



CEO WATER MANDATE REPORT
Communication on Progress



EPM
CEO WATER MANDATE REPORT

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INTRODUCTION

In order to achieve hydrological balance by/and ensuring water supply for public utilities provided by EPM, it is necessary to promote initiatives and projects contributing to the conservation of hydrographic basins, to water consumption management, and to appropriate management of the waste water in the system the company operates. These type of actions contribute to take care of the water resources and balance the natural availability through its uses and management.

Water is an essential commodity for life and the development of society. EPM Group strongly believes that it must contribute to the protection of hydrographic basins that tribute into its dams and systems, working together with public and private organizations, as well as the general community, —as it is a shared responsibility— in order to ensure the sustainability of this resource and the territories where it is present.

In order to ensure the provision of public utilities related to water supply and hydroelectric power generation, it is necessary to protect the tributary hydrographic basins, seeking to mitigate and prevent the ecosystem deterioration process, mainly occurring as a consequence of anthropic activities that may cause medium and long-term water availability problems. EPM strongly believes that the efficient water use and saving in its processes, as well as the waste water treatment in the system that operates, contribute to the conservation of the basins and the sustainability of the water resource that they provide. That is the reason why it develops programs and projects related to basin conservation, to efficient water use and saving, to waste water management, and to promote the intelligent use of public utilities by its users and the community.

COMPANY PROFILE

- ***EPM Group – From local to multi-Latin***

The EPM Group originated from EPM, a company of public nature owned by the Municipality of Medellín, which was incorporated in 1955 to provide the city's population with public utility services of water supply, electrical power, and telecommunications.

The EPM Group gradually broadened its coverage to 10 municipalities located in the geographical area known as Valle de Aburrá (Aburrá Valley), and it later reached other sub-regions of Antioquia's Region.

Its administrative and budgetary autonomy, its long-term vision, the quality of its services, the talent of its people, and the changes in the Colombian public utility legislation, allowed it to widen its horizon into other national markets, and diversify its business portfolio.

In 2003, the EPM Group started its growth process in other Colombian regions and carried out its first international transaction in Central America, after continue its growth process in other countries of Latin America.

Conclusively, the EPM Group is currently a Multi-Latin business group comprising 48 companies, with a clear growth horizon towards the year 2022, focusing on being a reference of operational excellence, reputation and transparency. It also aims at contributing to the well-being and equitable development in the territories where it operates by responsibly and comprehensively providing solutions in the fields of electric power, gas, water supply and sanitation.

The strategic planning model comprises three elements: identity, action and results. Its content is the following:

- **Corporate strategic planning**

Corporate Strategic Planning of the EPM Group

Identity

What we say we ARE:

Values
Purpose

Transparency / Responsibility /
Innovation / Commitment / Warmth /
Trustworthiness / Service

The EPM Group looks to remain through time by means of the contribution to developing sustainable and competitive territories, generating well-being and development with equity in the environments where it operates. Therefore, the Group focuses on developing infrastructure projects and offering our customers and users electricity, gas, water and sanitation solutions supported on business agreements and information and communications technology services comprising business activities that harmonize the financial, social and environmental results.

Action

How we decide to DO IT:

Businesses
Strategy



Results

What we decide to ACHIEVE:

Strategic Objectives
MEGA

The Group aims at achieving in 2022 an income of USD \$16,000 million, with an EBITDA of at least USD \$5,500 million, generating a great value for the stakeholders, taking care of the social aspects, and protecting the environment.



See, <http://sostenibilidadgrupoepm.com.co/en/our-group/what-we-dream-about/corporate-strategic-planning/>



Our Environmental and Corporate Social Responsibility -CSR- Policies

Corporate Social Responsibility

CSR is the thread that articulates and gives meaning to the business decisions of EPM in the perspective of creating social, environmental and economic value for its stakeholders.

EPM understands CSR as "mandatory or voluntary commitments EPM assumes in their engagement with stakeholders while preserving the central objective of sustainability."

Mandatory Commitments: They are inherent to social order and the law. We assume that these are the basis of socially responsible management and transparency signal to society in general

Voluntary Commitments: They are facultative related to the corporate purpose and have favorable impacts on stakeholders.

Sustainability Interdependence: Set of economic social and environmental factors, that favor the continuation and development of a company in a mutually beneficial business relationship with society.

CSR Policy

Corporate Social Responsibility should be the policy framework within which the strategic objectives of the EPM Group develop, to contribute to sustainable human development through the generation of social, economic and environmental value, welcoming sustainability topics covered by local, national and global initiatives. A socially responsible business performance has an ethical foundation, based on the recognition of the impact that their decisions have on stakeholders

Environmental management

Throughout its existence, the environmental dimension has remained a constant in the daily practice of EPM, articulated to its business management in providing public services and accompanying its growth and consolidation as a business group. It is part of their corporate social responsibility. EPM performs a comprehensive environmental management, which include compliance with legislation and voluntary commitments subscribed, the sustainable use of natural resources, continuous improvement of environmental performance and promoting and strengthening environmental culture among others. These principles are stated in its Environmental Policy, which commits all companies that are part of today's EPM Group. In this context the company performs multiple actions aimed at improving the environment, the responsible management of their impact and sustainable human development.

Environmental policy

The EPM Group, as a provider of public services related to energy, water, sanitation and telecommunications, is aware of its interdependence with the environment; therefore, you should conduct a comprehensive environmental management proactively with criteria of business competitiveness and environmental, economic and social sustainability.

Materials Issues

Process to identify the materiality of the EPM Group.



Identification of subjects

In order to build the list of important subjects, the company resorted to the voices of the stakeholders by means of direct dialogs in some cases, and through studies on expectations, needs, satisfaction or reputation, in other cases. Transactional interaction mechanisms, such as the ones for complaints and claims, were also used. The stakeholder participation is heterogeneous because it corresponds to the engagement dynamic of each one of the companies, which are in different evolution stages.

The voices of the stakeholders combined with the knowledge of the EPM Group's people on their territories, and with their experiences in the day-to-day interaction by means of the diverse processes of the companies.

The identified subjects were contrasted with strategic planning elements of the EPM Group, and with relevant global subjects of sustainability in order to incorporate them, if they were not identified in prior steps, provided that they belong to our environment and our strategy. The following sources were considered: the thematic areas and the Sustainable Development Goals of the post-2015 world development agenda, <http://www.centroregionalpma.org/web-pacto/esp/?q=/publicacion-centro-regional>, the PNUD 2010–2014 human development reports, the WBCSD work lines, the ISO26000 International Social Responsibility Standard, the Dow Jones Sustainability Index, the sustainability reports of outstanding companies of the sector, events such as the 7th World Urban Forum, and the topics of the GRI Sustainability Topics for Sector document.

The resulting list of issues and their corresponding actors was followed by subsequent processes of refining, revision, discussion and analysis, and by a pre-selection based on potential economic, environmental and social impacts for the EPM Group and the society, at the discretion of people with a vast knowledge of the subsidiaries and the corporate core. That was how the list of issues to prioritize was obtained.

Prioritization of topics

The prioritization was performed jointly with specialists of the organization by means of the prioritization criteria for material topics, an instrument designed by the company for estimating the value degree potentially generated or damaged by each subject for the EPM Group and its stakeholders.

This instrument assigns high values for the convergence of criteria, but the suitability of this condition was put as a matter to be analyzed in EPM's 2014 materiality exercise due to the fact that subjects with great importance in only one of the three evaluated categories can end up with a low total score, even if it has major repercussions on sustainability. With the purpose of compensating for this situation, the system was adjusted by means of an empirical contrast of the results, carried out by people who have the capacity to visualize the impact of the priority sustainability topics on the EPM Group, its stakeholders and the society in general.

For analyzing subjects and topics, qualitative techniques were used, translated into numerical expressions that makes it easier to understand, contrast and visualize certain qualities or trends, without forgetting that reality surpasses the limitations of the instruments trying to model it.

Importance of the topics for the EPM Group: impact or value of the topic for the EPM Group. Importance of the topics for the stakeholders: impact and value of the topic for EPM Group's stakeholders.



Topic management potential: possibilities or opportunities provided by the topic for developing it.

It includes the strategic planning; the social, economic and environmental aspects underlying in EPM Group's policies; the capacities of the companies; and the diverse time horizons. It includes the stakeholders' expectations and needs; the extent, scale and urgency of the economic, social or environmental impact; the closeness of the affected party; and the diverse time horizons. It includes the state of the issue in the context, its development in the organization, and the mobilization of the stakeholders around it.

Validation

The Sustainable Development Management Department refined the final result with expert criterion and based on the contributions received from the Management Committee (one of the Board of Directors support committees). The Strategy and Growth Executive Vice-President's Office is the responsible for ensuring that all fourteen material topics are reflected on the content of the Sustainability Report.

The materiality results are disclosed to the Strategic Corporate Planning and the Business Planning Departments in order to ensure the articulation with the strategic planning, feed the environment analysis and the 2015-2018 Business Plan.

The associated risks were identified for every material topic and for several relevant subjects, strengthening thus the organization's comprehensive risk management. This information can be broadened during the identification of the stakeholders.

The material topics are the axes upon which the engagement with all the stakeholders is managed by the business and support departments.

Ver: <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/general-information/material-aspects-and-coverage/>

Material Topics

Notably, some of the material issues identified by EPM Group for its sustainability report are related to the care of water in its operations and in the watershed supplying its reservoirs and systems

- **Water conservation**, topic related to indicators GRI-G4: EN8, EN9, EN10, EN22, EN26, EN27
- **Biodiversity**, topic related to indicators GRI-G4: EN11, EN12, EN13, EN14, EN17.
- **Climatic strategy**, topic related to indicators GRI-G4: EN15.

See, table 1. Material Topics in the EPM Group.

See, <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/general-information/report-parameters/global-reporting-initiative-index-gri-q4/>

Material topics	These are material topics because they have impact on...
AGU Water conservation	The survival and the supplies for productive processes.
AYC Access and purchasability of the public utility services	The universalization; accident and soil risks; coexistence conflicts.
BIO Biodiversity	The functional basis for the ecosystemic services that are necessary for the development of any human activity.
CAL Quality and safety of the products and services	The competitiveness and the quality of life.
CLI Quality of the work environment	The construction of coherence, trust; and on the productivity.
CON Responsible contracting	The sustainability and competitiveness through the development of capabilities applied to the local corporate fabric.
ECL Climatic strategy	The water shortage; floods and droughts; results of the productive activities.
ENR Diversification of renewable energies	The access to sustainable energy sources; and on the dependence on the water resource.
INT Integration in the territory	The feasibility of projects and operations; and on the role of the company as a development agent.
PSS Population without service	A basic lack, related to the business, of a very vulnerable population.
RDH Human Rights	The feasibility of the activities and on people's dignity.
RSE Balance in the CSR actions in the territories	The coherence with the strategic statements.
TAR Fees and prices	The financial sustainability; the competitiveness; and the payment capacity.
TRN Transparency and openness of the information	Less corruption and extra-costs; and more access to opportunities.

Table 1. Material Topics in the EPM Group.

1. DIRECT OPERATIONS

1.1. Water Consumption

Water collected and used by EPM during 2014, coming from different sources, surface, water supply, atmospheric, underground, etc., was 16,184 Mm³, of which 99.97% correspond to superficial water consumption, as indicated below:

- The total consumption of surface water was 16,180 Mm³.
- 98.20% of surface water was reused for the production processes of energy generation.
- Surface water consumption decreased 4.54% in relation to 2013. This decrease was associated to less energy generation in the Guatapé hydroelectric power station during 2014, due to the low levels of the Peñol-Guatapé reservoir.

The following tables show water consumption in the EPM's WWTP and DWTP and water consumption for energy generation.

Plant		2013		2014	
		Surface water (m ³ /year)	External aqueduct water supply (m ³ /year)	Surface water (m ³ /year)	External aqueduct water supply (m ³ /year)
PTAP	Aguas Frías	570,421		559,174	
	Ayurá	160,696,470		151,126,646	
	Barbosa	1,513,689		1,537,223	
	Caldas	3,482,547		3,501,695	
	La Cascada	1,603,792		1,586,747	

	La Montaña	8,753,434		8,079,980	
	Manantiales	110,817,395		113,460,719	
	San Antonio de Prado	2,580,041		2,588,928	
	San Cristóbal	4,083,747		4,466,484	
	Villa Hermosa	1,260,012		6,273,996	
	Palmitas	40,506		43,893	
PTAR	El Retiro		273		272
	San Fernando		158,930		170,995
Subtotal		295,402,054	159,203	293,225,485	171,267
Total		295,561,257		293,396,752	

Source: IDSOS.

Water consumption variation in the WWTP and DWTP of 2014 in relation to 2013 was 0.73%.

Water consumption for EPM's power generation (2014)				
Departments	Generation	Domestic use	Cooling	Total

	m ³ /year	m ³ /year	m ³ /year	m ³ /year
Sierra Dorada Operations Unit	30,669	10,194	59,222,772	59,263,635
Guadalupe Operations Unit	3,242,612,085	104,877		3,242,716,961
East Zone Operations Unit	4,188,416,792	53,647		4,188,470,439
North Zone Operations Unit	734,679,070	1,996		734,681,066
Small Power Plants Direction Office	974,936,951	1,329		974,938,279
Porce Operations Unit	6,690,004,487	30,363		6,690,034,850
Total	15,830,680,053	202,405	59,222,772	15,890,105,230

Source: IDSOS.

Some figures related to efficient use and saving of water are highlighted below:

The total volume of recirculated water for the company's processes was 55.94 Mm³. It corresponds to an increase of 30.11% in relation to 2013. The greater percentages correspond to water recirculation for processes associated to purification and energy generation, as explained below:

It was possible to save 3.66 Mm³ of water consumption in the EMP's DWTPs, thanks to the use of recirculated water that is returned to the purification process for washing the plants' filters. This volume is 1.25% of the total flow consumed in the process and represents an increase of recirculated water of 45.39% in relation to last year. Likewise, 52.2 Mm³ of water were reused for cooling the La Sierra, Guatapé, and Playas hydroelectric power stations.

In addition to the previous, it is calculated that it was not necessary to extract 3.9 Mm³ of water from the sources, thanks to the control of technical and commercial losses of the Non-Revenue Water Management project. These initiatives contribute to save and use efficiently the water resources, as well as to their sustainability.

The total residential consumption from different sources in the EPM facilities was 519,145.78 m³. Of that total, 15.39% corresponds to EPM Headquarters in the city of Medellín; such consumption was 79,909 m³ in 2014, which represented an increase of 11.38% in relation to last year. This increase was due to the demand of additional water consumption that was caused by the irrigation of the terraces, green walls, internal and external planters, the increase of water consumption in the cooling towers due to climatic conditions, and the filling of the perimeter channel.

The annual water consumption per capita at EPM Headquarters increased 9.91% in relation to last year; going from 45.48 liters/person/day in 2013 to 49.98 liters/person/day in 2014, with a daily average population of 4,380 people. This consumption is equivalent to a monthly average of 1.52 m³/person/month, which is within the efficient consumption range in this type of facilities (1-1.5 m³/person/month). The attached table shows the water consumption of the last three years in the EPM Building.

Initiatives and projects developed in 2014 associated to water consumption are highlighted below:

- **Unaccounted-For Water Management:** It included the development of activities for the control of technical losses like control of pressures, modernization, replacement of networks and service pipes and systematic search of leaks; as well as the activities for the control of commercial losses like normalization of frauds, improvement of metering, customer loyalty, communication activities and social management in subnormal sectors and informal car washes. The reached quantity of UFW in 2014 was 89.6 Mm³; a reduction of 8.5% was achieved in relation to last year. It is calculated that thanks to the management carried out, it was not necessary to extract 3.9 Mm³ of water from the sources, which contributes to the efficient use and savings of this valuable resource.
- **Efficient water use and water saving plans:** Follow up of the efficient water use and water saving plans of the Manantiales Plant systems was done Caldas and Barbosa, and the preparation of the plans of the Villa Hermosa, Aguas Frías, San Cristóbal, Palmitas, and La Cascada Plants systems and the Ayurá Plant system was started. Moreover, 100% of the scheduled activities related to the implementation and assistance to the efficient water use and water saving plans were carried out for the 22 facilities associated to the power generation stations. Also, awareness and training activities, civil works, and adaptation of equipments required in some facilities like offices, substations, workshops and administrative headquarters were carried out to guarantee efficient water use and water saving in our processes and activities.



- **Recirculation of filter-washing water:** We implemented a system of recirculation of filter-washing water in Aguas Frías; permanent monitoring and record of the recirculation activity of filter-washing water in the La Ayurá, La Cascada, La Montaña, Manantiales, San Antonio de Prado, San Cristóbal, Villa Hermosa, and Aguas Frías purification plants; and first designs of a sludge treatment system in the Barbosa DWTP, which includes recirculation of water.

See, <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/water-care/water-consumption/>

1.2. Wastewater management

It consist in the implementation, by EPM Group Companies, of management measures for wastewater discharges resulting from the activities and processes of its companies, in which water consumption is required.

The main results of the management of EPM discharges, resulting from its processes, equipment cooling, and domestic consumption, are summarized below:

- The total flow discharged by the EPM facilities in 2014 was 105.29 Mm³, which represents an increase of 0.78% over 2013, due to increased dumpings from water purification plants.
- 56.25% of total discharges from facilities corresponds to La Sierra thermoelectric plant.
- 41.22% of total discharges from facilities corresponds to San Fernando and El Retiro WWTP, which treat wastewater of El Retiro and the South of Aburra Valley.
- Domestic wastewater discharges were 335,943.17 m³, which corresponds to an increase of 0.97% over 2013.

In the attached figures and tables, domestic wastewater discharges are distributed by percentage and discharges are shown by type of facility.

Spillages by EPM facilities

Facilities	Type of treatment	Destination	2013	2014	2013-2014 variation
			Discharge (m ³ /year)	Discharge (m ³ /year)	%

10 DWTPs	None	Sewage system	2,687,927	2,256,485	-16,05
	None	Water current	15,221	45,285	197.52
2 WWTPs	Secondary	Water current	45,219,838	43,402,626	-4.02
La Sierra thermoelectric station	Secondary (industrial-waste)	Water current	9,962	6,698	-32.76
	None (cooling)	Water current	56,184,786	59,222,768	5.41
EPM Building	None (cooling)	Sewage system	20,057	22,136	10.37
Aqueduct operation area and pumping)	None	Sewage system	Se incluye dentro de lo doméstico	Se incluye dentro de lo doméstico	
Subtotal			104,137,791	104,955,998	0.79
Domestic from facilities			332,710	335,943	0.97
TOTAL			104,470,501	105,291,941	0.79

Source: IDSOS.

Initiatives and projects developed in 2014, related to wastewater management, are shown below:

- Sanitation and Discharge Management Plan of Aburra Valley:** in order to make progress with the SDMP, achieve the goal of removing 160 tons/day of BOD from the Medellin river, and increase the level of dissolved oxygen to 5 mg/l, in 2016 we will continue with the construction of the Bello WWTP, the operation of the San Fernando WWTP, and the awarding of the Centro Parrilla project for the modernization of water and sewerage systems in Medellin downtown. The

total investment in the execution of the plan during the period 2004-2014 was COP \$781,155 million, and the estimated investment for the period 2015-2017 is COP \$1,108,826 million. A table with the investments made and estimated by EPM for the Sanitation Plan of the Medellin river, Aburra Valley, is attached.

Medellín River rehabilitation - Investments executed and projected by EPM				
Modernization of the sewage networks and elimination of wastewater discharges				
Term	Investment (COP millions)	Physical goal (km)	Wastewater eliminated	discharges
2004-2014	335,195.00	284.20	758.00	
2015-2017	482,125.00	178.20	402.00	
Total	817,320.00	462.40	1,160.00	

San Fernando wastewater treatment plant	
Project / activity	Investment (COP millions)
Construction of WWTP	137,652.11
2015-2017 optimization	50,229.00
Total	187,881.11

Medellín River rehabilitation - Investments executed and projected by EPM	
Bello wastewater treatment plant	
Concept	Investment (COP millions)
2008-2014 execution	194,658.21
2015-2016 projection	524,226.81
Total	718,885.02
North wastewater interceptor	
Concept	Investment (COP millions)
2008-2014 execution	113,064.53
2015-2016 projection	35,724.76
Total	148,789.29
Collector branches of the North wastewater interceptor	
Concept	Investment (COP millions)
2008-2014 execution	545.69
2015-2016 projection	16,520.92

Medellín River rehabilitation - Investments executed and projected by EPM	
Total	17,066.61

EPM Sanitation and Spillage Management Plan Total (Aburrá Valley)	
Concept	Investment (COP millions)
2008-2014 execution	781,115.54
2015-2017 projection	1,108,826.49
2004-2017 plan total	1,889,942.03
Note: 2008-2014 compensatory rates, approximately COP 40 billion. Maser Urban Drainage Plan Agreement: COP 1.5 billion.	

- **Improvement of the San Fernando WWTP Efficiency:** the study for the improvement of the WWTP efficiency was performed, as well as the implementation of enhancement actions in this plant, as the chemically-enhanced primary treatment, change of membrane diffusers, and design of selectors. The program will continue in 2015.

In the San Fernando WWTP, 10,439 tons/year of BOD and 10,975 tons/year of TSS were removed, thus preventing these volumes of pollution from reaching the Medellín River.

- **Improvement of the Sludge Treatment:** works for the improvement of the sludge thickeners are carried out in the La Montaña SWTP ; while in the Barbosa SWTP, civil works, corresponding to the sludge treatment system, are being executed. The well in which different currents of discharged water will be received, the drying bed's foundations, among other support works will be ready by December 2014.
- **Studies:** the study: "Evaluation of the characteristics of sludges, cakes, and filtrates produced in sludge conditioning and drying systems of purification plants" was conducted in the first half of 2014, under the guidance of a professional in the purification process. The scope of the study

includes the analysis of the five plants that currently have a sludge conditioning and drying system.

- **San Nicolas Valley Project:** the project for the design and construction of some WWTP in the East of Antioquia continues, with the purpose of collecting and treating wastewater from a part of the population of this region.
- **Biosolids:** the use of biosolids, by-product of the sludge generated in municipal WWTP, is one of the challenges of EPM. In 2014, the competent environmental authority forbade direct application in pasture, forestry, and soil restoration, until the presentation of results from biological and physico-chemical tests that determine its toxicity, which involved its storage and, consequently, a drastic decrease in the compost production. 11 samplings were made in biosolids and sands produced in the WWTP and, to date, none of them has been classified as hazardous waste. In July 2014, the Ministry of Housing issued the Decree 1287, which regulates the use of biosolids produced in WWTP, providing many possibilities of use for this product in other activities. For its part, EPM made progress in the construction of a composter located in Don Matias, municipality of Antioquia, where a third part of the biosolids generated in its WWTP will be processed.

<http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/water-care/wastewater-management/>

1.3. Water Risk management

- The Strategic Environmental Plan includes integrated watershed management and environmental services, provides water care initiatives, such as watershed management, linkage to BanCO2 program, support to Cuenca Verde Corporation. See <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/water-care/water-conservation/>.
- There is a procedure for planning of energy resources to analyze the availability of water resources and with a study to characterize the response of water resources through the generation of future series of rainfall, flow and temperature with a horizon 2014-2100 and with Kairos methodology and software for the Integrated Risk Management.
- EPM completed in 2014 an agreement with the National University for characterization of the response of water resources through the generation of future series of rainfall, flow and temperature with a 2014-2100 horizon, considering scenarios of variability and climate change, in order to address adaptation action plan. See https://prezi.com/3rscb2ettync/cambio-climatico-epm/?utm_campaign=share&utm_medium=copy
- In the risk matrix of the EPM Group that is reported to the Board, a risk related to the availability of water resources, described as "limited access to natural resources for the provision of services" was identified and assessed. Also at the following levels of management these risks were identified, for example in the risk matrix Power Generation Business risk and described as "Decrease in the quality and quantity of water sources". Another example are the risks identified

and assessed in the six processes that make up the macro-process Provision of Water and Sanitation Service, focus on the quality and availability of water. The risks at different levels of management, were identified, their likelihood and consequence were valued, the existing controls were identified, and improvement plans were formulated and are being monitored from the Kairos Software.

- EPM participates in building risk maps of water quality, which should be updated annually by the health authority. In the first quarter of 2015 EPM formulated a sustainability strategy in order to ensure the quality of the water supplied to the users served by the Ayurá system.
- To manage the risk related to water availability associated with climate change, EPM has designed a model that simulates the hydraulic generation in terms of rainfall with Monte Carlo simulations, including the price of energy, and EPM losses for low hydrology. To evaluate the alternatives the cost of risk is modeled with possible coverage.
- EPM operates a hydro meteorological network in watersheds to power generation and supply water, which seeks to provide timely and reliable hydrologic and climate information, to the decision-making in the phases of power generation projects, operation of plants, commercialization of electric energy, and to perform assessments and environmental monitoring. Operation of these stations comprises from capture, processing and data analysis for hydrologic and hydraulic assessments and flow forecasts. In addition, EPM performs bimonthly monitoring to the flow and quality of water and supply sources for aqueduct and semiannually monitoring to the water quality for reservoirs generation, in compliance with the Environmental Management Plans.
- In addition, EPM establishes scenarios related to availability of water at processes level, like risks from raw water withdrawal process. With the methodology of Integrated Risk Management, scenarios related to water quantity and quality at different levels of management are analyzed.
- Also, EPM applies the Integrated Risk Management methodology, where a description of scenarios is made, controls are identified and measured, the probability and consequence is scored and a level of risk is defined. This assessment is done in the software KAIROS, where different scenarios risks associated with water quality and quantity are analyzed and improvement plans are defined.

1.4. Water Care Culture

- **Raising Awareness on Water and Environmental Conservation:** As part of the strengthening of the water culture, in 2014 EPM held events such as the celebration of the World Water Day, and ludic and educational activities at EPM Water Museum. Programas such as Cuidamundos program is addressed to students and teachers, the programs for environmental awareness raising along with EPM Foundation, the participation in the program Aló EPM, and the environmental training programs for EPM Group people were maintained.

- **Cuidamundos Intercollegiate Competition for Water 2015:** This EPM educational program managed to benefit about 30,000 students from schools in Medellín. The contest aims to raise awareness among children and youth about caring for water and natural resources.

In its 60 years, EPM supports initiatives to improve the quality of life of the community. Manuela Beltrán educational institution, located in the commune 3 of Medellín, was the winner of intercollegiate competition Cuidamundos for Water, EPM initiative that seeks to encourage children and young people caring for water resources and the environment.

This time it involved 20 educational institutions in Medellín. To participate, each school must conduct an educational campaign focused on the care and preservation of water from its water tributaries to the water and sewer service.

I want to watch my Planet: the public services are essential for improving the quality of life of people. Raw material resources are provided by nature and have required the ingenuity of man, for the development of technology and infrastructure to enable their water supply and energy generation.

See, <http://www.epm.com.co/site/Portals/0/images/media/movie.swf>

2. SUPPLY CHAIN AND WATERSHED MANAGEMENT

2.1. Water Conservation

Water is considered to be an essential commodity for the life and development of society. The protection and improvement of the river basins, and the environmental services they provide, is a priority in order to ensure the sustainability of the territories.

The environmental conditions of the basins directly affect the water supply sources of the reservoirs and other systems. To contribute to the improvement of such conditions and prevent the risks related to the availability of the water resource for the population it serves, EPM—directly and with other agents— promotes programs and projects such as erosion control, environmental sanitation, environmental management at reservoirs, forest management, restoration, fauna management, and environmental awareness.





EPM Management

Watershed of the Riogrande II reservoir

Watershed of the La Fe reservoir

Below are some of the programs and initiatives that EPM developed in 2014 to preserve the basins.

Cuencaverde Corporation: It was established on October 24, 2013, in order to manage and invest financial resources to protect, maintain and preserve environmental services, especially water, in the supplying watersheds of the Riogrande II and La Fe reservoirs, leading suppliers of water for the inhabitants of the Aburrá Valley and the watersheds themselves. It is a public-private partnership with the following partners: Municipality of Medellín, EPM, Cornare, Postobón, Nutresa Group, AMVA, Coca Cola–Femsa, and the Latin American Water Funds Partnership.

In 2014, EPM executed a cooperation agreement with Cuencaverde for COP 4,000 million for the implementation of projects related to: comprehensive water resource and biodiversity management, ecosystem restoration, promotion of sustainable production practices, strengthening of the governance and the culture of water, environmental dissemination and awareness raising, environmental studies, and monitoring and follow-up on the supplying watersheds for Riogrande II and La Fe reservoirs.

See, http://www.epm.com.co/site/portals/descargas/medios/Edicion_9.pdf

Reservoir Water Quality Program: Applied research on the quality of water in the EPM reservoirs Riogrande II, Porce II and La Fe, in agreement with Universidad de Antioquia and Universidad Nacional de Colombia. It addresses seven lines of study on physical processes, nutrients, sediments, limnoecology, agrochemicals, emerging contaminants and humic substances, through the development of 13 master theses and 13 PhD dissertations. The concept maps of the Riogrande II, La Fe, and Porce II reservoirs were obtained in 2014. Progress was made in the fulfillment of the objectives regarding the sediments, the agrochemicals and the recommendations. The latter will be submitted in 2015 in order to continue with the knowledge transfer process and to include the recommendations made during the reservoir operation. The total investment in the reservoir program is COP 5,626 million, out of which COP 627 million were paid during 2014.

Basin Management: During the implementation of the Strategic Environmental Plan by EPM Group, under the category “Comprehensive management of basins and environmental services”, the performed actions were related to: comprehensive management of water resources, forest management, biodiversity, and ecosystem services, territory management and land use, stakeholders engagement, and involvement in development programs. Some of these actions were jointly performed with other organizations such as environmental authorities, NGO’s,



universities and municipalities in order to protect and improve the environmental conditions of the river basins that supply the reservoirs or systems of interest for the parties. More information at: [Joint environmental responsibility](#).

Involvement in BanCO2 program: Payment strategy for environmental services, aimed at developing a compensation system for the conservation and restoration of natural forests, funded voluntarily by companies and individuals. It is developed in accordance to the region's situation, in which logging is part of peasants' subsistence. Therefore, paying for environmental services has become a mechanism to preserve them and reduce deforestation. EPM has joined the program supporting 82 families (1449 ha of forest) in municipalities in the East of Antioquia's Region, such as: La Ceja, La Unión, El Retiro, Abejorral, San Rafael, San Carlos, San Vicente, Alejandría, Carmen del Viboral, and El Peñol.

Efficient water use and water saving plans: Under Colombian Act 373 of 1997, the company has plans for the efficient use and water rationalization, aimed at optimizing water consumption and increasing its availability in supplying watersheds. During its implementation, actions related to technology changes, implementation of best practices, training sessions, and loss reduction, among others, are performed.

Involvement in the CEO Water Mandate: In 2014, EPM joined this United Nations' initiative, honoring its commitment to water conservation and to the belief that the engagement and actions of all the society are needed to ensure the sustainability of the territories where it carries out its actions and provides its services.

Pact for efficient water use and saving: In compliance with the agreement executed between the Ministry of Environment and Sustainable Development and the aqueduct, sewerage, and hydroelectric sectors that are members of the National Association of Utilities and Communication Company's - Andesco, progress was made in conducting some workshops related to water management and conflict resolution. Such spaces included the participation of companies in the guild, and other public and private parties.

Water Quality Monitoring: The quality monitoring on the sources that supply the Aqueduct System of the Metropolitan Area and the main sources for Riogrande II, La Fe, and Piedras Blancas reservoirs was performed twice a year for microbiological, physical, and chemical analyses of the tributary sources, the consolidation of such results, and obtaining quality curves for the sources. All of this enable the Company to adapt the treatment process and perform actions for the environmental authorities, in the appropriate cases.

Biodiversity: in the context of the company, biodiversity is related to impact minimization and the conservation, protection, restoration, knowledge, recuperation, management and sustainable use of its woods, forests, water reservoirs and forest plantations, which are located at the areas of influence of its water and electric power generation, transmission and distribution projects.

Biodiversity is the functional basis for the maintenance of the ecosystemic services, some of which are highly important to the company, such as it is the availability of hydrological resources and erosion control. Furthermore, an adequate management of biodiversity and its ecosystemic services generates conditions for society acceptance, and it is particularly important to stakeholders such as the local communities, the media and the environmental authorities.

Phenomena such as climate change, rapid deforestation, river pollution, among other, generate new conditions that put a higher pressure on the subject of the management of hydrological resources, woods and forests and, in general, biodiversity. Thus, EPM assumes the responsibility to conserve, restore, protect, know and sustainably use such biodiversity and its ecosystemic services.

Biodiversity is valuable on its own. It generates a high economic, environmental and social value for the EPM Group because it is the functional basis for the maintenance of the ecosystemic services, which are necessary for the regulation of the climate, the hydrological cycle, the rainfall pattern, the protection of soils, among other, and it guarantees the availability of hydrological resources and the control of erosion.

In 2014, there were positive results for the biodiversity topic in the Dow Jones Sustainability Index assessment, in the multi and water utilities industry. These results represent a challenge for the EPM Group.

The formulation of the Comprehensive Biodiversity and Ecosystemic Services Management Strategy was continued, as well as the creation of spaces for socialization and the involvement of the communities and institutions. Likewise, biodiversity conservation actions were carried out in compliance with the legal environmental obligations of its studies and projects. Such actions dealt with aspects related to the monitoring of fauna, flora and landscape, the conservation of protective areas, the management of fish resources and forest plantations, ecological restoration, the installation of covered cables in transmission lines, biological corridor initiatives, studies and disclosure of biodiversity-related information.

- **Protected areas, forests and plantations**

EPM depends on important ecosystem services to develop its activities, such as water resource regulation and sediment monitoring; these are important factors to the energy and water generation business. The diversity of habitats -aquatic, terrestrial, natural, modified- include from reservoirs to forest areas which are a crucial support of biodiversity and derive from demands of environmental license or volunteer management within EPM environmental and social commitment.

In order to avoid the negative impact of protected areas, EPM previously analyzes environmental restrictions; However, some of its energy generation projects involve buffer zones. This is the reason why EPM will make the required subtractions and compensations.



Furthermore, the forests related to EPM infrastructure have caused the regional important protecting areas disclosure. EPM analyzes the strategic components for the areas mentioned above in order to identify points in common and institutional synergies that lead to their conservation.

The impacts to biodiversity originated by EPM are connected with the habitats fragmentation, drainage, levels and flow changes, aquatic ecosystem pollution, deforestation and wildlife abuse. The impacts are managed through established measures and environmental authority monitoring.

EPM has under its rule important protecting areas which provides a significant habitat diversity, with over 37,617.62 hectares associated with biodiversity conservation; those are represented in 18,820.39 hectares of natural forests, 7,759.05 hectares of planted forests and 11,038.18 hectares of reservoir (UGASE, 2015). Regarding the ecosystem services of these areas, the Company is carrying out actions aimed at improving fauna and flora knowledge and ecosystem protection -either in lands in proximity to the company territories and in areas under its projects influence-.

The zones acquired by EPM near its reservoirs and water sources are intended to monitor sediment and contaminant income as well as regularize flows, thereby water reservoirs quality is improved in purification and generation plants. Different practice approaches have been disclosed destined to its management, such as forest plantation with introduced species for eroded areas or the natural forests sustainability protection.

Through the production and trees supply at reservoirs, the natural forest regeneration program facilitates the forest cover increase in the areas influenced by EPM projects.

In order to mitigate the impact of flora and fauna, the insulated system cable installation keeps being carried out in the compact system of primary network, just as the power lines redesign, seeking to avoid environmentally sensitive areas cross and environmentally compatible structures incorporation (considerable-height poles) during the design, construction and expansion of the system.

The payment for environmental services was adopted in eastern Antioquia zones by means of the Cornare BanCO2 program destined to forests conservation and reduction emissions, for this purpose a REDD+ project was elaborated for the carbon market registered in the CCB standard, where the figure of a biological corridor is presented as a crucial component of biodiversity.

EPM restored about 285 hectares in its projects protecting areas and plants, through different techniques, such as native species plantation inside the Riogrande I and II, Playas, Peñol, Miraflores, Piedras Blancas, Porce, La Sierra and Belmira moorland zones, as follows:

See, <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/biodiversidad/areas-protegidas-bosques-y-plantaciones/>

Other programs: EPM set up a network of drinking water dispensers at 50 sport facilities in Medellín, monthly benefiting approximately 250,000 people. Likewise, EPM Foundation has taken 129 small purification plants to schools located in rural areas, contributing to the quality of life of students and teachers.

As a complement to the actions previously described, below is a link to some initiatives related to the celebration of the World Water Day in 2014.

<http://www.epm.com.co/site/Home/Saladeprensa/Noticiasynovedadesnueva/EPMcustodiaelaquaparaelbienestardelacomunidad.aspx>

Also we attached to link sustainability report EPM, water conservation issue.

See, <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/water-care/water-conservation/>

2.2. Supply Chain

EPM do not know the exposure of their suppliers to water-related risks. However progress has been made on the issue due to the work that has been done in two fronts that leverage the relationship, strengthening and development of EPM suppliers and contractors

- **Supplier Development Model Project:** this Project is a set of systematic actions to develop and implement an improvement plan for Suppliers and Contractors of EPM Group. This project is being implemented in a pilot until mid-2016, it will deliver signals to adjust the Supplier Development Model to the needs of EPM and start implementing it in the second half of 2016. So far, in the implementation of this pilot, EPM has not selected suppliers that demonstrate problems related to water, but as EPM progress in the implementation of the model other suppliers that may require collaborative work with EPM to address this issue will be identified.
- **Prequalification and classification of supplier's methodology:** EPM is working on the design and development of a methodology for the prequalification of suppliers using criteria that allow for a comprehensive assessment and classify them into different levels in order to make recruitment processes more efficient, mitigate risks, propose action plans and leverage decision-making in the supply chain. This methodology assesses 10 dimensions, such as: Strategic Management, Human Resource Management, Quality Management, CSR Management, among others. One of them is the CSR dimension that assess social and environmental aspects of suppliers and one of the criteria to be evaluated is related to the care of resources and environment. This methodology is currently under construction.

3. Collective Action

3.1. Stakeholders Engagement

On April 29, 2014, during the event “Sustainability: Dialogue and Public Accountability”, the CEO made a public balance on sustainability management with on-site public and local television broadcasting. Viewers interacted by making questions by phone or social networks. At the end, a press conference was made, so the local media disclosed information on this event.

The event gave continuity to the direct participation of stakeholders, with roundtables for Community, Suppliers and Contractors, and employees of EPM Group, as well as control agencies, environmental and academic authorities.

The results of these activities were used as one of the inputs for identifying the relevant matters either for the stakeholders and the organization.

The following link contains wide information on the Dialogue and Public Accountability activity, the material submitted by the CEO, and the reports from all roundtables.

<http://www.epm.com.co/site/Home/SostenibilidadEPM/InformedeSostenibilidad.aspx>

Furthermore, EPM had a constant interaction with the stakeholders through activities such as the following:

- Experiential diploma course that includes customer visits offered to members of the EPM Board, managers and staff in order to understand their environment, needs and concerns.
- The dialogues with stakeholders as well as provide relevant issues, generate challenges facing responsiveness, the management of expectations, and the seemingly opposing interests. The divergence of interests between local stakeholders and the global society presents management complexities; it is the case, for example, of a population that defends an economic activity that creates jobs, even if it means the deterioration of a water source.
- Seven Suppliers and Contractors of EPM participated together with ISAGEN suppliers in the First Steps program from the Colombian Network for Global Compact extended to the Antioquia Node, led by EAFIT University and accompanied by ISAGEN in implementation. In the program, EAFIT students with an experiential learning methodology support the training, diagnosis and implementation process of CSR and sustainability issues through the 10 principles of the Global Compact.
- 15 meetings were held with Suppliers and Contractors, bringing together approximately 828 companies to address issues such as suppliers register mechanism, contracting processes, suppliers portfolio presentation.



- Training on public utilities for oversight members and discussions about public utilities in the subregions of Antioquia.
- Programs with community organizations, for the articulation of actions focused on the local and regional sustainable development in the territories.
- Meetings with municipal administrations and the community, and joint agendas with environmental authorities.
- Meetings with retirees and pensioners.
- Annual evaluation of the 2013 Sustainability Report with the stakeholders representatives, which provided insights for this report and for the CSR management in general.

3.2. Commitment to sustainability initiatives

In 2014, different actions were developed with regional organizations, seeking to act responsibly towards the environment. We highlight:

- **Water Fund:** Cuencaverde Corporation, was established on October 24, 2013, in order to manage and invest financial resources to protect, maintain and preserve environmental services, especially water, in the supplying watersheds of the Riogrande II and La Fe reservoirs, leading suppliers of water for the inhabitants of the Aburrá Valley and the watersheds themselves. It is a public-private partnership with the following partners: Municipality of Medellín, EPM, Cornare, Postobón, Nutresa Group, AMVA, Coca Cola–Femsa, and the Latin American Water Funds Partnership.

In 2014, EPM executed a cooperation agreement with Cuencaverde for COP 4,000 million for the implementation of projects related to: comprehensive water resource and biodiversity management, ecosystem restoration, promotion of sustainable production practices, strengthening of the governance and the culture of water, environmental dissemination and awareness raising, environmental studies, and monitoring and follow-up on the supplying watersheds for Riogrande II and La Fe reservoirs.

- **Involvement in BanCO2 Project**, through which the conservation and protection of 1,371 hectares of forest in Cornare region for 36 months will be financed, through a monthly salary of COP \$600,000 to 56 forest ranger families. Their mission is to take care of the forest and fulfill some commitments, such as participation in training, awareness raising, and productive entrepreneurship programs. The 56 families comprising BanCO2 Project for EPM, are located in nine Antioquia municipalities.

- **Participation in the development of the Master Plan for Urban Drainage for the Municipality of Medellín**, led by the municipal administration along with the participation of

EPM. An agreement is currently being implemented for the development of the plan and detailed design of the works in a pilot area in Medellín.

- **Development of socio-environmental management programs for Environmental sanitation and Tributary basin protection**, which will benefit 16 municipalities in Eastern Antioquia until 2017. The investment amount is COP 15,747 million.
- **Training the communities on the improvement of rural environmental quality**, improvement of the standard of living, improvement of the agriculture and livestock productivity, and recovery of damaged areas in Santa Inés Páramo. The total budget for this action was COP 2,235 million.
- **Round tables with environmental and municipal authorities**, in order to strengthen relations with municipal offices and environmental authorities, and to promote the positive impact on the communities provided with public utilities. The round tables are spaces for dialog and work on topics such as: guidelines for fishing management at the dams, agreements to promote the benefits of the natural gas service, optimization and opportunity in environmental procedures, and impact of the projects, among others. In 2014, the round tables with the following organizations stood out: Municipality of Medellín, Municipality of Envigado, Cornare, Corantioquia, and Corpourabá.

<http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/stakeholders/commitments-and-involvement/commitments-to-external-sustainability-initiatives/>

See also, Actions with Our Stakeholders:

<http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/stakeholders/our-stakeholders/>

4. Public Policy

- **Global Compact:** EPM is adhered to the Global Compact and as such not only does its annual progress report but actively participates in the Colombian node of the Covenant, which is actively involved in promoting the achievement of the Millennium Development Goals and any of the objectives of Sustainable Development future.

In the following link you can see our Alignment sustainability initiatives:

<http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/general-information/alignment-with-sustainability-initiatives/>

Similarly, we attach the link to commitments to external sustainability initiatives



<http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/stakeholders/commitments-and-involvement/commitments-to-external-sustainability-initiatives/>

- **Relations with the State:** the EPM Group builds up its relationship with the State (Congress and national and local governments) based on ethical principles and in accordance with its Corporate Responsibility and Communication policies, which are guided by transparency criteria and values, and following relationship plans with every stakeholder (Congress and governments), which prioritize the general benefit.

Through the public utilities guilds of which it is a member, and in some cases acting individually due to direct concern, EPM proactively participates in the regional or national regulative and legislative activities related to important issues for the sector, in order to reach an optimal regulation that refers to global interests and value generation for all stakeholders.

The company permanently monitored the regulations that have an impact on the public utilities sector, classifying it according to the impact on EPM and the Group. In the cases on which a regulation required observations by EPM, they were timely made before the competent authority, always taking care of the balance of interests among the stakeholders within the framework of our sustainability policy.

One of the major achievements of 2014 was the impact classification for both EPM and the Group, as well as the monitoring of the initiatives that were submitted to the Congress of the Republic of Colombia and Medellín's Council as a resource for the regulatory management.

The challenge for 2015 is to tend towards regulatory frameworks that provide a steady operation environment under fair market conditions that allow growing in terms of users, markets, products and services, always protecting the interests of EPM and the society as a whole, with the purpose of contributing to the company-society-environment sustainability. Another part of the challenge is to supplement the aforementioned actions with an adequate follow-up and management of the regulations that have an impact on the public utilities sector to develop a regulatory proactivity in every level.

5. Community engagement

5.1. Access and purchasing power of public utilities.

Availability of residential public utilities through conventional and alternative solutions that promote human and territories development.

Purchasability is related to options and solutions available so that customers and users have the opportunity to permanently enjoy residential public utilities, satisfying their likes, preferences, and needs, and taking into account their capacities and disposition.

Access implies availability of the service, considering the regulation and standards, through infrastructure solutions. Specific characteristics of unserved populations such as settlements outside the areas in the land use plans or high-risk areas are taken into account, in order to find solutions, either from the own capabilities of EPM or in coordination with other entities.

Universalization, understood as access and purchasability solutions, is a focus of the CSR policy. It is defined in the social dimension of the MEGA approved by the Board of Directors. Moreover, it is in the business core and is the essential contribution of the EPM Group to the construction of sustainable and competitive territories.

Due to its purpose and capabilities, the EPM Group is an agent destined to convene other agents in order to find solutions to this issue of high social value for its companies and stakeholders. This issue also has important implications in the construction of sustainable and competitive territories.

See, <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/access-and-purchasability-of-public-utilities/>

5.2. “Dignifying Homes” program.

This is a registration program that provides funding of the connection and, in some cases, the internal network costs. It is mainly aimed at strata 1, 2 and 3 (people more poor) in order to facilitate the access to the public utilities.

This program started operating in EPM in the 60s and it is one of the programs to which the high coverage rates are attributed. Currently, the program includes all the services: water supply, sewerage, electric power and gas.

35,119 users were connected to the electric power service in Antioquia in 2014 through the Dignifying Homes program. 20,136 of them are from the Medellín metropolitan area and Antioquia’s regions, and 14,983 are customers registered to the sewerage service, and 82,471 to the gas service.

See, <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/management-by-topics/access-and-purchasability-of-public-utilities/dignifying-homes/>

5.3. Antioquia clean drinking in 67 municipalities of Antioquia

Activities and virtual training have involved 1,146 people from 105 municipalities in the region.

In Antioquia, 67 municipalities now receive advice and direct support by the Convention clean drinking Antioquia, for institutional and operational strengthening of the companies providing public services, including water and basic sanitation in urban areas. While at first, the universe of the Convention was limited to the 64 municipalities that currently make up the Departmental Water Plan of Antioquia (PDA), during 2015 the Convention expanded its action to cover 80 locations. The additional attention to these 16 municipalities, meets technical assistance requirements for

their urban or rural public services, where they are doing work to improve water supply and sewerage, or requests for support in the case of municipalities that are not part of the PDA, which have been decertified by the Superintendency of Public Services. To achieve the objectives of the Convention, with the participation of municipal authorities and those who run and manage the units of service provider companies in each locality, 67 diagnoses have been issued so far with information on the state of business management and compliance with regulatory requirements. The information has been input to produce 67 action plans proposed for each specific case, activities to improve service delivery according to national regulations.

Signed by the Governor of Antioquia and EPM in October 2013, the Convention is intended to facilitate compliance with national regulations on the provision of municipal public services and the adoption of best management and operational practices that ensure quality, continuity and coverage of these services. The implementation of the Convention is run by a multidisciplinary team of professionals, that so far have conducted more than 600 interventions to train or advise providers or municipal auditors of public services in such diverse topics as management and operation of water supply systems, sewage and toilet, implementation guides and procedures, and periodic reporting of information due to the competent authorities, compliance with national laws and regulations, among others. Until June, in the activities of organized training and virtual by the Convention, 1,146 people participated working in utility companies or public services units of 105 municipalities of Antioquia.

The clean drinking Antioquia Convention, which runs until December 2015, is the insurance component for the provision of water supply, sewage and toilet services. This program makes part of the Antioquia's Region Water Plan, under the Programme for Prosperity of the National Government of Colombia.

See:

<http://www.epm.com.co/site/Home/SaladePrensa/Noticiasynovedades/AntioquiaPotableyLimpiaestapresenteen67municipiosantioquenos.aspx>

5.4. With its new prepaid water program, EPM innovates to serve people

With this new service, EPM continues to innovate in solutions for the most vulnerable population and adapts its services offered to the possibilities of low income users.

Forty families from Belen Altavista sector in Medellin already have the prepaid water program of EPM. Users will have the possibility to recharge water ranging between COP 5,000 and COP 100,000.



The general manager of EPM, Juan Esteban Calle Restrepo, said that "with this new initiative, EPM will continue to innovate to serve people, building on programs such as Prepaid Energy, which has been very successful and already has over 175,000 users. This is the best way to reach the most vulnerable customers and users and those with bad debt situation, so EPM had already launched the Pay to your needs program and now it is the turn to the Prepaid Water program with which we aim to cover a segment of the population in the base of the pyramid, within this purpose that contribute to building sustainable and competitive territories.

To make this dream come true, and benefit thousands of families, EPM conducted a pilot program with 300 users from nine districts of Medellín. In her acceptance of service is evaluated, the ease of use of the meter, operation and applied technology. This initiative involved a multidisciplinary group of EPM servers, which explored the existing technologies in the world.

In its first phase, the prepaid water service will be offered in the 10 municipalities of the Aburrá Valley where is expected to serve 10,500 users by the end of 2015 and 35,000 users by 2017. It includes residential, commercial, industrial and official users.

To know how the program works, see the next link:

<http://www.epm.com.co/site/Home/SaladePrensa/Noticiasynovedades/ConsumuevoservicioAguaprepago.aspx>

5.5. Other programs

EPM set up a network of drinking water dispensers at 50 sport facilities in Medellín, monthly benefiting approximately 250,000 people. Likewise, EPM Foundation has installed 129 small purification plants to schools located in rural areas, contributing to the quality of life of students and teachers.

6. TRANSPARENCY

The sustainability report is aligned with the Global Reporting Initiative (GRI).

EPM reports annually the information on sustainability management. Its report is based on the GRI Guidelines.

The report coverage corresponds to EPM and includes the management of the business lines: generation, transmission and distribution of electricity, gas, water and sanitation.

The Sustainability Report presented encompasses social and environmental management, corporate governance, EPM and EPM Group financial management and the management report of the CEO. This



CEO WATER MANDATE REPORT Communication on Progress



information is reported annually to the stakeholders and the society in general in the Public Accountability event and to other specific target audiences via face-to-face and virtual means.

The contents of the report were reviewed and approved by directors of the company and the report was externally verified by Deloitte&Touche, company that performs EPM external audit and also does the statutory audit for the EPM Group companies.

More information: see <http://sostenibilidadgrupoepm.com.co/en/social-and-environmental-management/general-information/report-parameters/external-verification/>

Note: For more details see the EPM website of the Sustainability Report 2014: <http://sostenibilidadgrupoepm.com.co/>