensive income in the section Statement of income, except for those that are under hedge accounting.

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 profit.

The derivatives embedded in contracts where the host is a financial asset in the scope of the norm are never split. Instead, the hybrid financial instrument as a whole is assessed for classification as follows: If a hybrid contract contains a host that is not an asset that falls within the scope of IFRS 9, an embedded derivative is separated from the host and is accounted for as a derivative if, and only if: (a) the economic characteristics and the risks of the implicit derivative are not closely related to those of the host contract; (b) a separate instrument with the same conditions as the embedded derivative meets the definition of a derivative; and (c) the hybrid contract is not measured at fair value with changes in fair value recognized in profit or loss (i.e., the derivative that is embedded in a financial liability measured at fair value through profit or loss is not split).

Hedge accounting

At the beginning of a hedging relationship, the company designates and formally documents the hedging relationship 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 the company shall assess the effectiveness of the changes in fair value of the hedging instrument when offsetting the exposure to changes in the fair value of the hedged item or in the cash flows, attributable to the risk hedged. Such hedges are expected to be highly efficient in achieving the offsetting of changes in the fair value or in the cash flows, and for this end they are permanently assessed throughout the information periods for which they were designated.

For hedging accounting purposes, hedges are classified and recorded as follows, once the criteria for their recording are complied with:

- Fair value hedging, when they hedge the exposure to fair value changes of assets or liabilities recognized or of non-recognized firm commitments.
- A change in the fair value of a derivative that is a hedging instrument is recognized in the Statement of comprehensive income, in the section Profit for the period 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 recorded value of the hedged item and is also recognized in the Statement of comprehensive income in the section Profit for the period as financial cost or revenue.
- For the fair value hedging related to items recorded at amortized cost, the adjustments to the recorded value are amortized through the Statement of comprehensive income in the section Profit for the period throughout the remaining term until their expiration. Amortization of the effective interest rate may begin as soon as there is an adjustment to the recorded value of the hedged item, but it must start at the latest when the hedged item is no longer adjusted for their fair value changes ascribable to the risk being hedged.

Amortization of recorded value adjustments is based upon the effective interest rate recalculated on the amortization starting date. If the hedged item is derecognized, the non-amortized fair value is immediately recognized in the Statement of comprehensive income in the section Profit for the period.

- 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 section Profit for the period.
- 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 (equity) the fair value variations of the hedging instrument to apply them to the income statement accounts when and at the rate that the hedged item affects these.
- The effective portion of the profit or loss for the measurement of the hedging instrument is immediately recognized in the Other comprehensive income, whereas the ineffective portion is immediately recognized in the Statement of comprehensive income in the section Profit for the period as financial cost.
- Values recognized in the Other comprehensive income are reclassified into the Profit for the period when the hedged transaction affects the profit, as well as when the hedged financial revenue or financial expense is recognized, or when the foreseen transaction takes place. When the hedged item constitutes the cost of a non-financial asset or liability, the values recognized in the Other comprehensive income are reclassified at the initial recorded value of the no-financial asset or liability. If the foreseen transaction or the firm commitment is no longer expected to happen, the accrued profit or loss previously recognized in the Other comprehensive income is reclassified into the Profit for the period.
- If the hedging instrument expires or is sold, it is resolved, or is exercised without a replacement or successive renovation of a hedging instrument for another hedging instrument, or if its designation as hedging is revoked, any accrued profit or loss previously recognized in 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 the company associated to the exchange rate risk.
- The objective of the foreign-currency net investment hedging, is to hedge the exchange rate risks that a Principal or Intermediate Parent Company having businesses abroad may have on the impact on the translation of financial statements from functional currency to presentation currency. The hedging of net investment in foreign currency is a hedging to the exposure in foreign currency, not a hedging of the fair value due to changes in the investment value.
- 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 profit or loss related to the ineffective portion is recognized in the Statement of comprehensive income in the section Profit for the period. For the disposal of the business abroad, the accrued value of the profits or losses recorded in the Other comprehensive income are reclassified in the Profit for the period.

Equity instruments

An equity instrument consists of any contract showing a residual interest on an entity's assets, after deducting all its liabilities. Equity instruments issued by the company are recognized 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 profit or loss is recognized in operations, coming from the purchase, sale, issuance, or cancellation of the company's own equity instruments.

2.17 Inventories

Goods acquired with the intention of selling them during the ordinary course of business or of consuming them in the service rendering process are classified as inventories.

Inventories are valued at cost or net realizable value, whichever is lower. The net realizable value is the estimated sale price in the normal course of business, less the estimated finalization costs and the estimated costs necessary to make the sale.

Inventories include merchandise in stock that do not require transformation, such as power, gas and water meters and procurement goods. They include materials such as minor spare parts and accessories for the rendering of services and the goods in transit and held by third parties.

Inventories are valued using the weighted average method and their cost includes the costs directly related to the acquisition and those incurred in to give them their current conditions and location.

2.18 Impairment value of non-financial assets

As of every presentation date, the company assesses whether they have any indication that a tangible or intangible asset may be impaired. The company estimates the recoverable value of the asset or Cash Generating Unit (CGU), at the moment it detects an indication of impairment, or annually (as November 30 and it is reviewed if there are significant or significant events presented in the month of December that merit analysis and be included in the calculation of impairment) for intangible assets with undefined lifespan and those that are still being used.

The recoverable value of an asset is the greatest value between the fair value less costs of sale, either of an asset or a Cash-Generating Unit (CGU, or UGE for its Spanish initials), and its value in use 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 CGU. When a reasonable and consistent base of distribution is identified, common/corporate assets are also assigned to the individual CGU or distributed to the smallest group of CGU for which it can be identified a reasonable and consistent distribution base. When the recorded value of an asset or of a CGU exceeds its recoverable value, the asset is considered impaired and the value is reduced to its recoverable amount.

When calculating the value of use, the estimated cash flows, either for an asset or a CGU, are discounted at their current value through a discount rate before taxes that reflects the market considerations of the temporary value of money and the specific risks of the asset. An adequate assessment model is used for determining the reasonable value less the costs of sale.

Losses for impairment of continued operations are recognized in the Statement of comprehensive income in the section Profit for the period in those expense categories that correspond to the function of the impaired asset. Losses for impairment attributable to a CGU are assigned proportionately based in the book value of each asset to the non-current assets of the CGU after exhausting goodwill. The CGU is the smallest identifiable group of assets, which generates cash inflows in favor of the company, which are largely, independent of cash flows derived from other assets or groups of assets. The company defined the CGU considering: 1) The existence of revenue and costs for each group of assets, 2) The existence of an active market for the generation of cash flows and 3) the way in which Manage and monitor operations. In order to assess the losses due to impairment, the assets are grouped in the following CGU: Generation, Distribution, Sanitation, Water supply, Gas and Transmission.

The impairment value for goodwill is determined by assessing the recoverable value of each CGU (or group of CGU) to which the goodwill relates. The value impairment losses related to goodwill cannot be reverted in future periods.

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

2.19 Provisions

Provisions are recorded when the company has a current, legal or implicit obligation, as a result of a past event. It is probable that the company has to give off resources that incorporate economic benefit to settle the obligation, and a reliable estimate can be made for the value of the obligation. In cases in which the company expects the provision to be reimbursed as a whole or in part, the reimbursement is recognized as a separate asset, but only in the cases when such reimbursement is practically certain, and the asset amount can be reliably measured. In the company, each provision is only used for dealing with expenditure for which it was initially recognized.

Provisions are measured with the best estimate from management of expenditure necessary to cancel the current obligation, at the end of the period being reported, considering the risks and the corresponding uncertainties. When a provision is measured using the estimated cash flow to cancel the current obligation, its recorded 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, yield of TES Bonds (Public Debt Securities issued by the General treasury of the Nation) must be used at the end of the period being reported.

The expense corresponding to any provision is presented in the Statement of comprehensive income in the section Profit for the period net of all reimbursement. The increase in provision due to the time elapsed is recognized as financial expense.

Provisions for dismantling

The company recognizes as part of the cost of a fixed asset in particular, to the extent that there is a legal or implicit obligation of dismantling or restoring, the estimation of the future costs in which the company expects to incur in to perform the dismantlement or restoring and its balancing entry is 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, that 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, the yield of TES Bonds (Public Debt Securities issued by the General Treasury of the Nation) must be spent.

Future estimated dismantlement or restoration costs are annually revised. Changes in the future estimated costs, in the dates estimated for expenditure or in the discount rate applied are added or deducted from the asset cost, without exceeding the recorded value of the asset. Any surplus is immediately recognized in 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 section Profit for the period.

Onerous Contracts

The company recognizes as provisions the current obligations that are derived from an onerous contract, as provisions and its offsetting is in the Statement of comprehensive income in the section Profit for the period. An onerous contract is the one in which the unavoidable costs of complying with the obligations it implies, exceed the economic benefits that are expected to receive therefrom.

Contingent liabilities

The possible obligations that arise from past events and the existence of which shall be only confirmed by the occurrence or non-occurrence of one or more uncertain future events that are not entirely under the company's control or the current obligations, that arise from past events, but that it is not probable, but possible, that an outflow of resources including economic benefits shall be required to liquidate the obligation or the amount of the obligation cannot be measured with enough reliability, are not recognized in the Statement of financial position, they are rather disclosed as contingent liabilities. Contingent liabilities generated in a business combination are recognized at fair value on the acquisition date.

Contingent assets

Assets of a possible nature, that arise from past successes, the existence of which has to be confirmed only by the occurrence, or the non-occurrence, of one or more uncertain events in the future, that are not entirely under the company's control, are not recognized in the Statement of financial position, they are instead disclosed as contingent assets when their occurrence is probable. Whenever the contingent fact is true the asset and the revenue associated are recognized in the Profit for the period. Contingent assets acquired in a business combination are initially measured at their fair values, on the acquisition date. At the end of subsequent periods being reported, those contingent liabilities are measured at the greatest amount it would have been recognized and the amount initially recognized less the accrued amortization recognized.

2. 20 Employee benefits

2.20.1. Post-employment benefits

Defined contribution plans

The contributions to the defined contribution plans are recognized as expenses in the Statement of comprehensive income in the section Profit for the period at the moment when the employee has rendered the service that grants them the right to make the contributions.

Defined benefit plans

Post-employment benefit plans are those in which the company has the legal or implicit obligation to respond for the payments of the benefits that were left to their charge.

For the defined benefit plans, the difference between the fair value of the plan assets and the present value of the plan obligation, is recognized as asset or liability in the Statement of financial position. The cost of giving benefits under the defined benefit plans is determined separately for each plan, through the actuarial assessment method of the projected credit unit, using actuarial assumptions on the date of the period being reported. Plan assets are measured at fair value, which is based upon the market price information and, in the case of quoted securities, it constitutes the published purchase price.

The actuarial profits or losses, the yield of plan assets and the changes in the asset ceiling effect, excluding the securities included in the net interest on the net defined benefits on the liabilities (assets), are recognized in the Other comprehensive income. The actuarial profits or losses include the effects of changes in the actuarial assumptions as well as adjustments due to experience.

The net interest on liabilities (assets) for net defined benefits includes the interest revenue for the plan assets, interest cost for the obligation for defined benefits and interests for the asset ceiling effect.

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 section Profit for the period in the period when they arise.

2.20.2. Short-term employment benefits

The company classifies as short-term employee benefits those obligations with the employees that it expects to liquidate during the twelve months period following the closing of the accounting period when the obligation was generated, or the service was rendered. Some of these benefits are generated from the current labor legislation, from collective bargaining agreements, or from non-formalized practices that generate implicit obligations.

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

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

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

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

2.20.3. Long-term employee benefits

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

The company measures long-term benefits in the same 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 working life should not be considered “long term” if at the accounting year closing each year the company has fully delivered them.

2.20.4. Termination benefits

The company recognizes as termination benefits, the considerations granted to the employees, payable as result of the decision of the company to terminate the employment agreement to an employee before the normal retirement date or the decision of an employee to accept the voluntary resignation in exchange for such benefits.

2.21 Service concession agreements

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

The company does not recognize these infrastructures as property, plant and equipment, it recognizes the consideration received in the contracts that meet the above conditions at its fair value, as an intangible asset to the extent that the company receives an entitlement to make charges to users of the service, provided that these entitlements are conditioned to the service use level, or as a financial asset, to the extent that there is an unconditional contractual right to receive cash or other financial asset, either directly from the assignor or from a third party. In those cases where EPM Group receives payment for the construction services, partly through a financial asset and partly through an intangible asset, each component of the consideration is recorded separately.

Financial assets of service concession agreements are recognized in the Statement of financial position as operating financial assets and subsequently are measured at amortized cost, using the effective interest rate. Assessment of impairment of these financial assets is made according to the value impairment policy of the financial assets.

Intangible assets of service concession agreements are recognized in the Separate statement of financial position as intangible assets denominated “intangible assets for service concession agreements” and are amortized on a linear basis within the term of duration thereof.

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 the company 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, is recognized following the provisions accounting policy.

2.22 Fair Value

The fair value is the price that would be received when selling an asset or that would be paid when transferring a liability in an orderly transaction between market participants on the measurement date, regardless of whether that price is directly observable or estimated using another assessment technique. When estimating the fair value of an asset or liability, the company considers the characteristics of the asset or liability if the market participants consider these characteristics when valuing the asset or liability on the measurement date.

Fair value for measurement and disclosure purposes in the present financial statements is determined on that basis, except for the transactions of stock-based payments, lease transactions, and the measurements that have certain similarities with the fair value but that are not fair value, such as the net realizable value or the value at use. The fair value of all financial assets and liabilities is determined on the date of presentation of the financial statements, for recognition or disclosure in the notes to the financial statements.

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 other than quoted prices included in Level 1, which are observable for the asset or liability, directly or indirectly.
- Based upon internal assessment techniques of cash flow discounts or other assessment models, using variables estimated by the company that are non-observable for the asset or liability, in the absence of variables observed in the market (level 3).

In the note 42 Measurement of fair value on a recurring and non-recurring basis provides an analysis of the fair values of financial instruments and non-financial assets and liabilities and more detail of their measurement.

2.23 Dividends in cash distributed to the owner of the company

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

2.24 Changes in estimates, accounting policies and errors

2.24.1. Changes in accounting estimates

As of December 31, 2018, the company recorded no significant changes in its financial statements as a result of a revision to its accounting estimates.

2.24.2. Changes in accounting policies

As of December 31, 2018, the accounting practices applied to the financial statements of the company are consistent with the year 2017, except for the following changes:

New standards implemented and change in voluntary accounting policies

In the current year, the Company has implemented the changes in the IFRS (new standards, amendments or interpretations), issued by the International Accounting Standards Board (IASB) that are mandatory for the accounting period beginning on or after January 1st, 2018.

IFRIC 22 Foreign Currency Transactions and Advance Consideration. Issued in December 2016, this Interpretation deals with how to determine the date of the transaction, to define the exchange rate that will be used in the initial recognition of assets, expense or revenue (or part thereof), in the writing-off of a non-monetary asset or non-monetary liability resulting from the payment or receipt of an advance in foreign currency. In this regard, the Interpretations Committee of the IFRS, reached the following conclusion: the date of the transaction, for purposes of determining the exchange rate, is the date of the initial recognition of the non-monetary advance payment asset or the deferred income liability. If there are several payments or receipts in advance, a transaction date is established for each payment or receipt. This does not apply when an entity measures the related asset, expense or revenue on initial recognition at its fair value or at the fair value of the consideration paid or received on a date other than the date of the initial recognition of the non-monetary asset or the non-monetary liability derived from the anticipated consideration (for example, the measurement of goodwill in accordance with IFRS 3 Business Combinations). It neither applies to income tax and insurance contracts.

These modifications have no impact on the financial statements, as they correspond to the current practice of the company.

FRS 9 Financial Instruments. In 2016, the company applied IFRS 9 Financial Instruments (revised July 2014) and the corresponding amendments to other IFRS before their effective dates.

IFRS 9 introduces new requirements for: classification and measurement of financial assets, impairment of financial assets and hedge accounting. The breakdown of these 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 Group was not affected by this new approach.
- Impairment of financial assets: the standard introduces the measurement of the correction of value for expected credit loss on financial assets that are measured at amortized cost or fair value with changes in another comprehensive income, accounts receivable for leases, assets of a contract or loan agreement and financial guarantee contract to which the impairment requirements are applied during the asset's lifespan.
- Changes in the accounting policies resulting from the adoption of IFRS 9 have not been restated, in which case the cumulative difference in provision for losses recognized under IFRS 9 is charged against the accumulated results as of January 1st, 2016.
- Resulting from the adoption of IFRS 9, the Company adopted the consequential amendments to IAS 1 Presentation of financial statements, which require that the impairment of financial assets be presented in a separate item in the statement of income and other comprehensive income.
- Hedge accounting: the standard introduces a substantially reformed approach to hedge accounting that aligns it more closely with risk management. The Group was not affected by this new approach.

IFRS 15 Revenue from Contracts with Customers. The company applies the new standard as of January 1, 2018 with special emphasis on the identification of performance obligations included in contracts with customers and the assessment of methods to estimate the amount and timing of variable consideration. The adoption of IFRS 15 did not have a material impact on the financial statements.

This standard was issued in May 2014, it is a new standard applicable to all income agreements of ordinary activities from contracts with customers, except leases, financial instruments and insurance contracts that are regulated by their respective standard. It is a joint project with the Financial Accounting Standards Board - FASB to eliminate differences in revenue recognition between IFRS and US GAAP.

The explanations made in April 2016 to IFRS 15 include the following points:

<u>a. Identification of the action as principal or as agent</u>

When a third party is involved in providing goods or services to a client, the company will determine whether the nature of its commitment is a performance obligation consisting in providing the goods or services specified by itself (i.e., acting as a principal) or in arranging for the third party the supply of those goods or services (i.e., acting as an agent).

b. Variable consideration

Corresponds to any amount that is variable according to the contract. The amount of the consideration may vary due to discounts, refunds, compensations, reimbursements, credits, price reductions, incentives, performance bonuses, penalties or other similar elements. The agreed compensation may also vary if the entitlement of an entity to receive it depends on whether or not a future event occurs, e.g., a consideration amount would be variable if a product with a right of return was sold or a fixed amount is promised as a performance premium at the time of achieving a specified milestone.

c. Application methods

The standard allows the use of two methods for the initial application as follows: Full retrospective method and Modified method. The company applies to this standard following the Modified method.

Modified method. With the modified approach, the accumulated effect of the initial application shall be recognized as an adjustment to the opening balance of the accumulated earnings (or other component of equity, as applicable) of the annual reporting period that includes the initial application date. Under this transition method, an entity applies this Standard retroactively only to contracts that are not completed on the date of initial application (e.g., January 1st, 2018 for an entity with December 31 as the end of the year). Consequently, information presented for 2017 has not been restated and continues to be reported in accordance with IAS 18, IAS 11 and related interpretations. In general, the disclosure requirements of IFRS 15 have not been applied to comparative information.

The Company completed its qualitative and quantitative analysis of the effects for the adoption of IFRS 15 in its financial statements. Assessment included, among others, the following activities:

- Analysis of contracts with clients and their main characteristics,
- Identification of performance obligations in the aforementioned contracts,
- Determination of the prices of transactions and the effects caused by variable considerations,
- Allocation of transaction amounts to each performance obligation,
- Analysis of the appropriateness of the moment in which revenue must be recognized by the company either at a point in time or during the time.
- Analysis of the effects that the adoption of IFRS 15 originated in accounting policies, processes and internal control.

For submission periods that include the initial application date, an entity shall provide all the following additional disclosing information:

(a) The amount for which each item in the financial statements is affected in the current reporting period by the application of this Standard compared to IAS 11 and IAS 18 and related Interpretations that were in effect prior to the change; and

(b) An explanation of the reasons for the significant changes identified.

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

The basic principle of IFRS 15 is that an entity recognizes revenue from ordinary activities in a way that it represents the transfer of goods or services committed to customers in exchange for an amount that reflects the consideration to which the entity expects to be entitled to in exchange for said goods or services.

An entity recognizes revenues from ordinary activities in accordance with this basic principle by applying the following steps:

Stage 1: Identify the contract (or contracts) with the customer.

Stage 2: Identify performance obligations in the contract.

Stage 3: Determine the transaction price.

Stage 4: Allocate the transaction price between the performance obligations of the contract.

Stage 5: Recognize revenue from ordinary activities when (or as) the entity satisfies a performance obligation.

Under IFRS 15, an entity recognizes revenue when an obligation is satisfied, for example, when the "control" of the goods or services underlying the execution of the particular obligation are transferred to the customer. More specific guidelines have been added to the standard to handle specific scenarios. Additionally, further disclosures are required.

It will replace the IAS 18 Revenue, IAS 11 Construction Contracts, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers and SIC 31 Barter Transactions Involving Advertising Services.

IAS 28 -Investments in Associates and Joint Ventures. Modification forms part of the annual improvements to the IFRS 2014-2016 Cycle standards issued in December 2016, it 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 collective investment fund, investment trust or other similar entity, including insurance funds linked to investments, the entity may choose to measure these investments at fair value through profit or loss in compliance with IFRS 9. An entity must choose this separately for each associate or joint venture at the initial recognition of the associate or joint venture. It also makes clear that if an entity that is not itself an investment entity has an equity in an associate or joint venture that is an investment entity, the entity when applying the equity method may retain the fair value measurement applied by the entity to that associate or joint venture that is an investment entity to the equities of the associate or joint venture that is an investment entity in subsidiaries. This election is made separately for each associated investment entity or joint venture, on the date subsequent to the date on which: (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 first becomes a parent company.

These modifications have no material effect on the financial statements.

IAS 23 Borrowing Costs. The modification forms part of the annual improvements to the IFRS 2015-2017 Cycle standards issued in December 2017, establishes that to the extent that the funds of an entity come from generic loans and it uses them for obtaining a qualifying asset, this will determine the amount of the capitalization costs applicable by applying a capitalization rate to the expenditure made in said asset. The capitalization rate will be the weighted average of the borrowing costs applicable to all the loans received by the entity pending during the period. However, an entity shall exclude from this calculation the borrowing costs applicable to loans specifically agreed to finance a qualifying asset until substantially all the activities necessary to prepare that asset for its intended use or sale are completed. The amount of borrowing costs that an entity capitalizes during the period will not exceed the total borrowing costs incurred during that same period.

These modifications had no effect, since the calculation had been carried out as established.

IAS 40 Investment Property. The amendment made in December 2016, has an effect on the transfer of investment property (reclassifications) caused by "change in its use", elaborating on that last term: a change in use occurs when the property meets, or fails to meet, the definition of investment property and there is evidence of change in use. In isolation, a change in management's intentions for the use of a property does not provide evidence of a change in use. For that, we continue with the examples provided by the standard in paragraphs 57 and 58 (not substantially modified). Paragraphs 84C to 84E and 85G were added to define the transitional provisions when making investment property transfers.

In the company, there was no effect associated with the implementation of said amendment, considering that it is included in the technical and financial definitions.

2.24.3. Application of new and revised standards

Changes to IFRS (new standards, amendments or interpretations), which have been published in the period, but have not yet been implemented by the company, are detailed below:

Standard	Date of compulsory application	Change type
IFRS 17 Insurance Contracts	January 1st, 2021	New
IFRIC 23 Uncertainty over Income Tax Treatments	January 1st, 2019	New
IFRS 16 Leases	January 1st, 2019	New
IAS 28 Investments in Associates and Joint Ventures (Long-Term Investment in Associates and Joint Ventures)	January 1st, 2019	Amendment
IFRS 9 Financial Instruments (Prepayment Features with Negative Compensation)	January 1st, 2019	Amendment
IFRS 3 Business Combinations (Annual Improvements to IFRS Standards 2015-2017 Cycle - previously held interests in the assets and liabilities of the joint operation where control was obtained)	January 1st, 2019	Amendment
IFRS 11 Joint Arrangements (Annual Improvements to IFRS Standards 2015-2017 Cycle - previously held interests in the assets and liabilities of the joint operation where joint control was obtained)	January 1st, 2019	Amendment
IAS 12 Income Tax (Annual Improvements to IFRS Standards 2015-2017 Cycle - Income Tax Consequences of Payments on Financial Instruments Classified as Equity)	January 1st, 2019	Amendment
IAS 19 Employee Benefits - Plan Amendment, Curtailment or settlement	January 1st, 2019	Amendment
IFRS 3 Business Combinations – Amendment, Definition of a Business	January 1st, 2020	Amendment
IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, changes in accounting estimates and errors - Amendment, Definition of Material	January 1st, 2020	Amendment

IFRIC 23 Uncertainty over Income Tax Treatments. Issued in June 2017, this Interpretation attempts to resolve the issue of how to reflect in the financial statements, the uncertainty that arises from the accounting treatment applied in the tax returns, whether or not it is accepted by the tax authority. In the face of such uncertainty, the accounting treatment is considered an "uncertain accounting treatment" assessed to estimate the probability of acceptance by the tax authority. If accepted, the accounting tax position consistent with the tax treatment used or planned to be used in the income tax returns of the entity must be determined and if not, the effect of the uncertainty in the determination of the related accounting tax position must be reflected.

In the latter case, the effect of the uncertainty must be estimated, using either the most probable quantity or the expected value method, depending on which method best predicts the solution of the uncertainty.

The Interpretation allows to apply any of the following approaches for the transition:

• Full retrospective approach: this approach can be used only if possible without the use of retrospective. The application of the new Interpretation will be registered in accordance with IAS 8, which means that the comparative information will have to be restated; or

• Modified retrospective approach: the restatement of comparative information is not required or permitted according to this approach. The cumulative effect of initially applying the Interpretation will be recognized in the opening equity at the date of the initial application, being the beginning of the annual reporting period in which the entity applies the Interpretation for the first time.

The company is assessing the effects that the application of this interpretation could cause.

The interpretation will be of compulsory application for annual periods beginning on January 1st, 2019. Early application is permitted.

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

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

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

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

This new standard requires more detail in the disclosures.

During 2018, the Company built the guidelines, the financial technical definitions and identified the impacts by the adoption of said standard in all fronts: processes, technology, people; In addition, an analysis was made for all the contracts that the Company has to identify those that were affected.

The Company will have an approximate effect by the recognition of assets for right of use and lease liabilities of $294,000 measured at the present value of the remaining royalties for those contracts that were classified in accordance with IAS 17 in operating leases, discounted using an incremental interest rate on loans; it also includes the update of the asset and the liability for financial leases that were recognized considering IAS 17. For the latter, the asset recognized in property, plant and equipment valued at $1,738,118 will be reclassified to the asset for right of use.

The Company will adopt the standard using the Modified retrospective approach with recognition of the accumulated effect on retained profit as of January 1st, 2019, without comparative presentation of the financial statements prior to the date of application.

Short-term leases that do not exceed 12 months or that correspond to low-value underlying assets will not be recognized as right-of-use assets, in exchange, the Company will use the practical expedient and recognize those leases in the Statement of comprehensive income.

IAS 28 Investments in Associates and Joint Ventures - Long-Term Investment in Associates and Joint Ventures. The amendment to IAS 28, issued in October 2017, establishes how IFRS 9 must be applied to other financial instruments in Associates or Joint Ventures to which the equity method is not applied. These include long-term interests that, in essence, form part of the entity's net investment in an associate or joint venture. Modifications will be compulsory for annual periods beginning on January 1st, 2019. Early application is permitted.

IFRS 9 Financial Instruments. The amendments to IFRS 9, related to prepayment features with negative compensation, allow companies to measure financial assets, prepaid with negative compensation at amortized cost or fair value, through Other comprehensive income if a specific condition is met; instead of at fair value with profit or loss.

The company is assessing the effects that the application of this amendment could cause.

Amendments will be of compulsory application for annual periods beginning on January 1st, 2019.

IFRS 3 Business Combinations. The amendment to IFRS 3, which is part of the annual improvements to IFRS standards 2015-2017 Cycle issued in December 2017, establishes that when control is obtained of a business where previously it was part of a joint operation and was entitled to assets and liabilities for liabilities relating to that joint operation before the acquisition date, the transaction is a business combination carried out in stages and the interest previously held in the joint operation must be remeasured.

These amendments do not have any material effect on the consolidated financial statements.

Amendments will be of compulsory application for annual periods starting on January 1st, 2019. Early application is permitted.

IFRS 11 Joint Arrangements. The amendment to IFRS 11, which forms part of the annual improvements to IFRS Standards 2015-2017 Cycle issued in December 2017, establishes that when joint control of a business is obtained where previously it was part of a joint operation but did not have joint control, the interest previously held in the joint operation should not be re-measured.

These amendments do not have any material effect on the financial statements.

Amendments will be of compulsory application for annual periods starting on January 1st, 2019. Early application is permitted.

IAS 12 Income Tax. Amendment to IAS 12, which is part of the annual improvements to IFRS standards 2015-2017 cycle issued in December 2017, makes clear that all the consequences of income tax on dividends (distribution of profits) must be recognized in Profits and losses, Other comprehensive income or Equity, depending on the initial recognition of the transaction. Specifically, it establishes that an entity will recognize the consequences of the dividend income tax as defined in IFRS 9 when it recognizes a liability to pay a dividend. The consequences of income tax on dividends are more directly linked to past transactions or events that generated distributable profits, than to distributions made to owners. Therefore, an entity recognizes the consequences of dividends on income tax in Profit for the period, other comprehensive income or Equity depending on where the entity originally recognized those transactions or past events.

The company is assessing the effects that the application of this amendment could cause.

Amendments will be of compulsory application for annual periods starting on January 1st, 2019. Early application is permitted.

IAS 19 Employee Benefits - Plan Amendment, Curtailment or settlement. For the counting of current or actual service cost, both for the components of the defined benefit cost, and for the recognition and measurement of post-employment benefits - defined benefit plans and for other long-term employee benefits, making actuarial assumptions at the beginning of the annual reporting period will be required to determine the cost of current services. However, if an entity measures again the liability (asset) for net defined benefits in accordance with the current fair value of the assets of the plan and the current actuarial assumptions (paragraph 99), it will determine the cost of the services of the present yearly period for the remaining of the annual reporting period following the plan amendment, curtailment or settlement, by using the actuarial assumptions used to remeasure the liability (asset) for defined benefits in accordance with paragraph 99(b) - the benefits offered according to the plan and assets of the plan after plan amendment, curtailment or settlement. When a plan amendment, curtailment or settlement takes place, an entity shall recognize and measure the cost of the past service, or a profit or loss from the settlement.

Regarding the net interest on the net defined benefit liability (asset), it will be determined by multiplying the amount of this liability (asset) by the specified discount rate, i.e., the amount corresponding to the issuing of bond or high-quality corporate bonds in that currency or, failing this, the market yields of government bonds denominated in that currency.

The company is assessing the effects that the application of this amendment could cause.

The interpretation will be of compulsory application for annual periods starting on January 1st, 2019. Early application is permitted.

IFRS 3 Business Combinations. The amendment to IFRS 3, issued in October 2018, clarifies the Definition of a Business, in order to help determine whether a transaction should be accounted for as a business combination or as an asset acquisition. The new business definition is as follows: An integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing goods or services to customers, generating investment income (such as dividends or interest) or generating other income from ordinary activities.

Additionally, this amendment clarifies that, to be considered a business, a set of activities or assets must include at least one input and a substantive process that together contribute significantly to the ability to create products. It eliminates the assessment of whether market participants are able to replace any missing inputs or processes and continue to produce products and includes an optional concentration test that allows a simplified assessment of whether an acquired set of activities and assets is not a business.

The company is assessing the effects that the application of this amendment could cause.

The amendment to IFRS 3 will be of compulsory application for annual periods starting on January 1st, 2020. Early application is permitted.

IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, changes in accounting estimates and errors. This amendment, issued in October 2018, modifies the definition of material, the new definition of material is as follows: Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general-purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity. Additionally, some examples of circumstances that may cause important information to be hidden are included.

The company is assessing the effects that the application of this amendment could cause.

The amendment to IAS 1AND IAS 8 will be of compulsory application for annual periods starting on January 1st, 2020. Early application is permitted.

2.24.4. Errors in previous periods

As of December 31, 2018, the company did not perform any adjustments to the separate financial statements for errors in previous periods.

2.24.5. Changes in presentation

At the end of the 2018 period, considering the materiality of the figure and the nature of the concept, a change was made in the presentation of the Statement of comprehensive income for the 2017 period. The purpose of the reclassification is to facilitate the reading of the financial statements by the users of these. The item reclassified was the following:

Concept	Previous statement	Current statement	2017
Reversal loss due to Impairment on accounts receivable	Other income	Impairment loss on accounts receivable	27,704

Figures stated in millions of Colombian pesos

Note 3. Significant accounting judgments, estimates, and causes of uncertainty in the preparation of financial statements

The following are the significant judgments and assumptions, including those that involve accounting estimates that the company's management used in the application of the accounting policies under IFRS, 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 by the cut-off 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. The company assesses its estimates on a regular basis. Actual results may differ from those estimates.

The significant estimates and judgments made by the company are described below:

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

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

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

Determining whether goodwill has suffered impairment implies the calculation of the value at use of the CGUs to which it has been assigned. The calculation of the value at use requires that the entity determines future cash flows that should arise from CGUs and a discount rate appropriate to calculate the current value. When the actual future cash flows are lower than expected, an impairment loss may arise.

– **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.

– **Lifespan and residual values of property, plant and equipment and intangibles.**

In the assumptions and hypothesis used for determining the lifespans, technical aspects such as the following are considered: periodical maintenances and inspections made to the assets, failure statistics, environmental conditions and operating environment, protection systems, replacement processes, obsolescence factors, recommendations of manufacturers, climate and geographical conditions, and experience of the technicians that know the assets. Aspects such as market values, reference magazines, and historic sales data are considered for determining the residual value.

– **Assumptions used for calculating the fair value of financial instruments including the credit risk.**

The company discloses the fair value corresponding to each class of financial instrument in such a way it allows comparing it with the recorded values. Macro-economic projections calculated within the company are used. Investment portfolio is valued at market price. In its absence, a similar one is looked for in the market and if not, assumptions are used.

Macro-economic rates are projected using the cash-flow methodology. Derivatives are estimated at fair value. Accounts receivable are estimated at the market rate in force and effect for similar credits. Accounts receivable from employees are valued in a similar way as massive debtors, except for mortgage credits.

The methodology used for equity investments is the cash flow; those quoted in the stock exchange are estimated at market prices; all others, 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 area professionals, the type of contingent liability, the possible legislative changes, and the existence of high-court rulings that applies to the concrete case, the existence of similar cases in the company, the study and analysis of the substance of the issue, the guarantees existing at the time of the events. The Company shall disclose and not recognized in the financial statements those obligations classified as possible; obligations classified as remote are not disclosed nor recognized.

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

In the assumptions and hypothesis used for determining future expenditure for asset dismantlement and retirement obligations, aspects such as the following were considered: estimate of future outlays in which the company must incur for the execution of those activities associated to asset dismantlement on which legal or implicit obligations have been identified, the initial date of dismantlement or restoration, the estimated date of finalization and the discount rates.

– **Determination of the existence of financial or operating leases based on risk transfer and benefits of the leased assets.**

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

– **Recoverability of deferred tax assets.**

Deferred tax asset has been generated by the temporary differences that generate future fiscal consequences in the financial position of the company; these differences are essentially represented in fiscal assets that exceed the assets under IFRS, 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's deferred tax asset is recovered in the net income taxed on the current income tax generated.

– **Assessment of portfolio deterioration**

For the calculation of the expected credit loss, each obligation is assigned an individual probability of non-payment that is calculated from a probability model involving sociodemographic, product and behavior variables.

The model uses a window of twelve months, which is why for an obligation to be provisioned at a certain percentage in the same period is assessed. The model will be applied based on the Scorecard developed considering the information of the company. The models are defined according to the information available and the characteristics of the population groups for each one. Even though the methodology applies to all accounts with balance, some exclusions must be considered, such as: accounts derecognized; self-consumptions; contributions; public lighting and in general charges from third parties. For its calculation, it is previously defined the moment from which it is considered that an obligation was defaulted and will not be recovered.

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

PE = PI x SE x PDI, where:

Probability of Default (PI): this corresponds to the probability that, within a period of twelve months, the debtors of a certain segment and portfolio rating incur in default.

Outstanding Balance of the Asset (SE): corresponds to the balance of capital, balance of interests, and other current charges of the obligations.

Losses due to non-compliance (PDI): defined as the economic deterioration that the entity would incur in the event that any of the non-compliance situations materialize.

- **Revenue estimates**

The Group recognizes income from the sale of goods and the rendering of services to the extent that the performance requirements for the company are met, regardless of the date on which the corresponding invoice is issued, to carry out this estimate information from contracts or agreements with customers is taken and so the value to be recognized in revenue is stablished.

When the moment at which revenue should be recognized is uncertain, the company determines to recognize the revenue at the moment in which the performance obligation is satisfied, for those performance obligations that are satisfied over time it is common to use the method of the measured resource as the actually executed costs compared to the estimated costs.

For other concepts different from the supply of residential public utilities, the company estimates and recognizes the value of revenues from sales of goods or rendering of services based on the terms or conditions of interest rate, period, etc., of each contract that causes the sale.

In the month after recording the estimated revenue, its value is adjusted by the difference between the value of the actual revenue already known against the estimated revenue.

Note 4. Significant transactions and other relevant aspects during the period

The significant transactions and other relevant aspects that occurred during the period, different from those of the normal business of the company, are related to the contingencies of the Ituango Hydroelectric Project, that took place on April 28, 2018 due to a geological event that blocked the diversion tunnel of the Cauca River with approximately 160 thousand cubic meters of rock and soil, which caused the occluding and flooding of the dam. As a result, EPM has led its decisions prioritizing the protection of the communities and the environment in the first place and after that the infrastructure of the project. Therefore, on May 7, 2018, the decision was made to drain the dammed water through the powerhouse of the future power generation plant for rechanneling it to its traditional flow into the Cauca River and thus lower the water level of the dam. On January 16 and February 5, 2019, the intake gates No. 2 and No. 1, respectively, were closed, thus cutting the waterflow through the powerhouse. From February 8, 2019, the recovery of the flow of the Cauca River began through the flow of water through the tailrace.

In relation to the foregoing, EPM has recognized in its separate financial statements as of December 31, 2018, the following:

- Cost and progress of the construction of the Ituango hydroelectric project for $9,368,040 (see note 5).
- Provision for $38,877 for the care of those affected in the Puerto Valdivia municipality, as compensation for emerging damages, lost profits and moral damages, due to the flooding waters of the Cauca River as a result of the blockage of the site on April 28, 2018. In addition to the provision for $42,917 for the care of people who had to be evacuated as a result of said event (see notes 28.1.6 and 33).
- Provision for $137,318 of guarantee for the reliability charge covered by the construction and setting up of the Pescadero Ituango Hydroelectric Plant (see notes 28.1.6 and 33).
- Provision for $31,388 for environmental contingency, established by the specific action plan for the recovery of the parties affected by the occluding events of the diversion tunnel of the Cauca River that happened at the site on April 28, 2018 and by the closing of floodgates that decreased the flow of the river downstream of the site. (see notes 28.1.1 and 33).
- Provision for $101,797 for the breach, from January to October 2021, to the Intercolombia transporter for the months after the connection infrastructure of the Ituango project comes into operation. (see notes 28.1.6 and 33).
- Loss for $78,295 corresponding to retirement of assets due to the contingency. (see note 34).
- Other expenses of $45,639 recognized for the attention of the community affected by the contingency. (see note 34).

Note 5. Property, plant and equipment, net

The breakdown of the recorded value for property, plant and equipment is as follows:

Property, plant and equipment	2018	2017
Cost	30,963,802	26,644,181
Accrued depreciation and impairment loss	(3,923,315)	(3,510,672)
Total	**27,040,487**	**23,133,509**

Figures stated in millions of Colombian pesos

The following is the breakdown of the recorded value for temporarily idle property, plant and equipment:

Temporarily idle property, plant and equipment	2018	2017
Plants, pipelines and tunnels	29,833	53,719
Land and buildings	21,508	9,076
Machinery and equipment	105	34
Total temporarily idle property, plant and equipment	**51,446**	**62,829**

Figures stated in millions of Colombian pesos

The most significant variation is due to the components of the small power generation plants: Rio Piedras, and Dolores; For the Dolores power plant, a modernization project is underway, and commissioning is expected in 2019, for Rio Piedras the business is looking at alternatives. The land belongs to the Porce IV project that was not executed and that the company has not yet made decisions on and the project land of Espiritu Santo that has not yet started.

For the 2018 and 2017 periods the company does not possess decommissioned property, plant and equipment that has not been classified as non-current assets held for sale.

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

2018	Networks, lines and cables	Plants, pipelines and tunnels	Construction in progress[1]	Land and buildings	Machinery and equipment	Communication and computer equipment	Furniture, fixtures and office equipment	Other property, plant and equipment[2]	Total
Initial balance	5.060.448	7.322.713	8.450.022	5.111.232	206.506	197.597	68.430	227.233	26.644.181
Additions[3]	19.864	1.632.750	2.791.105	15.448	7.150	32.717	1.002	17.969	4.518.005
Advanced payments (amortized) made to third parties	-	-	28.243	-	-	-	-	1.106	29.349
Transfers (-/+)	484.528	247.388	(900.642)	19.385	11.875	8.979	17.643	(546)	(111.390)
Disposals (-)	(377)	(26.626)	(80.117)	(1.549)	(1.942)	(22.885)	(1.225)	(1.604)	(136.325)
Other changes	68.254	(74.019)	(17.241)	48.033	(96)	3	-	(4.954)	19.980
Final balance	**5.632.717**	**9.102.206**	**10.271.370**	**5.192.549**	**223.493**	**216.411**	**85.850**	**239.204**	**30.963.800**
Accrued depreciation and impairment loss									
Initial balance of accrued depreciation and impairment loss	(1.255.981)	(1.386.950)	-	(569.441)	(89.290)	(124.339)	(28.365)	(56.306)	(3.510.672)
Depreciation for the period	(160.573)	(188.192)	-	(58.272)	(10.782)	(24.636)	(6.835)	(5.969)	(455.259)
Disposals (-)	238	16.278	-	79	1.853	22.569	1.225	1.402	43.644
Other changes	(633)	463	-	(589)	(49)	(146)	(29)	(43)	(1.026)
Final balance accrued depreciation and impairment loss	**(1.416.949)**	**(1.558.401)**	**-**	**(628.223)**	**(98.268)**	**(126.552)**	**(34.004)**	**(60.916)**	**(3.923.313)**
Total final balance property, plant and equipment	**4.215.768**	**7.543.805**	**10.271.370**	**4.564.326**	**125.225**	**89.859**	**51.846**	**178.288**	**27.040.487**
Advanced payments made to third parties									
Initial balance	-	-	38.310	-	-	-	-	1.195	39.505
Movement (+)	-	-	81.684	-	-	-	-	1.524	83.208
Movement (-)	-	-	(53.441)	-	-	-	-	(417)	(53.858)
Final balance	**-**	**-**	**66.553**	**-**	**-**	**-**	**-**	**2.302**	**68.855**

Figures stated in millions of Colombian pesos

2017	Networks, lines and cables	Plants, pipelines and tunnels	Construction in progress[1]	Land and buildings	Machinery and equipment	Communication and computer equipment	Furniture, fixtures and office equipment	Other property, plant and equipment[2]	Total
Initial balance	4,436,917	7,133,077	6,647,660	5,039,129	165,101	161,379	53,025	173,851	23,810,139
Additions[3]	35,251	27,982	2,762,297	24,851	9,412	37,299	925	70,284	2,968,301
Advanced payments (amortized) made to third parties	-	-	17,960	-	-	-	-	1,195	19,155
Transfers (-/+)	364,046	422,611	(961,753)	22,310	33,672	58	14,601	(17,798)	(122,253)
Disposals (-)	(356)	(25,117)	(157)	(247)	(1,146)	(1,040)	(121)	(1,717)	(29,901)
Other changes	224,590	(235,840)	(15,985)	25,189	(533)	(99)	-	1,418	(1,260)
Final balance	**5,060,448**	**7,322,713**	**8,450,022**	**5,111,232**	**206,506**	**197,597**	**68,430**	**227,233**	**26,644,181**
Accrued depreciation and impairment loss									-
Initial balance of accrued depreciation and impairment loss	(1,111,517)	(1,205,277)	-	(511,524)	(79,178)	(99,246)	(23,243)	(50,202)	(3,080,187)
Depreciation for the period	(144,633)	(190,439)	-	(57,986)	(11,044)	(26,102)	(5,118)	(7,399)	(442,721)
Disposals (-)	192	8,795	-	82	979	969	117	1,467	12,601
Other changes	(23)	(29)	-	(13)	(47)	40	(121)	(172)	(365)
Final balance accrued depreciation and impairment loss	**(1,255,981)**	**(1,386,950)**	**-**	**(569,441)**	**(89,290)**	**(124,339)**	**(28,365)**	**(56,306)**	**(3,510,672)**
Total final balance property, plant and equipment	**3,804,467**	**5,935,763**	**8,450,022**	**4,541,791**	**117,216**	**73,258**	**40,065**	**170,927**	**23,133,509**
									-
Advanced payments made to third parties									-
Initial balance	-	-	20,350	-	-	-	-	-	20,350
Movement (+)	-	-	71,536	-	-	-	-	1,204	72,740
Movement (-)	-	-	(53,576)	-	-	-	-	(9)	(53,585)
Final balance	**-**	**-**	**38,310**	**-**	**-**	**-**	**-**	**1,195**	**39,505**

Figures stated in millions of Colombian pesos

The property, plant and equipment exhibit a variation compared to 2017, mainly due to the construction of infrastructure in the different businesses of the company, of which, the most relevant corresponds to the construction of the Ituango Hydroelectric Project, for $1,752,025.

[1] Includes capitalization of loans for $310,419 (2017: $248,171), the weighted average effective rate used to determine the amount of borrowing costs was 7.85% in Colombian pesos and 5.73% in USA dollars (2017: 8.40% and 4.01%).

[2] Includes equipment and vehicles of the automotive fleet, medical and scientific equipment, property, plant and equipment in assembly, property, plant and equipment in transit and replacement assets, transportation equipment, traction and elevation, dining equipment, kitchen, pantry and lodging.

[3] Includes purchases, capitalized expenditure that meets the recognition criteria, goods received from third parties and costs for dismantling and removing elements of property, plant and equipment. At the end of 2018 and 2017 no grants were received from the Government.

The following are the main projects under construction:

Project	2018
Construction project Ituango	9,368,040
San Fernando Plant Expansion	86,723
Playas Recovery Project	63,781
San Antonio de Prado Interconnection	34,380
Santo Domingo Project	25,926
Electricity Center Replacement Project	22,538
Large Central Camps	21,890
Main Distribution San Nicolas Valley	20,924
Guatape Transfomer Reposition	19,011
San Nicolas Valey-wastewater	17,002
Calizas Substation-Associated Lines	11,497
Control Program - Power-loss Management	9,808
Others	569,850
Total	**10,271,370**

Figures stated in millions of Colombian pesos

[4] As of December 31, 2018, the Ituango Hydroelectric Project presented a physical advance of 88.2% (2017: 80.5%). It is estimated that the first power generation unit could start operating as of the last quarter of 2021. However, this start date is very dynamic, due to the changes that occur in the technical variables and the evolution and efficiency of the measures implemented to address the contingency of the Ituango Hydroelectric Project, that took place on April 28, 2018 due to a geological event that blocked the diversion tunnel of the Cauca River with approximately 160 thousand cubic meters of rock and soil, which caused the occluding and flooding of the dam. As a result, EPM has led its decisions prioritizing the protection of the communities and the environment in the first place and after that the infrastructure of the project. Therefore, on May 7, 2018, the decision was made to drain the dammed water through the powerhouse of the future power generation plant for rechanneling it to its traditional flow into the Cauca River and thus lower the water level of the dam.

As of the cut-off date of the financial statements, it was not possible to estimate the value of the real damages to the powerhouse, both in the civil works component and in the electromechanical equipment component. Once the passage of water from the reservoir through the facilities can be restricted and the water remaining in the reservoir can be emptied, a clear and precise assessment of the damages can be performed, and the adjusted estimates can be made regarding the time of interventions, recovery engineering and the works to be implemented to fully recover this component of the project, using updated information.

At the end of the period, impairment testing was performed on assets linked to a CGU and have intangible assets with indefinite useful lives, which did not show impairment.

As of December 31, 2018, there are restrictions on the realization of the property, plant and equipment, associated to some equipment of the automotive fleet for a net recorded value of $2 (2017: $6). These restrictions are due to theft, personal injury and garnishments and have been affected as a guarantee for compliance with obligations.

The most significant commitments of acquisition of property, plant and equipment of the company at the cut-off date amount to $3,452,179 (2017: $1,123,327).

The following is the historical cost of the fully depreciated property, plant and equipment that continue in operation as of December 31, 2018 and 2017:

Group	2018	2017
Communication and computer equipment	19,507	30,640
Plants, pipelines and tunnels	12,602	17,852
Machinery and equipment	10,617	7,109
Networks, lines and cables	5,219	4,995
Furniture and fixtures	3,015	-
Otras propiedades, planta y equipo	2,971	5,820
Buildings	962	1,033
Total	**54,893**	**67,449**

Figures stated in millions of Colombian pesos

The most significant variation in computer equipment and communications, is due to the losses that have been made by the replacement plan in 2018, likewise, with the revision of annual lifespans it was possible to identify assets that were not in operation and were found totally depreciated, thus were decommissioned.

Note 6. Investment property

The fair value of investment property is based on an appraisal made by experts with recognized professional capacity and recent experience in the category of real estate investments subject to assessment; this value has been determined by the Corporacion Avaluos Lonja Inmobiliaria, Ingenieria y Avaluos S.A.S and Activos e Inventarios Limitada, this activity is performed at least once a year. To determine the fair value of investment property, the comparative or market method is used, which consists of deducting the price by comparing transactions, supply and demand and appraisals of similar or comparable properties, previous adjustments of time, conformation and location; the residual method, which applies only to buildings and is based on the determination of the cost of the updated construction less the depreciation for age and state of conservation; and the income method, which is used to determine the possible value of a good according to its capacity to generate revenue, taking into account the probable monthly royalty value that tenants would be willing to pay in the market of leases. See Note 42 Measurement of fair value on a recurring and non-recurring basis.

Investment property	2018	2017
Initial balance	116.823	116.628
Net profit or loss due to valuation of fair value[1]	1.125	9.528
Disposals (-)	(40.034)	(152)
Transfers[2] (-/+)	(85)	(9.181)
Total	**77.829**	**116.823**

Figures stated in millions of Colombian pesos

[1] See detail in note 20. Accumulated other comprehensive income, note 31. Other income and note 34. Other expenses.

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

As of December 31, 2018, revenue from leases of investment property for the period amounted to $657 (2017: $669) and the direct expenses of the period related to investment property amounted to $61 (2017: $68).

As of December 31, 2018, and 2017 there were no contractual obligations to acquire, construct or develop investment property or for repairs, maintenance or improvements to them.

As of December 31, 2018, there are no contractual restrictions on investment property.

Note 7. Other intangible assets

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

Intangibles	2018	2017
Cost	**1,080,396**	**962,868**
Goodwill	260,950	260,950
Other intangibles	819,446	701,918
Accrued depreciation and impairment loss	**(342,130)**	**(299,938)**
Other intangibles	(342,130)	(299,938)
Total	**738,266**	**662,930**

Figures stated in millions of Colombian pesos

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

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

Figures stated in millions of Colombian pesos

2017	Goodwill	Concessions and similar rights	Capitalized development expenses	Software and IT applications	Licenses	Rights	Other intangible assets[1]	Total
Initial balance cost	260,950	283,158	31,462	105,838	57,157	47,431	22,724	808,720
Additions[2]	-	1,246	25,133	16,086	5,117	-	1,109	48,691
Transfers (-/+)	-	17,813	-	2,819	227	-	101,348	122,207
Disposals (-)	-	-	-	(9,092)	(9,583)	-	(424)	(19,099)
Other chahges	-	-	81	(81)	-	2,572	(223)	2,349
Final balance cost	**260,950**	**302,217**	**56,676**	**115,570**	**52,918**	**50,003**	**124,534**	**962,868**
Initial balance accrued depreciation and impairment loss	-	(187,479)	-	(54,009)	(26,098)	(804)	(2,270)	(270,660)
Amortization for the period[3]	-	(23,754)	-	(15,629)	(6,714)	(307)	(1,211)	(47,615)
Disposals (-)	-	-	-	8,531	8,967	-	-	17,498
Other changes	-	-	-	(10)	(43)	-	892	839
Final balance accrued depreciation and impairment loss	**-**	**(211,233)**	**-**	**(61,117)**	**(23,888)**	**(1,111)**	**(2,589)**	**(299,938)**
Final balance intangible assets net	**260,950**	**90,984**	**56,676**	**54,453**	**29,030**	**48,892**	**121,945**	**662,930**

Figures stated in millions of Colombian pesos

[1] Includes easements, intangibles related to customers and other intangibles corresponding to premiums at gas service stations. In easements, transfers to operation of the Bello Guayabal-Ancon Line, Sierra-Cocorna Line, San Lorenzo projects were submitted.

[2] Includes purchases, capitalizable expenditure that meets the recognition criteria and concessions. In 2018, the purchases associated with capitalized development expenditure were earmarked for IT projects: OPEN Migration and EAM Asset Management. At the end of 2018 and 2017 no grants were received from the Government.

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

At the end of the period, impairment testing was performed on assets linked to a CGU and have intangible assets with indefinite useful lives, which did not show impairment.

At the end of the periods, impairment testing was performed on assets for those intangibles with an indefinite lifespan. The detail of the impairment recognized in the statement of comprehensive income can be found in note 8. Impairment of assets.

The lifespans of intangible assets are:

Concessions and similar rights	As contract effective term	
Easements	Indefinida - Según vigencia del contrato	
Capitalized development expenses	Indefinite	
Software and IT applications	Finite	3 to 5 years
Licenses	Finite	3 to 5 years
Rights	As contract effective term	
Other intangible assets	Finite	7 to 15 years

Amortization of intangibles is recognized as costs and expenses in the Statement of comprehensive income, section Profit for the period, in the item Costs of services rendered and administrative expenses.

As of December 31, 2018, and 2017, no restrictions on the realization of intangible assets were identified and no contractual commitments were identified for the acquisition of said assets.

The recorded value at the cut-off date and the remaining amortization period for significant assets is:

Relevant intangible assets	Lifespan	2018	2017
Goodwill Ituango	Indefinite	177,667	177,667
Goodwill Espiritu Santo	Indefinite	82,980	82,980
Easement lines corridor 53	Indefinite	63,040	61,503
Easement lines corridor 52	Indefinite	29,525	25,606

Figures stated in millions of Colombian pesos

The following intangible assets have an indefinite useful life: goodwill and easements, the latter are agreed in perpetuity. By definition, an easement is the real, perpetual or temporary right over another property, under which it can be used, or exercise certain rights of disposal, or prevent the owner from exercising some of their property rights (Art. 2970 of the Colombian Civil Code). In EPM, easements are not treated individually, since they are constituted for public utilitye projects, where the general interest prevails over the individual, considering that the objective is to improve the quality of life of the community; the aforementioned projects do not have a definite temporality, that is why they are constituted in perpetuity supported in their use. However, there are some easements with a definite useful life, because they are tied to the useful life of the main asset required by the easement.

As of December 2018, and 2017 they have a recorded value of $425,271 and $382,507 respectively.

Intangible assets with indefinite lifespans	2018	2017
Goodwill		
Ituango Power Generation Plant Project	177,667	177,667
Espiritu Santo	82,980	82,980
Surtigas Necoclíi	303	303
Subtotal goodwill	**260,950**	**260,950**
Other intangible assets		
Easements	164,321	121,557
Subtotal other intangible assets	**164,321**	**121,557**
Total intangible assets with indefinite lifespans	**425,271**	**382,507**

Figures stated in millions of Colombian pesos

The variation presented by easements is mainly due to the transfers to operations carried out in the following projects: Bello Guayabal-Ancon Line, La Sierra-Cocorna Line and San Lorenzo Line.

Note 8. Impairment of assets

8.1 Impairment of investments in subsidiaries, associates and joint ventures

At the date of presentation of the financial statements no impairment losses were recognized in the Statement of comprehensive income, related to investments in subsidiaries, associates and joint ventures.

The cumulative effect of recognized impairment losses is presented below:

Investment	Recorded value	
	2018	2017
Subsidiary		
Hidroecologica del Teribe S.A. HET	86,963	86,963
Aguas de Malambo S.A. E.S.P.	1,641	1,641
Total subsidiarieas	**88,604**	**88,604**

Figures stated in millions of Colombian pesos

8.2 Impairment loss of Cash Generating Units

The recorded value of the goodwill and the intangible assets with indefinite useful life associated with each CGU are broken down below:

Cash Generating Unit	Recorded value	
	2018	2017
Power generation		
Goodwill	260,647	260,647
Easements	444	444
CGU - Power generation-	**261,091**	**261,091**
Power Transmission		
Easements	127,023	91,861
CGU - Power Transmission-	**127,023**	**91,861**
Power Distribution		
Easements	28,906	10,985
CGU - Power Distribution-	**28,906**	**10,985**
Gas (Natural gas)		
Goodwill	303	303
Easements	3,679	3,512
CGU - Gas-	**3,982**	**3,815**
Water supply		
Easements	2,919	2,861
CGU - Water supply-	**2,919**	**2,861**
Sanitation		
Easements	1,350	1,350
CGU - Sanitation-	**1,350**	**1,350**

Figures stated in millions of Colombian pesos

The description of the CGUs is broken down below:

- CGU Power Generation (Generacion Energia), which activity consists of power generation and the commercialization of large electric power blocks, based on the acquisition or development of a portfolio of power proposals for the market.
- CGU Power Distribution (Distribucion Energia), which activity consists of transporting electric power through a set of lines and substations, with their associated equipment, operating at voltages below 220 KV, the commercialization of power to the end user of the regulated market and the development of related and complementary activities. Includes the Regional Transmission System (STR, for its Spanish initials), the Local Distribution System (SDL, for its Spanish initials), the public lighting utility and the rendering of associated services.
- CGU Power Transmission (Transmision Energia), which activity consists of the transporting of energy in the National Transmission System (STN, for its Spanish initials), composed of the set of lines, with their corresponding connection equipment, which operate at voltages equal to or greater than 220 KV. The National Transmitter (TN, for its Spanish initials) is the legal entity that operates and transports electric power in the STN or has established a company whose purpose is the development of said activity.
- CGU Gas, which activity consists of driving gas from the city gate to the end user, through medium and low-pressure pipes. It includes the sale of gas by different systems, including distribution by network, vehicular natural gas, compressed natural gas and service stations.
- CGU Water Supply (Provision Aguas), which activity consists in conceptualizing, structuring, developing and operating systems for supplying water. It includes carrying out the commercial management of the portfolio of services related to the water supply for different uses, in addition to the use of the productive chain, specifically in the power generation, and the supply of raw water.
- CGU Sanitation (Saneamiento), includes the activities of conceptualizing, structuring, developing and operating wastewater and solid waste management systems.

Goodwill is assigned mainly to the segment/CGU Generation, which presented a balance as of December 31, 2018 for $260,647 generated as a result of the liquidation of the subsidiary EPM Ituango S.A E.S.P. and Espiritu Santo whose assets were transferred to EPM, additionally, a goodwill in the CGU Gas product of the business combination with the Surtidora de Gas del Caribe S.A. E.S.P. in the municipality of Necocli for $303.

The intangible easement with indefinite useful life is assigned to the CGU: Generation, Transmission, Distribution, Gas, Water Provision and Sanitation, which present a balance of $164,321 (2017: $111,013).

As of December 31, 2018, and 2017, impairment testing was performed on the CGUs with associated intangible assets with an indefinite lifespan, but no impairment was shown associated to them.

The value in use and recorded value of CGUs at the end of 2018 that have an indefinite useful life is detailed below:

CGU	value in use	Recorded dvalue
Generation	20,593,115	17,117,851
Distribution	6,904,731	3,927,679
Water supply	3,208,352	2,285,798
Sanitation	1,501,502	966,331
Gas	977,066	811,833
Trasmission	926,097	852,669
Total CGU	**34,110,863**	**25,962,161**

Figures stated in millions of Colombian pesos

Note 9. Investment in subsidiaries

The breakdown of the subsidiaries of the company at the date of the reporting period is the following:

Name of subsidiary	Location (Country)	Main Activity	Percentage of participation and voting rights		Date of establishment
			2018	2017	
Empresa de energia del Quindio S.A. E.S.P. EDEQ	Colombia	Provides public utilities for electric power purchase, sale and distribution of electricity.	19.26%	19.26%	22/12/1988
Central Hidroelectrica de Caldas S.A. E.S.P. CHEC	Colombia	Provides public power utilities, operating power generation plants, transmission and sub transmission lines and distribution networks, as well as the commercialization, import distribution and sale of electricity.	24.44%	24.44%	09/09/1950
Electrificadora de Santander S.A. E.S.P. ESSA	Colombia	Provides public utilities of electrical power: purchase, sale and distribution of electric power.	0.28%	0.28%	16/09/1950
Centrales Electricas del Norte de Santander S.A. E.S.P. CENS	Colombia	Provides public utilities for electric power, purchase, export, import, distribution and sale. Construction and operation of generating plants, transmission line substations and distribution networks.	12.54%	12.54%	16/10/1952
Hidroecologica del Teribe S.A. HET	Panama	Finances the construction of the Bonyic hydroelectric project required to meet the growing power demand of Panama.	99.18%	99.19%	11/11/1994
Gestion de Empresas Electricas S.A. GESA	Guatemala	Renders advice and consulting services to electric power distribution, generation and transmission companies.	99.98%	99.98%	17/12/2004
Aguas Nacionales EPM S.A. E.S.P. [3]	Colombia	Provides public utilities for water, sewage and sanitation, as well as waste management and treatment, complementary activities and engineering services specific to these utilities.	99.97%	99.97%	29/11/2002
Aguas Regionales EPM S.A. E.S.P.	Colombia	Ensures the provision of residential public utilities of water supply and sanitation, and compensate for the lag of the infrastructure of these services in associate municipalities.	67.25%	67.25%	18/01/2006
Empresa de Aguas del Oriente Antioqueno S.A. E.S.P.	Colombia	Ensures the provision of residential public water supply and sanitation utilities as well as other complementary activities related to these utilities.	56.00%	56.00%	22/11/1999
Aguas de Malambo S.A. E.S.P. [1]	Colombia	Devoted to guarantee the provision of public utilities for sewage and sanitation in the jurisdiction of the Municipality of Malambo, Department of Atlantic.	97.46%	96.86%	20/11/2010
Empresas Publicas de Rionegro S.A. E.S.P. - EP RIO 4	Colombia	Renders residential public utilities, among them water supply and sewage, as well as the complementary and related activities related to these; specifically, the administration, operation, maintenance and investments of the water supply and sewage systems of the Municipality of Rionegro, the execution of programs and projects on environmental issues and the renewable and non-renewable natural resources; promotes sustainable development. Additionally, the company will provide maintenance to the public lighting network of the Municipality of Rionegro.	100.00%	100.00%	9/12/1996
Empresas Varias de Medellin S.A. E.S.P.	Colombia	Subsidiary dedicated to the provision of the public cleaning utility within the framework of integral management of solid waste.	64.98%	64.98%	11/01/1964
EPM Inversiones S.A.	Colombia	Devoted to the investment of capital in national or foreign companies organized as utility companies.	99.99%	99.99%	25/08/2003
Maxseguros EPM Ltd	Bermuda	Negotiating, contracting and management of reinsurance for policies for equity protection.	100.00%	100.00%	23/04/2008
Panama Distribution Group S.A. PDG	Panama	Capital investment in companies.	100.00%	100.00%	30/10/1998
Distribucion Electrica Centroamericana DOS S.A. DECA II	Guatemala	Performs capital investments in companies engaged in the distribution and commercialization of electric power and in providing telecommunications services.	99.99%	99.99%	12/03/1999
EPM Capital Mexico S.A. de CV 5	Mexico	Executes infrastructure projects related to energy, lighting, gas, telecommunications, sanitation, potable water treatment plants, sewage treatment, wastewater treatment, buildings, as well as its operation, studies and services.	39,36%	39,36%	04/05/2012
EPM Chile S.A. [2]	Chile	Executes power, lighting, gas, telecommunications, sanitation, sewage treatment plants and sewage treatment projects, as well as providing such services and participating in all types of public and private tenders and auctions.	99.99%	99.99%	22/02/2013
patrimonio Autonomo Financiacion Social	Colombia	Manages the resources and payments of the social financing program created to facilitate users the purchase of electric and natural gas appliances and IT related products.	100.00%	100.00%	14/04/2008

[1] In November 2018, EPM capitalized Aguas de Malambo S.A. E.S.P. for $8,000 and in November of 2017 for $12,499.

2 In April 2018, EPM capitalized EPM Chile S.A for $2,453

3 In November 2017, EPM capitalized Aguas Nacionales EPM S.A. E.S.P. for $259,999.

4 Subsidiary acquired by EPM through the trading of shares transaction perfected on October 31, 2017. Subsequently, it was capitalized in November 2017 for $14,235. Through Act No. 54 of March 14, 2018, the Company was transformed into a simplified joint stock company, consequently, its corporate name was changed to Empresas Publicas de Rionegro S.A.S. E.S.P., this modification was registered in the commercial registry of the Chamber of Commerce of Eastern Antioquia (Camara de Comercio del Oriente Antioqueno) on April 10, 2018.

5 In June 2017, EPM capitalized EPM Capital Mexico S.A. of C.V. at $4,055.

In the subsidiaries in which there is less than 50% direct ownership, control is obtained through indirect ownership of the other EPM Group companies.

The value of investments in subsidiaries at the cut-off date was:

Subsidiary	2018					2017				
	Value of investment				Total	Value of investment				Total
	Cost	Equity method	Impairment	Dividends		Costo	Equity method	Impairment	Dividends	
EPM Inversiones S.A.	1,561,331	14,117	-	(139,714)	1,435,734	1,561,331	(116,317)	-	(136,228)	1,308,786
Aguas Nacionales EPM S.A. E.S.P.	1,552,115	(46,953)	-	-	1,505,162	1,552,115	(22,645)	-	-	1,529,470
EPM Chile S.A.	1,044,935	(667)	-	-	1,044,268	1,042,481	(248,292)	-	-	794,189
Distribucion Electrica Centroamericana DOS S.A. DECA II	1,009,257	1,009,465	-	(171,850)	1,846,872	1,009,257	928,984	-	(88,810)	1,849,431
Hidroecologica del Teribe S.A. HET	346,067	(196,050)	(86,963)	-	63,054	346,067	(207,084)	(86,962)	-	52,021
Panama Distribution Group S.A. PDG	238,116	284,791	-	(28,401)	494,506	238,117	264,733	-	(33,120)	469,730
Central Hidroelectrica de Caldas S.A. E.S.P. CHEC	140,663	32,960	-	(20,677)	152,946	140,663	16,719	-	(12,843)	144,539
EPM Capital Mexico S.A. de C.V.	102,774	(37,257)	-	-	65,517	102,774	(46,334)	-	-	56,440
Patrimonio Autonomo Financiacion Social 1	69,414	67,325	-	-	136,740	84,414	49,788	-	-	134,202
Maxseguros EPM Ltd.	63,784	97,024	-	-	160,807	63,784	73,005	-	-	136,789
Aguas de Malambo S.A. E.S.P.	58,718	(26,904)	(1,641)	-	30,173	50,718	(25,529)	(1,641)	-	23,548
Centrales Electricas del Norte de Santander S.A. E.S.P. CENS	57,052	(21,927)	-	(2,418)	32,707	57,052	(23,103)	-	(3,881)	30,068
Aguas Regionales EPM S.A. E.S.P.	47,228	15,106	-	-	62,334	47,228	9,464	-	-	56,692
EMPRESAS PUBLICAS DE RIONEGRO SAS ESP	46,905	9,829	-	-	56,734	46,904	853	-	-	47,757
Empresas Varias de Medellin S.A. E.S.P.	32,967	93,179	-	-	126,146	32,967	83,525	-	-	116,492
Empresa de Energia del Quindio S.A. E.S.P. EDEQ	28,878	10,638	-	(4,401)	35,114	28,878	10,087	-	(6,170)	32,795
Gestion de Empresas Electricas S.A. GESA	25,782	14,766	-	(3,841)	36,706	25,782	14,763	-	(4,721)	35,824
Electrificadora de Santander S.A. E.S.P. ESSA	2,514	48	-	(238)	2,324	2,514	(177)	-	(216)	2,121
Empresa de Aguas del Oriente Antioqueno S.A. E.S.P.	1,564	1,022	-	-	2,586	1,564	695	-	-	2,259
Total	**6,430,064**	**1,320,511**	**(88,604)**	**(371,540)**	**7,290,431**	**6,434,610**	**763,135**	**(88,603)**	**(285,989)**	**6,823,153**

Figures stated in millions of Colombian pesos

1. The decrease of the cost of the investment in the autonomous equity of social financing is due to a refund of contributions made for $15,000

The breakdown of the equity method recognized in the Profit for the period and in the Other comprehensive income of the period is as follows:

The financial information of the company’s subsidiaries as of the date of the reporting period is as follows. All subsidiaries are accounted for using the equity method in the separate financial statements:

Subsidiary	2018			2017		
	Equity method for the period		Total	Equity method for the period		Total
	Profit for the period	Other comprehensive income		Profit for the period	Other comprehensive income	
EPM Inversiones S.A.	225,280	41,391	266,671	145,355	5,532	150,886
Aguas Nacionales EPM S.A. E.S.P.	(24,308)	-	(24,308)	(2,960)	(0)	(2,960)
EPM Chile S.A.	284,995	(11,855)	273,140	88,992	46,302	135,294
Distribucion Electrica Centroamericana DOS S.A. DECA II	176,749	6,495	183,244	214,359	59,831	274,190
Hidroecologica del Teribe S.A. HET	(816)	11,790	10,974	(24,738)	(684)	(25,421)
Panama Distribution Group S.A. PDG	45,905	8,312	54,217	41,018	16,237	57,254
Central Hidroelectrica de Caldas S.A. E.S.P. CHEC	29,057	27	29,084	19,388	(150)	19,238
EPM Capital Mexico S.A. de CV	1,648	6,430	8,079	(119)	2,203	2,084
Maxseguros EPM Ltd	10,711	13,308	24,019	9,747	(588)	9,160
Centrales Electricas del Norte de Santander S.A. E.S.P. CENS	5,283	(226)	5,057	2,214	(286)	1,927
Aguas de Malambo S.A. E.S.P.	(1,330)	-	(1,330)	(1,857)	-	(1,857)
Aguas Regionales EPM S.A. E.S.P.	5,642	-	5,642	5,288	(0)	5,288
Empresas Publicas de Rionegro S.A. E.S.P. - EP RIO	8,967	-	8,967	853	-	853
Empresas Varias de Medellin S.A. E.S.P.	11,588	(1,945)	9,643	10,876	(3,780)	7,097
Empresa de Energia del Quindio S.A. E.S.P. EDEQ	6,489	232	6,721	4,721	(115)	4,606
Gestion de Empresas Electricas S.A. GESA	4,334	297	4,631	4,677	-	4,677
Electrificadora de Santander S.A. E.S.P. ESSA	385	55	440	264	(9)	256
Empresa de Aguas del Oriente Antioqueno S.A. E.S.P.	326	1	327	110	-	110
Patrimonio Autonomo Financiacion Social	18,702	-	18,702	13,871	-	13,871
Total	**809,606**	**74,312**	**883,918**	**532,059**	**124,492**	**656,552**

Figures stated in millions of Colombian pesos

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

Figures stated in millions of Colombian pesos

2017	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Ordinary income	Profit for the period	Other comprehensive income	Total comprehensive income
						Continuing operations		
Empresa de energia del Quindio S.A. E.S.P. EDEQ	56,985	183,318	41,977	40,663	218,959	24,821	(596)	24,225
Central Hidroelectrica de Caldas S.A. E.S.P. CHEC	236,067	840,980	164,082	382,867	653,603	79,862	(614)	79,248
Electrificadora de Santander S.A. E.S.P. ESSA	256,755	1,277,097	282,117	669,520	1,034,530	95,754	(3,151)	92,603
Centrales Electricas del Norte de Santander S.A. E.S.P. CENS	185,507	839,297	222,315	594,082	615,993	17,653	(2,284)	15,369
Hidroecologica del Teribe S.A. HET	15,849	451,270	57,306	332,877	43,861	(25,670)	(379)	(26,048)
Gestion de Empresas Electricas S.A. GESA	13,216	-	130	-	5,885	4,678	-	4,678
Aguas Nacionales EPM S.A. E.S.P.	261,845	1,339,625	53,245	17,151	2,460	(491)	-	(491)
Aguas Regionales EPM S.A. E.S.P.	24,982	104,149	23,670	21,165	48,209	7,859	-	7,859
Empresa de Aguas del Oriente Antioqueno S.A. E.S.P.	1,065	3,372	162	240	1,693	196	-	196
Aguas de Malambo S.A. E.S.P.	13,128	22,350	3,723	5,548	11,195	(1,717)	-	(1,717)
Empresas Publicas de Rionegro S.A. E.S.P. - EP RIO	40,781	45,550	10,794	27,779	5,015	853	-	853
Empresas Varias de Medellin S.A. E.S.P.	175,917	129,672	96,700	148,111	212,061	16,750	(5,816)	10,934
EPM Inversiones S.A.	1,732	1,245,110	875	2,337	4	145,084	5,391	150,476
Maxseguros EPM Ltd	303,929	-	167,141	-	8,229	9,747	(588)	9,160
Panama Distribution Group S.A. PDG	499,842	1,730,440	1,023,433	619,404	1,875,827	82,425	15,987	98,412
Distribucion Electrica Centroamericana DOS S.A. DECA II	724,078	2,486,491	573,092	917,525	2,723,268	268,086	60,014	328,100
EPM Capital Mexico S.A. de CV	271,749	553,562	259,386	394,062	174,794	(890)	1,935	1,045
EPM Chile S.A.	274,832	3,796,453	224,742	3,051,762	535,137	90,110	45,096	135,206

Figures stated in millions of Colombian pesos

9.1 Changes in ownership in subsidiaries that did not result in loss of control

During 2018, there were changes in ownership of the following subsidiaries:

The percentage of ownership in Aguas de Malambo S.A. E.S.P. increased to 97.46%, by capitalization of EPM. This variation had an effect on the application of the equity method, reducing the investment by $44, recognized directly in equity.

During 2017, there were changes in ownership of the following subsidiaries:

The percentage of ownership in Aguas de Malambo S.A. E.S.P. increased to 96.86%, by EPM capitalization. This variation had an effect on the application of the equity method, reducing the investment by $104, recognized directly in equity.

The percentage of ownership in EPM Capital Mexico S.A. of C.V. increased to 39.36%, by capitalization of EPM. This variation had an effect on the application of the equity method, reducing the investment by $1,515, recognized directly in equity.

Note 10. Investment in associates

The breakdown of investment in associates of EPM at the date of the reporting period is the following:

Name of the associate	Location (country)	Main activity	Percentage of participation and voting rights		Date of establishment
			2018	2017	
Hidroelectrica Ituango S.A. E.S.P.	Colombia	Promotion, design, construction operation, maintenance and electric power sales at the national and international scale from the Ituango Hydroelectric Power Plant.	46.33%	46.33%	29/12/1997
Hidroelectrica del Rio Aures S.A. E.S.P.	Colombia	Generation and sale of electric power through a hydroelectric power plant located i n the municipalities of Abejorral and Sonson, in the Department of Antioquia.	32.99%	42.04%	14/05/1997
UNE EPM Telecomunicaciones S.A.	Colombia	Renders telecommunications and ITC utilities, information services and complementary activities.	50.00%	50.00%	29/06/2006
Inversiones Telco S.A.S.	Colombia	Invest in companies whose corporate purpose is the provision of telecommunications utilities, TIC, information services and complementary activities, as well as in companies that render services of business processes outsourcing.	50.00%	50.00%	5/11/2013

1 As of December 31, 2018, the percentage of EPM decreased due to capitalizations made by other shareholders.

The value of investments in associates at the cut-off date was:

Associate	2018				2017			
	Value of investment			Dividends	Value of investment			Dividends
	Cost	Impairment	Total		Cost	Impairment	Total	
Hidroelectrica Ituango S.A. E.S.P.	34,227	-	34,227	-	34,227	-	34,227	-
Hidroelectrica del Rio Aures S.A. E.S.P.	2,478	-	2,478	-	2,478	-	2,478	-
UNE EPM Telecomunicaciones S.A.	2,342,488	-	2,342,488	38,483	2,342,488	-	2,342,488	-
Inversiones Telco S.A.S.	55,224	-	55,224	3,442	55,224	-	55,224	-
Total invstment in associates	**2,434,417**	**-**	**2,434,417**	**41,924**	**2,434,417**	**-**	**2,434,417**	**-**

Figures stated in millions of Colombian pesos

Note 11. Investment in joint ventures

The breakdown of joint ventures of EPM at the cut-off date is as follows:

Name of the joint venture	Location (Country)	Main Activity	Percentage of participation and voting rights		Date of establishment
			2018	2017	
Parques del Rio S.A.S. [1]	Medellín	Construction, operation, management and sustainment of the Parques del Rio Medellin project, as well as acting as urban project manager.	33%	33%	26/12/2015

1 Joint venture constituted on November 26, 2015, in which the Municipality of Medellin, Interconexion Electrica S.A. E.S.P. (ISA), Massive Transport Company of Valle de Aburra Ltda. (Metro) and EPM. The Entity seeks to be the manager of the next urban developments in the city, the department and the country, taking advantage of synergies in the areas of infrastructure, mobility, environmental and social, among others.

The value of investments in joint ventures at the cut-off date was:

Name of the joint venture	2018		2017	
	Value of investment		Value of investment	
	Cost	Total	Cost	Total
Parques del Rio S.A.S.	99	99	99	99
Total investment in joint ventures	**99**	**99**	**99**	**99**

Figures stated in millions of Colombian pesos

Note 12. Trade and other receivables

The breakdwn of trade and other receivables at the date of the reporting period is as follows:

Trade and other receivables	2018	2017
Non-current		
Public utilities debtors	319.038	302.514
Impairment loss public utilities	(93.776)	(84.493)
Economic associates	1.652.922	1.688.594
Employee loans	89.353	80.779
Impairment loss employee loans	(11)	(0)
Other debtors receivable	46.166	19.086
Impairment loss other debtors receivable	(910)	(130)
Total non-current	**2.012.782**	**2.006.350**
Current		
Public utilities debtors	1.410.316	1.325.815
Impairment loss public utilities	(193.238)	(182.091)
Economic associates	120.601	45.195
Employee loans	29.519	27.583
Dividends and participations receivable	46.687	20.482
Impairment loss employee loans	(322)	(286)
Construction contracts	782	246
Other debtors receivable	273.170	329.753
Impairment loss other debtors receivable	(59.027)	(43.174)
Total current	**1.628.488**	**1.523.523**
Total	**3.641.270**	**3.529.873**

Figures stated in millions of Colombian pesos

The non-current portion shows an increase of $6,432, justified by the combined effect of the increase in the balance of receivables for the sale of assets associated with the sale of land to Pro-mobiliaria, the increase in debtor balances of public utilities and the decrease in the balance of loans to economic associates; the latter explained by the payment received by EPM Chile

The current portion increased by $104,965 is justified by the increase in the balances of debtors of public utilities, especially the distribution service of power, aqueduct and prepaid products.

Accounts receivable for $782, associated with construction contracts, correspond to the collections made to the Support fund for rural energization in interconnected areas (FAER, for its Spanish initials). This under a contract signed with the Colombian Ministry of Mines and Energy.

Accounts receivable from public utilities debtors do not generate interest and the term for collection depends on the type of use of the same. In residential use, the collection of invoices is projected to take place 10 days after the invoice is generated. Individual contracts with large customers or the energy sector contemplate deadlines agreed in particular negotiations. In the latter case, the period is generally 30 days.

48.71% of the total balance corresponds to loans to economic associates for $1,773,524: Hidrosur for $1,090,680 (2017: $906,848), Hidroecologica del Teribe for $406,120 (2017: $233,970), EPM Chile for $258,640 (2017: $187,075) and EPM Transmision Chile for $18,083 (2017: No debt).

Impairment of portfolio

The Company measures the value correction for expected losses during the lifespan of the asset using the simplified approach, which consists in taking the current value of credit loss arising from all possible default events at any time during the lifetime of the operation.

This alternative is taken given that the volume of clients handled by the Company is very high and the measurement and control of the risk by stages can lead to errors and to an underassessment of the impairment.

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

At the cut-off date, the ageing analysis of accounts receivable at the end of the reporting period that are impaired is:

	2018		2017	
	Gross recorded value	Lifetime expected credit losses value	Gross recorded value	Lifetime expected credit losses value
Public utilities debtors				
Not past due nor impaired	1,433,607	(106,629)	1,249,274	(91,396)
Less than 30 days	94,207	(7,074)	152,456	(2,452)
30-60 days	16,339	(2,242)	37,170	(1,734)
61-90 days	8,114	(2,497)	8,046	(2,069)
91-120 days	5,857	(2,597)	8,232	(1,857)
121-180 days	7,284	(4,578)	7,171	(3,122)
181-360 days	11,783	(10,555)	11,812	(10,651)
Greater than 360 days	152,164	(150,842)	154,168	(152,933)
Total public utilities debtors	**1,729,354**	**(287,014)**	**1,628,329**	**(266,214)**
Other debtors				
Not past due nor impaired	2,186,065	(4,688)	2,159,126	(4,412)
Less than 30 days	7,130	(1,266)	10,159	(1,913)
30-60 days	9,491	(3,633)	5,288	(1,744)
61-90 days	2,172	(588)	626	(200)
91-120 days	1,152	(483)	447	(190)
121-180 days	14,530	(13,880)	636	(460)
181-360 days	11,272	(8,576)	2,800	(2,679)
Greater than 360 days	27,390	(27,155)	32,635	(32,363)
Total other debtors	**2,259,201**	**(60,270)**	2,211,718	(43,960)
Total receivables	**3,988,555**	**(347,284)**	**3,840,047**	**(310,174)**

Figures stated in millions of Colombian pesos

Impairment of accounts receivable from public utilities exhibits an increase of $20,430 in relation to 2017, mainly explained by the recognized losses in the portfolio of customers linked to prepaid products, due to change from the traditional service to this alternative generates that the accumulated provision is adjusted to 100% of the exposed balance and is recognized in the age range Without Default

Impairment of the portfolio balances associated to other debtors also exhibited an increase equivalent to $16,680, mainly explained by the recognition of the expected loss in accounts receivable from: Comercial Energetica del Oriente and the Superintendence of Public Utilities.

The reconciliation of the expected credit loss of the portfolio is as follows:

Lifetime expected credit losses	2018	2017
Adjustment at the beginning of the period	(310.174)	(303.178)
Changes in impairment of receivables held at the beginning of the period	(25.757)	(16.527)
Financial assets not written-off during the period	2.677	2.899
New financial assets originated or purchased	(83.701)	(20.976)
write-offs	69.721	27.703
Other changes	(51)	(96)
Final balance	(347.284)	(310.174)

Figures stated in millions of Colombian pesos

Impairment showed an increase corresponding to the recognition of expected losses in portfolio balance associated with power distribution products, the prepaid products and the drinking water treatment service.

For the reconciliation the other movements of employee loans, rendering of services, sales of goods, accounts receivable of procurement services, among others are considered.

Portfolio reconciliation is as follows:

Portfolio balance	2018	2017
Initial balance of financial assets	3.840.047	3.630.390
New financial assets originated or purchased	11.790.763	10.480.677
Financial assets write-offs	(10.983.903)	(10.268.121)
Derecognition of financial assets	(2.677)	(2.899)
Other changes - Include change description -	(655.675)	-
Final balance	3.988.555	3.840.047

Figures stated in millions of Colombian pesos

The Company derecognizes, against the impairment of value recognized in an allowance account, the values of impaired financial assets when it becomes apparent that some obligations can not be recovered through executive action, coercive collection or ordinary means. These actions must be supported with additional files where the requests for writing off is documented.

The grounds for requesting the approval of the portfolio derecognition in EPM are the following:

- Registered accounts receivable do not represent certain rights, goods or obligations for EPM.
- The rights or obligations lack adequate documentation and support to allow the undertaking of relevant procedures for payment collection.
- It is not possible to collect the right or obligation, by coercive or judicial collection, once the pre-legal collection stage has been exhausted.
- When it is impossible to identify and individualize the natural or legal person to collect the portfolio.
- When once assessed and established the cost-benefit relationship, results more expensive advancing the collection process than the amount of the obligation.
- When prescribing the asset title and executive title or upon expiration of the right.
- When having advanced the executive process, there are no assets to make effective the settlement of the obligation.
- When having advanced the liquidation process for natural or legal person in judicial terms, and the assets received for dation in payment do not cover the entire debt; in this case the unpaid balance is derecognized.

Bodies responsible for derecognizing

The writing-off of impaired portfolio EPM is approved by the Portfolio Writing-Off Committee, which is chaired by the Manager of Accounting and Financial Services, the assistance of the Director of Financial Transactions and the head of the Credit and Management Portfolio Unit. The Committee meets periodically or when a particular situation warrants it.

Note 13. Other financial assets

The breakdown of the other financial assets at the closing of the period is as follows:

Other financial assets	2018	2017
Non-current		
Derivatives designated as hedging instruments under hedge accounting		
Swap Agreements	173,989	14,150
Total derivatives designated as hedging instruments under hedge accounting	**173,989**	**14,150**
Financial assets measured at fair value through changes in profit for the period		
variable-yield securities	64,547	55,314
Fiduciary rights	402,067	353,669
Total financial assets measured at fair value through changes in profit for the period	**466,614**	**408,983**
Financial assets measured at fair value through changes in other comprehensive income		
Equity instruments	1,581,092	1,605,902
Total financial assets measured at fair value through changes in other comprehensive income	**1,581,092**	**1,605,902**
Total other non-current financial assets	**2,221,695**	**2,029,035**
Current		
Derivatives designated as hedging instruments under hedge accounting		
Swap Agreements	12,241	-
futures contracts	-	96
Total derivatives designated as hedging instruments under hedge accounting	**12,241**	**96**
Financial assets measured at fair value through changes in profit for the period		
Fixed income securities	972,788	57,494
Pledged investments	5,647	5,434
Total financial assets measured at fair value through changes in profit for the period	**978,435**	**62,928**
Total other current financial assets	**990,676**	**63,024**
Total other assets	**3,212,371**	**2,092,059**

Figures stated in millions of Colombian pesos

Conventional purchases and sales of financial assets are recorded applying the trading date.

13.1 Financial assets designated at fair value through Other comprehensive income

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

Equity Investment	2018	2017
Interconexion Electrica S.A. E.S.P. [1]	1,574,226	1,598,999
Other investments	6,866	6,903
Total	1,581,092	1,605,902
Dividends recognized during the period related to investments that are recognized at the end of the period[2]	102,968	44,157
Dividends recognized during the period	102,968	44,157

Figures stated in millions of Colombian pesos

[1] As of December 31, 2018 the market price of Interconexion Electrica S.A. E.S.P. closed at $13,980 (2017: $14,200) Colombian pesos.

[2] In December 2018 UNE EPM Telecomunicaciones S.A. decreed dividends for $38,483 payable on January 29, 2019.

Equity investment stated in the previous table are not maintained for negotiating purposes, instead, they are maintained for strategic purposes in the medium and long term. The management of the company considers that classification for these strategic investments provides more reliable financial information, which reflects the changes in their fair value immediately in the result of the period.

Note 14. Leases

14.1. Financial lease as lessee

As of the cut-off date, the recorded value for property, plant and equipment under financial leasing is as follows:

2018	Land and buildings	Communication and computer equipment	Machinery and equipment	Plants, pipelines and tunnels	Total assets
Cost	200,084	2,379	2,063	1,610,257	1,814,783
Accrued depreciation	(73,938)	(1,557)	(1,143)	-	(76,638)
Total	**126,146**	**822**	**920**	**1,610,257**	**1,738,145**

Figures stated in millions of Colombian pesos

2017	Land and buildings	Communication and computer equipment	Machinery and equipment	Total assets
Cost	200,057	2,380	2,063	204,500
Accrued depreciation	(69,600)	(1,465)	(1,077)	(72,142)
Deterioro de valor	-	-	-	-
Total	**130,457**	**915**	**986**	**132,358**

Figures stated in millions of Colombian pesos

The most relevant financial lease agreements are:

– Lease of the property called " Edificio Empresas Publicas de Medellin". The agreement has a term of 50 years counted from December 2001, automatically renewable for an equal term if neither party expresses otherwise. The fee is $1,500 monthly, which will be readjusted each year by the Consumer Price Index (IPC, for its Spanish initials).

– The implicit-lease in the interconnection contract signed with the subsidiary Aguas Nacionales for the Aguas Claras Wastewater Treatment Plant. The agreement has an estimated duration of 40 years as of December 2018, with an estimated monthly fee of $9,414 which integrates a component that is readjusted by the Consumer Price Index (IPC) and another component that grows to a 15% annual rate.

At the cut-off date, the minimum future payments and the current value of the minimum financial lease payments are distributed as follows:

Financial lease	2018		2017	
	Minimum payments	Present value of the minimum lease payments	Minimum payments	Present value of the minimum lease payments
One year	131,284	124,558	18,000	17,181
More than one year and up to five years	533,935	398,745	72,000	55,613
More than five years	15,521,707	1,282,276	522,000	123,514
Total leases	**16,186,926**	**1,805,579**	**612,000**	**196,308**
Minus - value of unearned interest	(14,381,347)	-	(415,692)	-
Present value of the minimum lease payments	**1,805,579**	**1,805,579**	**196,308**	**196,308**

Figures stated in millions of Colombian pesos

The total of future minimum non-cancellable sublease payments of assets acquired in finance leases that the company expects to receive at the cut-off date is $2,396 (2017: $2,022). The expense for contingent leases of financial leases recognized in Profit for the period is $20,782 (2017: $18,692).

14.2 Operating lease as lessor

The most significant operating lease agreements are for the electrical infrastructure for the installation of networks by telecommunications operators. The contingent installments of these leases are determined based on the updating of the Producer Price Index (IPP, for its Spanish initials) and IPC variables as well as the updating of the lease payments and these contracts can be renewed.

The value of non-cancelable payments for operating leases is as follows:

Leases	2018	2017
	Non-cancelable operating leases	Non-cancelable operating leases
One year	47,656	41,452
More than one year and up to five years	13,610	8,598
More than five years	15,208	14,069
Total leases	**76,474**	**64,119**

Figures stated in millions of Colombian pesos

Revenue from contingent leases recognized in Profit for the period is $23,576 (2017: $24,003).

The company as a lessor does not have contracts adopting the legal figure of a lease and that in essence do not constitute it.

14.3 Operating lease as lessee

The most significant operating lease agreements are for premises for customer service offices in the different municipalities of Antioquia and the Metropolitan Area, spaces for installations and operation of antennas in meteorological stations, office equipment and accessories, user printing infrastructure, equipment for virtual meetings, among others, which have no restrictions. The contingent installments of these leases are determined based on the CPI as well as the updating of the lease payments and these contracts can be renewed.

As of the cut-off date, minimum future payments for operating leases, which cannot be canceled, are distributed as follows:

Leases	2018	2017
	Non-cancelable operating leases	Non-cancelable operating leases
One year	6,642	13,748
More than one year and up to five years	11,501	16,943
Total leases	**18,143**	**30,691**

Figures stated in millions of Colombian pesos

The total of future minimum non-cancellable sublease payments of assets acquired under operating leases is $25 (2017: $18). The expense for contingent leases recognized in the result of the period is $164, (2017: $133).

Operating lease payments recognized as expenses for the period are $10,662 (2017: $10,716).

The company as a lessee does not have contracts adopting the legal figure of a lease and that in essence do not constitute it.

Note 15. Warranties

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

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

Note 16. Other assets

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

Concept	2018	2017
Non-current		
Advance payments[1]	14,892	25,820
Employee benefits	42,414	39,545
Advance paymets to suppliers[2]	19,868	9,522
Deferred loss from leaseback	22,283	22,958
Goods received as dation in payment	1,285	1,285
Total other non-current assets	**100,742**	**99,130**
Current		
Advance payments[1]	59,569	55,408
Advance payments to suppliers[2]	43,422	45,160
Other recoverables due to other taxes	1,400	-
Other advance payments or recoverables due to taxes and contributions	92	-
Total other current assets	**104,483**	**100,568**
Total other assets	**205,225**	**199,698**

Figures stated in millions of Colombian pesos

[1]The non-current portion includes insurance for $5,381 (2017: $15,369) comprised of the full-risk-policies of the Ituango Hydroelectric Project for $5,349 (2017: $15,151) and civil non-contractual liability for $32 (2017: $228),

both valid through March 15, 2020, which are being amortized; the premium in legal stability contracts for $8,249 (2017: $9,141) and leases for $1,262 (2017: $1,310).

The current portion includes insurance for $52,823 (2017: $46,982), comprised mainly of the full-risk-policies for $29,740 (2017: $27,405), of which $9,150 (2017: $9,459) are from the Ituango Hydroelectric Project, and other insurances for $23,083 (2017 : $19,577) of which $12,985 (2017: $13,414) correspond to climate change insurance; goods and services for $2,941 (2017: $3,076) and leases and maintenance for $3,804 (2017: $5,349).

[2]Corresponds to resources given for management, mainly of the agreements with: Urban Development Company (EDU, for its Spanish initials) for $18,407 (2017: $6,893) and Corporacion Parque Arvi for $1,544 (2017: $1,152).

Note 17. Inventories

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

Inventories	2018	2017
Materials for the rendering of services [1]	113,983	113,740
Goods in stock [2]	2,956	2,149
Goods in transit	395	595
Total inventories at cost or at net realizable value, whichever is less	**117,334**	**116,484**

Figures stated in millions of Colombian pesos

[1] Includes materials for the rendering of services held by third parties, which are those delivered to contractors that perform activities related to the rendering of services.

[2] Includes goods in stock that do not require transformation, such as power, gas and water meters, and supply goods, as well as those held by third parties.

Inventories were recognized for $92,222 (2017: $100,512) as the cost of the merchandise sold or cost to provide the service during the period. The inventory decline recognized as an expense during the period amounted to $3 (2017: $114).

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

The company has not committed inventories in warranty for liabilities.

Note 18. Cash and cash equivalents

The composition of cash and cash equivalents at the end of the period is as follows:

Cash and cash equivalents	2018	2017
Cash on hand and in banks	537,618	106,520
Other cash equivalents	298,161	128,006
Total cash and cash equivalents reported in the statement of financial position	**835,779**	**234,526**
Cash and cash equivalents reported in the statement of cash flows	**835,779**	**234,526**
Restricted cash	**79,823**	**116,250**

Figures stated in millions of Colombian pesos

Treasury securities expire within a period equal to or less 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 as detailed below. As of December 31, 2018, the fair value of restricted cash equivalents is $79,823 (2017: $116,250).

Fund or convention	Intent	2018	2017
Fondo de Vivienda Sinpro	Contribute to the acquisition and improvement of housing, to the beneficiaries of the convention subscribed between EPM and the unions.	17,936	17,525
Fondo de Vivienda Sintraemdes	Contribute to the acquisition and improvement of housing, to the beneficiaries of the convention subscribed between EPM and the unions.	17,002	20,410
Convenio Area Metropolitana del Valle de Aburra	Convention suscribed between the metropolitan area of the valley of aburra and Empresas Publicas de Medellin E.S.P., Act of execution No. 4 of the framework agreement No. CT 2015-000783 of 2015	8,006	-
Ministerio de Minas y Energia - Fondo Especial Cuota Fomento	Convention for construction co-financing: infrastructure for the distribution and connection to lower income users in the municipalities of Amaga, Santafe de Antioquia, Sopetran, San Jeronimo and Ciudad Bolivar. Compressed Natural Gas and connection to users of Don Matias, Entrerrios, San Pedro, Santa Rosa and Yarumal. Convention No. 106: construction of the connection infrastructure for users of the Aburra Valley, La Ceja, La Union and El Retiro. Convention 179: includes the municipality of Sonson.	5,443	5,245
Banco Bogota INCODER	Aunar esfuerzos y recursos entre EPM y el INCODER para llevar a cabo el proyecto "estudio de factibilidad para la construccion del distrito de riego y drenaje en parte de la region del uraba antioqueno" con alcance multiproposito.	4,791	9,989
Departamento de Antioquia, Convenio construccion via el Aro - Municipio de Ituango	Managing the resources contributed by the Government of Antioquia to co-finance the construction of the El Aro road - Connection via Puerto Valdivia site of the dam - Ituango municipality.	2,605	7
Credito BID 2120	Disbursement for the construction of the Aguas Claras plant for the treatment of wastewater (PTAR Bello).	2,289	166
Fondo de Educacion Sinpro	Promote the welfare of employees to meet the payment needs for fees, textbooks and equipment for advancing their own studies or the studies of family members.	2,258	2,140
Fondo de Educacion Sintraemdes	Promote the welfare of employees to meet the payment needs for fees, textbooks and equipment for advancing their own studies or the studies of family members.	2,107	2,010

Figures stated in millions of Colombian pesos

Fund or convention	Intent	2018	2017
Municipio de Guatape y Cornare	Join efforts for the improvement of technical, economic and social conditions for the execution of the phase 1 of the project to improve the environmental and landscape infrastructure of the Malecon San Juan del Puerto, for the development of sustainable tourism in the Municipality of Guatape.	1,994	2,334
Fondo Entidad Adaptada de Salud y Fondo Fosyga	Mechanism for the control and monitoring of contributions collected by Contributive Regime of Social Security and Healthcare.	1,857	1,610
Corporacion Autonoma de Guatape	Join efforts for the improvement of technical, economic and social conditions for the execution of the phase 1 of the project to improve the environmental and landscape infrastructure of the Malecon San Juan del Puerto, for the development of sustainable tourism in the Municipality of Guatape.	1,742	2,111
Convenio puntos SOMOS	Provide services for the operation of the key capacities associated with the item Points of the Loyalty Program on a large scale for the EPM Group.	1,651	1,522
Transacciones internacionales de energia	Guarantee corresponding to the "compensation" that must be made between the invoice of stock exchange transactions and the advance payments, looking for real payment to be made to XM .	1,636	10,721
Fondo de Calamidad Sintraemdes	Promote the welfare of employees to meet the payment for urgent and unforeseen needs or those of their close family group.	1,613	1,551
Convenios tasas de alumbrado publico y de aseo con los municipios	Convention to manage the resources of territorial entities for the payment to municipalities with agreements of collection of the rates of public lighting and cleaning, these are resources exempt of the 4x1000 tax in Colombia.	1,571	3,308
Fondo de Calamidad Sinpro	Promote the welfare of employees to meet the payment for urgent and unforeseen needs or those of their close family group.	1,310	1,293
CONVENIO INTERADMINISTRATIVO CT -2017-001388 (460007009)	Convention for the construction of 7 indigenous schools in 5 municipalities.	1,057	-

Figures stated in millions of Colombian pesos

Fund or convention	Intent	2018	2017
Programa Aldeas	Usage of the wood that completes its maturation cycle in the forests planted by EPM around its dam reservoirs, to build social housing in the municipalities of Antioquia outside the Valley of Aburra and deliver them to low-income families, preferably in a displacement situation, be it forced or voluntary.	732	1,165
CONTRATO INTERADMINISTRATIVO Numero Pc-2017-001532 De 2017,	Interventory construction of connections for aqueduct and sewerage networks in the neighborhoods Pepe Sierra I, Barrios de Jesus, El Progreso and La Canada del nino:	494	-
Fondo de Reparacion de motos	Promote the welware of official workers who work in the regional market and use motorcycles of their property for the performance of their work.	406	381
Municipio de Medellin - Aguas	Comprehensive management of water for human consumption of the inhabitants of the municipality of Medellin	382	879
Ministerio de Minas y Energia	Contributions from the Ministry of Mines and Energy in accordance with the provisions of contract FAER GGC 430 of 2015 for rural electrification works in the Municipality of Ituango.	191	643
Convenio construccion de infraestructura en Madera para Emvarias	Resource management for the construction of infrastructure in Madera for Emvarias in the La Pradera sanitary landfill.	124	-
Municipio de Caldas	Manage the resources allocated by the municipality of Caldas for the development of the project "Construction, replacement and modernization of aqueduct and sewerage networks and their complementary works, in the urban area of the municipality of Caldas".	116	168
Aporte Municipios de Pueblorrico y Ciudad Bolivar	Convention for the construction of 7 indigenous schools.	90	-
Distrito Termico	Agreement with the Ministry of Environment and Sustainable Development for the execution of the activities of the La Alpujarra Thermal District.	71	167

Figures stated in millions of Colombian pesos

Fund or convention	Intent	2018	2017
Municipio de Barbosa - Subsidios	Agreement to partially subsidize the connection of users in strata 1 and 2 in the municipality of Barbosa.	62	59
Espiritu Santo	EPM - Settlement of the Espiritu Santo project	60	58
Depositos Ley 820	Guarantee required by the leesor to the lessse, for the payment of publicutilities, according to Article 15 of Law 820 of 2003 and regulatory decree 3130 of 2003.	59	53
Municipio de Medellin - Terrenos	Acquisition of properties identified and characterized within the zones of protection of hydrographic basins supplying aqueduct systems in the municipality of Medellin.	58	56
Cuenca Verde	Manage the resources allocated for the fulfillment of the objectives of the Corporacion Cuenca Verde.	40	13
Convenio Marco Municipio Medellin No. 4600049285	Construction by EPM of walkways and other road elements in the downtown of Medellin, taking advantage of the Centro Parrilla project, that is, the renovation of aqueduct and sewerage networks.	39	37
Bogota Galeria Bolivar	Adjust the Carrera 51 (Bolivar road) between the Calle 44 (San Juan avenue) and 57 (La Paz street) and transfom this road segment into what is called La Galeria Bolivar.	23	7,102
Municipio de Medellin - Moravia	Construction, repair work and replacement of aqueduct and sewage networks and paving in the municipality of Medellin of the roads affected by these works in the Moravia neighborhood.	3	3
IDEA convenio 4600003912	Inter-administrative agreement to join efforts for the design and construction of electricity generation and distribution systems in rural areas in the department of Antioquia.	2	2
Bogota Convenio parques del rio	Transfer of public utilities networks for the development of the project called Parques del Rio Medellin.	1	1
IDEA Convenio 4600003283	Join efforts for the construction of residential gas connections in the different subregions of the department of Antioquia under the framework program "Gas without Borders".	1	22,373
Subsidios Goberrnacion 2016	Manage resources to subsidize the connections of lower income users in the department of Antioquia.	-	526
Convenio Interadministrativo Plaza del Tomatero en el Municipio del Penol	Join efforts to improve the technical, economic, environmental and social conditions to boost development and counteract the effect generated, for the municipality of Penol, of the reduction levels of the Penol-Guatape dam reservoir.	-	369
Fondo multilateral del protocolo de Montreal	Collaboration afgreement with the Ministry of Environment and Sustainable Development for the development of activities within the framework of the implementation in Colombia of the Montreal Protocol.	-	248
Convenio Municipio de Itagui Colector Ajizal	Manage the resources allocated by the Municipality of Itagui for the construction of the stabilization works for the channel of the creek the sesteadero for the Ajizal collector.	-	5
Total restricted resources		**79,823**	**116,250**

Figures stated in millions of Colombian pesos

Note 19. Equity

19.1 Capital

The company does not have its capital divided into shares and did not have increases or decreases in capital in the reported period.

19.2 Reserves

Of the accounts that make up equity, the reserves at the cut-off date were constituted by:

Reserves	2018	2017
Legal reserves		
Initial balance	2,370,045	2,505,608
Release	(990,610)	(135,563)
Final balance of legal reserves	**1,379,435**	**2,370,045**
Occasional reserves		
Initial balance	574,008	574,008
Final balance of occasional reserves	**574,008**	**574,008**
Other reserves		
Initial balance	7,591	7,591
Final balance of other reserves	**7,591**	**7,591**
Total reserves	**1,961,034**	**2,951,644**

Figures stated in millions of Colombian pesos

The nature and purpose of the company's equity reserve are described below:

Legal reserve

The company has constituted the legal reserves, in compliance with the tax provisions of Colombia that were contained in Articles 130 of the Tax Code, which was repealed by Law 1819 of 2016 (reserve of 70% for the excess of tax depreciation over the accountable) and Decree 2336 of 1995 (for revenue incorporated to profits in the application of the equity method applied under local regulation).

Occasional reserves

In compliance with article 211 of the Colombian Tax Code, the company has gathered the required reserves in order to enjoy the special tax treatment and obtain cut in the income and complementary taxes.

Other reserves

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

[1]The Board of Directors, in its sessions of March 20, 2018 and March 14, 2017, approved:

- The release of reserves for $990,610 (2017: $135,563) gathered in previous periods by authorization of the Board of Directors.

19.3 Retained profit

The movement of retained profit during the period was as follows:

Retained profit	2018	2017
Initial balance	15,569,351	14,766,986
movement of reserves	990,610	135,563
Surpluses or dividends decreed	(1,203,504)	(1,609,136)
Equity method for changes in equity	(24,111)	14,621
Other movement for the period	-	73,128
Total cumulative profit	**15,332,346**	**13,381,162**
Net profit for the period	**2,344,822**	**2,188,189**
Total retained profit	**17,677,168**	**15,569,351**

Figures stated in millions of Colombian pesos

The surplus paid during the year was $1,503,504 (2017: $1,309,136), $656,457 (2017: $550,438) ordinary and $547,047 (2017: $458,698) extraordinary and the payment for $300,000 (2017: $300,000) for the sale of ISAGEN.

Note 20. Accumulated other comprehensive income

The breakdown of each component of the other comprehensive income for the separate statement of financial position and the corresponding tax effect is as follows:

Accumulated other comprehensive income	2018			2017		
	Gross	Tax effect	Net	Gross	Tax effect	Net
Reclassification of property, plant and equipment and other assets to investment property	13,439	(1,360)	12,079	13,439	(1,360)	12,079
new measurements of defined benefit plans	(11,995)	7,027	(4,968)	(12,367)	5,010	(7,357)
Equity investments measured at fair value through equity	2,280,287	(127,822)	2,152,465	2,305,097	(131,202)	2,173,895
participation in other comprehensive income of subsidiaries	826,024	5,169	831,193	750,761	6,215	756,976
cash flow hedges	(26,103)	(47,553)	(73,656)	(28,880)	20,211	(8,669)
Total	**3,081,652**	**(164,539)**	**2,917,113**	**3,028,050**	**(101,126)**	**2,926,924**

Figures stated in millions of Colombian pesos

During the year 2018, net gains from changes in the fair value of hedging instruments were reclassified to the results of the period for $168,298.

Below, a reconciliation of the initial and final balances to the cut-off date is presented for each component of comprehensive income:

20.1 Component: Reclassification of property, plant and equipment to investment property

The component of Reclassification property, plant and equipment to investment properties of Other comprehensive income corresponds to transfers from property, plant and equipment to investment property, which are measured at fair value. Changes in fair value do not reclassify to Profit for the period.

Reclassification of property, plant and equipment to investment property	2018	2017
Initial balance	12,079	12,079
Total	**12,079**	**12,079**

Figures stated in millions of Colombian pesos

20.2 Component: New measurements of defined benefit plans

The component of new measures of defined benefit plans represents the accumulated value of actuarial profits or losses, the return on plan assets and changes in the effect of the asset ceiling, excluding the values included in the net interest on the liability (asset) of net defined benefits. The net value of the new measurements is transferred to retained profit and does not reclassify to the results of the period.

Component: new measurements of defined benefit plans	2018	2017
Initial balance	(7,357)	2,736
Profit for the period due to new measurements of defined benefit plans	372	(18,735)
Associated income tax (or equivalent)	2,017	8,642
Total	**(4,968)**	**(7,357)**

Figures stated in millions of Colombian pesos

20.3 Component: Equity investments measured at fair value through equity

The component of other comprehensive income from equity investments measured at fair value through equity represents the accumulated value of the profits or losses from the assessment at fair value less the values transferred to retained profit when these investments have been sold. Changes in fair value do not reclassify to the result of the period.

Equity investments measured at fair value through equity	2018	2017
Initial balance	2,173,895	1,742,477
Net earnings due to changes in the fair value of investment property	(24,810)	475,220
Associated income tax (or equivalent)	3,380	(43,802)
Total	**2,152,465**	**2,173,895**

Figures stated in millions of Colombian pesos

20.4 Component: Participation in other comprehensive income of subsidiaries

The component of participation in other comprehensive income of subsidiaries represents the accumulated value of the application of the equity method to the profits and losses of other comprehensive income of the subsidiaries. The accumulated value of the profits or losses will be reclassified to the results of the period or to the accumulated profits, depending on the items that originated the equity method, when once these investments are sold.

Participation in other comprehensive income of subsidiaries	2018	2017
Initial balance	756,976	632,908
New measurements of defined benefit plans	(2,215)	(10,007)
Equity investments measured at fair value through equity	(38,347)	124,381
Hedging operations	137	(100)
Profit due to conversion of business abroad	115,502	10,319
Associated income tax (or equivalent)	(765)	(101)
Total other comprehensive income for the period	**74,312**	**124,492**
Cumulative profit (loss) transferred to retained profit/loss for the period -New measurements of defined benefit plans	133	644
Profit transferred to cumulative income for the period -Equity investments measured at fair value through equity	29	(12)
Cumulative loss transferred to cumulative income for the period -Profit due to conversion of business abroad	23	(1,506)
Associated income tax (or equivalent) - Cumulative profit (loss) transferred to cumulative income/loss for the period	(280)	450
Total cumulative other comprehensive income	**(95)**	**(424)**
Total	**831,193**	**756,976**

Figures stated in millions of Colombian pesos

20.5 Component: Cash flow hedges

The component of other comprehensive cash flow hedges represents the accumulated value of the effective portion of the profits or losses that arise from changes in the fair value of hedged items in a cash flow hedge. The accumulated value of the profits or losses will reclassify to the results of the period only when the covered transaction affects the result of the period or the highly probable transaction is not expected to occur, nor to be included, as part of its recorded value, in a non-financial hedged item.

Cash flow hedges	2018	2017
Initial balance	(8,669)	(11,904)
Losses due to changes in the fair value of hedging instruments	171,076	(93,080)
Associated income tax (or equivalent)	(77,717)	8,377
Cumulative losses due to changes in the fair value of hedging instruments reclassified as profit/loss for the period	(168,299)	87,938
Associated income tax (or equivalent)	9,953	-
Total	**(73,656)**	**(8,669)**

Figures stated in millions of Colombian pesos

Note 21. Credits and loans

The following is the breakdown of the recorded value of credits and loans:

Credits and loans	2018	2017
Non-current		
Commercial banks loans	844.579	781.470
Multilateral banks loans	3.249.965	1.093.597
Development banks loans	1.778.009	802.370
Other bonds and securities issued	6.177.480	7.785.050
Total other credits and loans non-current	**12.050.033**	**10.462.487**
Current		
Commercial banks loans	559.344	331.686
Multilateral banks loans	615.310	574.672
Development banks loans	175.734	117.552
Bonds and securities issued	374.717	469.370
Other bonds and securities issued	2.029.387	455.148
Loans to economic associates	40.088	36.415
Total other credits and loans current	**3.794.580**	**1.984.843**
Total other credits and loans	**15.844.613**	**12.447.330**

Figures stated in millions of Colombian pesos

During 2018, the following disbursements of long-term credits were made:

Long-term credit with EDC (Export Development Canada) with the following conditions: LIBOR rate + 1.40% and a term of 6 years:

- January USD 110 million
- April USD 100 million.
- May USD 90 million.

Long-term credit with CAF (Development Bank of Latin America) with the following conditions: LIBOR rate + 3.1% and a term of 18 years:

- June USD 100 million.
- August USD 100 million.

Long-term credit with the National Bank for Economic and Social Development - BNDES with the following conditions: fixed rate: 4.887% and for a term of 23.5 years:

- February USD 11 million.
- March USD 4 million.

Long-term credit with IDB-2120 with the following conditions: LIBOR rate and a term of 25 years:

- May USD 23 million.
- August USD 9 million.
- September USD 48 million.

Long-term credit with IDB INVEST, a disbursement was made in December for USD 450 million, assigned to tranches A and B, with financial conditions: LIBOR rate + 2.75%, a term of 12 years, LIBOR rate + 2.1125%, a term of 8 years.

During 2018, the following short-term credits were obtained:

- January, with Bancolombia for 170,000, with an IBR rate of + 1.59% and Banco Popular for $100,000, with an IBR rate of + 1.80%. Both with a term of 1 year.
- February, with Bancolombia for $130,000, with an IBR rate of + 1.59% and a term of 1 year.
- November, with EMVARIAS for $40,000, with an IBR rate of + 2.1% and a term of 1 year.
- December, with COLPATRIA for $100,000 with an IBR rate of + 1.78% and for a term of 1 year.
- December, with BBVA for $35,000, with an IBR rate of 1.79% and a term of 1 year.

The breakdown of credits and loans of the entity is as follows:

Institution or loan	Original currency	Initial date	Term	Nominal interest rate	2018				2017			
					IRR	Nominal value	Amortized cost value	Total amount	IRR	Nominal value	Amortized cost value	Total amount
2218 BID 800- RELIQUIDADO	USD	14/07/1994	25	LIBOR + 1.43%	2.43%	26,312	827	27,139	2.29%	48,320	1,672	49,992
1665 BID-1664-1	COP	9/12/2005	20	7.8%	9.24%	332,231	4,367	336,598	9.46%	379,692	3,935	383,627
2179 BANK OF TOKYO-MITSUB	USD	29/09/2008	15	LIBOR + 0.95%	2.07%	270,782	14,372	285,154	1.17%	298,376	16,760	315,136
1256 BONOS TASA FIJA	COP	20/11/2008	10	13.8%	0.00%	-	-	-	13.79%	58,000	853	58,853
1254 BONOS IPC	COP	20/11/2008	10	IPC + 5.37%	0.00%	-	-	-	10.49%	174,410	3,563	177,973
1257 BONOS IPC II TRAMO	COP	22/01/2009	10	IPC + 5.8%	9.16%	138,600	2,366	140,966	10.25%	138,600	2,447	141,047
1259 BONOS TF II TRAMO	COP	22/01/2009	10	10.8%	10.79%	74,700	7,558	82,258	10.79%	74,700	7,564	82,264
1220 BID 2120	USD	25/03/2009	25	LIBOR + 0%	3.62%	374,249	(1,614)	372,635	3.33%	111,903	(55)	111,848
2021 BID 2120-1	COP	25/03/2009	25	6.272%	7.25%	190,295	(2,591)	187,704	7.05%	190,295	(1,892)	188,403
2022 BID 2120-2	COP	25/03/2009	25	7.5%	8.06%	388,096	1,624	389,720	8.04%	413,134	4,607	417,741
2023 BID 2120-3	COP	25/03/2009	25	6.265%	6.56%	193,216	2,134	195,350	6.56%	205,681	826	206,507
1261 BONOS IPC III TRAMO	COP	21/04/2009	15	IPC + 6.24%	9.63%	198,400	4,260	202,660	10.55%	198,400	4,374	202,774
1262 BONOS INTERNACIONALE	USD	29/07/2009	10	7.625%	8.25%	1,624,875	49,306	1,674,181	8.17%	1,492,000	39,894	1,531,894
1264 BONOS IPC IV TRAM 2	COP	14/12/2010	12	IPC + 4.2%	7.58%	119,900	515	120,415	8.74%	119,900	113	120,013
1265 BONOS IPC IV TRAM 3	COP	14/12/2010	20	IPC + 4.94%	8.40%	267,400	548	267,948	9.37%	267,400	(57)	267,343
1266 GLOBAL 2021 COP	COP	31/01/2011	10	8.375%	8.70%	1,250,000	88,210	1,338,210	8.69%	1,250,000	85,144	1,335,144
1013 AFD	USD	10/08/2012	14	4.311%	4.47%	824,287	13,588	837,875	4.47%	840,978	13,693	854,671
1267 BONOS IPC V TRAMO I	COP	4/12/2013	5	IPC + 3.82%	0.00%	-	-	-	8.55%	41,880	83	41,963
1268 BONOS IPC V TRAMO II	COP	4/12/2013	10	IPC + 4.52%	8.17%	96,210	(311)	95,899	9.10%	96,210	(529)	95,681
1269 BONOS IPC V TRAM III	COP	4/12/2013	20	IPC + 5.03%	8.62%	229,190	(1,541)	227,649	9.54%	229,190	(1,819)	227,371
5765 AGRARIO	COP	20/05/2014	16	IPC + 4.7%	8.38%	116,000	(1,234)	114,766	9.22%	116,000	(1,098)	114,902
1270 BONOS IPC VI TRAMO I	COP	29/07/2014	6	IPC + 3.57%	7.36%	125,000	740	125,740	8.31%	125,000	322	125,322
1271 BONOS IPC VI TRAMO II	COP	29/07/2014	12	IPC + 4.17%	7.78%	125,000	166	125,166	8.70%	125,000	42	125,042
1272 BONOS IPC VI TRAM III	COP	29/07/2014	20	IPC + 4.5%	8.08%	250,000	(100)	249,900	8.99%	250,000	(191)	249,809
1273 GLOBAL 2024 COP	COP	3/09/2014	10	7.625%	7.74%	965,745	17,243	982,988	7.73%	965,745	16,659	982,404
1274 BONOS IPC V TRAM IV	COP	20/03/2015	10	IPC + 3.65%	8.01%	130,000	362	130,362	8.94%	130,000	192	130,192
1275 BONOS IPC VII TRAMO I	COP	20/03/2015	5	IPC + 2.72%	6.13%	120,000	167	120,167	7.11%	120,000	(102)	119,898
1276 BONOS IPC VII TRAMO II	COP	20/03/2015	12	IPC + 3.92%	7.34%	120,000	146	120,146	8.25%	120,000	(67)	119,933
1277 BONOS IPC VII TRAM III	COP	20/03/2015	20	IPC + 4.43%	7.83%	260,000	949	260,949	8.86%	260,000	367	260,367
2015 CLUB DEAL BANK OF TOKYO	USD	29/12/2015	5	LIBOR + 1.4%	4.94%	763,691	6,548	770,239	4.00%	701,240	(3,567)	697,673
2016 BNDES	USD	26/04/2016	24	4.887%	5.22%	132,517	(4,144)	128,373	5.22%	76,971	(3,092)	73,879
1014 EDC	USD	4/08/2016	6	LIBOR + 1.4%	4.65%	974,925	10,059	984,984	0.00%	-	-	-
1015 CAF	USD	3/10/2016	18	LIBOR + 3.1%	6.28%	649,950	5,285	655,235	0.00%	-	-	-
EMVARIAS	COP	6/07/2017	1	DTF + 2.44%	0.00%	-	-	-	8.20%	35,000	1,415	36,415
1278 GLOBAL 2027 COP	COP	31/10/2017	10	8.375%	8.46%	2,300,000	15,626	2,315,626	8.46%	2,300,000	13,925	2,313,925
6015 COLPATRIA	COP	12/12/2017	1	IBR + 1.65%	0.00%	-	-	-	6.38%	100,000	324	100,324
6016 COLPATRIA	COP	21/12/2017	1	IBR + 1.65%	0.00%	-	-	-	6.36%	100,000	170	100,170
6014 POPULAR	COP	26/12/2017	1	IBR + 1.8%	0.00%	-	-	-	6.47%	100,000	87	100,087
1230 IDB INVEST tramo 12 años	USD	29/12/2017	12	LIBOR + 2.75%	6.37%	1,218,656	(36,582)	1,182,074	0.00%	-	-	-
1231 IDB INVEST tramo 8 años	USD	29/12/2017	8	LIBOR + 2.125%	5.88%	243,731	(7,346)	236,385	0.00%	-	-	-
6017 POPULAR	COP	15/01/2018	1	IBR + 1.8%	6.06%	100,000	1,312	101,312	0.00%	-	-	-
6018 Bancolombia	COP	22/01/2018	1	IBR + 1.59%	5.87%	100,000	1,110	101,110	0.00%	-	-	-
6019 Bancolombia	COP	29/01/2018	1	IBR + 1.59%	5.87%	70,000	697	70,697	0.00%	-	-	-
6020 Bancolombia	COP	19/02/2018	1	IBR + 1.59%	5.89%	130,000	873	130,873	0.00%	-	-	-
1016 EMVARIAS	COP	8/11/2018	1	IBR + 2.1%	6.38%	40,000	88	40,088	0.00%	-	-	-
1019 COLPATRIA	COP	19/12/2018	1	IBR + 1.78%	6.06%	100,000	199	100,199	0.00%	-	-	-
1020 BBVA	COP	20/12/2018	1	IBR + 1.793%	6.07%	35,000	59	35,059	0.00%	-	-	-
Total						**15,668,958**	**195,841**	**15,864,799**		**12,254,026**	**206,565**	**12,460,591**

Figures stated in millions of Colombian pesos

Transaction costs of contracted credits that have not been disbursed were $20,185 (2017: $13,264).

The interest paid for credit operations was $925,980 (2017: $766,640).

The Net loss (profit) for difference in exchange was $503,317 (2017: $59,255).

Subseries	Original currency	Initial date	Term	Nominal interest rate	2018				2017				amount awarded					
					IRR	Nominal value	Amortized cost value	Total amount	IRR	Nominal value	Amortized cost value	Total amount	Amount 2017	Amount 2016	Amount 2015	Amount 2014	Amount 2013	Amount 2012
A10a	COP	20/11/2008	10	IPC + 5.37%	0.00%	0	0	0	10.49%	174,410	3,563	177,973	174,410	174,410	174,410	174,410	174,410	174,410
A10a	COP	22/01/2009	10	IPC + 5.8%	9.16%	138,600	2,366	140,966	10.25%	138,600	2,447	141,047	138,600	138,600	138,600	138,600	138,600	138,600
A10a	COP	4/12/2013	10	IPC + 4.52%	8.17%	96,210	-311	95,899	9.10%	96,210	-529	95,681	96,210	96,210	96,210	96,210	96,210	0
A10a	COP	20/03/2015	10	IPC + 3.65%	8.01%	130,000	362	130,362	8.94%	130,000	192	130,192	130,000	130,000	130,000	0	0	0
A12a	COP	14/12/2010	12	IPC + 4.2%	7.58%	119,900	515	120,415	8.74%	119,900	113	120,013	119,900	119,900	119,900	119,900	119,900	119,900
A12a	COP	29/07/2014	12	IPC + 4.17%	7.78%	125,000	166	125,166	8.70%	125,000	42	125,042	125,000	125,000	125,000	125,000	0	0
A12a	COP	20/03/2015	12	IPC + 3.92%	7.34%	120,000	146	120,146	8.25%	120,000	-67	119,933	120,000	120,000	120,000	0	0	0
A15a	COP	21/04/2009	15	IPC + 6.24%	9.63%	198,400	4,260	202,660	10.55%	198,400	4,374	202,774	198,400	198,400	198,400	198,400	198,400	198,400
A20a	COP	14/12/2010	20	IPC + 4.94%	8.40%	267,400	548	267,948	9.37%	267,400	-57	267,343	267,400	267,400	267,400	267,400	267,400	267,400
A20a	COP	4/12/2013	20	IPC + 5.03%	8.62%	229,190	-1,541	227,649	9.54%	229,190	-1,819	227,371	229,190	229,190	229,190	229,190	229,190	0
A20a	COP	29/07/2014	20	IPC + 4.5%	8.08%	250,000	-100	249,900	8.99%	250,000	-191	249,809	250,000	250,000	250,000	250,000	0	0
A20a	COP	20/03/2015	20	IPC + 4.43%	7.83%	260,000	949	260,949	8.86%	260,000	367	260,367	260,000	260,000	260,000	0	0	0
A5a	COP	4/12/2013	5	IPC + 3.82%	0.00%	0	0	0	8.55%	41,880	83	41,963	41,880	41,880	41,880	41,880	41,880	0
A5a	COP	20/03/2015	5	IPC + 2.72%	6.13%	120,000	167	120,167	7.11%	120,000	-102	119,898	120,000	120,000	120,000	0	0	0
A6a	COP	29/07/2014	6	IPC + 3.57%	7.36%	125,000	740	125,740	8.31%	125,000	322	125,322	125,000	125,000	125,000	125,000	0	0
C10a	COP	22/01/2009	10	10.8%	10.79%	74,700	7,558	82,258	10.79%	74,700	7,564	82,264	74,700	74,700	74,700	74,700	74,700	74,700
C10a	COP	20/11/2008	10	13.8%	0.00%	0	0	0	13.79%	58,000	853	58,853	58,000	58,000	58,000	58,000	58,000	58,000
Bono internacional	USD	29/07/2009	10	7.625%	8.25%	1,624,875	49,306	1,674,181	8.17%	1,492,000	39,894	1,531,894	1,492,000	1,500,355	1,574,735	1,196,230	963,415	884,115
Bono internacional	COP	31/01/2011	10	8.375%	8.70%	1,250,000	88,210	1,338,210	8.69%	1,250,000	85,144	1,335,144	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Bono internacional	COP	3/09/2014	10	7.625%	7.74%	965,745	17,243	982,988	7.73%	965,745	16,659	982,404	965,745	965,745	965,745	965,745	0	0
Bono internacional	COP	31/10/2017	10	8.375%	8.46%	2,300,000	15,626	2,315,626	8.46%	2,300,000	13,925	2,313,925	2,300,000	0	0	0	0	0
TOTAL						**8,395,020**	**186,210**	**8,581,230**		**8,536,435**	**172,780**	**8,709,215**	**8,536,435**	**6,244,790**	**6,319,170**	**5,310,665**	**3,612,105**	**3,165,525**

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

Debt/EBITDA Covenant

EPM has several financial covenants, established in the loan agreements signed with the French Agency for Development (AFD), Inter-American Development Bank, Development Bank of Latin America (CAF), National Bank for Economic and Social Development (BNDES), HSBC, IDB Invest, 2009 international bond issue and warranty by the Japan Bank for International Cooperation (JBIC).

The loss (profit) of these indicators to December 2018 is broken down below:

Covenant	Credit type	2017	2018	Limit	Meets
EBITDA/FINANCIAL EXPENSES	BNDES, AFH, HSBC, Bonds 2019	5,49	5,45	3,00	✓
Monthly accrued EBITDA		4.732	5.115		
Monthly accrued financial expenses		863	939		
EBITDA/FINANCIAL EXPENSES NET	CAF, IDB Invest	6,91	7,06	3,00	✓
Monthly accrued EBITDA		4.732	5.115		
Monthly accrued financial expenses		863	939		
Monthly accrued financial revenue		177	214		
DEBT/EBITDA LTM	JIBD, AFD, BID, Bonds 2019	3,43	3,86	3,50	✗
Financial liability *		16.211	19.736		
EBITDA last twelve months		4.732	5.115		
NET DEBT/EBITDA LTM	CAF, IDB Invest, HSBC	3,16	3,34	4,00	✓
Financial liability *		16.211	19.736		
Cash and cash equivalents **		1.272	2.645		
EBITDA last twelve months		4.732	5.115		
LONG-TERM DEBT/EQUITY	JBIC, BNDES, BID	0,69	0,74	1,50	✓
Long-term debt		14.315	16.265		
Equity		20.868	22.034		

Figures stated in millions of Colombian pesos

* The financial liability for the Debt/EBITDA calculation does not consider treasure credit and transitories, amortized cost and pension bonds

** Cash and cash equivalents plus other financial assets less restructed-use funds

*** Long-ter debt does not include pension bonds

Regarding long-term financial debt to EBITDA ratio, as of December 2018, the value of the indicator is 3.86.

Contractually, one of the management structures to avoid defaulting on these types of covenants is the issuance of waivers by creditors.

It should be noted that the fact that EPM exceeds the agreed covenant Debt/EBITDA does not generate a direct activation of the declaration of non-compliance by the banking entities, nor of early payment, for being an action contractually subject to the bank(s) decision to exercise or not such declaration and additionally to the fact of having remedial periods agreed in the contracts to attend a possible default.

EPM must report compliance with the Long-Term Financial Debt/EBITDA indicator as follows: to the Japan Bank for International Cooperation (JBIC) quarterly, to the French Development Agency (AFD) semiannually and to the Inter-American Development Bank (BID) annually. For the results of December 2018, a waiver was granted by the AFD and the IDB, as for the JBIC, it expressed its intention to contractually modify the covenant or give

a waiver of default, depending on the analyzes carried out internally once the official Financial Statements for the year are published.
Due to the periodicity of measurement, the waivers delivered by AFD and IDB cover the 2019 term, while JBIC will review the compliance of said indicator quarterly.

Regarding the 2009 International Bonds and the HSBC credit, these have agreed on the Financial Debt/EBITDA and Net Financial Debt/EBITDA indicators, respectively, but they are inactive, given that EPM has two credit risk ratings at an investment grade level.

Default events

During the reporting period, the company has not defaulted on any principal or interest payment of its loans.

Note 22. Creditors and other accounts payable

The creditors and other accounts payable consist of:

Creditors and other accounts payable	2018	2017
Non-current		
Adquisition of goods and services	628	628
Deposits received as collateral	43	37
Resources received for management	3,224	8,635
Construction contracts	588	6,653
Total creditors and other accounts payable non-current	**4,483**	**15,953**
Current		
Creditors[1]	462,460	731,104
Adquisition of goods and services	529,266	591,525
Allocated grants	6,961	2,542
Deposits received as collateral	310	310
Received advanced payments	506	506
Resources received for management	22,422	36,429
Other accounts payable	853	762
Construction contracts	(6,950)	(1,514)
commission due	2,110	2,110
Total creditors and other accounts payable current	**1,017,938**	**1,363,774**
Total creditors and other accounts payable	**1,022,421**	**1,379,727**

Figures stated in millions of Colombian pesos

[1] As of December 2017 the report included the financial surplus payable to the Municipality of Medellín for $300,000 for the sale of the shares of ISAGEN, which were paid in 2018.

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

Note 23. Other financial liabilities

The other financial liabilities consist of:

Other financial liabilities	2018	2017
Non-current		
Financial leases (see note 14)	1,804,509	195,329
Pension bonds[1]	250,253	270,413
Derivatives not under hedge accounting	-	3,592
Cash flow hedge derivatives (see note 24)	-	18,913
Total other financial liabilities non-current	**2,054,762**	**488,247**
Current		
Financial leases (see note 14)	1,070	979
Pension bonds[1]	284,797	264,266
Derivatives not under hedge accounting	-	10,269
Cash flow hedge derivatives (see note 24)	-	33,367
Total other financial liabilities current	**285,867**	**308,881**
Total other financial liabilities	**2,340,629**	**797,128**

Figures stated in millions of Colombian pesos

Conventional purchases and sales of financial liabilities are recorded applying the trading date.

[1]The variation is accounted for by the amortized cost and the payments made during the period.

23.1 Default events

During the reporting period, the company has not defaulted on any principal or interest payment of its loans.

Note 24. Derivatives and hedges

The company has a cash flow hedge that consists of hedging the variation in future cash flows assignable to certain risks, such as interest rate and exchange rate that may impact profits, whose fair values at the end of the reporting period amount to a right of $186,230 (2017: 38,131 Obligation). The risks hedged in these operations are:

hedge classification	Description	Risk Covered	trench	Hedged item	Recorded value of hedged item	Recorded value of hedging instrument	Changes in fair value of the hedging instrument for the period	Changes in fair value of the hedged item for the period	Hedge effectiveness recognized in the profit for the period	Hedge effectiveness recognized in the other comprehensive income	Reclassification of other comprehensive income to profit for the period[1]
Cash flow hedging											
Swaps	Cross Currency Swap	USD/COP Exchange rate and LIBOR/fixed rate for debt services	Part of the Club Deal and AFD credits	Credit in U.S. dollars	2,593,098	(186,230)	(169,970)	20,068	N.A	(169,970)	(191,712)
Futures	Derivex	Precio de Venta en bolsa de energía -> Sale price of power in the stock market	N.A.	Sales of power: highly probable item	N.A	-	314	N.A	N.A	314	411

Figures stated in millions of Colombian pesos

[1] The reclassification of Other Comprehensive income to Profit for the period, for swap instruments, affected interests item, difference in exchange, difference in interest and capital of the right; and for the instruments futures contracts affected the item of power sales in the stock market. Additionally, $23,823 were capitalized as borrowing costs mainly to the Ituango project.

Cash Flow hedging

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

Characteristics														
Hedged underlying	Club Deal credit	Club Deal credit	Club Deal credit	Club Deal credit	Club Deal credit	Club Deal credit	AFD Credit	AFD Credit	AFD Credit	AFD Credit	AFD Credit	EDC Credit	EDC Credit	EDC Credit
Trench No.	2	3	8	9	14	12	1	2	3	4	5	1	2	3
Closing date	24-May-16	26-May-16	20-Jun-16	8-Jul-16	21-Jul-16	8-Aug-16	3-Feb-17	6-Feb-17	10-Feb-17	24-Mar-17	30-Mar-17	23-Mar-18	3-Apr-18	11-May-18
Derivative type	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS	CCS
Counterpart	JP Morgan	JP Morgan	Bank of America Merrill Lynch	BNP Paribas	BNP Paribas	BNP Paribas	BNP Paribas	BNP Paribas	BNP Paribas	CITI BANK	CITI BANK	Goldman Sachs	Goldman Sachs	Goldman Sachs
Nominal amount (USD)	50,000,000	50,000,000	60,000,000	40,000,000	5,000,000	30,000,000	64,750,000	47,381,250	85,312,500	13,164,375	85,312,500	110,000,000	100,000,000	90,000,000
Spot exchange rate	3,058	3,053	2,976	2,965	2,924	2,990	2,850	2,855	2,850	2,899	2,878	2,847	2,776	2,816
Obligation (COP)	152,900,000,000	152,650,000,000	178,560,000,000	118,600,000,000	14,620,000,000	89,700,000,000	184,537,500,000	135,273,468,750	243,140,625,000	38,163,523,125	245,529,375,000	313,170,000,000	277,600,000,000	253,440,000,000
EPM pays	IBR + 2.17	IBR + 2.17	9.30%	8.42%	8.48%	8.44%	IBR + 0,83	IBR + 0,33	IBR + 0,69	IBR + 0,379	IBR + 0,479	IBR + 0,432	IBR + 0,4071	IBR + 0,3286
	IBR OIS compound 1 day	IBR OIS compound 1 day					IBR OIS compound 1 day	IBR OIS compound 1 day	IBR OIS compound 1 day	IBR OIS compound 1 day	IBR OIS compound 1 day	IBR OIS compound 1 day	IBR OIS compound 1 day	IBR OIS compound 1 day
EPM receives	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	LIBOR 6 months + 140	Fixed rate 4,50%	Fixed rate 4,04%	Fixed rate 4,32%	Fixed rate 4,25%	Fixed rate 4,32%	Libor +0%	Libor +0%	Libor +0%
	Forward starting	Forward starting	Forward starting	Forward starting	Back starting	Back starting	Back starting	Back starting	Back starting	Back starting	Back starting	Back starting	Back starting	Back starting
Expiring date	29-Dec-20	29-Dec-20	29-Dec-20	29-Dec-20	29-Dec-20	29-Dec-20	31-Jul-22	31-Jul-22	31-Jul-22	31-Jul-22	31-Jul-22	4-Aug-22	4-Aug-22	4-Aug-22
Initial exchange	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Final exchange	Si	Si	Si	Si	Si	Si	No	No	No	No	No	No	No	No
Modality	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery	Non Delivery

* CCS : Cross Currency Swap

Early termination of hedging

The company had reclassified to non-cash flow hedge accounting two instruments swaps that were canceled in February 2018. The characteristics of the canceled operations are as follows:

Characteristics	Trench 1	Trench 11
Contract date	24-May-16	21-Jul-16
Hedged underlying	Club Deal credit	Club Deal credit
Derivative type	CCS	CCS
Counterpart	Merrill Lynch International	BNP Paribas
Nominal amount (USD)	50,000,000	25,000,000
Spot exchange rate	3,058	2,924
Obligation (COP)	152,900,000,000	73,100,000,000
EPM pays	IBR + 2.1077	8.48%
	IBR OIS compound 1 day	
EPM receives	LIBOR 6 months + 140	LIBOR 6 months + 140
Periodicity	half-yearly	half-yearly
Expiring date	29-Dec-20	29-Dec-20
Initial exchange	No	No
Final exchange	Yes	Yes
Cancelation date	12-Feb-18	12-Feb-18
Cancelation exchange rate	2,887	2,898
EPM (Pays / Receives)	Pays	Pays
Amount of reported liquidity (USD)	3,720,000	1,630,000

* CCS : Cross Currency Swap

Embedded derivatives

The company has not formalized contracts that contain embedded derivatives.

Note 25. Changes in liabilities for financing activities

The conciliation of the liabilities that arise from the financing activities is as follows:

Reconciliation of financing activities 2018	Initial balance	Cash flows	Changes other than cash		Other changes[1]	Total
			Foreign currency movement	Fair Value		
Long-term credits and loans (See note 21)	12,447,331	2,845,884	281,444	-	269,954	15,844,613
Short-term credits and loans (See note 21)						
Liabilities for leases (See notes 13 and 23)	196,310	(987)	-	-	1,610,257	1,805,580
Derivative and hedging instrument (See notes 13, 23 and 24)	51,891	-	-	(162,670)	(75,451)	(186,230)
Dividends or surplus paid (See note 19)	300,000	(1,503,504)	-	-	1,203,504	0
Other cash flows due to financing activities	-	7,324	-	-	(7,324)	-
Total liabilities due to financing activities	**12,995,532**	**1,348,717**	**281,444**	**(162,670)**	**3,000,940**	**17,463,963**

Figures stated in millions of Colombian pesos

Reconciliation of financing activities 2017	Initial balance	Cash flows	Changes other than cash		Other changes[1]	Total
			Foreign currency movement	Fair Value		
Long-term credits and loans (See note 20)	9,532,101	3,782,524	39,997	-	(2,892,135)	10,462,487
Short-term credits and loans (See note 20)	1,288,588	(2,269,889)	19,259	-	2,946,885	1,984,843
Liabilities for leases (See notes 12 and 22)	197,214	(906)	-	-	-	196,308
Derivative and hedging instrument (See notes 12, 22 and 23)	70,933	(12,384)	-	126,209	(132,864)	51,895
Dividends or surplus paid (See note 18)	-	(1,309,136)	-	-	1,609,136	300,000
Total liabilities due to financing activities	**11,088,836**	**190,209**	**59,256**	**126,209**	**1,531,022**	**12,995,532**

Figures stated in millions of Colombian pesos

[1] Includes interest paid during the year for $1,002,253 (2017: $853,437), which are classified according to the company's policy as operating activities in the statement of cash flow; variation in the measurement at amortized cost of credits and loans $919,927 (2017: $784,976); credits to economic associates for $40,088 (2017: $36,414), which are classified as investment activities in the statement of cash flow; and the dividends caused and not paid during the year.

Note 26. Employee benefits

The item of employee benefits recognized at the cut-off date, presents the following composition:

Employee benefits	2018	2017
Non-current		
Post-employment benefits	262,950	243,726
Long-term benefits	42,745	38,971
Total employee benefits non-current	305,695	282,697
Current		
Short-term benefits	89,285	83,726
Post-employment benefits	50,212	48,091
Termination benefits		
Total employee benefits current	139,497	131,817
Total	445,192	414,514

Figures stated in millions of Colombian pesos

26.1 Post-employment benefits

Covers the defined benefit plans and the defined contribution plans detailed below:

26.1.1. Defined benefit plans

Defined benefit plans	Pensions[1]		Retroactive severances[2]		Educational assistance plan[3]		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Current value of liabilities due to defined benefits								
Initial balance	446,297	444,543	99,348	92,609	71	104	545,716	537,256
Current service cost	-	-	3,471	3,452	-	-	3,471	3,452
Profit (or loss) due to interests	29,529	29,938	6,105	6,387	3	5	35,637	36,330
Assumptions by experience	4,820	13,479	(7,886)	1,313	39	(7)	(3,027)	14,785
Financial assumptions	450	5,700	1,214	5,445			1,664	11,145
Payments made by the plan[5]	(37,754)	(47,428)	(12,644)	(9,858)	(32)	(31)	(50,430)	(57,317)
Other changes	73	65	67		-	-	140	65
Current value of liabilities as of December 31	**443,415**	**446,297**	**89,675**	**99,348**	**81**	**71**	**533,171**	**545,716**
Fair value of plan assets								
Initial balance	253,899	273,288	-	-	-	-	253,899	273,288
Payments made by the plan[5]	(48,522)	(44,746)	-	-	-	-	(48,522)	(44,746)
Profit due to interests	15,622	18,160	-	-	-	-	15,622	18,160
Expected plan yields (excluding profits due to interests)	(989)	7,197	-	-	-	-	(989)	7,197
Fair value of plan assets as of December 31	**220,010**	**253,899**	**-**	**-**	**-**	**-**	**220,010**	**253,899**
Surplus or (deficit) of the defined benefit plan	**223,405**	**192,398**	**89,675**	**99,348**	**81**	**71**	**313,161**	**291,817**
Net assets (or liabilities) of the defined benefit plan	**223,405**	**192,398**	**89,675**	**99,348**	**81**	**71**	**313,161**	**291,817**
Total defined benefits	**223,405**	**192,398**	**89,675**	**99,348**	**81**	**71**	**313,161**	**291,817**

Figures stated in millions of Colombian pesos

[1]Includes a retirement pensions plan recognized prior to the validity of the General Pension System of Law 100 of 1993 with their respective substitutions, that are distributed in the actuarial calculation by groups differentiating the life annuities, those shared with Colpensiones, the pension substitutions and those that generate a pension share. The plan is made up of EPM retirees and retirees belonging to the pension commutation for the liquidation of the Empresa Antioquena De Energia EADE. It includes contributions to social security and burial insurance. 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 this plan. During the period, the plans have not undergone Employee Benefits - Plan Amendment, Curtailment or settlements that represent a reduction in the present value of the obligation.

[2]Includes a plan for retroactive severance pay; it is a post-employment benefit that applies approximately to the 8.5% of EPM employees and consists in the recognition of an average monthly salary multiplied by the number of years of service, payable through advances and at the time of termination of contract. The source that gives rise to the plan is the “Sixth Law of 1945 whereby some provisions are issued on labor conventions, professional associations, collective conflicts and special labor jurisdiction” and National Decree 1160 of 1989, whereby Law 71 of 1988 is partially regulated, and whereby regulations on pensions and other provisions are issued. For the retroactive severance plan, neither possible risks nor significant amendments are identified during the period.

[3]Includes an educational aid plan granted to each of the children of EPM retirees, including aid for preparatory, technical school or university studies. It has its origin in Article 9 of Law 4 of 1976, by which rules on pension matters are issued in the public, official, semi-official and private sectors and provides that companies or employers will grant scholarships or aid for preparatory, technical school or university students, to the children of their retired staff, under the same conditions as those granted or established for the children of active workers.

The weighted average of the duration in years, of the obligations by defined benefit plans at the cut-off date, is presented below:

Benefit	2018		2017	
	From	To	From	To
EPM Pension	8.4	11.4	8.6	11.4
Educationla assistance EPM	1.6	1.6	1.7	1.7
Retroactive severances	6.1	6.1	6.6	6.6

[4] I Includes $50,430 (2017: $57,317) of securities paid for settlements of the plan, corresponding to pensions, retroactive severances and educational aid plan.

The company has no restrictions on the current realization of the defined benefit plan surplus.

The company did not make any contributions for defined benefits during 2018 and does not expect to make contributions for the next year period.

Fair value of the plan assets is composed as follows:

Assets that support the plan	2018		2017	
	Participation %	Fair value	Participation %	Fair value
Cash and cash equivalents	0.40%	873	2.24%	5,676
Debt instruments				
AAA	89.84%	197,649	84.26%	213,934
AA	6.80%	14,950	9.74%	24,720
Investment funds[1]	2.97%	6,538	3.77%	9,569
Total debt instruments	**99.60%**	**219,137**	**97.76%**	**248,223**
Total assets that support the plan	**100.00%**	**220,010**	**100.00%**	**253,899**

Figures stated in millions of Colombian pesos

[1]Comprises a collective investment fund with a conservative profile, with immediate availability of resources called Rentaliquida, managed by Fiduciaria Davivienda, with a balance of $1,522 and an Exchange Trade Fund (ETF), which follows the Colcap behavior, with a balance of $5,016.

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

Assumptions	Concept	
	2018	2017
Discount rate (%)	6.90 - 5.00	5.40 - 7.10
Yearly salary increase rate (%)	4.6	4.00 - 4.70
Real rate of return on plans assets	3.14	5.76
Future yearly pension increase rate	3.5	3.5
Yearly inflation rate (%)	3.5	3.5
Mortality rate tables	Valid rentiers 2008 table	

The following table shows the effect of a variation for more than 1% and less than 1% in the salary increase, in the discount rate and in the increase in the benefit over the obligation for post-employment defined benefit plans:

Supuestos	Increase in discount rate by +1%	Decrease in discount rate by -1%	Salary increase by +1%	Salary decrease by -1%	Increase in benefit increasement by +1%	Decrease in benefit increasement by -1%
EPM Pension	308,059	360,361				
Social security contributions EPM	25,461	29,554				
Educationla assistance EPM	80	82			82	80
EADE Pension	74,110	91,988				
Social security contributions EADE	940	1,112				
Retroactive severances	85,077	94,547	98,016	81,736		
Total post-employment benefits	493,726	577,645	98,016	81,736	82	80

Figures stated in millions of Colombian pesos

The methods and assumptions used to prepare the sensitivity analysis of the Present Value of the Defined Benefit Obligations (DBO) was made using the same methodology that for the actuarial calculation as of December 31, 2018: Projected Unit of Credit (PUC) method. The sensibility does not present neither limitations nor changes in the methods or assumptions used to prepare the analysis of the current period.

Calculation of pension liabilities and pension commutations according to fiscal requirements

Resolution 037 of 2017 issued by the General Accountancy of the Nation established the obligation to disclose the calculation of pension liabilities in accordance with the parameters established in Decree 1625 of 2016 and Decree 1833 for pension commutations; therefore, the figures presented below do not correspond to the IFRS requirements.

Pension liabilities

The actuarial calculation of pensions was prepared with the following technical bases:

Actuarial assumptions - Pension obligation	2018	2017
Real technical interest rate	4.8	4.8
Salary increase rate	5.09	5.74
Pension increase rate	5.09	5.74
Mortality rate table	Valid rentiers 2008 table	

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

Concept	2018		2017	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by the company	652	161,125	670	162,821
Personnel pensioned with amounts shared with Colpensiones (state pension system)	439	65,322	375	54,553
Personnel benefit shared with Colpensiones	457	61,614	466	62,486
Personnel pensioned with amounts shared with other institutions	271	34,489	300	45,040
Total	**1,819**	**322,550**	**1,811**	**324,900**

Figures stated in millions of Colombian pesos

Below are the pension bonuses related to pension obligations:

Concept	2018		2017	
	Number of people	Amount of the reserve	Number of people	Amount of the reserve
Retirement payment type A modality 1	246	2,524	250	2,399
Retirement payment type A modality 2	4,210	172,172	4,284	169,374
Retirement payment type B	2,324	305,588	2,506	319,937
Retirement payment type T	5	340	5	393
Other - Contributions Law 549	178	4,925	178	4,636
Difference	**6,963**	**485,549**	**7,223**	**496,739**

Figures stated in millions of Colombian pesos

Following, the differences between the pension liabilities calculated under IFRS and the fiscal pension liabilities are shown:

	2018	2017
Pension liabilities under IFRS	359.774	361.986
Fiscal pension liabilities	808.098	821.638
Difference	**(448.324)**	**(459.652)**

Figures stated in millions of Colombian pesos

Pension commutation liabilities

The actuarial calculation of pension commutation was prepared with the following technical bases:

Actuarial assumptions - Pension-switching	2018	2017
Real technical interest rate	4.8	4.8
Salary increase rate	5.09	5.74
Pension increase rate	5.09	5.74
Mortality rate table	Valid rentiers 2008 table	

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

Concept	2018		2017	
	Number of people	Amount of the obligation	Number of people	Amount of the obligation
Personnel pensioned entirely by the company	109	23,558	151	31,288
Personnel pensioned with amounts shared with Colpensiones	340	42,781	312	35,451
Personnel benefit shared with Colpensiones	34	2,757	31	2,435
Personnel pensioned with amounts shared with other institutions	44	3,576	44	4,547
Total	**527**	**72,672**	**538**	**73,721**

Figures stated in millions of Colombian pesos

Below are the pension bonuses related to the pension commutation liability:

Concept	2018		2017	
	Number of people	Amount of the reserve	Number of people	Amount of the reserve
Retirement payment type A modality 1	12	35	12	33
Retirement payment type A modality 2	262	10,398	267	9,787
Retirement payment type B	226	21,795	229	21,199
Retirement payment type T	3	149	3	219
Other - Contributions Law 549	3	107	3	101
Difference	**506**	**32,484**	**514**	**31,339**

Figures stated in millions of Colombian pesos

Differences between the pension commutation liability as calculated under IFRS and the tax pension commutation liability are shown below:

	2018	2017
pension-switching liabilities under IFRS	83,240	83,972
Fiscal pension-switching liabilities	105,157	105,059
Difference	(21,916)	(21,087)

Figures stated in millions of Colombian pesos

26.1.2. Defined contribution plans

The company made contributions to defined contribution plans for $54.462 (2017: $53,012), recognized in the Profit for the period as an expense $15,731 (2017: $14,412), cost $31,846 (2017: $28,341), and investment projects.

26.2 Long-term employee benefits

Long-term benefits	seniority premium[1]	
	2018	2017
Current value of liabilities due to other long-term benefits		
Initial balance	38,971	35,375
Past service costo de servicio pasado	4,218	3,282
Profit (or loss) due to interests	2,613	2,454
Assumptions by experience	588	1,838
Financial assumptions	433	965
Payments made by the plan	(4,078)	(4,943)
Final balance of current value of liabilities	**42,745**	**38,971**
Net liabilities due to long-term benefits	**42,745**	**38,971**

Figures stated in millions of Colombian pesos

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

[1]Includes a plan of seniority premium. It is a long-term benefit granted to employees through the Collective Labour Agreements, in EPM it is granted considering the years of continuous or discontinuous service. It is

recognized and paid only once in the respective period and in accordance with the established terms: every 5 years will be paid 12, 17, 23, 30, 35 and 40 days of basic salary, respectively. The form of payment can be in cash, in leisure time or a combination of both at the employee's choice. For the staff that resign the company to access the old-age or disability pension, they have the right to a proportional payment for the time of service, if they have less than one year to complete the next five years at the time of disengagement. For the plan of seniority premium, no possible risks are identified.

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

Benefit	2018		2017	
	From	To	From	TO
seniority premium	6.6	6.6	6.7	6.7

The company does not expect to make contributions to the plan for the next year period.

The main actuarial assumptions used to determine the obligations for long-term employee benefit plans are the following:

Assumptions	Concept	
	2018	2017
Discount rate (%)	6.7	6.7
Yearly salary increase rate (%)	4.85	4.7
Yearly inflation rate (%)	3.5	3.5
Mortality rate tables	Valid renters 2008 table	

The following table shows the effect of a variation for more than 1% and less than 1% in the salary increase, in the discount rate and in the increase in the benefit over the obligation for long-term benefit plans:

Assumptions	Increase in discount rate by +1%	Decrease in discount rate by -1%	Salary increase by +1%	Salary decrease by -1%
seniority premium	40,237	45,574	45,815	39,980
Total long-term benefits	**40,237**	**45,574**	**45,815**	**39,980**

Figures stated in millions of Colombian pesos

The methods and assumptions used to prepare the sensibility analysis of the current value of Defined Benefit Obligations (DBO) were done using the same methodology as for the actuarial calculation as of December 31, 2018: Forecasted Credit Unit (FCU). The sensibility does not present any limitations, or amendments in the methods and assumptions used to prepare the analysis of the current period.

26.3 Short-term employee benefits

The composition of the short-term benefits is as follows:

Short-term benefits	2018	2017
Payroll payable	6,745	7,579
Severances	34,325	31,065
Interests on severances	4,062	3,572
Vacations	14,053	13,235
Vacations bonus	28,363	26,629
Holidays (Christmas) bonus	25	36
Bonuses	1,712	1,610
Total short-term benefits	**89,285**	**83,726**

Figures stated in millions of Colombian pesos

Note 27. Taxes, contributions and rates

The detail of taxes, contributions and rates, other than income tax, is as follows:

Taxes, contributions and rates	2018	2017
Current		
Withholding tax on income and and stamp duty	60,051	52,316
Unified property tax	1	132
Industry and commerce tax	21,884	16,593
Appreciation tax	136	-
Costom tax and charges	1,126	10,024
Contributions	4,866	4,806
Rates	15,545	16,137
National consumption tax	4	3
Other national taxes	696	696
Other municipal taxes	7	5
Value added tax (VAT)	3,879	3,366
Total taxes, contributions and rates current	**108,195**	**104,078**
Total taxes, contributions and rates	**108,195**	**104,078**

Figures stated in millions of Colombian pesos

Note 28. Provisions, Contingent Liabilities and Contingent Assets

28.1 Provisions

The reconciliation of provisions is as follows:

Concept	dismantling and restoration[1]	onerous contracts[2]	Lawsuits[3]	Business combinations[4]	Other provisions[5]	Total
Initial balance	**16,959**	**89,416**	**179,440**	**144,453**	**21,827**	**452,095**
Additions	31,476	-	6,399	-	312,248	**350,123**
Uses	(1,815)	(28,864)	(2,314)	(572)	21,710	**(11,855)**
unused amounts reversed (-)	(15)	(2,246)	(14,507)	(4,902)	(55,661)	**(77,331)**
Adjustment for changes in estimates	(2,382)	-	77,483	-	36,006	**111,107**
Exchange Difference			(485)	10,983	-	**10,498**
Other changes	609	2,745	7,511	3,707	760	**15,332**
Final balance	**44,832**	**61,051**	**253,527**	**153,669**	**336,890**	**849,969**
Non-current	13,201	31,463	50,629	144,622	121,002	**360,917**
Current	31,631	29,588	202,898	9,047	215,888	**489,052**
Total	**44,831**	**61,051**	**253,527**	**153,669**	**336,890**	**849,969**

Figures stated in millions of Colombian pesos

[1]Increase due to the execution of the environmental action plan corresponding to the recovery of affectations, downstream, caused by the occluding and flooding of the Ituango Project in April 2018 (detail in number 28.1.1).

[2]Decrease due to the payments made to TGI, and to the proximity to the contract's end date.

[3]Increase due to the change of claims of 9 labour lawsuits which plaintiffs are former employees of EADE.

[4]Increase due to the contingency of the Ituango project and the "Guayabal 230 kV Connection and Associated Works" project (detail in section 28.1.6).

28.1.1 Dismantling

– In 2018 EPM includes the provision arising from the contingency of the Ituango project for $ 31,388 for environmental contingency, established by the specific action plan for the recovery of the parties affected by the events of the occluding of the Cauca river diversion tunnel that presented the project. on April 28, 2018; by the closing of floodgates in 2019 that decreased the flow of the river downstream of the project; and for the events that may arise due to the technical milestones still to be reached, specific to the contingency, as well as the execution of the project itself.

  The specific action plan for recovery must consider three framework programs:
  a. Recovery of affected marshes
  b. Recovery of the affected fish fauna
  c. Restoration of aquatic habitats located in the affected area

  These three programs correspond to the environmental component as an answer to the identification of the caused effects, as well as discretionary actions. It also includes social programs, economic activities, infrastructure, risk management, among others.
  The different actions are planned to be developed between the municipalities of Valdivia to Nechi, however, if they are identified in the municipalities that are part of La Mojana, they will also be subject to intervention.

EPM is compelled to incur costs of dismantling or restoring its facilities and assets. Currently, there are three provisions for dismantling or restoration:

- Withdrawal of transformers containing PCBs (polychlorinated biphenyls): EPM has committed to the dismantling of these assets from 2014 to 2026 covered by Resolution 222 of December 15, 2011 of the Ministry of Environment and Sustainable Development and the Stockholm Convention of May 22 of 2008. The provision is recognized by the present value of the expected costs to settle the obligation using estimated cash flows. The main assumptions considered for calculating the provision are: estimated costs, CPI and fixed rate TES. To date it has been shown that the provision will be affected given that it is expected to complete the dismantling in a shorter time than estimated, while the estimated costs decrease since the dismantling peak has already ended.

- Amaga Mine: with Resolution 130 AS-1106242 of October 21, 2011 issued by CORANTIOQUIA, the environmental component of the closure plan for the coal mines of the mining title is approved and for this purpose construction contracts have begun. Among those are: Miscellaneous civil works, urban planning and monitoring in the coal mines with mining title, code RPP 434 in the area of the Amaga municipality.

  The main assumptions considered for calculating the provision are: estimated costs, CPI and fixed rate TES. Currently the company is in the final stage of the actions contemplated in the aforementioned resolution and awaiting a pronouncement by CORANTIOQUIA on the matter, which could involve more monitoring. However, it is clear that independent of this pronouncement, EPM must carry out the necessary actions for the return of the title and that includes legal and technical processes and the framing of decisional structures. To date, it has been shown that the provision will be affected, given that, depending on the qualification of the existing risk, it is imperative to continue monitoring the gases from the mines in the Amaga area for the coming year 2019.

- Environmental provision in the construction of infrastructure projects: arises as a legal obligation derived from the granting of an environmental licenses to compensate for the loss of biodiversity during the construction phase, as well as compensation for the taking of reserve areas, the effect on protected species and forest use; obligations that are formalized through the resolutions of National Authority of Environmental Licenses (ANLA), Regional Autonomous Corporation (CAR) and/or the Ministry of Environment and Sustainable Development (MADS).

  The executions of the biotic environmental compensations of the project stretch beyond the time in which the asset begins technical operation, being necessary to implement the figure of the provision with the intention that these expenditures will remain as a greater value for the construction in progress. The company is committed to compensate the loss of biodiversity, taking and closure from 2016 to 2019 according to the resolutions: Res. 1313/2013 ANLA, Res. 519/2014 ANLA, Res LA. 0882/04/08/2014 ANLA, Res. 1166/2013 MADS, Res. 1852/2013 CAR, Res. 2135/2014 CAR, Resolution 1189/22/07/2104 MADS, Res. 1120907/17-03-2015 CORNARE, Res. 141011206/16-10-2014 CORANTIOQUIA, Res LA. EIA1-9872 21/04/2014 CVS, among others. The provision is recognized by the present value of the expected costs to settle the obligation using estimated cash flows. The main assumptions considered in the calculation of the provision are: estimated costs, CPI and fixed rate TES.

28.1.2. Contracts for valuable consideration

As of December 31, 2018, the company has recognized $61,051 (2017: $89,414) for the contract of fuel supply and transportation signed between EPM and TGI-Transportadora de Gas Internacional S.A. E.S.P., with the objective of supporting the Termo Sierra plant and obtaining the income from the reliability charge established by the Energy and Gas Regulatory Commission.

The main assumptions considered for calculating the provision are: costs associated to the contract with the stated conditions, utilization factor or suspension of payments for contract maintenance, LIBOR rate, fixed rate in Colombian pesos TES, Market Representative Rate (TRM, for its Spanish initials) for the quarter and macroeconomic environment.

The main hypothesis used for future events are: from 2018 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 for the Termo Sierra plant and the rest of the time would be paid without using the contract (only fixed costs).

28.1.3. Lawsuits

This provision covers the estimated probable losses related to labour, civil, administrative and tax lawsuits that arise in the operations of EPM. The main assumptions considered for calculating the provision are: Average CPI to actual data in previous years and projected data in future years, fixed rate TES in Colombian pesos to discount, estimated value to be paid, and the estimated payment date for those lawsuits rated as probable. As of today, no future events have been foreseen that may affect the calculation of the provision.

In order to minimize the uncertainty that may arise regarding estimated dates of payment and values to be paid in a lawsuit rated as probable, the company uses business rules based on statistical to obtain the average length of processes per action as well as case law to estimate the maximum amounts the law defines for the value of the extra-economic or intangible claims when they exceed their amount, as described below:

Average length of processes per action

Administrative and tax processes

Type of legal action or procedure	Average length (in years)
Abbreviated	4
Petition for compliance	4
Group action	6
Representative actions	4
Conciliation (pre-trial)	2
Partie civile proceedings	4
Contractual (Breach of contract)	13
Survey and demarcation	5
Executive	5
Singular executive	3
Expropriation	4
Comprehensive reparation incident (criminal)	2
Imposition of easements	4
Nullification of administrative acts	5
Nullification and reinstatement of rights	10
Nullification and reinstatement of labour rights	11
Ordinary litigation	7
Ordinary of membership	5
Accusatorial criminal (Law 906 of 2004)	4
Division's lawsuit	4
Protection of consumer rights	6
Police Grievance	3
Right to reclaim	7
Direct compensation	12
Oral	5

Labour processes

Type of legal action or procedure	Average length (in years)
Labor Solidarity	3.5
Pension	3.5
Extra hours	3.5
Job reinstatement	4
Salary scale equalization	3.5
Unfair dismissal compensation	3.5
Reassessment of social benefits	3.5
Compensation work accident	4
Refund of the health/pension contribution	4

Application of case law

Typology: the values of claims for compensation of extra-patrimonial damages will be recorded according to the following typology:

- Non-material damage.
- Damage to health (physiological or biological damage), derived from a physical or psychophysical injury.
- Damage to relationship life.
- Damage to constitutional and conventional property.

The values of other extra-patrimonial damage claims not recognized by case law will not be recorded, unless by the claim can be inferred that, despite being otherwise denominated, it corresponds to one of the accepted typologies. Neither will claims for extra-patrimonial compensation for damages to property be recorded.

Quantification: The amounts of extra-patrimonial damage claims will be recorded uniformly as follows, regardless of its typology:

Direct victim compensation	100 Monthly Minimum Legal Wage Enforced (MMLWE)
Indirect victim compensation	50 Monthly Minimum Legal Wage Enforced (MMLWE)

The following are the recognized lawsuits:

Third party (Plaintiff)	Complaint	Amount in COP
Oscar Elías Arboleda Lopera	Includes 173 plaintiffs who worked for EADE and express that in the dissolution and liquidation of that company there was employer substitution, which makes the company liable for all the labor obligations.	161,007
John Walter Jaramillo	Nullification for the dismissal, with the respective salaries and their increases, the social benefits during all the time they remain disengaged; in the same way it will be on behalf of the demander the contributions to the social security until it is effectively reinstated.	7,241
Oliver Antonio Aguirre Soto	Nullification for the record of conciliation signed under duress (defect) and consequently order the job reinstatement, the reimbursement, the payment of all the salaries and benefits not received, similarly, the payment of all contributions to social security from the moment of dismissal and until the actor is effectively reinstated.	3,058
Víctor Vergara	Job reinstatement for former EADE worker	2,596
Jenifer Andrea Marcelo Jiménez	Order Empresas Publicas de Medellin E.S.P. jointly and severally, to the compensation for all material damages for loss of profit, past and future, as well as the moral and serious alterations to the conditions of existence due to a work accident.	2,442
Francisco Javier Muñoz Usman	Nullification for the dismissal, with the respective salaries and their increases, the social benefits during all the time they remain disengaged; in the same way it will be on behalf of the demander the contributions to the social security until it is effectively reinstated.	1,515
Carlos Olimpo Cardona	The plaintiff to be reinstated to the same positions or offices or another of the same or higher category that they had been performing, that as a consequence of the compensation, all the salaries and legal social benefits that were not perceived must be compensated as well, in addition to all the contributions caused in favor of the Comprehensive Social Security System.	1,240
Varios laborales	Other processes of less than $ 1,240 million pesos.	15,041
Consorcio Dragados Porce II	Compensate the plaintiffs the amounts resulting from the return of the illegally deducted compensation by EPM in the contracting process No. CD002376.	27,427
Fiduciaria Colpatria S.A.	Issue payment order against EPM and in favor of Fiduciaria Colpatria S.A. acting as spokesperson for the Autonomous Trust FC - Enertotal.	4,708
Consorcio Dragados Porce II	That EPM be ordered to recognize and pay the amount of damages caused in the good name of the companies that constituted the CONSORTIUM DRAGADOS CONCONCRETO PORCE II	3,888
Unión Temporal Energía Solar S.A. y Estructuras Arbi Ltda.	It be declared that the bid submitted by the plaintiffs to the tender N ° ES-2043-GI convened by EPM, was legally suitable to take it into account at the moment of awarding the respective contract of the tender N ° ES-2043-GI.	1,865
Construcciones Pico y Pala Ltda.	Nullification of resolutions 95070 of 05/04/1999, from EPM, by means of which contract 1 / DJ-682/15 between EPM and Consortium Trainco S.A. was unilateraly terminated, and 113701 of 03/15/2000, from EPM, by means of which the appeal for reversal filed against resolution 95070 of 04/05/1999 was resolved negatively.	1,786
Accesorios y Sistemas S.A.	Nullification of resolution 3077 of 11/12/200, issued by the General Manager of EPM, by means of which it was decided to declare the risk realization of quality and correct operation of the vehicles object of the contract 090321557.	1,133
TRAINCO S.A.	Nullification of resolutions 161052 of 03/05/2001, from EPM, by means of which contract 2101870 between EPM and Trainco SA was unilaterally terminated. and 178702 of 06/07/2001.	1,038
Didier De Jesús Restrepo Montoya	The plaintiffs claim compensation for moral damages allegedly caused by the eviction of their homes installed in a property owned by EPM, for the construction of the Porce III Hydroelectric Project, by which they were the object of eviction ordered by the Mayor's Office of the Municipality of Anori.	1,017
Consorcio Dragados Porce II	Registration difference in account change 271005 Litigation No. 14000857	(486)
Varios Administrativos	Other processes of less than $1,016 million pesos.	11,521
Municipio de Yumbo (Valle)	Industry and commerce and its complementary, posters and boards and public lighting.	4,393
Varios fiscales	Other processes of less than $4,392 million pesos.	1,097
Total recognized lawsuits		**253,527**

Figures stated in millions of Colombian pesos

28.1.4. Business combination

Corresponds to contingent considerations related to the acquisition of the following group of assets that constitute a business: Espiritu Santo Energy S. de R.L. subsidiary and Empresas Varias de Medellin S.A. E.S.P. (EMVARIAS) subsidiary, the balance as of December 31, 2018 amounted to $135,082 (2017: $125,428) and $18,587 (2017: $19,025), respectively.

The main assumptions considered for calculating the contingent consideration related to the acquisition of Espiritu 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 applying a discount rate (LIBOR Rate) according to the risk of the liability. As of this date no future events have been revealed that may affect the calculation of the provision.

The main hypothesis used in the future events of the contingent consideration related to the acquisition of EMVARIAS are: ongoing lawsuits against EMVARIAS at the date of the transaction, definition of the year of materialization of each lawsuit, definition of the related amount to each of the disputes, estimate of future contingent expenses related to the litigation estimated for each year and discount rate (TES fixed rate) to discount future contingent expense flows. To date, there have been no future events that could affect the calculation of the provision.

28.1.5. Implicit subsidiary obligations

Corresponds to the implicit obligation of the Hydroecological of Teribe S.A. (HET) subsidiary derived from the application of the equity method.

28.1.6. Other provisions

- For 2018 EPM includes the following provisions derived from the contingency of the Ituango project:

1. Provision of $38,877 for the contingency of the Ituango project that caused the flood of the Cauca River because of the occluding that the project suffered on May 12, 2018. For the attention of those affected in the Puerto Valdivia municipality, for Compensation of emerging damage, lost profits and moral damages, $25,807 were allocated; and, $13,070 for the destruction caused to community infrastructure. Due to adjustments and payments, this provision ended, in December 2018, at $38,815.
2. Provision of $42,917 for the recovery of families affected and evacuated by the total losses of their homes and economic activities as a result of the flooding Cauca River, caused by the occluding of the Ituango project, on April 28, 2018. This provision includes all maintenance costs for the shelters and the payment of financial support, this estimate was projected until March 2019, the official estimated date of the red alert.
3. Provision for the warranty of the reliability charge of $137,318 to cover the construction and commissioning of the Hydroelectric Power Plant and its monthly readjustments.

   Establishment of the provision for warranty No. 10090002278 - Reliability charge which amount is USD 42.3 million (COP $137,318). According to Resolution CREG 061 of 2017, the warranties of the reliability charge for the entry of new generation projects are executed when the commercial operation of the plant is delayed for more than one year. The contingencies presented in the diversion tunnel make the Ituango Hydroelectric project incur in this type of delay and, therefore, under the current regulations, the execution of this warranty.

   EPM is negotiating with the CREG and the Government in general, a modification to the regulation of warranties of reliability charge that provides some opportunity to continue with the obligations of steady power and that in turn avoids the execution of the warranty in matter. The main actions are: a) making feasible several auctions of annual reconfiguration of the amount, b) seek for support in other generation assets, such as generation with the Termo Sierra power station and c) looking for new power plants that increase the country's power supply.
4. Provision of $101,797 for the default, from January to October of 2021, to the Intercolombia transporter for the months following the entry into operation of the connection infrastructure of the Ituango project.

- **Performance guarantee**: for $14,947 to the project "Conexion Proyecto Guayabal 230 kV and Associated Works" (associated with the Bello-Guayabal-Ancon project) of the EPM distributor for the breach of obligations that covers the guarantee, which also guarantees the date of operation (date completed), the taking of power from the system during the first ten (10) months, at a value equal to or greater than 90% of the energy demand that was projected to consume (which was not fulfilled).
- EPM keeps other provisions oriented to the welfare and quality of life of its employees and family group, such as: employer's policy, multiplier points, Somos program, technical reserve and provision for high-cost and catastrophic illness.

  The main assumptions considered for calculating the welfare and Quality of Life provision are:

  Management premium: Awarded to the members of EPM management as an extra-legal benefit. An aggregate deductible was contracted from November 1st, 2016 through December 31, 2018, for $5,500. The main assumptions considered for calculating of each type of provision are the provision are: discount rate TES fixed rate, estimated value to be paid and estimated date of payment. To date, there have been no future events that could affect the calculation of this provision.

  Multiplying points: Points obtained throughout the year must be recognized at the request of the interested party or by decision of the Human Talent Development Directorate each accounting closing for the period and must be disbursed along with the payroll. The value of each point is equivalent to 1% of the Monthly Minimum Legal Wage Enforced (MMLWE) and the points should not be accumulated from one year to the next.

  Somos Program: The program operates under the modality of point accumulation. Depending on behavior of the statistics the points are accounted for with a cashing probability of 80%.

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

  high-cost and catastrophic illness: The calculating basis for this provision is that corresponding to the analysis of the entire population served of affiliates and beneficiaries of the Entidad Adaptada de Salud (EAS) of EPM, that suffer of any of the previously authorized illnesses.

28.1.7. Estimated payments

The estimate of the dates on which the company will have to disburse payments related to the provisions included in this notes to the separate statement of financial situation at the cut-off date, is the following:

Estimated payments	Dismantling and restoration	Onerous contracts	Lawsuits	Business combinations	Other	Total
2019	37,072	29,681	207,926	47,894	215,408	537,981
2020	7,584	31,463	36,700	124,384	104,297	304,428
2021	55	-	4,671	-	2,403	7,129
2022 y otros	209	-	16,851	20,238	3,452	40,750
Total	**44,920**	**61,144**	**266,148**	**192,516**	**325,560**	**890,288**

Figures stated in millions of Colombian pesos

28.2 Contingent liabilities and assets

The breakdown of contingent liabilities and contingent assets is as follows:

Description	Contingent liabilities	Contingent assets	Net
Lawsuits	727,479	331,918	(395,561)
Total	**727,479**	**331,918**	**(395,561)**

Figures stated in millions of Colombian pesos

The company has lawsuits or procedures that are currently in process with the legal, administrative and arbitration bodies. Considering the reports of the legal advisors, it is reasonable to consider that such lawsuits will not affect/significantly affect the financial situation or the solvency, even in the case of unfavorable conclusion of any of them.

The main lawsuits pending of resolution and judicial and extrajudicial disputes in which the company is a party to as of the report date, are indicated below:

Contingent liabilities

Third party (Plaintiff)	Complaint	Amount in COP
ISAGEN S.A. E.S.P.	Order EPM to compensate ISAGEN for the damages suffered as a result of the aforementioned fire and the consequent unavailability of the Guatape Power Plant.	252,804
Federacion Nacional de Cafeteros	Recognition and payment of investments made by the National Federation of Coffee Growers of Colombia (Federacion Nacional de Cafeteros de Colombia) in electrical infrastructure works.	107,393
Compania Minera La Cuelga Ltda.	Compensation of all economic damages caused to the La Cuelga Mining Company, caused for the works of execution and filling of the reservoir and commissioning of the Porce III hydroelectric project.	38,955
Reinaldo De Jesus Jaramillo Sucerquia	Economic liability by HIDROITUANGO S.A ESP be declared for the damages and losses caused to the plaintiffs (606 people), due to the impediment to work, due to the violation of the right to work, caused by the construction works of the Ituango Hidroelectric Power Plant.	38,117
Aura De Jesus Salazar Mazo	Compensation by the impediment to perform the mining activity 100 MMLWE; and, for moral damages that they assess, in an equivalent to 200 MMLWE for each of the people in the group, about 113 people.	37,996
Aura De Jesus Salazar Mazo	Collective right for about 113 people each claiming $ 1,133,400 for loss of income and $ 78,753,854 for future loss of income, for destroying, interrupting and cutting the ancestral horseshoe paths that lead from the "Alto Chiri" village in the municipality of Briceno to the "Valley of Toledo" parish.	27,253
Yalida Maria Madrigal Ochoa	For the eleven defendants, pledging damages to their social and family life due to the death of Nicolas Alberto Moreno Trujillo.	11,506
Varios administrativos	Other processes of less than $11,505 millon pesos.	198,149
Jesus Evelio Garces Franco	Nullification to the resolutions that resolves appeal for reconsideration by EPM, and by the Public Utilities Superintendency (SSPPD, fr its Spanish initials); EPM be declared administratively responsible to reinstatement of rights to the plaintiff for undue payment of alleged works in connection with the aqueduct.	161
Demandas laborales	Job reinstatement, Salary scale equalization, Extra hours, Convention acquired rights, etc.	15,145
Total contingent liabilities		**727,479**

Figures stated in millions of Colombian pesos

Regarding the uncertainty in the estimated date of payment and amount to be paid, for contingent liabilities the same business rules indicated in note 28.1.3 Lawsuits apply.

EPM possesses too as contingent liability, an Environmental Sanctioning Procedure, with the following information:

Third party (Plaintiff)	Complaint	Amount in COP
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	Sanction against EPM for obstructing the river flow, when closing the bottom discharge valves of the Porce III Hydroelectric Power Plant, to perform repair works in the slopes of the discharging basin of the tailgate, in the dam and the discharge of the ecological flow without knwing the concept by the competent environmental authority.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	For the disposal of waste material from the excavation activities of the construction of the Via Puerto Valdivia (Dam site - Ituango) on the riverstream and protection strip of the Tamara ravine; and, for having made the substitution of bridges located along Via Puerto Valdivia to build two (2) Box Culverts without the authorization for it; and, for having made wastewater discharges to an infiltration field in the "El Ciruelar" property.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	Perform construction and operation of a tunnel (Dam Site - Ituango); and, having made the disposal of waste material from the excavation the margin of the road that leads from the Municipality of San Andres de Cuerquia to the Corregimiento del Valle parish, without having the respective license or having previously obtained the modification of the granted environmental license.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	For occupaying the Ituango river channel, for the installation of a pumping system without having the respective license; and, having carried out the water collection from the Ituango river source by pumping without having previously obtained the modification of the environmental license.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	Usage of inadequate practices regarding surface water sources in the project area; collection of water from the "El Roble", "Burunda", "Bolivia" and "Guacimal" ravines, at higher flows than those granted and/or authorized for the development of the project; for not installing in each of the concessioned water bodies the infrastructure to monitor the remaining flows, in order to be presented in environmental compliance reports; not performeing and submitting water quality and hydrobiological monitoring for the communities in the Cauca river, under the conditions established in the environmental license. For not performing reconformation and recovery of the riverstream of the San Andres river and its flood zone to its natural conditions, within the period granted; for using materials from the San Andres River, without the updated environmental licenses; for not submitting the results of sediment monitoring in the Cauca river, in order to establish the comparison baseline at the beginning phase of operation of the project. Exceeding the maximum allowed levels of PST (particulate matter) and air pollutants in the asphalt plant located in the Industrial Zone "El Valle"; for not constructing the necessary facilities and infrastructures in the chimney of the asphalt plant to monitor emissions from stationary sources; for not complying with the management measures of the "Waste managemen and disposal and disposal zones scheme" when disposing plant material mixed with inert material inside the deposits and lack of signaling of the active disposal zones. All this in the project area of the "construction, filling and operation of the Pescadero Hydroelectric-Ituango Project" ...	Not possible to determine the amount

Third party (Plaintiff)	Complaint	Amount in COP
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	Increase in 78L/s the catchment flow of water from the San Andres River; for the industrial use in the operation of the crushing plant and concrete without having the respective lecense or having previously obtained the modification of the license granted for the development of the Project "Construction and Operation of the Hydroelectric Plant Pescadero-Ituango Project", putting at risk the water and hydrobiological resources; and, for not implemented the environmental management measures for the addition of the slopes on which the geomembrane was installed and the waterproofing of the soil putting at risk the hydric and hydrobiological resource.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	For not performing the environmental management measures established in the Environmental License granted for the Development of the Project "Construction and Operation of the Hydroelectric Plant Pescadero-Ituango Project" for the proper management and disposal of waste material from the excavation and construction of the Puerto Valdivia highway, disposing the material at the slopes of the road and the water sources "Cauca River" and "La Guamera Ravine"; and, having formed the deposits "La Planta" and "Cacharime" at less than thirty meters (30 Mts) from the water source "Cauca River". No haber implementado las medidas de manejo ambiental establecidas en la Licencia Ambiental otorgada para el Desarrollo del Proyecto “Construccion y Operacion Hidroelectrico Pescadero – Ituango relacionadas con el manejo y la debida disposicion del material sobrante de excavacion de la construccion de la via Puerto Valdivia arrojando los mismos sobre taludes de la via y las fuentes hidricas “Rio Cauca” y “Quebrada la Guamera”; y, haber conformado los depositos “La Planta” y “Cacharime” a menos de treinta metros (30 Mts) de la fuente hidrica “Rio Cauca”.	Not possible to determine the amount
Direccion de Bosques, Biodiversidad y Servicios Ecosistemicos del Ministerio de Ambiente y Desarrollo Sostenible	For the itervention of 100 Hectares that contained forest species subject to a national ban without the prior Resolution that authorizes their removal and that were in the area of the reservoir of the Hydroelectric Project Ituango.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	For obstructing the riverstream of the "Tenche Ravine" by filling it with stony material.	Not possible to determine the amount
National Authority of Environmental Licenses (ANLA, Autoridad Nacional de Licencias Ambientales)	For the activities related to the construction of the Auxiliary System of Deversion (SAD) and its associated infrastructure, within the "Construction and Operation of the Hydroelectric Plant Pescadero-Ituango Project", without previously processing and obtaining the modification to the environmental license ... "	Not possible to determine the amount

Contingent assets

Third party (Plaintiff)	Complaint	Amount in COP
Comisión de Regulación de Energía y Gas - CREG	Nillufucation of the administrative act issued by CREG, and the memorandum MMECREG-438 of 28-02-98 by which response to the right to petition presented by EPM.	85,756
Ministerio del Medio Ambiente y Desarrollo Territorial	Nullification, decreed that within the costs related to the construction and operation of the Porce III Hydroelectric Project, EPM may include the costs related to readjustments and other concepts.	4,728
Interconexión Eléctrica S.A. E.S.P. ISA	For the recognition of EPM for the amounts corresponding to the compensation that ISA received between 1995 and 1999, for the line modules that correspond to the STN's use assets in the Playas and Guatapé substations (civilly responsible).	3,365
Poblado Club Campestre Ejecutivo S.A.	Liability for the damage to the collector owned by EPM, which collects and transports wastewater from the sanitation basin of the La Honda Ravine in the municipality of Envigado.	3,150
Otros administrativos	Processes of less than $3,150 millon pesos.	6,928
Municipio de Bello	Complete nullification of the complex administrative act contained in Resolutions 2717 of 2009 and 0531 of 2010. PTAR Bello.	112,258
Municipio de Bello	Reimbursement (of payments) by EPM, for determinating and settlement of capital gains, PTAR Bello.	107,079
Otros Fiscales	Processes of less than $3,221 millon pesos.	2,145
La Nación Ministerio de Salud y Protección Social	The Ministry of Health and Social Protection (MINSALUD), has the legal and constitutional obligation to recognize and pay the amounts for services provided to members in relation to medicines and/or procedures, interventions or elements not included in the Mandatory Health Plan (POS, for its Spanish initials).	6,509
Total contingent assets		**331,918**

Figures stated in millions of Colombian pesos

As of December 31, 2018, the value determined by the experts to be compensated is $331,918 (2017: $329,058).

Estimated payments and collections

The estimate of the dates on which the company will have to disburse payments related to contingent liabilities or will collect payments for contingent assets provisions included in this notes to the separate statement of financial situation at the cut-off date, is the following:

Year	Contingent liabilities	Contingent assets
2019	168,240	97,194
2020	12,491	124,268
2021	8,837	9,299
2022 and others	1,010,355	135,617
Total	**1,199,923**	**366,378**

Figures stated in millions of Colombian pesos

Note 29. Other liabilities

The breakdown other liabilities is as follows:

Other liabilities	2018	2017
Non-current		
Revenue Received in Advance	2,892	3,099
Assets received from customers or third parties	8,076	8,161
Other deferred credit	21,159	21,229
Collection in favour of third parties	9	10
Subtotal other liabilities non-current	**32,136**	**32,499**
Current		
Revenue Received in Advance	51,956	58,067
Collection in favour of third parties	82,252	76,165
Subtotal other liabilities current	**134,208**	**134,232**
Total	**166,344**	**166,731**

Figures stated in millions of Colombian pesos

29.1 Revenue received in advance

The breakdown of Revenue received in advance at the cut-off date is as follows:

Revenue received in advance	2018	2017
Non-current		
Leases	2,203	2,375
Power utilities sales	689	724
Total revenue received in advance non-current	**2,892**	**3,099**
Current		
Leases	173	172
Sales	8,674	9,581
Power utilities sales	40,862	33,553
Natural gas utilities sales	5,406	8,329
Other revenue received in advance	(3,159)	6,432
Total revenue received in advance current	**51,956**	**58,067**
Total revenue received in advance	**54,848**	**61,166**

Figures stated in millions of Colombian pesos

Note 30. Revenue from ordinary activities

The company, for presentation purposes, disaggregates its revenue for the services it renders, in accordance with the business lines in which it participates and the way in which the administration analyzes them. The breakdown of revenue from ordinary activities is as follows:

Revenue from ordinary activities	2018	2017
Sales of goods	30	-
Rendering of services		
Power utility[1]	3,002,126	2,589,311
Power transmission service	151,184	205,859
Power distribution service	2,975,226	2,777,404
Natural gas utility[3]	851,597	735,005
Sanitation utility	419,580	400,591
Aqueduct utility[4]	571,677	492,044
IT services	7,172	4,581
Construction contracts	22,899	32,714
Other services	42,216	38,202
Refunds[5]	(194,289)	(178,068)
Total rendering of services	7,849,418	7,097,643
Leases	47,536	48,277
Gain on sale of asset[6]	23,596	1,040
Total	**7,920,550**	**7,146,960**

Figures stated in millions of Colombian pesos

[1]Revenue from the power generation service showed higher sales to large customers, an increase in quantities, mainly due to the new demand from Ecopetrol Rubiales, Grupo Femsa, Corona and Grupo Exito.

[2]Revenue from the power distribution service increased due to the higher unit cost and the increase in consumption.

[3]The increase is mainly due to higher sales in the secondary market and higher demand of the termicas de la Costa.

[4]The increase is explained by higher consumption, users and rates.

[5] Refunds presented an increase due to a greater refund of the reliability charge associated with greater power generation.

[6]The increase is due to the sale of land that the company made to the subsidiary Promobiliaria S.A. for the execution of a real estate project.

The company recognized the following amounts for the period, for the contracts in force at the cut-off date described in the previous paragraph:

2018	Carrying value of asset at the beginning of the period	Carrying value of asset at the end of the period	Carrying value of liability at the beginning of the period	Carrying value of liability at the end of the period
Contract of uniform conditions for regulated utilities[1]	316.578	352.720	18.883	14.086
Non-regulated market - (NRM) or large customers[1]	115.837	136.800	25.575	34.642
Total	**432.415**	**136.800**	**44.458**	**48.728**

2017	Carrying value of asset at the beginning of the period	Carrying value of asset at the end of the period	Carrying value of liability at the beginning of the period	Carrying value of liability at the end of the period
Contract of uniform conditions for regulated utilities[1]	312,193	316,578	43,017	18,883
Non-regulated market - (NRM) or large customers[1]	99,387	115,837	11,033	25,575
Total	**411,580**	**432,415**	**54,050**	**44,458**

Figures stated in millions of Colombian pesos

[1] contracts with uniform conditions are those through which EPM, provides residential public utilities in exchange for a price in cash, which will be set according to the rates in force, and to the use that is given to the service by the users, subscribers or owners of real estate and users, who when benefiting from the utilities provided by EPM, accept and abide by all the provisions defined thereof.

[2] The Resolution 131 of December 23 of 1998 by the Commission for Power and Gas Regulation (CREG, for its Spanish initials) establishes the conditions of power supply and levels for large consumers and indicates in its article 2 the electric power limits for a user to contract the power supply in the competitive market; The aforementioned resolution allows the draw up of contracts with large consumers to establish by common agreement the prices of power supply; the purpose of these contracts is to supply electric power to the consumer, as an unregulated user, to meet their own demand.

Another important agreement is the representation contract with XM, which at the end of December 2018 does not report balances for assets and liabilities of the contract.

In contracts with customers, no revenue from performance obligations rendered in previous periods was recognized during this period.

For these contracts it is not possible to identify the outstanding value of performance obligations not satisfied considering that these are contracts without a termination date.

Note 31. Other revenue

The breakdown of the other revenue, which are part of the revenue from ordinary activities, is as follows:

Other revenue	2018	2017
Compensations[1]	105,932	9,462
Recoveries[2]	65,819	182,472
Commissions	28,995	27,229
Other ordinary revenue	19,393	10,144
Utilization	6,106	6,212
Professional fees	5,060	1,749
Tender sale	2,521	653
Valuation of investment property	1,596	9,941
Government grants	1,145	-
Contracts for public utilities management	89	268
Total	**236,656**	**248,130**

Figures stated in millions of Colombian pesos

[1]In 2018, $67,966 was included as compensation for emerging damage caused by the events that occurred in 2017 at the Playas Hydroelectric Plant; for damages in the transportation of some equipment of the Ituango Project in 2016 and for damages in the Porce Hydroelectric Power Plant and compensation for lost profits of $16,150. In addition, the income tax was accrued for $15,000 from the non-contractual civil liability policy for the affectation to third parties by the Ituango Project in accordance with the letter from the insurance company with the reserves for claims in process that must be made by the insurance companies. In 2017 it included $5,908 for the compensation of damages related to the Playas plant.

[2]In 2017, the return for overpayment for the wealth tax in the 2011-year period is included for $127,205.

Note 32. Costs of services rendered

The breakdown of Costs of services rendered is as follows:

Costs of services rendered	2018	2017
Cost of goods and public services (utilities) for sale[1]	2,636,154	2,177,226
Personal services	484,878	433,246
Depreciations	425,876	415,504
Orders and contracts for other services	277,371	273,807
Licenses, contributions and royalties	135,845	145,905
Orders and contracts for maintenance and repairs	127,275	138,615
Materials and other operating expenses	107,793	104,403
Insurances	81,786	77,942
General	59,421	61,384
Amortizations	29,740	36,507
Taxes and rates	33,782	30,709
Consumption of direct imputs	23,557	27,466
Professional fees	22,772	32,232
Others	15,786	15,624
Total	**4,462,036**	**3,970,570**

Figures stated in millions of Colombian pesos

[1]Includes the value of electrical power purchases in block and on the stock exchange, connection cost, use of lines and pipelines, cost for sales and distribution of natural gas, among other costs. The increase compared to the previous period is mainly due to the use of networks due to greater sales to large customers, greater purchases of power in the stock market and in the long term and higher sales of gas in the secondary market.

Note 33. Administrative expenses

The breakdown of Administrative expenses is as follows:

Administrative expenses	2018	2017
Personnel expenses		
Payroll expenses	201,611	194,161
Social security expenses	74,720	75,123
Pension expenses	14,101	12,109
Other post-employment benefit plans different from pension	1,354	1,329
Other long-term benefits	2,466	2,686
Benfits in interst rates to employees	6,183	5,102
Total personnel expenses	**300,435**	**290,510**
Other miscellaneous provisions[1]	310,230	37,060
Provision for contingencies[2]	121,646	116,087
Taxes, contributions and rates	103,197	113,450
Charges, fees and services	54,139	63,276
maintenance	42,286	41,799
Intangibles	33,059	27,443
Provision for dismantling, removal or rehabilitation	31,388	90
Impairment of property, plant and equipment	29,384	27,217
Other general expenses	26,865	27,052
Amortization of intangibles	18,175	11,107
Studies and projects	15,386	17,732
Christmas lights	9,681	14,525
General insurances	7,544	5,581
Promotion and publications	6,792	11,578
Publicity and advertising	6,780	9,060
Surveillance and private security	6,695	7,276
Public utilities	5,250	5,952
Services of cleaning, cafeteria, restaurant and laundry	5,225	5,553
Provision for onerous contracts	4,796	5,856
Total general expenses	**838,518**	**547,694**
Total	**1,138,953**	**838,204**

Figures stated in millions of Colombian pesos

[1]Includes provisions for $137,318 for the guarantee that covers the construction and commissioning of the Ituango Pescadero Hydroelectric Plant, $101,797 for the Ituango connection, $42,917 to maintain assistance to evacuees due to the contingency of the project and $31,388 for the environmental contingency.

[2]Includes the update in the change of claims for 9 labour lawsuits of EADE and provision for $38,877 for the assistance to those affected by the contingency in the Ituango Hydroelectric Project that happened on April 28, 2018.

Note 34. Other expenses

The breakdown of Other expenses is as follows:

Other expenses	2018	2017
Loss on asset disposal[1]	91,325	18,252
Otros gastos ordinarios[2]	54,428	1,919
Contributions to non-corporate entities	15,024	21,158
Arbitral awards and extrajudicial conciliations	11,737	1,307
Loss due to changes in fair value in investment property	471	414
Court rulings	82	108
Loss on sale of assets	33	10
Total	**173,100**	**43,168**

Figures stated in millions of Colombian pesos

[1]Includes $78,295 for asset retirement due to the contingency of the Ituango Hydroelectric Project.

[2]Includes $45,639 recognized for the assistance to the community affected by the contingency of the Ituango Hydroelectric Project.

Note 35. Financial income and expenses

35.1 Financial income

The breakdown of Financial income is as follows:

Financial income	2018	2017
Interest revenue:		
Debtors and default interests	205,119	193,398
utility trust rights	21,631	33,799
Gain on valuation of financial instruments at fair value	17,132	18,386
Depósitos bancarios	15,769	13,611
Others	2,566	3,056
Total financial income	262,217	262,250

Figures stated in millions of Colombian pesos

35.2 Financial expenses

The breakdown of Financial expenses is as follows:

Financial expenses	2018	2017
Interest expenses:		
Interest on financial lease liabilities	39,570	35,785
Other interest expenses	3,227	245
Total interests	42,797	36,030
Total expense due to interest on financial liabilities not measured at fair value through change in profits and losses	1,030,950	904,926
Less interest capitalized on eligible assets	(334,242)	(279,974)
Other financial expenses:		
Charges	575	755
Other financial expenses[1]	77,468	136,041
Total gastos financieros	**817,548**	**797,778**

Figures stated in millions of Colombian pesos

[1]Includes in 2017 the assessment of financial instruments at fair value of the hedges that are not under hedge accounting because the underlying was canceled in November 2017.

Note 36. Net exchange difference

The effect of transactions in foreign currency was as follows:

Exchange difference	2018	2017
Exchange difference revenue		
Own position		
For goods and services and other	4,163	1,189
for liquidity	52,933	28,456
Accounts receivable	119,941	73,348
Other adjustments in exchange difference	-	3,368
Total Own position	**177,037**	**106,361**
Financial		
Gross income	5,249	14,416
Debt hedging	(42)	(330)
Total Financial	**5,207**	**14,086**
Total exchange difference revenue	**182,244**	**120,447**
Exchange difference expenses		
Own position		
For goods and services and other	12,852	3,068
Accounts receivable	77,055	12,347
Other adjustments in exchange difference	13,130	548
Total Own position	**103,037**	**15,963**
Financial		
Gross expenditure	508,566	73,672
Debt hedging	(221,915)	(33,859)
Total Financial	**286,651**	**39,813**
Total exchange difference expenses	**389,688**	**55,776**
Exchange difference, net	**(207,444)**	**64,671**

Figures stated in millions of Colombian pesos

Rates used for the exchanging foreign currency in the separate financial statements are:

Currency	Numeric code	Exchange to USD as of December 31		Exchange rate as of December 31		Average exchange rate	
		2018	2017	2018	2017	2018	2017
United States Dollar	USD	1.37	1.25	3,249.75	2,984.00	2,956.43	2,951.32
Guatemalan quetzal	GTQ	7.74	7.34	420.03	406.27	393.01	401.49
Mexican peso	MXN	19.69	19.57	165.01	152.51	153.78	156.51
Chilean peso	CLP	694.00	614.98	4.68	4.85	4.61	4.55
Euro	EUR	0.87	0.83	3,714.95	3,583.19	3,486.87	3,335.21
Japanese yen	JPY	109.72	112.65	29.62	26.50	26.77	26.32
Pound sterling	GBP	0.79	0.74	4,138.88	4,036.61	3,941.13	3,803.77
Swiss franc	CHF	0.99	0.97	3,296.56	3,062.09	3,021.12	2,999.08

Note 37. Effect of participation on equity investment

The effect by participation in equity investments is as follows:

Participation on equity investment	2018	2017
Dividends and participations[1]	102,968	44,157
Profit due to business combination[2]	-	32,669
Profit due to sales of equity investment	-	20
Total	**102,968**	**76,846**

Figures stated in millions of Colombian pesos

[1] Includes dividends from financial instruments for $102,968 (2017 $44,157) (see note 13. Other financial assets).

[2] During the 2017-year, a profit due to business combination for $ 32,669 was recognized, for the acquisition of control on November 1, 2017 of the subsidiary Empresas Publicas de Rionegro S.A. E.S.P. (EP RIO), originated by the difference between the consideration transferred and the fair value of the net identifiable acquired assets[3].

The consideration transferred was established based on the assessment of the company that considers future investments (investments in capital assets – capex- that are executed when a business invests in the purchase of a fixed asset or to add value to an existing asset) that must be carried out to guarantee its viability and an adequate provision of public utilities; which generates a negative value.

Note 38. Income tax

38.1 Tax provisions

Tax provisions applicable and in effect, establish the following:

- The nominal rate of the income tax is 33% and a surtax of 4%.
- Accordance to current tax regulations, the Company is subject to income tax and complementary taxes. The applicable rates are the following: 34% in 2017 and 33% in 2018, plus a surcharge of 6% in 2017 and 4% in 2018. Said surcharge is applicable when the taxable base of the tax is greater than or equal to $ 800 million pesos.
- Income taxes for occasional income tax are taxed at the 10% rate.
- Residential public utilities in Colombia are excluded from determining the income tax by the system or presumptive income calculated based on the net tax equity of the immediately preceding year.

Below are some fiscal considerations with impact on taxation in the Republic of Colombia.

[3] Established based on IFRS 13 fair value measurement.

Financing Bill Colombia

During 2018, the National Government presented a financing bill to the Congress of the Republic, whose purpose, according to the explanatory memorandum, is to cover additional requirements received during the approval process of the General National Budget Law (PGN, fir its Spanish initials) for 2019 in the Congress of the Republic, whose additional resources required amount to $14,000[4] billion Colombian pesos. This corresponds to an austere budget, but that allows the continuation of social and economic programs of vital importance for the country's fairness and economic growth.

The initiative is supported by information collected by the Ministry of Finance and Public Credit that collects the opinion of citizens, associations, companies, academic and territorial entities, and public entities of different nature against the creation of new income and the modification of existing ones.

Under this scenario and after exhausting the stages required for the inception of the bill within the Colombian legal system, on December 28, 2018, Law 1943 of 2018 "By which financing laws for the restoration of the equilibrium in the national budget and other provisions are dictated" was enacted.

Thus, among the main modifications, the following can be highlighted:

General rate of income tax and complementary

The rates of income tax and complementary are modified, as follows:

Year 2019: Thirty-three percent (33%)

Year 2020: Thirty-two percent (32%)

Year 2021: Thirty-one percent (31%)

Year 2022 and forward: Thirty percent (30%)

Presumptive income

Shall have a phasing-out, as follows:

Year 2018: 3.5%

Years 2019 and 2020: 1.5%

Year 2021 and forward: 0%

Value-Added Tax (VAT) or Sales tax

- The general rate of 19% will remain in force.
- The rate of 5% for electric vehicles and their components, parts and accessories will remain in force, as well as for components and spare parts for the natural gas-powered vehicle plan.
- The VAT rule of article 192 of Law 1819 of 2016 remains in force, according to which, the VAT rate of contracts in which a public entity is contracting will correspond to the date of the resolution or award act, or subscription of the respective contract, the rates will increase once they are added.

[4] **Translator note:** In Spanish one billion is 1,000,000,000,000 (10^{12}), while in English is 1,000,000,000 (10^{9}). The stated amount is 14,000,0000,0000,0000.

Other elements

- It is allowed to take as tax deductions in the income tax the VAT paid in the acquisition, import, construction and forming of real productive fixed assets, including the required services to put the good in use conditions, and those assets acquired through leasing.
- The possibility of taking as a tax deduction of 50% of the industry and commerce tax is incorporated. It is expected that, starting in 2022, this discount will be of 100%.
- The tax on dividends received by national companies is applied to the general rate of 7.5% by way of withholding tax on income, that will be transferable and imputable to the resident natural person or investor resident abroad.
- The sale of electric power generated based on wind energy, biomass or agricultural waste, solar, geothermal or ocean will be exempt income tax for a period of 15 years according to the definitions of Law 1715 of 2014 and Decree 2755 of 2003.
- Article 264 of Law 223 of 1995 that allows taxpayers to support their actions in the written concepts issued by the DIAN is repealed, now they continue to be mandatory for the entity's officials; in the case of taxpayers, they can only defend their actions based on the law.
- The Colombian Holding Companies (CHC) framework is created as an instrument to promote foreign investment in the country.
- Tax benefits are implemented through the figure of Mega-Investments (Mega-Inversiones) with the possibility of accessing a stable tax regime.
- The subcapitalization rule that limited the deductibility of the interest paid when there is overindebtedness is modified, specifying that such limitations only apply with respect to the debts contracted between national economic associates.

38.2 Reconciliation of the effective rate

The reconciliation between the applicable tax rate and the effective rate and the composition of the income tax expense for the 2018 and 2017 periods is as follows:

Income tax and complementary	2018	%	2017	%
Earnings before taxes	2.493.178		2.671.396	
Theoretical Tax				
Items that increase income	3.185.762	128%	1.455.195	54%
Wealth tax	0		27.842	
Dividends actually received from controlled companies	391.940		343.806	
Other -Provisions and non-deductible expenses	1.989.159		420.505	
IFRS valuations	53.302		99.715	
Adjustment Amortized cost	751.361		563.327	
Less items that decrease income	4.314.278	173%	3.359.367	126%
Deduction Real productive fixed assets	781.121		792.906	
Non-taxed dividends	304.495		203.495	
Excess of accounting depreciation over fiscal depreciation			393.401	
Non-taxed recovery	112.578		126.995	
Others	1.372.077		407.841	
Equity method	831.434		480.589	
Bank expenses, commissions and credit operation tax	691.343		592.784	
IFRS revenue	116.343		206.040	
Settlement of derivatives	76.265		127.612	
Recoveries by impairment	28.622		27.704	
Liquid income for the year	**1.364.662**	**55%**	**767.224**	**29%**
Less Tax-exempt income	38.476		54.118	
Liquid Taxable income	**1.326.186**	**53%**	**713.106**	**27%**
Income tax rate	33%			34%
Surtax rate	3%			6%
Occasional income tax rate	10%			10%
Income tax	437.641	18%	242.852	9%
Surtax	40.586	2%	44.425	2%
Occasional income tax	539	0%	0	0%
Less tax discounts	(5.570)	0%	(124.778)	-5%
Adjustments recognized in the current period related to the current income tax of previous periods	(97.923)	-4%	13.933	1%
Current tax	**375.273**	15%	**176.432**	7%
Detail of current and deferred expenses				
Current tax	375.272	15%	176.432	7%
Deferred tax	(226.916)	-9%	306.775	11%
Income tax	**148.356**	6%	**483.207**	18%

Figures stated in millions of Colombian pesos

38.3 Income tax recognized in profit or loss

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

Income tax	2018	2017
Current income tax		
Expenses (revenue) due to current income tax	478,766	287,277
Adjustments recognized in the current period related to the current income tax of previous periods	(97,923)	13,933
Tax benefits for tax losses, tax credits or temporary differences used in the period	(5,570)	(124,778)
Total Current income tax	**375,273**	**176,432**
Deferred tax		
Net expenses (revenue) due to deferred tax related to the origen and reversal of temporary differences	(8,966)	306,775
Net expenses (revenue) due to deferred tax related to changes in income tax or regulations	(217,951)	-
Total deferred tax	**(226,917)**	**306,775**
Income tax	**148,356**	**483,207**

Figures stated in millions of Colombian pesos

The rates used to determine the deferred tax are:

Year	2018	2019	2020	2021	2022
Income	33%	33%	32%	31%	30%
Surtax	4%	-	-	-	-
Total rate	**37%**	**33%**	**32%**	**31%**	**30%**

38.4 Temporary differences that do not affect the deferred tax

The deductible temporary differences and the unused tax losses and credits, for which the company has not recognized deferred tax assets, are detailed below:

Concept	2018	2017
Asset (or liability) for current income tax		
Total Asset current income tax	**2,037**	**237,389**
Recoverable balances of income tax	2,037	237,389
Total Asset (or liability) for income tax	**2,037**	**237,389**

Figures stated in millions of Colombian pesos

38.5 Income tax recognized in other comprehensive income

The detail of the tax effect corresponding to each component of “other comprehensive income” of the Consolidated Statement of comprehensive income is the following:

Other comprehensive income of the Statement of comprehensive income	2018			2017		
	Gross	Tax effect	Net	Gross	Tax effect	Net
Items that will not be reclassified after profit for the period						
New measurements of defined benefit plans	372	2,017	2,389	(18,735)	8,642	(10,093)
Equity investments measured at fair value through equity	(24,810)	3,380	(21,430)	475,220	(43,802)	431,418
Participation in other comprehensive income of subsidiaries	(40,562)	(712)	(41,274)	114,374	(122)	114,252
Items that can be reclassified after profit for the period						
Cash flow hedges	2,777	(67,764)	(64,987)	(5,142)	8,377	3,235
Participation in other comprehensive income of subsidiaries	115,639	(53)	115,586	10,219	21	10,240
Total	**53,416**	**(63,132)**	**(9,716)**	**575,936**	**(26,884)**	**549,052**

Figures stated in millions of Colombian pesos

38.6 Deferred Tax

The breakdown of the Deferred tax is as follows:

Deferred tax	2018	2017
Deferred tax asset	656,975	1,400,719
Deferred tax liability	2,813,803	3,722,095
Total net deferred tax	**(2,156,828)**	**(2,321,376)**

Figures stated in millions of Colombian pesos

38.6.1. Deferred tax asset

Deferred tax asset	Initial balance 2017	Net changes included in Profit for the period 2017	Changes included in Other Comprehensive Income 2017	Final balance 2017	Net changes included in Profit for the period 2018	Changes included in Other Comprehensive Income 2018	Final balance 2018
Assets	**655.401**	**(176.066)**	**-**	**479.335**	**(295.873)**	**-**	**183.462**
Property, plant and equipment	305.595	(64.369)	-	241.226	(200.666)		40.560
Intangibles	1.550	14.944	-	16.494	(9.375)	-	7.119
Investment property	2.699	(105)	-	2.594	(2.594)	-	-
Investments and derivative instruments	96.182	(80.995)	-	15.187	(15.187)	-	-
Accounts receivable	211.941	(22.002)	-	189.939	(70.058)	-	119.881
Inventories	3.658	(3.652)	-	6	(6)	-	-
Other assets	33.777	(19.888)	-	13.889	2.013	-	15.902
Liabilities	**747.105**	**163.672**	**10.607**	**921.384**	**(449.887)**	**2.017**	**473.514**
Credits and loans	243.761	(166.584)	-	77.177	135.500	-	212.677
Accounts payable	36.366	16.105	-	52.471	(52.471)	-	-
Employee benefits	91.556	181.352	2.230	275.138	(258.994)	2.017	18.161
Derivative operations	12.082	4.526	8.377	24.985	(24.762)	-	223
Provisions	162.272	(3.712)	-	158.560	(528)	-	158.032
Other liabilities	201.068	131.985	-	333.053	(248.632)	-	84.421
Deferred tax asset	**1.402.506**	**(12.395)**	**10.607**	**1.400.719**	**(745.760)**	**2.017**	**656.976**

Figures stated in millions of Colombian pesos

38.6.2. Deferred tax liability

Deferred tax liability	Initial balance 2017	Net changes included in Profit for the period 2017	Changes included in Other Comprehensive Income 2017	Final balance 2017	Net changes included in Profit for the period 2018	Changes included in Other Comprehensive Income 2018	Final balance 2018
Assets	**2.920.486**	**138.477**	**43.801**	**3.102.764**	**(484.617)**	**64.384**	**2.682.531**
Property, plant and equipment	2.623.752	102.451	-	2.726.203	(311.302)	-	2.414.901
Intangibles	26.973	17.450	-	44.424	(20.481)	-	23.943
Investment property	6.150	1.309	-	7.459	(6.099)	-	1.360
Investments and derivative instruments	113.526	60.829	43.801	218.155	(83.475)	64.384	199.064
Accounts receivable	104.372	(11.020)	-	93.352	(60.051)	-	33.301
Inventories	3.253	(3.247)	-	7	(7)	-	-
Other assets	42.459	(29.295)	-	13.164	(3.202)	-	9.962
Liabilities	**469.838**	**155.905**	**(6.412)**	**619.331**	**(488.059)**	-	**131.272**
Credits and loans	121.414	(112.640)		8.774	(8.774)	-	-
Accounts payable	112.274	12.378	-	124.652	(55.396)	-	69.256
Employee benefits	148.719	90.550	(6.412)	232.857	(228.570)		4.287
Derivative operations	-	-	-	-	57.729		57.729
Provisions	5.792	(474)	-	5.318	(5.318)	-	-
Other liabilities	81.639	166.091	-	247.730	(247.730)	-	-
Deferred tax liability	**3.390.324**	**294.382**	**37.389**	**3.722.095**	**(972.676)**	**64.384**	**2.813.803**
Total deferred tax asset/liability	**1.987.819**	**306.776**	**26.782**	**2.321.376**	**(226.916)**	**62.367**	**2.156.827**

Figures stated in millions of Colombian pesos

The relevant differences in the deferred asset and liability, are presented mainly by the application of the new rates introduced by Law 1943/2018, meaning, a recovery of the tax.

Another significant item is the exchange difference not performed by the application of the exchange rate at the end of the reporting period, which when compared to the exchange rate established by the fiscal rule, generates a temporary difference greater than that reported in the calculation of the deferred tax of the previous year.

38.6.3 Temporary differences

Temporary differences associated with investments in subsidiaries, associates and joint ventures, for which deferred tax liabilities have not been recognized, amount to $4,884,192 (2017: $4,352,416).

The most significant concepts on which temporary differences were presented are the following:

In assets, the largest effects on the deferred tax arise from temporary differences in property, plant and equipment, in accounts receivable in relation to portfolio provisions due to the difference in the portfolio cleaning-up provision under tax-law and the impairment of portfolio under IFRS and as a result of the assessment at amortized cost of accounts receivable. The unrealized rate difference in the cxc is another representative item in the temporary differences, a concept introduced by Law 1819/2016.

Regarding liabilities, the items that affect the calculation of the deferred tax are, mainly, the settlement of the provision corresponding to installments of pension bonds, the actuarial calculation in pensions and pension commutation of EADE and the credits and loans for the assessment at amortized cost of bonds, securities issued, credits and loans. The unrealized difference in accounts payable is another representative item in temporary differences, a concept also introduced by Law 1819/2016.

The temporary differences over which no deferred tax was generated were, among others, investments in subsidiaries, associates and joint ventures, according to paragraph 39 of IAS 12; likewise, in the items that do not have future tax consequences, as it is the case of liabilities for taxes and for the financial returns generated in the assets of the plan, because these classify as exempt income.

The approval of dividends after the revelation date and before the financial statements were authorized for publication, does not generate income tax consequences since it is established as a policy for the national subsidiaries that only tax-free profits and reserves are distributed. The tax effects that may be generated by the dividends decreed by the foreign subsidiaries, with the entry into force of Article 69 of Law 1943/2018, shall be considered as income exempt capital under the Colombian Holding Companies (CHC) framework.

Note 39. Information to be disclosed about related parties

EPM is a decentralized entity of the municipal order, whose only owner is the Municipality of Medellin. The capital with which it was constituted and operates, as well as its equity, is of public nature. The Mayor of Medellin presides the Board of Directors of EPM.

As related parties of 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 employee welfare.

The total value of the transactions made by the company with its related parties during the corresponding period is presented as follows:

Transactions and balances with related parties	Revenue[1]	costs and expenses[2]	Amounts receivable[3]	Amounts payable[4]	Guarantees received
Group EPM subsidiaries					
2018	438,352	250,162	1,575,289	89,870	
2017	498,247	145,825	1,438,242	55,476	
Group EPM associates:					
2018	57,912	32,760	44,831	12,176	
2017	37,519	29,772	2,251	7,046	
key management personnel:					
2018		8,191	894	1,065	317
2017		7,024	1,597	1,173	
Other related parties:					
2018	23,231	67,728	9,805	214,522	
2017	103,389	77,558	9,837	575,524	

Figures stated in millions of Colombian pesos

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] The detail of the revenue obtained by the company from its related parties is as follows:

	Revenue	2018	2017
Subsidiaries	Sale of goods and rendering of services	298,512	398,565
	Interests	108,475	79,252
	Professional fees	8,730	4,445
	Other	22,636	15,984
Associates	Sale of goods and rendering of services	14,691	36,755
	Other	43,221	764
Other related parties	Sale of goods and rendering of services	22,465	96,898
	Interests	351	80
	Professional fees	23	96
	Other	393	6,315

Figures stated in millions of Colombian pesos

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

	Costs and expenses	2018	2017
Subsidiaries	Purchase of goods and services	173,911	144,445
	Professional fees	797	1,380
	Other	75,454	
Associates	Purchase of goods and services	29,035	29,043
	Professional fees	3,725	729
	Other	0	
Other related parties	Purchase of goods and services	42,553	42,147
	Interests	2	
	Professional fees	907	696
	Other	24,266	34,715

Figures stated in millions of Colombian pesos

[3] The detail of the loans granted by the company to its related parties is as follow:

	Granted loans	Original currency	Term	Nominal interest rate	2018			2017		
					Nominal value	Amortized cost value	Total amount	Nominal value	Amortized cost value	Total amount
Hidroecologica del Teribe S.A. HET	Loan 1	USD	23 Years	LIBOR 3M + 4.43	375,160	30,959	406,119	355,095	30,922	386,017
EPM chile S.A.	Loan 1	USD	15.7 Years	LIBOR 6M + 3.80	258,333	307	258,640	287,648	26	287,674
Inversiones y Asesorias South Water Service SpA	Loan 1	USD	7 Years	LIBOR 12M +3.140	-	-	-	585,794	5,097	590,891
	Loan 2	USD	7 Years	LIBOR 12M +3.750	-	-	-	462,895	6,312	469,207
HIDROSUR	Loan 1	CLP	8,5 Years	0.072	1,091,371	(690)	1,090,681			
EPM Chile Transmision	Loan 1	USD	8 Years	LIBOR 6M + 3.40	18,076	7	18,083			

Figures stated in millions of Colombian pesos

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

	Received loans	Original currency	Term	Nominal interest rate	2018			2017		
					Nominal value	Amortized cost value	Total amount	Nominal value	Amortized cost value	Total amount
Empresas Varias de Medellin S.A. E.S.P.	Loan 1	COP	1 Year	DTF + 2.44%	-	-	-	35,000	1,415	36,415
	Loan 2	COP	1 Year	IBR + 2.1%	40,000	88	40,088			

Figures stated in millions of Colombian pesos

Transactions and balances with related government entities

The total of financial surpluses paid to the Municipality of Medellin to December 2018 was $1,503,504 (2017: $1,309,136).

Remuneration to the Board of Directors and key personnel of the company:

Members of the key management personnel in the company include:

Concept	2018	2017
Wages and other short-term employee benefits	7,335	6,323
Other long-term employee benefits	856	701
compensation to key management personnel	**8,191**	**7,024**

Figures stated in millions of Colombian pesos

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

Note 40. Capital Management

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

The company manages its capital in order to plan, manage and assess the attainment of financial resources in the national and international financial markets, for strategic investments, and investment projects, through different options that optimize costs, that guarantee the stability of adequate financial indicators and adequate credit rating, and minimize financial risk. For this, the following capital management policies and processes have been defined:

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, striving to optimizing financing costs.

The company has not made any changes to its objectives, policies and capital management processes during the period ended as of December 31, 2018 and December 2017.

In order to face the changes in the economic conditions, the company implements proactive management mechanisms for their financing, enabling as far as it is feasible, different financing alternatives, so that at the time performance of any long-term credit operation is required, there will be access to the source that each time has availability of competitive market conditions at the required time.

Following are presented the values that the company manages as capital:

	2018	2017
Bonds and loan		
Other bonds and debt securities	8,206,867	8,240,198
Commercial bank loans	1,403,924	1,113,156
Multilateral bank loans	3,865,275	1,668,269
Development bank loans	1,953,742	919,922
Issued bonds and debt securities	374,717	469,370
Other loans	40,088	36,415
Total debt	**15,844,613**	**12,447,330**
Total capital	**15,844,613**	**12,447,330**

Figures stated in millions of Colombian pesos

Note 41. Financial risk management objectives and policies

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

Market risk refers to the changes or volatility of market variables that can 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, cash flow, financial indicators, contracts, project viability and investments.

Credit risk refers to the possible default of payment obligations by third parties derived from contracts or financial transactions performed.

Liquidity risk is the scarcity of funds and the inability to obtain the resources at the time they are required to cover the contractual obligation and carry out investment strategies. The scarcity of funds leads to the need to sell assets or contract financing operations in unfavorable market conditions.

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

41.1 Market Risk

Market Risk is the risk that the fair value of the future cash flows of a financial instrument may fluctuate due to changes in market prices. The company has identified that financial instruments affected by market risk include:

- Cash and cash equivalents
  - Fiduciary charges
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
  - Swaps

The methods and hypotheses used when preparing the sensitivity analysis consist of:

- For cash and cash equivalents, fixed income securities and Investments pledged as collateral: the methodology used to measure market risk is the Value at Risk (VaR), consisting of the quantification of the maximum loss that the portfolio could present in a month with a level of confidence of 95%. For the quantification of the VaR, is used a methodology defined within the EPM Group.
- For swaps, sensitivity analyzes were performed under the assumption of keeping agreed hedges constant according to their indexation rates.
-

41.2. Interest rate risk

Interest Rate Risk is the risk that the fair value or future cash flows of a financial instrument may fluctuate as a result of changes in market interest rates. EPM has identified that financial instruments affected by interest rate risk include:

- Cash and cash equivalents
    - Fiduciary charges
- Other financial assets:
    - Fixed income securities
    - Investments pledged as collateral
    - Swaps
- Credits and loans
- Trade debtors and other accounts receivable

The concentration of interest rate risk appears when there are large individual exposures and significant exposures to counterparties whose probability of default is determined by factors such as the economic sector, currency and credit ratings. Interest rate risk management seeks to preserve capital and maintain or increase profitability. EPM has defined policies on risk in interest rates, through the identification of risks, the determination of the position of rates and the simulation of possible hedging strategies. This assist decision making, oriented to maintaining the position to hedge it, and later the results of the executed strategies are assessed.

Sensibility analysis to interest rates

The following table indicates the sensibility to a possible reasonable change in the interest rates of financial instruments exposed to this risk, without considering the effect of hedge accounting. Keeping all other variables constant, the pre-tax profit/loss and EPM's equity would be affected by changes in variable interest rates as follows:

	Increase/decrease in basic points	Financial effect	
		In earnings before taxes	In equity
2018			
Financial assets measured at fair value with change in profit			
Investments at fair value with change in profit	*100*	*(14,054)*	*(11,243)*
	(100)	*14,054*	*11,243*
Financial assets measured at amortized cost			
Accounts receivable in foreign currency	*100*	6,828	5,463
	(100)	*(6,828)*	(5,463)
Financial liabilities measured at amortized cost			
Credits and loans	*100*	*(38,243)*	*(30,594)*
	(100)	*38,243*	*30,594*
Financial liabilities measured at fair value with change in other comprehensive income			
Derivative instruments	*100*	*(3,991)*	*(3,193)*
	(100)	*3,991*	*3,193*
2017			
Financial assets measured at fair value with change in profit			
Investments at fair value with change in profit	*100*	*31*	*(31)*
	(100)	*24*	*(24)*
Financial assets measured at amortized cost			
Accounts receivable in foreign currency	*100*	17,338	13,870
	(100)	*(17,338)*	(13,870)
Financial liabilities measured at amortized cost			
Credits and loans	*100*	*(91,839)*	*(73,471)*
	(100)	*(91,839)*	*(73,471)*
Financial liabilities measured at fair value with change in other comprehensive income			
Derivative instruments	*100*	*303*	*(11,956)*
	(100)	*(303)*	*12,576*

Figures stated in millions of Colombian pesos

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

41.3. Exchange risk

Exchange risk is the risk that the fair value or future cash flows of a financial instrument may fluctuate as a result of changes in exchange rates.

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

- Cash and cash equivalents
- Other financial assets:
  - Fixed income securities
  - Swaps
- Credits and loans
- Trade debtors and other accounts receivable
- Loans to economic associates

The exposure to exchange risk relates, first, to financing activities in a currency other than the functional currency and with the hedging operations contracted. The company manages its exchange risk through hedging operations over a medium-term period. It is EPM's policy not to close speculative hedging transactions, so that the conditions of the hedging derivative instruments replicate the conditions of the underlying with the purpose of maximizing hedge effectiveness. EPM hedges its exposure to fluctuations in exchange rates using different hedging instruments, including Swaps, Forwards and Options at different terms.

Sensibility analysis to Exchange rates

The following table indicates the sensibility to a possible reasonable change of 100 Colombian pesos in the exchange rate to American Dollars without considering the effect of hedge accounting. The effect is caused by the variation in monetary and non-monetary assets. Keeping other variables constant profit/loss before taxes and the company's assets would be affected by changes in exchange rates as follows:

	Increase/decrease in basic points	Financial effect	
		In earnings before taxes	In equity
2018			
Financial assets measured at fair value with change in profit			
Other financial assets - fixed-rate bonds	*100*	*28,773*	*23,019*
	(100)	*(28,773)*	*(23,019)*
Cash and cash equivalents	*100*	*8,244*	*6,595*
	(100)	*(8,244)*	*(6,595)*
Financial assets measured at amortized cost			
Accounts receivable in foreign currency	*100*	3,799	3,039
	(100)	*(3,799)*	*(3,039)*
Financial liabilities measured at amortized cost			
Credits and loans	*100*	*482,159*	*385,727*
	(100)	*(482,159)*	*(385,727)*
Financial liabilities measured at fair value with change in other comprehensive income			
Derivative instruments	*100*	*64,773*	*51,819*
	(100)	*(64,773)*	*(51,819)*
2017			
Financial assets measured at fair value with change in profit			
Other financial assets - fixed-rate bonds	*100*	*30*	*24*
	(100)	*(30)*	*(24)*
Cash and cash equivalents	*100*	*251*	*201*
	(100)	*(251)*	*(201)*
Financial assets measured at amortized cost			
Accounts receivable in foreign currency	*100*	6,505	5,204
	(100)	*(2,854)*	*(2,283)*
Financial liabilities measured at amortized cost			
Credits and loans	*100*	*(121,820)*	*(97,456)*
	(100)	*121,820*	*97,456*
Financial liabilities measured at fair value with change in other comprehensive income			
Derivative instruments	*100*	*59,183*	*47,346*
	(100)	*(59,183)*	*(47,346)*

Figures stated in millions of Colombian pesos

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

41.4 Credit Risk

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

- Cash and cash equivalents
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
  - Swaps
- Trade debtors and other accounts receivable

Credit risk management by type of financial instrument is detailed below:

- **Cash and cash equivalents, fixed income securities and Investments pledged as collateral:** For credit risk management, EPM assigns limits by issuer, by counterpart and by intermediary considering the financial, risk and fundamental assessment of the entities, emphasizing on capitalization levels of shareholders. The methodology considers the characteristics proper of the investments portfolio and applicable regulations. 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 assessed entities.
  - When the value of the consolidated investment portfolio exceeds the equivalent of 10,000 Monthly Minimum Legal Wage Enforced (MMLWE), 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 eligible 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 portfolio administration.
  - Stock broker companies backed by banks, that is, banked counterparts, must have a minimum equity of 30,000 MMLWE.

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

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

- For investments with a term equal to or less than one (1) year, the banking institution must have a current rating corresponding to the maximum category for the short-term according to the scales used by the rating agencies and at least the second-best current rating for the long-term;
- For investments with a term greater than one (1) year, the banking institution must have the highest current long-term rating according to the scale used by the rating agencies and the maximum rating for the short-term according to the scale used for such term.
- Swaps: EPM is exposed to the risk that a counterparty does not recognize the right and in order to mitigate it, previously assessing of risk levels for each entity with which it expects to perform an operation.
- Trade debtors and other account receivables: EPM is exposed to the risk that users of residential public utilities will default or not pay for such utilities. Accounts receivable from debtors of residential public utilities are divided in two large groups: customers that defaulted their payments and customers that made financing or payment agreements made as a portfolio recovery strategy or for obtaining new customers.

EPM assesses the behavior and amounts of accounts receivable at the end of each period to determine if there is objective evidence that the receivable is impaired and identify its possible impact on future cash flows. The criteria used to determine that there is objective evidence of an impairment loss are:

- Customers that default in two (2) or more bills.
- Knowledge or evidence of the customer entering processes of corporate restructuring, insolvency or liquidation.
- The rise of social turmoil, be it of public order or natural disasters, which according to experience are directly correlated with the default of accounts.

In order to avoid an excessive concentration of risk, EPM has developed and put into operation various strategies that allow it to mitigate the risk of default, among which are:

- Persuasive collection by making phone calls and sending letters to customers with assistance from specialized collection agencies.
- Segmentation of customers to identify those with the highest risk, based on the amounts, to execute personalized collection activities.
- Possibility of payment agreements or partial payments that lead to the recovery of exposed capital.
- Compensation of receivables and payables by EPM with customer that are also suppliers.
- When the former strategies do not generate satisfactory results, coercive collection actions are implemented through suspension of the service.
- If the former strategies do not generate satisfactory results, the collection of receivables through the judicial process is proceeded.

Likewise, expanding the product portfolio to customers in such a way as to facilitate debt payment is encouraged, e.g., prepaid power and water.

As mentioned, EPM makes payment or financing agreements, which are executed as a strategic portfolio recovery or for obtaining new customers. These give right to fixed or determinable payments and are included in current assets, except those expired with more than 12 months from the date of generation of the report, in which case they are classified as non-current assets.

In general terms, in order to guarantee the debts of customers, blank promissory notes with letters of instructions are issued, and once the financed amount exceeds certain pre-established amounts in the internal regulations, real or bank guarantees are requested, and in cases where the client is a state entity, is proceeded to the pledge of resources that EPM, prior agreement, collects from the client.

For credit risk management of accounts receivable in its different stages (risk cycle), methodologies, procedures, guidelines and business rules are incorporated, complying with commercial and financial policies, in order to achieve a comprehensive and sustainable vision of the clients.

To leverage the stages of the credit risk cycle, there are different statistical methodologies that allow obtaining an estimate of the future payment behavior of the accounts. These methodologies are described below:

- CREDIT SCORING

Allows obtaining a customer's risk profile based on payment behavior and specific characteristics, which allows the segmentation of the population, suggesting the optimal candidates for offering basic services and/or value-added products.

- SCORING OF APPROVAL FOR VALUE-ADDED PRODUCTS

Profiles customers that request a value-added credit, assigning a risk level to the applicants and according to the established business rules assists in making the final approval-or-denial decision.

- PORTFOLIO CLASSIFICATION MODEL

Assigns the probability of short-term default (2 months) of the services subscribed, in order to design collection prioritization strategies.

- EXPECTED LOSS CALCULATION MODEL

Allows finding the probability that the subscribed services may enter into default within a period of 12 months, which is then used to calculate the expected loss of the accounts.

The company considers that the value that best represents its exposure to credit risk at the end of the period, without considering any guarantee taken or other credit enhancements is:

Concept	2018	2017
Cash and cash equivalents	835,779	234,526
Investments in debt instruments	978,435	62,927
Investments in equity instruments	1,581,092	1,605,902
Accounts receivable	(287,014)	(266,584)
Other accounts receivable	(60,270)	(43,590)
Maximum exposure to credit risk	**3,048,022**	**1,593,181**

Figures stated in millions of Colombian pesos

41.5 Liquidity Risk

Liquidity Risk refers to the possibility of insufficient resources for the timely payment of operations and commitments of the entity, and thus EPM would be forced to obtain liquidity in the market or to liquidate investments in an onerous manner. It is also understood as the possibility of not finding buyers for offered bonds.

The Group has identified that the financial instruments affected by the liquidity risk include:

- Cash and cash equivalents
- Other financial assets:
  - Fixed income securities
  - Investments pledged as collateral
  - Swaps
- Trade debtors and other accounts receivable

To control liquidity risk, time-series comparisons of figures are made of benchmark indicators and of liquidity levels at different time-frames. From that assessment, investment strategies that do not affect the liquidity of the companies are formulated, considering the cash-budget and the market risk analyses to consider the diversification of the funding fund sources, the capacity to sell assets and the creation of contingency plans.

The main aspects considered in the analysis are:

- Liquidity of securities: analyses characteristics of the issuer, amount, and negotiation volume.
- Market liquidity: analyses the market's general behavior and forecasts rates to infer future behavior.
- Portfolio liquidity: cash flows are coordinated to determine investment strategies according to 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 non-derivative financial liabilities and assets:

	Aerage effective interest rate	Less than 1 year	From 1 to 2 years	From 2 to 3 years	From 3 to 4 years	More than 4 years	Total contractual obligation
2018							
Non-derivative Financial liabilities with variable interest rate	7.94%	1,876,128	176,553	1,426,553	176,553	4,487,658	8,143,445
Non-derivative Financial liabilities with fixed interest rate	6.17%	818,213	1,092,793	93,483	1,455,151	4,065,843	7,525,483
Non-derivative Financial assets	7.39%	953,136	12,500	8,000	1,100	-	974,736
Non-derivative Financial assets- portfolio	7.39%	141,611	201,399	264,558	265,406	1,610,953	2,483,927
Total		**3,789,088**	**1,483,245**	**1,792,594**	**1,898,210**	**10,164,454**	**19,127,591**
2017							
Non-derivative Financial liabilities with variable interest rate	7.20%	631,969	219,279	1,008,559	68,119	2,078,902	4,006,828
Non-derivative Financial liabilities with fixed interest rate	7.93%	227,063	1,735,763	169,063	1,421,144	4,694,164	8,247,197
Non-derivative Financial assets	6.44%	33,617	8,402	7,000	8,000	2,000	59,019
Non-derivative Financial assets- portfolio	6.03%	304,630	100,422	202,163	460,332	1,273,855	2,341,402
Total		**1,197,279**	**2,063,866**	**1,386,785**	**1,957,595**	**8,048,920**	**14,654,446**

Figures stated in millions of Colombian pesos

Values included in the tables above for non-derivative financial liabilities and assets may change in view of fluctuations in the interest rate with variable respect to the interest rate estimated at the end of the reporting period. The company considers that cash flows cannot occur earlier than indicated above.

The following table shows the analysis of contractual expirations remaining for derivative financial liabilities:

	Less than 1 year	From 1 to 2 years	From 2 to 3 years	From 3 to 4 years	More than 4 years	Total contractual obligation
2018						
Swap Contracts	21,520	(45,843)	12,165	(192,984)	-	(205,142)
Total	21,520	(45,843)	12,165	(192,984)	-	**(205,142)**
2017						
Swap Contracts	45,094	30,857	(14,388)	(3,037)	(5,480)	53,046
Total	45,095	30,857	(14,388)	(3,037)	(5,480)	**53,046**

Figures stated in millions of Colombian pesos

The main method for the assessment and follow-up of liquidity is the projection of the cash flow that is performed at EPM and is consolidated in the cash budget. From this, a daily follow-up and projections of this cash position 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, according to the cash flows generation capacity in EPM.

These projections consider debt financing plans of EPM, fulfillment of ratios, compliance with organizational objectives and applicable regulations.

Note 42. Measurement of fair value on a recurring and non-recurring basis

The methodology established in IFRS 13 Fair value measurement specifies a hierarchy in the assessment techniques based on whether the variables used in the determination of the fair value are observable or not. The company determines the fair value on a recurring and non-recurring basis, as well as for disclosure purposes:

- Based upon prices quoted in active or passive markets identical to those the company can access on the measurement date (level 1).
- Based upon assessment techniques commonly used by the market participants and that use variables different from prices quoted which are observable for the asset or liability, directly or indirectly (level 2).
- Based upon internal assessment techniques of cash flow discounts or other assessment models, using variables estimated by the company that are non-observable for the asset or liability, in the absence of variables observed in the market (level 3).

During 2018 and 2017 in EPM no transfers have been made between the fair value hierarchy levels, either for transfers in and out of the levels.

Assessment techniques and variables used in the company for measurement of fair value for recognition and disclosure:

Cash and cash equivalents: includes money in cash and banks and highly liquid investments, easily convertible into a certain amount of cash and subject to an insignificant risk of changes in value, with a maturity of three months or less from the date of acquisition. EPM uses the market approach as assessment technique for this item, these items are classified in level 1 of the fair value hierarchy.

Investments at fair value through profit and loss and through equity: includes investments made to optimize the liquidity surpluses, i.e., all those resources that are not immediately allocated to the performance of the activities that constitute the corporate object of the companies. EPM uses the market approach as assessment technique, these items are classified in level 1 of the fair value hierarchy.

Derivative instruments – Swaps: EPM uses derivative financial instruments, such forwards, futures, swaps and options to hedge financial risks, mainly Interest rate risk, Exchange risk and commodities prices. Such derivative financial instruments are recognized initially at their fair value as of the date when the derivatives agreement is executed and are later reassessed at their fair value. EPM uses as assessment technique for the swaps the discounted cash flow, with an income approach. The variables used are: interest rate swap curve for rates denominated in US dollars, to discount cash flow in US dollars; and external interest rate swap curve rates denominated in Colombian pesos, to discount cash flows in pesos. These items are classified in level 2 of the fair value hierarchy.

The following table shows for each of the fair value hierarchy levels, the assets and liabilities of the company, measured at fair value on a recurring basis to the cut-off date, as well as the total value of the transfers between level 1 and level 2 occurred during the period:

Measurement at fair value on a recurring basis 2018	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	218,338	-	-	218,338
	218,338	-	-	218,338
Other investments in debt titles				
Fixed income securities	972,788	-	-	972,788
Variable income securities	64,547	-	-	64,547
Investments pledged as collateral	5,647	-	-	5,647
	1,042,982	-	-	1,042,982
Other equity investments				
Variable income securities	1,574,359	-	6,733	1,581,092
	1,574,359	-	6,733	1,581,092
Fiduciary trust rights				
Fiduciary in administration	402,067	-	-	402,067
	402,067	-	-	402,067
Derivative				
Swaps	-	186,230	-	186,230
	-	186,230	-	186,230
Investment property				
Urban and Rural Land	-	70,040	-	70,040
Buildings and houses	-	7,789	-	7,789
	-	77,829	-	77,829
Derivatives				
Swaps	-	192,484	-	192,484
	-	192,484	-	192,484
Total	**3,237,746**	**71,575**	**6,733**	**3,316,054**
	98%	**2%**	**0%**	

Figures stated in millions of Colombian pesos

The recorded value and the estimated fair value of assets and liabilities of the company that are not recognized at fair value in the separate statement of financial position, but require their disclosure at fair value, as of December 31, 2018 and 2017 is as follows:

Measurement at fair value on a recurring basis 2018	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents	11,755	-	-	11,755
	11,755	-	-	11,755
Other investments in debt titles				
Fixed income securities	57,492	-	-	57,492
Variable income securities	55,315	-	-	55,315
Investments pledged as collateral	5,435	-	-	5,435
	118,242	-	-	118,242
Other equity investments				
Variable income securities	1,599,169	-	6,733	1,605,902
	1,599,169	-	6,733	1,605,902
Fiduciary trust rights				
Fiduciary in administration	353,668	-	-	353,668
	353,668	-	-	353,668
Derivative				
Futures contracts	-	97	-	97
Swaps	-	14,150	-	14,150
	-	14,247	-	14,247
Investment property				
Urban and Rural Land	-	108,456	-	108,456
Buildings and houses	-	8,367	-	8,367
	-	116,823	-	116,823
Derivados				
Swaps	-	66,138	-	66,138
	-	66,138	-	66,138
Contingent considerations				
Provisions-business combination	-	144,453	-	144,453
	-	144,453	-	144,453
Total	**2,082,834**	**(79,521)**	**6,733**	**2,010,046**
	104%	**-4%**	**0%**	

Figures stated in millions of Colombian pesos

Concept	2018		2017
	Recorded value	Estimate fair value	
		Level 2	Level 2
Assets			
Public utilities	1,442,340	1,449,122	1,626,491
Employees	118,539	121,740	110,297
Associates	1,773,523	1,773,524	1,733,789
Other accounts receivable	306,868	307,956	59,669
Total assets	3,641,270	3,652,342	3,530,246
Liabilities			
Other Issued bonds and securities	8,206,867	8,206,866	8,240,198
Commercial bank loans	1,403,924	1,403,924	1,113,156
Multilateral bank loans	3,865,275	3,865,274	1,668,269
Development bank loans	1,953,742	1,953,742	919,922
Issued bonds and securities	374,717	374,719	469,370
Loans to economic associates	40,088	40,088	36,415
Total liabilities	15,844,613	15,844,613	12,447,330
Total	**(12,203,343)**	**(12,192,271)**	**(8,917,084)**
		100%	**100%**

Figures stated in millions of Colombian pesos

As of December 31, 2018, and 2017, there were no items in levels 1 and 3.

Note 43. Service Concession Arrangements

As of December 31, 2018, the company manages as operator several concessions that contain provisions for the construction, operation and maintenance of facilities, as well as the provision of public utilities such as water supply, collection and treatment of waste water, according to application regulations.

The remainder term of the concessions where the company acts as operator is detailed below:

Entity/Agreement	Activity	Country	Concession period	Initial remaining period
Empresas publicas de Medellin - Municipio de Caldas	The Municipality agreeds to make available and facilitate the use of networks and other infrastructure for the rendering of water supply and sewage utilities.	Colombia	30 years (extendable)	10 years
Empresas publicas de Medellin - Municipio de Sabaneta	The Municipality agreeds to make available and facilitate the use of networks and other infrastructure for the rendering of water supply and sewage utilities.	Colombia	10 years (extendable)	6 years
Empresas publicas de Medellin - Municipio de La Estrella	Execution of works and rendering of the supply of drinking water and sewage utilities.	Colombia	10 years (extendable)	6 years
Empresas publicas de Medellin - Municipio de Envigado	Rendering of water supply and sewage utilities.	Colombia	10 years (extendable)	9
Empresas publicas de Medellin - Municipio de Itagui	Construction of aqueduct and sewage networks to rerender the utilities to the assignated neighborhoods.	Colombia	30 years (extendable)	29
Empresas publicas de Medellin - Municipio de Bello	Execution of works and rendering of the supply of water (aqueduct) and sewage utilities.	Colombia	10 years (extendable)	5 years
Empresas publicas de Medellin - Municipio de Copacabana	Execution of works for the supply of drinking water, sewage and the rendering of such utilities.	Colombia	20 years (extendable)	12 years
Empresas publicas de Medellin - Municipio de Girardota	Prestacion del servicio de acueducto y alcantarillado.	Colombia	20 years (extendable)	14 years
Empresas publicas de Medellin - Municipio de Barbosa	The Municipality agreeds to make available and facilitate the use of networks and other infrastructure for the rendering of water supply and sewage utilities.	Colombia	30 years (extendable)	9 years

At the cut-off date, no revenues and costs incurred by the exchanged construction services for a financial asset or an intangible asset have been recognized.

Service Concession Arrangements

The concession agreements between EPM and the Municipalities, establish the conditions under which the aqueduct and sewerage networks are managed, operated and maintained for the supply of drinking water utility and sanitation of wastewater to its inhabitants, under the terms, conditions and rates established by the Commission for the Regulation of Drinking Water and Basic Sanitation (CRA).

In the agreements the following rights and obligations for EPM as operator in the service concession agreement are stated:

- The right to receive from the Municipality the whole of aqueduct and sewerage networks and to have exclusivity as system operator.

- Obligation to make exclusive use of the aqueduct and sewerage networks for the purposes for which they are intended, maintain them and return them under the conditions of use in which they were received.
- Some concession agreements have an automatic renewal option for equal periods unless one of the parties expresses the intention of not continuing with it.
- Concession agreements do not establish the obligation to construct elements of property, plant and equipment.

Upon termination of the concession, EPM must return the aqueduct and sewerage networks without any consideration to the Municipalities. No changes have occurred in the terms of the concession contract during the period.

For these agreements, the intangible asset model is applicable. See Note 7 Other intangible assets.

Note 44. Events occurred after the period being reported

On March 1, 2019, the Norwegian-Chilean firm Skava Consulting delivered the results of the root cause analysis of the contingency of the Ituango hydroelectric project. The study, which was conducted independently and is based on the scientific method, was aimed at analyzing the root cause of a specific event: the occluding of the auxiliary diversion tunnel (GAD, Galeria Auxiliar de Desviación), a structure that was in operation since September 2017 and in April 2018 it was the only water outlet of the Cauca River while the dam and tailrace were completed, among other main works of the project.

The auxiliary diversion tunnel (GAD, for its Spanish initials) was built as a temporary alternative that, once it came into operation, would allow the technical and ultimate sealing of the original diversion tunnels.

The consulting team that participated in the root cause investigation was composed of 7 German, Swiss and Chilean engineers. Among them 3 professionals with more than 25 years of experience in this industry, 2 with a doctorate degree and 2 with a master's degree, experts in geotechnical engineering with experience in tunnels and dams, and in rock, geology, hydrology and civil engineering for mining projects, metro systems and hydroelectric power plants.

Based on the available documental and analytical evidence, Skava Consulting considered as most probable hypothesis that the obstruction of the auxiliary diversion tunnel (GAD), was due to the "progressive erosion in weak areas of the rock", located on the floor of the tunnel, that were not properly addressed due to a design deficiency during the advisory stage.

To the date of presentation of the separate financial statements, the financial effect of the results of the root cause analysis for the contingency of the project is not estimated.

EPM continues the recovery of the Ituango project, always with the priority of reducing the risks for the people who live downstream from the main works.

After the revelation date of the consolidated financial statements and before the authorization for publication date, no relevant events occurred that imply adjustments to the figures.

ATTACHED 4

Certification for the Financial Superintendence of Colombia

Jorge Londoño De la Cuesta, in his capacity as legal representative of the municipally-owned industrial and commercial company known as Empresas Públicas de Medellín E.S.P., and in accordance with Article 37 of Act 222 of 1995 and Article 46 of Act 964 of July 8, 2005,

CERTIFIES

That the financial statements and other reports that are relevant to the public do not contain any flaws, inaccuracies, or errors that may prevent the actual financial position or operations of Empresas Públicas de Medellín E.S.P. as of December 31, 2018, from being known.
That the information contained therein has been previously verified according to the current International Financial Reporting Standards (IFRS) and that their balances have been faithfully taken from the books.

Jorge Londoño De la Cuesta
CEO
Colombian citizenship ID No. 70,564,579

This certification is issued in Medellín on March 26, 2019, to comply with the demands made by the Financial Superintendence of Colombia to security issuers.

estamos ahí.

Empresas Públicas de Medellín E.S.P
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Conmutador: 3808080 - Fax: 3569111
Medellín-Colombia
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ATTACHED 5

EMPRESAS PÚBLICAS DE MEDELLÍN E.S.P.

REPORT ON THE INTERNAL ACCOUNTING CONTROL SYSTEM EVALUATION

ACCOUNTING INFORMATION 2018

During 2018, the Vice President of Corporate Auditing of Empresas Públicas de Medellín E.S.P., in the development of his function of constantly verifying and evaluating the internal control system, and in compliance with the provisions of Act 87 of 1993, performed evaluations to determine the status of the internal accounting control system of EPM with regards to the management and recording of operations on the accounting system, and emphasizing on the accuracy of the registered transactions, the effectiveness of the internal (operational, financial, and accounting) procedures, the protection of the resources, and the trustworthiness of the financial statements and accounting reports.

Pursuant to the provisions of Ruling 193 of 2016 of the General Accounting Office of Colombia, and for administrative purposes, the Vice Presidency of Corporate Auditing is responsible for permanently evaluating the implementation and effectiveness of the internal accounting control required to optimize the quality of financial information of the entity. As part of the evaluation, the Vice Presidency reviewed the strengths and weaknesses of the internal control system of the accounting processes and monitored the recommendations made during previous auditing works, as well as the extraordinary events that might occur during the evaluated period, taking into account auditing methods and techniques that are appropriate for the basic operation of the entity, from an independent and objective perspective.

This evaluation process offered improvement opportunities, especially concerning the orientation and re-orientation in the application of the regulatory framework, due to the complexity and exigencies of the International Financial Reporting Standards, the decentralization of the process activities, and the amount of processed information. In our opinion, these observations deserve adjustment actions; therefore, we made recommendations that have been implemented and analyzed by the offices responsible for the audited processes, in order to set an improvement plan in motion.

As a result of the evaluations performed during 2018, it is concluded that the internal accounting control system is in process of adjustment to the needs of the organization and is being efficiently developed, in accordance with the guidelines established on the corresponding regulations, since it was found that the evaluated controls mitigate the risks of the accounting process.

Sincerely,

OSCAR ALBERTO CANO CASTRILLÓN
Vice President of Corporate Auditing

Empresas Públicas de Medellín E.S.P
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Medellín-Colombia

ATTACHED 6

Medellín March 27, 2019

The undersigned general secretary of Empresas Públicas de Medellín E.S.P.

CERTIFIES

That Empresas Públicas de Medellín E.S.P is a municipally-owned industrial and commercial company, established as a legal entity with independent equity, in accordance with Agreement 69 of 1997, issued by the Council of Medellín.

That, in accordance with the statutes of the entity, Agreement 12 of 1998, its legal representative is the CEO, position currently held by Jorge Londoño De la Cuesta, who is empowered, subject to the provisions of Article 18 of the aforementioned statutes, to ensure the normal operation of the company.

This certificate is issued for the Financial Superintendence of Colombia at the request of the Accounting and Costs Office.

MARITZA ALZATE BUITRAGO
Vice President of Legal Affairs and General Secretary

estamos ahí.
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