

2013 | Sustainability
Report



40 years

Letter from the General Director [G4-1]

In May 2014 we celebrated the Itaipu Binacional's 40th Birthday and 30 years of electricity generation. The project, bold and innovative, which put to the test the determination and ability of Brazil and Paraguay, is currently a model of shared management, a world leader in generating clean and renewable energy and a reference in corporate sustainability.

In 2013 we supplied 75% of the Paraguayan and 16.9% of the Brazilian demand. We reached, for the fourth time, the world record for electricity production, enough generation to supply the Earth for two days. We also launched the 500kV transmission line, connecting the Paraguayan side of the plant to the substation of Villa Hayes, in Asuncion. This is the greatest work accomplished after the construction of the plant and will allow advances in the Paraguayan industrialization and economic growth.

In addition to being at the top of our productivity, in the last decade we conquered international projection and recognition as a company strongly committed to sustainability. This is clearly related to Brazil's new role in the world, especially in the area of renewable energies.

Thanks to investments and partnerships, we are a pioneer company in research and development of electric vehicles and technologies for the production of biogas. And with the Cultivating Good Water Program (CAB in Portuguese),

and its set of programs and actions, we have become a reference of good environmental practices.

We are convinced that companies can and should significantly contribute to the equation that all nations seek to solve: to obtain economic development, conserve natural resources and make societies more just and stable. And the respect for human rights and the appreciation of diversity are initiatives to be drawn on this journey.

We were pioneers in the Brazilian electric sector in promoting equality and were one of the first companies in the world to sign the Women's Empowerment Principles (WEPs). Ten years after creating the Fostering Gender Equality Incentive Program, in 2013 we were recognized by UN Women and the United Nations Global Compact with the WEPs Leadership Awards in the category "Seven Principles". This achievement encouraged us to create the WEPs Brazil Award 2014, in order to spread the culture of gender equality among Brazilian companies of all sizes.

Our portfolio of programs and activities benefit thousands of residents of the tri-national region, with infrastructure improvements, stakeholder engagement for the development of major projects such as the expansion of the Foz do Iguaçu airport, the implementation of the Federal University of Latin American Integration (Unila), the construction of a second bridge between Brazil and

Paraguay and the choice of Foz do Iguçu as the training center for the South Korean National team during the World Cup, giving the city a greater international exposure and benefiting tourism.

And with the implementation of the Itaipu Technological Park (ITP) in 2004, we invested heavily on research and development, creating a dynamic hub of technological innovation that has contributed to the regional sustainable development.

The celebration of the 40th Birthday is even more important when it comes to strengthening of the bilateral relationships, in which both Brazil and Paraguay governments reaffirm their leadership and commitment to overcoming the challenges of economic development, social inclusion and regional integration.

We are one of the few companies in the world that has adopted the G4, the new version of the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI). Launched in 2013, the new generation of guidelines aims to improve the reports and involve the senior management in the process, to comprehensively map the organization's target audiences and focus on the most relevant issues regarding sustainability.

In this report we present the main results achieved in 2013, product of all counselors, chief officers, employees and partners engagement. We also share our core commitment so that in 2020 we are a generator of clean and renewable energy with the best operating performance and best sustainability practices in the world.

Enjoy your reading!



A stylized, handwritten signature in black ink, appearing to read 'Jorge Miguel Samek'.

Jorge Miguel Samek
Brazilian General Director





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About the report

Itaipu Binacional annually publishes its Sustainability Report since 2004. This year, the company voluntarily adopted the new version of the Guidelines (G4) of the Global Reporting Initiative (GRI), a methodology that has been used for the elaboration of the last seven editions of the document.

The actions presented in this report were conducted between January 1st and December 31st, 2013, in Brazil. As Itaipu is a binational company, information on governance, electricity generation and economic performance include shares in Brazil and Paraguay.

The paper also reports on the Itaipu-Brazil Foundation of Social Security and Social Work (Fundação Itaipu-Brasil de Previdência e Assistência Social - Fibra), Itaipu Technological Park Foundation (ITP) and Itaiguapy Foundation, institutions incorporated by Itaipu.

The Sustainability Report is written with the aid of the focal points of sustainability, employees representing all departments and foundations. The process is coordinated by the Social Responsibility Advisory Office and the document was formally approved by the Advisors for Planning and Coordination of departments, as well as the Strategic Planning Office and by the Coordinator of the Sustainability Management System (SMS).

Since 2004, Itaipu submits its reports to external verification. This edition was assured by KPMG Risk Advisory Services Ltda. (learn more on page 92).

The document includes the indicators on the GRI Electric Utilities Sector Supplement and was produced according to the Comprehensive option of the GRI Guidelines. Of the 149 indicators that comprise the G4 version, 113 are reported by Itaipu, since they relate directly to the more relevant themes of the business. [G4-17; 28; 29; 30; 32; 33; 48]

Reading Guide

- *The information in Social Dimension - Human Resources, Social Dimension - Society and Environmental Dimension consider only the Brazilian side of the company.*
- *Despite the strategic importance to the business, the office in Brasília does not present significant environmental and social impacts. As a result, in this Report are considered significant operational units the industrial area of the plant and offices located in Foz do Iguaçu, Santa Helena, Guaira and Curitiba. [G4-22; 23]*
- *Itaipu influence area is the region of the Paraná Watershed 3 (BP3), composed of 28 municipalities in the western region of Paraná and 1 in Mato Grosso do Sul. [G4-22; 23]*
- *Itaipu Binacional, in this document, is also called plant, binational, company and organization.*
- *“Lake” should be understood as Itaipu’s reservoir.*
- *The term “employee” refers to those that are part of the company’s own staff.*
- *The term “co-workers” means the entire workforce and includes employees, apprentices, trainees and employees of companies that provide services to Itaipu.*
- *The sign (+) used throughout the document means that there is additional information.*



The process of defining the report content

The 16 material aspects identified in consultations with stakeholders conducted in 2012 were updated for this edition of the Report and will be valid until 2016. The revision, carried out with the support of specialized consultancy, has been validated by the strategic group of Itaipu, composed by the Strategic Planning Office, Advisors for Planning and Coordination and by the Coordinator of the Sustainability Management System (SMS).

The process considered relevant issues to the operational area of the company, its strategic planning, significant topics for Eletrobras (Centrais Elétricas do Brasil) and other Brazilian companies in the energy sector, as well as indices and sustainability protocols answered by Eletrobras and Itaipu, such as the Corporate Sustainability Index (ISE) of BM&F Bovespa and the International Hydropower Association (IHA).

The analysis of the issues resulted in the inclusion of the topics “water” and “energy”, for being strategic to the business. The topic “Energy - price reduction impacts” was deleted, because its importance for the electricity sector was specifically in 2012, the year the Provisional Measure 579 was enacted by the Brazilian government, but it did not impact Itaipu.

The topic “operating performance” combined two others: “availability/reliability of electricity supply” and “installed capacity/net electricity production”. We also unified the topics “Types of Management - Social” and “Relationship with the community/Social programs”. For other topics there were adjustments in the terminology to follow trends in sustainable management. [G4-18; 19; 20; 21; 22; 23; 26; 27; 37]

Materiality [G4-18; 19; 20; 21; 22; 23; 27]

	Relevance		Impacts		
	External Stakeholders	Internal Stakeholders	Economic	Environmental	Social
Water	X	X	X	X	X
Energy	X	X	X	X	X
Economic Performance	X	X	X	X	X
Environmental Management	X	X	X	X	X
Biodiversity	X	X		X	
Operating Performance	X	X	X	X	X
Relationship with the community	X		X	X	X
Training and Education		X			X
Risks and opportunities	X	X	X	X	X
Indirect economic impacts	X		X		X
Fight against forced or compulsory labor	X		X		X
Corporate Governance	X	X	X	X	X
Anti-corruption practices	X		X		
Research and Technology Development	X	X	X	X	X
Diversity and Equal Opportunity		X	X		X
Human Resources Management		X	X		X

Company Profile [G4-56]

Mission

"To generate quality electricity via socially and environmentally responsible practices, and to foster sustainable economic, tourist, and technological development in Brazil and Paraguay."

Vision

"Until 2020, Binational Itaipu will consolidate as the best performance generator of clean and renewable power, with the best operative performance and the best practices of sustainability in the world, impelling the sustainable development and regional integration."

50%

The capital of Itaipu is shared equally by Brazil and Paraguay governments, represented respectively by Centrais Elétricas do Brasil (Eletrobras) and Administración Nacional de Electricidad (Ande). [G4-7; 9]

98,630,035

megawatts-hour of the electricity were generated by Itaipu in 2013.

16.9%

of the electricity consumed in Brazil in 2013 was generated by Itaipu.

75%

of Paraguay's electricity demand was supplied by Itaipu.

Timeline

1966	1973	1974	1975	1982	1984	1991	2000	2002
Iguaçu Minutes are signed: Brazil and Paraguay start negotiations.	On April 26 th Brazil and Paraguay presidents sign the Itaipu Treaty.	Itaipu Binacional as an institution is established.	Power plant construction begins, with the removal of 55 million m ³ of rocks and soil to divert the river.	Creation of the reservoir in just 14 days. On November 5 th , Itaipu was officially inaugurated.	The powerplant's first generator goes online, turning out electricity.	The 18 th generator goes online, and Brazilian cities and states are included in the distribution of royalties.	For the first time, Itaipu breaks the electricity production world record by reaching the mark of 93,427,598 MWh.	Creation of the Code of Ethics.

Basic Policies and Guidelines

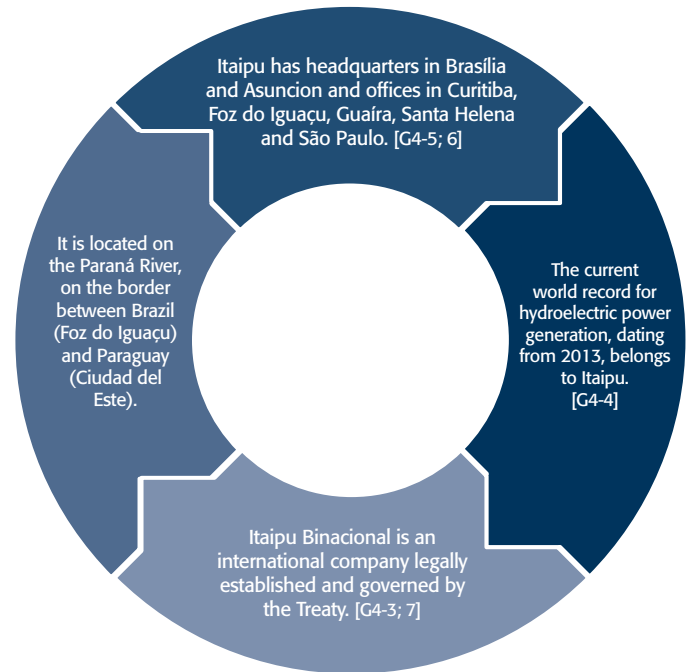
- Respect for human beings
- Binational integration
- Proactivity and innovation
- Accountability and account rendering
- Recognition of people's work
- Corporate sustainability
- Regional sustainable development
- Ethical values

US\$ 3.8 billion

was the revenue of electricity services provided in the period. [G4-4; 9]

1,466

Brazilian joined the staff of the company, including seven members of the Supervisory Board and five Chief Officers, plus Brazilian General Director. [G4-9]



2003

Social-environmental responsibility and sustainable economic, tourist and technological development are included in the company's mission.

2005

Reversal Notes set forth that the company's initiatives in social and environmental fields are to be permanent components of the company and beginning of the public selection processes.

2007

The last two generators are included in the original power plant project, being a total of 20.

2008

Itaipu breaks its own electricity production world record by turning out 94,684,781 MWh.

2009

Creation of the Ombudsman Office.

2010

The Social Responsibility Advisory Office is created.

2012

For the third time, Itaipu breaks its own electricity production world record by turning out 98,287,128 MWh and implementation of the Sustainability Management System (SMS).

2013

By generating 98,630,035 MWh, Itaipu hits the mark of the largest electricity generator in the world for the fourth time.



Electricity production and supply

For 40 years, Itaipu has contributed to the development and economic growth of Brazil and Paraguay. From the moment the company started generating electricity, around 2 billion MWh were designed for both countries. And in 2013 the binational broke, for the fourth time, the world record for electricity production.

Itaipu is the second largest installed capacity of hydroelectric power generation in the world, being behind the Chinese Three Gorges Dam. The production does not solely depend on the operational availability of its generating units. Water resources, transmission systems that allow a production runoff and consumption demand in Brazil and Paraguay are also necessary.

The Brazilian electricity production and transmission system is unique in the world. Basically all energy generated in the country is available at the National Interconnected System. Controlled by the National System Operator (NSO), the agency daily sets the production of plants according to the demands of all regions and regardless of generation capacity.

Therefore, the milestone of generating 98.6 million MWh, achieved in December, driven by the momentum of Brazilian and Paraguayan economies, as well as the high temperatures recorded at the end of the year, which intensified the use of air conditioners. In Paraguay, the generation of electricity is determined by the Administración Nacional de Electricidad (Ande).

The excellent operating levels are the result of continuous and rigorous production planning and of the ongoing job training of our professionals, resulting in a high availability of the generating units. The coordination with external Itaipu partners (Eletrobras, Ande and NSO) and reinforcements made by Furnas and Copel in the transmission lines have also been essential to the high operating performance of the company.

Net generated output* broken down by primary energy source and regulatory regime (GWh) [G4-EU2]

Source	2013		2012		2011	
Hydraulic	97,878		97,533		91,523	
Regulatory system	Brazil	Paraguay	Brazil	Paraguay	Brazil	Paraguay
	88,467	9,411	88,783	8,750	83,487	8,036

*Net energy is the total energy generated, excluding the amount consumed by Itaipu itself in its operational processes.

Electricity production and supply

Brazilian electricity market

Brazil has an estimated hydropower potential of 260 GW and is one of the five countries in the world with the greatest technical ability to use water in the generation of electricity. According to the [Decennial Energy Expansion Plan 2022](#), approved by the Ministry of Mines and Energy and developed with the help from the Energy Research Company, the electricity consumption will increase from 466,000 MWh in 2013 to 672,000 MWh in the next ten years.

And it is estimated that during this period the installed generating capacity will increase from 119,535 to 183,053 megawatts, that means an increase of 53%. In order to do so, a government investment of R\$ 200 billion for power generation is planned, prioritizing hydroelectric, wind and energy coming from sugarcane bagasse, which should be responsible for 80% of the expansion.

Another R\$ 60 billion will be allocated to the transmission system, mainly for the expansion of the network, which currently is 104,000 kilometers long and is expected to reach 155,000 km.

Paraguayan demand

The energy generated by Itaipu in 2013 met 75% of the energy market in Paraguay. The trend is to increase the supply to the country, since a new transmission line of 500 kilovolts (kV) began to operate in November. Considered one of the most important works of the Paraguayan government, the line will ensure the supply of electricity and economic development of the country.

The system consists of three major works, all performed by Itaipu: the expansion of the substation on the right bank of the plant; the construction of Villa Hayes substation in Asuncion; and the installation of 348 kilometers of transmission lines. Earlier, the energy reached the capital through two 220 kV lines, which caused an overload in the system and a greater technical loss.

In three years, the work mobilized approximately 130 employees of the plant and about 2,500 employees of contractor companies. The system works were financed by the Structural Convergence Fund for Mercosur (Focem). Including the value of the design and technical support contracts, investments reached US\$ 310 million.

The share of hydroelectric electricity in the Brazilian energy matrix reduced 13% in the last three years, while the presence of non-renewable sources increased from 8.4% to 19.8% in the same period. Thus, investments in technologies that help predict the weather behavior in Brazil become a relevant factor to decrease the activation of thermal plants. Currently the forecast is made with seven or ten days in advance.

The energy produced by Itaipu in 2013 supplied 16.9% of the national market, against 17.3% of the previous year. The fact is due to the increase in the share of thermal power plants and to the energy produced by the hydroelectric plants Jirau and Santo Antônio that entered the National Interconnected System since April. With the increasing domestic demand recorded in recent years, Itaipu is preparing to reach the milestone of generating 100 million MWh. [G4-8]

Availability and reliability of electricity supply

The indicators that measure the period in which the generating units of Itaipu are operating or available for operation are among the best in the world. In 2013 we reached 96.21%, exceeding the annual target, which is to remain at a level equal to or exceeding 94%. The availability rate is monitored by all company management levels, including the Supervisory Board.

Several initiatives have been undertaken to make the hydrological conditions practically the only variant for production. One of them is the introduction, in January 2013, of a new periodic preventive maintenance program, which allowed an overall increase of 57 days in the annual availability of machines without changing the reliability of the generating units.

The factor of planned outage because of maintenance decreased from 4.44% to 3.69%. And the unplanned outage due to failure decreased from 1.70% to 0.10%.

Another decision contributed to overcome the productive performance by 2.58% when related to the previous year: the expansion of the transmission limit in the 60 Hz sector from

3,000 to 4,500 MW in bad weather conditions. The operation limit in normal conditions is of 7,000 MW.

Itaipu uses the System Operation and Maintenance to plan, schedule, execute, monitor, analyze and regulate the activities of operation and maintenance of the plant. The Maintenance Plan defines the term and scope of maintenance of the generating units, auxiliary and processing systems.

The interval between preventive stops cannot exceed 18 months. It is expected to reduce the annual maintenance time from 48 to 6 hours in 2017, thanks to an update on the oil level control system in the accumulator of the speed regulator and other process improvements. [G4-EU30]

Average plant availability factor [G4-EU30]

	2013	2012	2011
Planned outage hours	6,468	7,800	7,046
Unplanned outage hours	169	2,787	9,059
Total operating hours¹	175,200	175,680	175,200
Availability factor of generating units (%)²	96.21%	93.86%	90.81%

¹ 2012 was a leap year, so the total operation hours of the plant was higher in the period.

² The percentage underwent little change due to the maintenance shutdown of the generating unit U6 between September 2010 and April 2012.

Itaipu Lake

- The Itaipu Reservoir stores 29 billion m³ of water from the Paraná River. Its total area is of 1,350 km², 770 km² in the Brazilian side and 580 km² in the Paraguayan side. The depth ranges from 22 to 170 meters.
- It is the 7th largest reservoir in Brazil, after the lakes of the Sobradinho (BA), Tucuruí (PA), Balbina (AM), Porto Primavera (SP), Serra da Mesa (GO) and Furnas (MG) plants.
- 10,4 MW per km² is the rate of water use for energy production from the Itaipu Reservoir, the best among Brazilian reservoirs. Each 0.1 km² of wetland can generate 1 MW.

Main Dam

196 meters high and 7,744 meters long, it has the needed gap for the waterfall to generate energy.

Spillway

Used to drain the water from the Paraná River (which does not pass through the turbines) when the reservoir is full. It is 483 meters long, 390 meters wide and its flow capacity is of 62.2 thousand m³ of water per second.

The production of Itaipu in 2013 would be enough to supply the electricity consumption of Brazil for **79 days**, of the Southeast Region for **5 months** and of Foz do Iguaçu for 185 years. The generated **342,907 MWh** that exceeded the production of 2012 could supply the Paraguayan demand for **6 days**.



Penstocks

They carry water from the reservoir to the turbines. They are 142 meters long and have an internal diameter of 10.5 meters.

Generating Units

Each unit consists of a generator, a turbine and its auxiliaries.

Potential

- 700 MW is the installed capacity of each of the 20 generating units. [G4-EU1]
- A single generating unit of Itaipu would be sufficient to supply 2.5 million households that spend on average, each, 200 kWh per month.

How is energy generated?

1

When entering the penstock, the water pressure produces a rotary motion to the turbine.

2

When the water passes through the turbine, hydraulic energy is converted into mechanical energy.

3

The generator that is coupled to the turbine transforms the mechanical energy into electrical energy.

4

The generated energy is carried by cables or bus bars to the transformer, which increases the tension (voltage) of the energy so that it can reach consumers through the transmission lines.

Electricity production and supply

Power transmission

Itaipu has eight transmission lines, and each is from 8 to 11 km long. The lines carry the electricity generated by the plant to the substation in Foz do Iguaçu. From there, the energy is sent to the National Interconnected System by Furnas, a company that is also responsible for the conversion of the 50 hertz (Hz) electricity, produced by Itaipu machines, to 60 Hz.

For transmitting the power to large consumer centers, the substation Furnas has two systems. The first is the Direct Current system, which takes the 50 Hz produced energy to Ibiúna (SP). With a length of approximately 810 km, this system consists of two transmission lines of 600 kilovolts (kV).

The second is the Alternating Current system, which sends the energy produced by the ten 60 Hz machines of Itaipu to Tijuco Preto (SP), going through two intermediate substations: Ivaiporã (PR) and Itaberá (SP). It consists of three transmission lines with a tension of 765 kV and about 900 kilometers long.

The transmission line of 525 kV between the substations Foz do Iguaçu and Cascavel Oeste, operated by Paraná Power Company (Copel) and that influences the operation of Itaipu in 60 Hz and the transmission in 765 kV went into operation in 2012. The system is responsible for the South-Southeast interconnection of the National Interconnected System allowing an increase in the energy received by the southern region and a best use of the generation of Itaipu.

Brazilian Energy Matrix (participation by source)

		2013	2012	2011
Renewable sources	Hydraulic	79.2%	86%	91.2%
	Biomass	0.2%	0.1%	0.1%
	Wind	0.8%	0.6%	0.4%
	Total	80.2%	86.8%	91.6%
Non-renewable sources	Natural gas	11.2%	6.8%	2.7%
	Fuel	2.6%	1.3%	0.7%
	Coal	2.7%	1.5%	1.1%
	Nuclear	2.8%	3.1%	3.2%
	Other	0.5%	0.5%	0.7%
	Total	19.8%	13.2%	8.4%
Total power generated and made available in the National Interconnected System, in GWh		523,427	512,737	493,791

Source: Management Information Report of the Brazilian Electricity Regulatory Agency of December 2013 (available at www.aneel.gov.br).

Research and Development

In order to preserve the knowledge gained over 30 years of operation and maintenance, and to share its expertise with other companies of the national and international power sector, the company implemented the Itaipu Corporate University (UCI). Managed by a board of 14 members, it operates in three areas: Corporate Education; Research, Development & Innovation; and Knowledge Management.

As the UCI does not have its own structure, the binational works in partnership with the Itaipu Technological Park Foundation (ITP). In 2013 the binational invested US\$ 1.90 million in the Center for Advanced Studies on Dam Safety (Ceasb) and in the Laboratory of Automation and Simulation of Power Systems in Real Time (Lasse).

Installed on the ITP in 2008, Ceasb provides support to Itaipu in preventive displacement monitoring of the dam structure due to varying temperature and tank level. Currently researchers are studying the possibility of installing instruments used in bridges and buildings to automate the tracking. Other technical and strategic solutions for dam safety are developed at the Center, such as three dimensional and geotechnical modeling and computerized tools.

Lasse conducts testing and verification of the dynamic performance of equipment and systems associated with the generation, transmission and distribution of electric power. Operated by the Institute of Applied Technology and Innovation (Itai), it operates in the ITP since 2007.

In 2013 Itaipu also invested US\$ 3.77 million in research directed towards promoting sustainable development. Among these are the projects of electric mobility and the use of renewable energy sources, especially biogas; feasibility studies for the production of hydrogen from water and storage in the form of gas; and research on species conservation of the fauna and flora. Learn more about these initiatives on page 78.

Contingency Planning

Itaipu is a worldwide reference in dam safety. Besides visual observations, technicians and engineers perform regular readings and inspections on all 2400 installed instruments and write, twice a year since the construction of the plant, an analysis of the actual situation of the work. A committee consisting of internationally renowned consultants performs an audit on the hydroelectric every four years, according to the law of dam safety.

To ensure the operation of the corporate systems in situations of unplanned stops, two redundant data centers operate at different locations in the plant. The Emergency Action Plans consider as being the main risks: fire and/or explosion, flooding, presence of foreign body or vessel drifting toward the dam, fall of transmission towers and evacuation.

A management group is responsible for developing, updating and coordinating training and simulations. Government agencies, community and civil society cooperate with each other in the preparation of plans. Two of them were in preparation in 2013 and the completed plans are available to the co-workers on the intranet.

Power generation support activities also have procedures in crises and threats situations. Security of digital data, communication and reducing the reservoir level are some examples. (+)[G4-2; 14]



Governance

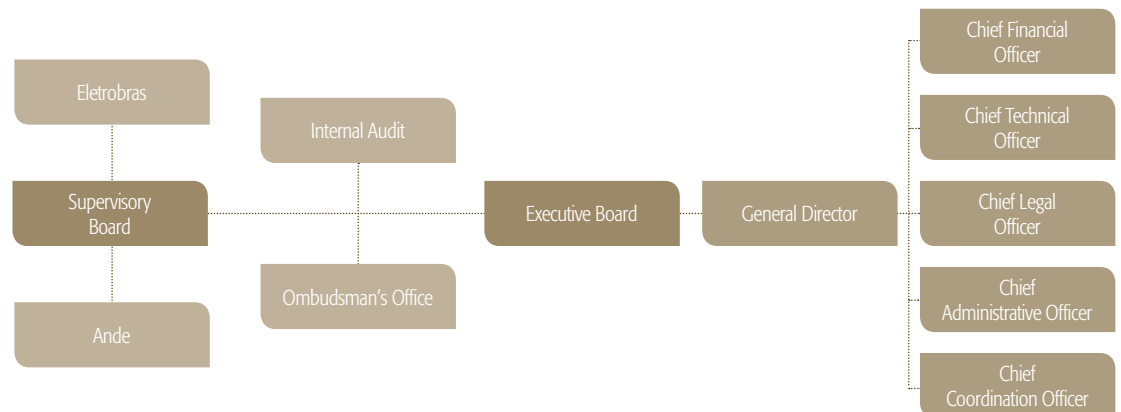
The Itaipu Treaty, signed on April 26, 1973 by the governments of Brazil and Paraguay, in order to regulate the exploitation of the hydroelectric potential of the Paraná River, is the result of intense diplomatic negotiations. The document gave rise to Itaipu Binacional, the responsible organization for the construction and management of the plant, which in 2014 celebrates 40 years of existence.

Itaipu is governed by the Treaty and its three annexes, Supplementary Acts and by general and specific rules of the International Public Law. The document provides the company a captive power market until the year 2023, in which Centrais Elétricas Brasileiras (Eletrobras) and Administración Nacional de Electricidad (Ande), owners of the binational, fully buy the energy generated by the hydroelectric plant.

The two countries also equally share the company's ownership, management and the right to purchase the energy produced for their own consumption. The Treaty also grants the right of each partner to buy the excess to its own energy consumption, paying values as established in Annex C. Annex A is the Statute of the company and Annex B contains a general description of the facilities and ancillary works for the production of electricity.

All decisions of business management are the result of understanding between representatives of both Itaipu's owners. Situations in which there is no consensus are solved by the governments of the two countries. In 2013 some members of the Supervisory and Executive Boards, from Brazilian and Paraguayan sides, were replaced. Check out the changes on the next page.

Governance Framework [G4-34; 38]



Supervisory Board and Executive Board on December 31st, 2013 [G4-13; 34; 38]

Supervisory Board Members	
Brazil	Paraguay
Alceu de Deus Collares	Aníbal Saucedo Rodas* (replacing Paulo Bernardo Reichardt)
João Vaccari Neto	Carlos Alberto Gonzáles
José Antônio Muniz Lopes	Leila Teresa Rachid Lichi* (replacing Mirtha Vergara de Franco)
Luis Pingelli Rosa	Oswaldo Román Romei
Orlando Pessuti ¹ * (replacing Celso Luiz Nunes Amorim)	Sixto Luis Duré Benítez* (replacing Roger Balbí Balbuena Sánchez)
Roberto Átila Amaral Vieira ¹	Víctor Raúl Romero Solís* (replacing Carlos Dionisio Heisele Sosa)
Representative from the Ministry of Foreign Affairs	
Eduardo Santos* (replacing Antonio José Ferreira Simões)	Carlos María Ocampos Arbo* (replacing José María Cardozo Saguier)
Brazilian Direction	Paraguayan Direction
General Director: Jorge Miguel Samek	General Director: James Spalding* (replacing Franklin Rafael Boccia Romanách)
Acting Chief Technical Officer: Jorge Miguel Samek ²	Chief Technical Officer: José María Sanchez Tillería
Chief Legal Officer: César Eduardo Zilliotto	Acting Chief Legal Officer: Benigno María López Benítez* (replacing Eusebio Ramón Ayala)
Chief Administrative Officer: Edésio Franco Passos	Acting Chief Administrative Officer: Carlos Jorge Paris Ferraro* (replacing Alberto Magno Ricardo González)
Acting Chief Financial Officer: Margaret Mussoi Luchetta Groff	Chief Financial Officer: Uvaldino Javier Galeano Benítez
Chief Coordination Officer: Nelson Miguel Friedrich	Acting Chief Coordination Officer: Francisco Pedro Domaniczky Lanik* (replacing Sady María Aranda de González)

* Members taking office in the course of 2013.

¹ Counselors Roberto Átila Amaral Vieira and Orlando Pessuti left the Supervisory Board in January and April 2014, respectively, and were replaced in May by Aloísio Mercadante and Orlando Moisés Fischer Pessuti.

² In April 2014, Airton Langaro Dipp assumed the position of Brazilian Chief Technical Officer, which was temporarily occupied by the General Director since July 2011.

Itaipu has no committees linked to the Supervisory Board in order to counsel in decision-making on economic, environmental and social impacts. The Brazilian and Paraguayan Chief Officers assist the Board with regard to the development and improvement of knowledge on sustainability, as well as in decision-making. [G4-34; 43]

The economic, environmental and social issues are handled by the Sustainability Management System, consisting of a coordinator and a group of organizers representing all Chief offices of the company. The initiatives, which also consider the cultural dimension aiming the assimilation of the principles of sustainability, are reported to the Brazilian General Director, responsible for communicating the Supervisory Board. [G4-35; 36]

All members of the Supervisory Board are independent, not in executive positions and do not belong to staff of Itaipu. The Chief Officers attend meetings but have no voting rights. [G4-38; 39]

All members of the Board are appointed by the governments of Brazil and Paraguay in equal numbers and there is no specification as to the professional training of the nominees. Terms last for four years. The same applies to the Executive Board, which has a term of five years. [G4-38; 40]

Regular meetings of the Board are held every two months. In each meeting a president is elected, always alternating between a Brazilian and Paraguayan representative. The members share corporate decisions with equal voting power. [G4-41; 47]

For decision-making, the presence of a majority of counselors of each country is required. In case of no parity of votes, counselors that will not vote are drawn, until the number of representatives is the same for both partners. [G4-41]

The duties of the Board are: to comply with and enforce the Itaipu Treaty, its Annexes and Supplementary Acts; approve the budget and business plan, which includes goals related to sustainability; set basic guidelines and bylaw; examine the Annual Report, the Balance Sheet and Profit and Loss Statement. [G4-42; 45]

Management approach

Towards achieving the vision set for 2020, Itaipu uses the Corporate Planning and Control System. Through the business plan, the organization sets strategic goals, tactical guidelines, programs and actions, as well as the necessary financial resources to make them feasible. The plans are made with a five-year horizon and revisions are made annually or as the General Directors deem necessary.

In 2013, all chief offices concluded their strategic maps, ensuring the alignment of sectorial and corporate strategies. In Brazil, the Sustainability Management System (SMS) acts in synergy with the Business Plan in order to disseminate the culture and concepts of sustainability among the co-workers and to promote greater interaction between the areas, for the development of programs and actions in accordance with the Sustainability Policy of the organization.

Following the proposal of the path of structured training in a cultural dimension of SMS, five "Sustainable Dialogues" were held during the year, which encouraged discussion of the sustainability issue among managers, supervisors, Chief Officers and foundations. Meetings per dimension (environmental, corporate, cultural and socioeconomic development) in order to deepen the knowledge of programs, projects and business activities were also carried out, and also aiming to list the activities that will be priority for organizers and managers, seeking to obtain indicators and goals to enhance the practice of sustainability in Itaipu.

Another initiative that went forward throughout the year is the creation of the Integrated Risk and Internal Control Management System. After interviews with Chief Officers and superintendents of both sides, the Dictionary and Risk Map of Itaipu were presented in September, expected to be approved in the first semester of 2014.

Managers of all offices analyzed the identified topics and elected 15 priority risks. The work will allow the identification of possible

improvement areas in internal control, in accordance with the international standards established in the Sarbanes-Oxley (SOX). The ultimate goal is to develop a model for risk management linked to business objectives.

The voluntary adoption of G4, the most current version of the Guidelines of Global Reporting Initiative (GRI), and the correlation with indicators of the International Hydropower Association (IHA), used as reference in the strategic planning of Itaipu, is the beginning of an integrated work between the Social Responsibility Advisory Office, the Corporate Planning and Control System and the SMS, seeking to solve and leverage the sustainable business performance. The development of social and environmental goals was also started and should be presented to the Corporate Planning and Chief Officers in 2014. [G4-2; 14; 46]

Risks and opportunities

The Treaty of Itaipu establishes the commitment of hiring the plant's total installed capacity, which results in a highly predictable revenue by sales of electricity services. The acquisition of these services, in its entirety, is held by Eletrobras and Ande, and Itaipu's electricity fare, equally hired by both companies, is sufficient to cover operating expenses, obligations of Annex "C" and debt of the company.

Despite the high debt level, this risk is mitigated since the National Treasury of Brazil and Eletrobras are the major creditors of Itaipu, and Eletrobras is the main revenue source for being the largest purchaser of electricity produced by Itaipu. [G4-2]

Corporate goals

Goal	2013 Performance	2014 Goals
Financial risk (Standard & Poor's) "brAAA"	Reached "brAAA"	Maintain "brAAA"
Financial Balance Index* ≥ 98% and ≤ 102%	Not reached 96%	≥ 98% and ≤ 102%
Index of Total Liabilities EBITDA* ≤ 10	Overcome 8.5	≤9
Generation Availability Index ≥ 94%	Overcome 96.21%	≥ 94%
Annual growth of visitors to the Itaipu Tourism Complex (Brazilian side) 5%	Overcome 8%	10%
Index of General Favorability of the Organizational Climate Survey (Brazilian side) 74%	Overcome 74.9%	The survey is conducted every two years. The target for 2015 is 76%.
Reduction in energy consumption 5%	Overcome 6.7 %	5%
Reduction in fossil fuel consumption 3%	Overcome 13%	3%

* The economic and financial outlook of Itaipu is structured to meet the objectives of the Annex C of the Treaty and the indicators have been formulated so that the electricity rate keeps the balance of 100% between revenue and expenditure and that in 2023 there is a full amortization.

Transparent management practices

Being a binational company with differentiated legal nature, Itaipu undergoes strict controls that are foreseen in the Treaty and its Annexes and, since 2007 the company follows the Sarbanes-Oxley Act (SOX). In 2013 no cases of corruption have been identified in the company or among the employees and no training on the subject was given.

Despite not having specific risks assessments related to corruption, any acts of corruption or fraud can be reported to the senior management or identified via Internal Audit, Independent Audits, Ombudsman Office, Contact Us and Ethics Committee. Depending on the case, complaints can be forwarded to internal measures, to the Federal Prosecutor or the Federal Police.

Both the Financial Statements and internal controls are reviewed periodically by the Brazilian and Paraguayan team of Internal Audit and by the binational consortium of external audit. Both use international methodology in order to avoid fraud. The Financial Statements are approved by the Chief Officers and Supervisory Board.

Furthermore, it is for the Ethics Committee to strive for the compliance of standards of conduct, values and principles, established in the [Code of Ethics of Itaipu](#). Another transparent management practice adopted by the company is the reverse binational electronic trading, in which the provider that proposes the lowest price wins. And since 2006, the company is using the Integrated Business Management System, which provides an improved information management. [G4-49; 56; 58; SO3; SO4; SO5]

Communication Channels

Itaipu has several channels to communicate with its stakeholders, the main being the [Ombudsman Office](#), the [Contact Us](#) channel, the Press Office, the institutional site, profiles on Twitter, Facebook and internal communication channels, Ethics Committee and especially Itaipu's newspapers, in electronic ([JIE](#)) and wall ([JIM](#)) versions.

The Contact Us recorded 4,596 calls via email (itaipu@itaipu.gov.br), consisting of questions, compliments, requests for support, technical questions and assistance for academic papers, which were answered by the management area with the support of the specific areas of the company.

The Ombudsman Office, directly linked to the Supervisory Board, ensures the right of a response to the call within 30 days and follows the demands until the final solution, respecting the confidentiality of the complainer's data. In 2013, the Ombudsman Office has expanded its service receiving manifestations of the in-house public. Lectures were held, folders were distributed and the reformulation of the page was done to internally promote the expansion of the service.

Altogether, the Ombudsman Office received 153 calls, 61% more than the previous year; 130 were external calls, 15 were internal and 8 anonymous. Of the total, 82% were fully answered. The e-mail was the main chosen channel: 88 requests, followed by 37 who arrived via electronic system, which was deployed in August and runs on the website and intranet.

The Ombudsman did not record complaints that could be classified as "impacts on society". There were 11 complaints that could be classified as "human rights violations", three from the external public and eight from the internal public. Such demands were solved with measures of agreed solution or deemed unfounded.

Four complaints concerning environmental impacts were received in the period, and one was not answered because it is a subject about which Itaipu cannot intervene. Complaints relating to labor practices were answered with the aid of the Administrative and Legal Officers. [G4-49; 50; 57; 58; EN34; LA16; SO11; HR3; HR12]

Stakeholder engagement

In order to achieve its strategic goals, Itaipu has direct and indirect relationships with various actors. There is no formal process for stakeholder engagement, but the company offers several communications tools and always involves the public in the preparation, planning, implementation and evaluation of programs, projects and actions it develops.

In general, social and environmental initiatives define their audience based on the area of influence of the company, which is the region of the Paraná Watershed 3 (BP3), composed of 28 municipalities in the state of Paraná and 1 in Mato Grosso do Sul. In some situations, the initiatives also include cities of the borders of Brazil with Paraguay and Argentina, in joint actions in the areas of health and infrastructure. [G4-25]

National and international associations

Itaipu, according to its values, participates and supports organizations that promote sustainable initiatives. These include associations, institutes, councils and committees that advocate hydropower, conservation and efficient energy management; water resources; human rights; sustainable management; biodiversity and regional development. (+) [G4-16]

Subscribed or endorsed initiatives by the company [G4-15]

- *Earth Charter*
- *Eletrobras Environmental Education Committee*
- *Istanbul Water Consensus - "Water Pact"*
- *Statement of Corporate Commitment against Child and Teenager Sexual Abuse*
- *Child-Friendly Company*
- *Paraná and Foz do Iguaçu Agenda 21 Forum*
- *Journey of the Treaty on Environmental Education for Sustainable Societies*
- *Memorandum of Understanding: Integrated Water Resources Management - MoU UNESCO*
- *Memorandum of Understanding: Use of renewable energies and energy efficient technologies - UNIDO MoU - Eletrobras*
- *Business Pact against Child and Teenager Sexual Exploitation on Brazilian Roads*
- *United Nations Global Compact*
- *National Pact to Eradicate Slave Labour in Brazil*
- *Brazilian Human Rights Plan*
- *Women's Empowerment Principles (WEPs) – United Nations Global Compact and UN Women*
- *Principles for Responsible Management Education (PRME)*
- *Fresh Start Program – Brazilian Justice Council*
- *Selo Vira Vida (Life-Changing Seal)*
- *Adhesion Agreement with the Network against Child and Adolescent Sexual Exploitation*
- *La Plata River Watershed Treaty*

Stakeholders and forms of relationship (+) [G4-24; 26]

STAKEHOLDERS	RELATIONSHIP	COMMUNICATION CHANNELS
Credit and Financial Agents	Eletrobras and the Brazilian Development Bank (BNDES) were the main funders of the construction of Itaipu. The National Treasury is the largest stakeholder after having assumed credits assigned by Eletrobras in 1998. Banco do Brasil and Caixa Econômica Federal are the financial agents with which Itaipu keeps most of the company's funds. FOCEM is the financial agent in charge of financing the project to build the 500kV Transmission Line, of which Itaipu acts as the executing agency. FINEP funds the development and assembly of the hybrid bus prototype (electric/ethanol) in order to use the vehicle as a reference for industrial scale production.	Meetings, official letters, data, accounting information or reports, and other documents.
Associations and Cooperatives	Contribution to building a more just society, improving the quality of life and increasing income, and partnerships for the development of specific actions; cooperation agreement for the exchange of information and actions related to the implementation of specific program initiatives.	Regular meetings, consultations, email, participation in committees and programs, technical cooperation agreements, accountability, institutional visits, events.
Local authorities, public agencies and the like	Institutional relationships and support of social, environmental, watershed management and security actions.	Regular meetings, official letters, consultations, institutional visits, and other events.
Clients/Capital holders	Eletrobras and Ande are buyers of the available power and the electricity associated to it, they hold the capital of US\$ 100 million in equal and non-transferrable shares. The Brazilian National Treasury and the Ministry of Mines and Energy are in charge of paying a part of the compensation for the assignment of power.	Official letters, data, accounting information or reports, regular meetings, institutional visits, Eletrobras holding company work group events, Sustainability Report, accounting information and/or reports.
Co-workers	Responsible for keeping the company in operation.	Lectures, emails, Online newspaper page (JIE), Wall paper Itaipu (JIM), intranet, team meetings, theatrical presentations, institutional visits, events, Sustainable Dialogues and Sustainability Report.
Local communities	Partnership in several outreach and environmental programs.	Participation in various committees and donation drives, institutional visits, events, Sustainability Report.
Utility companies	Essential service providers.	Letters, meetings, email, and technical cooperation agreements.
Unions	Labor relations and technical cooperation for the exchange of information.	Official letters, institutional visits, events, meetings and other documents.
Teaching and research institutions	Partnership and support for projects and technical cooperation; internships.	Meetings, email, accounting data or information, institutional visits, events, and other documents.
Suppliers	Business opportunities and fostering sustainable practices.	Website, public procurement, official letters, financial statements, certificates of good standing, and other documents.
Foundations	Services, training, culture and partnerships in social and environmental programs.	Letters, reports, courses, email, institutional visits, meetings, agreements, and others.

STAKEHOLDERS	RELATIONSHIP	COMMUNICATION CHANNELS
Governments (municipal, state, federal and other countries)	Partnerships in projects, articulation of legal and regulatory issues for the benefit of local communities, information exchange, institutional relationships and support to environmental and security initiatives, Ibero-American Cooperation Agreement for replicability of the Cultivating Good Water (CAB in Portuguese), conservation practices, works and constructions.	Meetings, inspections, financial statements, certificates of good standing, official letters and other documents, tax certificates, institutional visits, events, letter of intent and cooperation agreement.
Institutes	Data and information exchange, studies, partnerships, certification related to biodiversity and services.	Statement of Commitment, letters, reports, emails, website, meetings, data, accounting information, institutional visits, events and others.
Media	Campaigns, various news reports, clipping and research.	Press releases provided via email, phone calls, and meetings with journalists, and accounting information and/or reports.
NGOs and public interest NGOs	Project development partnerships and support for different initiatives.	Meetings, events, email, agreements, and other documents.
Business organizations	Participation with Eletrobras in Corporate Sustainability Index of the Stock Exchange of São Paulo, partnership in different specific actions, including actions for economic, tourism and regional integration development.	Meetings, official letters, agreements, email, institutional visits, events, Sustainability Report and other documents.
International organizations	Partnerships in social and environmental programs, technical and scientific cooperation, support for the replicability of the Cultivating Good Water (CAB in Portuguese) program and environmental commitments.	Letters, email, meetings, events and Sustainability Report, agreements, technical cooperation and confidentiality agreements, institutional visits.
Insurance companies	Different coverage according to possible damage to facilities and equipment and personal injuries.	Official letters and other documents.
State-run companies and free enterprises	Partners in social and environmental programs, technical and scientific cooperation, campaigns, and other events.	Letters, email, reports, meetings, agreements, campaigns, and others.
Brazilian Military Organizations	Partners in organizing events, technical cooperation, information transmission.	Letters, emails, meetings, lectures, institutional visits and events.



Economic Dimension

Itaipu is a nonprofit binational organization that has its financial bases and electricity provision services defined in [Annex C](#) of the Treaty, which guarantees absolute equality of rights and obligations between Brazil and Paraguay. The main management challenge is to maintain the economic and financial balance of the company, in other words, the annual revenue of the electricity provision services must be equal to the costs.

The company has been strengthening the structure of internal processes related to accounting records control by means of the Sarbanes-Oxley Act (SOX), one of the most rigorous management models adopted by Itaipu in 2008. Towards promoting the culture of correct application and use of internal procedures, with a view to ensuring the reliability and transparency of financial data, seminars and meetings with managers were held throughout the year.

Another important development in 2013 was the implementation of the debt management module in the SAP system, specifically designed to meet the unique characteristics of Itaipu. Since August, calculations and application of payments and charges were automated, providing greater reliability and transparency to the process.

Payments related to the debt service, amortization and financial expenses represented 60% of the electricity provision services costs.

Including financial rolls, US\$ 27 billion were raised in national and international financial agencies for the construction of the plant. The renegotiation with Eletrobras in 1997 resulted in the substitution of the indexes per U.S. dollar, as well as in setting annual payment capacities and the extension of the debt payment term for the year 2023.

Regarding the Value Added Distribution (learn more on page 36), the balance of distribution to third parties showed a gradual decrease due to the lower volume of charges related to debt service payable each year: US\$ 961 million in 2013, US\$ 1,030 million in 2012 and US\$ 1,093.7 million in 2011.

On the other hand, the reduction in the percentage allocated to employees comes from the smallest amounts accrued for post-employment benefits (future liabilities estimated by actuarial calculations, from the company's pension and retirement program that are administered by private pension foundations, as well as the medical care program).

The item "withheld" refers to accounting results obtained in each year, being US\$ 1,188.9 million compared to US\$ 520.6 million in 2012 and US\$ 784.2 million in 2011.

Components of the electricity service cost and amounts in 2013:

- **Royalties:** Financial compensation of the Brazilian and Paraguayan governments for the use of the hydraulic potential of the Paraná River to generate energy. US\$ 528.8 million.
- **Capital income:** Compensation of Ande and Eletrobras by 12% per year on the paid-in capital, adjusted for inflation. US\$ 48.1 million.
- **Operating expenses:** current expenditures and expenditures with personnel, materials, goods and services. US\$ 764.4 million.
- **Financial charges and amortization of loans and financing:** Amounts paid for financial charges and debt amortization. US\$ 2.1 billion.
- **Reimbursement of administration and supervision expenses:** Compensation of Ande and Eletrobras for the administration and supervision expenses. US\$ 40.7 million.
- **Results of the statement of income in the year:** Annual balance between revenue and costs of electricity service. US\$ 12.3 million.

Revenues of Itaipu derive from the contracting, by Eletrobras and Ande, of the entire installed available capacity. This ensures that the company has sufficient revenue to cover expenses.

All energy produced in excess of the guaranteed energy (associated with the contract of installed capacity) is called non-binding energy. It does not generate additional revenue because it is billed considering the royalties charges, reimbursements of administration and supervision expenses, and compensation for energy transfer from one country to another.

The Treaty provides that each government has the right to 50% of Itaipu's power. If one of the countries does not use all the available energy for its own consumption, the other country has the right to acquire the excess by compensation for energy transfer.

The company primarily follows the accounting practices adopted in Brazil and Paraguay. Exceptions arising from particularities of Itaipu are explained in the [Notes to Financial Statements](#), available on its website.

The U.S. dollar is adopted as reference currency in the transactions accounting and in the presentation of financial statements, in calculating the unit cost of electricity (fare), as well as payments made to governments and companies holding its capital (Eletrobras and Ande) and the main creditors of loans and financing.

The daily transactions, such as payroll and procurement of services and materials, are performed in the local currency of each country (Real and Guarani). For accounting purposes, the values are converted to U.S. dollars according to the currency exchange rate prevailing on the transaction date.

Highlights in 2013:

US\$ 3.6

billion was the generated value added.

US\$ 560

million was the amount of value added directed to labor remuneration.

US\$ 948

million were allocated to the governments of Brazil and Paraguay in labor taxes, royalties and compensating Paraguay for the energy transferred to Brazil (energy transfer).

US\$ 820

million were allocated to the remuneration of debt, being debt charges, monetary variations and other financial expenses.

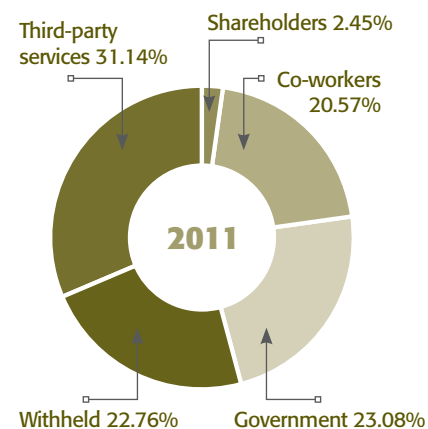
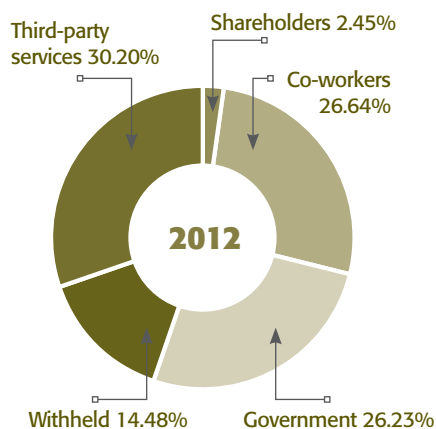
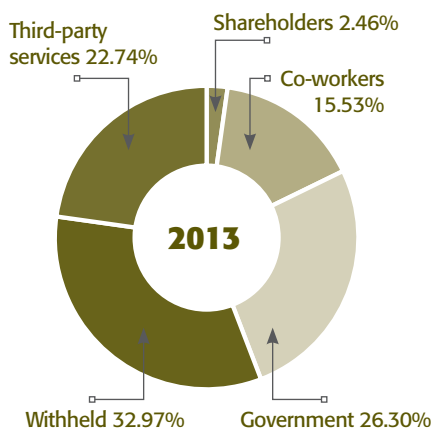
US\$ 1.2

billion was the accounting result of the year.

US\$ 35.68/megawatt-hour (MWh)

was the average cost of energy for Brazil.

Value Added Distribution [G4-EC1]



Economic Dimension

Annual Performance - iBase (in US\$) [G4-EC1]

1 – Calculation Basis	2013			2012		
Net Revenue (NR)	3,800,361			3,797,867		
Operating Result (OR)	1,188,903			520,563		
Gross Payroll (GPR)	430,786			396,073		
2 – Internal Social Indicators	Amount (thou)	% over GPR	% over NR	Amount (thou)	% over GPR	% over NR
Meals	19,253	4.47%	0.51%	23,853	6.02%	0.63%
Compulsory labor charges	49,847	11.57%	1.31%	48,415	12.22%	1.27%
Private pension plans	60,597	14.07%	1.59%	50,818	12.83%	1.34%
Health	71,729	16.65%	1.89%	63,872	16.13%	1.68%
Occupational Health and Safety	1,157	0.27%	0.03%	1,039	0.26%	0.03%
Education	6,861	1.59%	0.18%	6,901	1.74%	0.18%
Culture	0	0.00%	0.00%	0	0.00%	0.00%
Training and Career development	2,232	0.52%	0.06%	2,156	0.54%	0.06%
Daycare centers or daycare vouchers	1,683	0.39%	0.04%	1,457	0.37%	0.04%
Profit sharing	38,801	9.01%	1.02%	33,642	8.49%	0.89%
Others	55,987	13.00%	1.47%	50,995	12.88%	1.34%
Total – Internal Social Indicators	308,147	71.53%	8.11%	283,148	71.49%	7.46%
3 – External Social Indicators	Amount (thou)	% over OR	% over NR	Amount (thou)	% over OR	% over NR
Education	24,362	2.05%	0.64%	25,738	4.94%	0.68%
Culture	295	0.02%	0.01%	1,668	0.32%	0.04%
Health and Sanitation	18,188	1.53%	0.48%	13,473	2.59%	0.35%
Sports	0	0.00%	0.00%	0	0.00%	0.00%
Fight against hunger and for food safety	142	0.01%	0.00%	2,837	0.54%	0.07%
Others	27,712	2.33%	0.73%	36,341	6.98%	0.96%
Total contributions to society	70,699	5.95%	1.86%	80,057	15.38%	2.11%
Taxes (excluding labor charges)	0	0.00%	0.00%	0	0.00%	0.00%
Total - External Social Indicators	70,699	5.95%	1.86%	80,057	15.38%	2.11%
4 – Environmental Indicators	Amount (thou)	% over OR	% over NR	Amount (thou)	% over OR	% over NR
Investments related to the production/operation of the company	6,642	0.56%	0.17%	1,809	0.35%	0.05%
Investments in third-party programs and/or projects	11,212	0.94%	0.30%	8,085	1.55%	0.21%
Total environmental investments	17,854	1.50%	0.47%	9,894	1.90%	0.26%
As to establishing “annual goals” to minimize residues, the overall consumption in production/operation and to increase the efficiency in the use of resources, the company:	() has no goals () meets 0 to 50% () meets 51 to 75% (x) meets 76 to 100%					

5 – Staff Indicators¹	2013	2012
Number of employees at the end of the period	3,283	3,458
Number of admissions in the period	146	323
Number of outsourced employees ²	746	1,012
Number of interns ³	109	118
Number of employees over 45 years of age	1,482	1,701
Number of women working for the company	619	635
Percentage of management positions occupied by women	7.43%	6.93%
Number of blacks working for the company	263	257
Percentage of management positions occupied by black	3.42%	3.50%
Number of people with disabilities or special needs	58	54
6 - Relevant information on the practice of corporate citizenship	2013	Goals 2014
Ratio between the highest and lowest pay at the company	ND	ND
Total number of occupational accidents ³	14	0
The social and environmental projects developed by the company were defined by:	() chief officers (x) chief officers and managers () all employees	
Safety and health standards at the workplace were defined by:	() executives and managers () all employees (x) all + Internal Committee on Accident Prevention	
As to union freedom, the right to collective bargaining and internal representation of the workers, our company:	() does not get involved () follows ILO rules (x) encourages and follows ILO rules	
Private pension plans include:	() chief officers () chief officers and managers (x) all employees	
Profits are shared with:	() chief officers () chief officers and managers (x) all employees	
When selecting suppliers, the same ethical and social and environmental responsibility standards adopted by our company:	() are not considered () are suggested (x) are enforced	
As to company employees' participation in volunteer work programs, our company:	() does not get involved () supports (x) organizes and encourages	
Total number of customer complaints and criticism:	at the company: NAP at the Consumer Protection Agency (Procon): NAP in Court: NAP	
Percentage of complaints and criticism fulfilled or solved:	at the company: NAP at the Consumer Protection Agency (Procon): NAP in Court: NAP	
Total value added to share (in US\$):	US\$ 3,606,557	US\$ 3,595,756
Value Added Distribution (VAD):	26.30% government 15.53% co-workers 2.46% shareholders 22.74% third parties 32.97% withheld	26.23% government 26.64% co-workers 2.45% shareholders 30.20% third parties 14.48% withheld
7 – Other information		

Data are binational. The information about the Paraguayan staff was not included in the assurance scope.

¹ The Staff Indicators are binational, except for the number of outsourced employees, number of interns and total accidents, for which the presented data is only referring to the Brazilian side.

² Itaipu does not have outsourced employees, that is, people working in areas directly related to the business or management departments. Regarding this item, we report the employees of out sourced companies that were hired on the Brazilian side of the company to provide secondary services such as building maintenance and cleaning.

³ Data of the Brazilian side of the entity in 12/31/13.

NA – Information not available from both countries. NAP – Not-Applicable because Itaipu has no direct end consumers.

Economic Dimension

Value Added Statement (in US\$)* [G4-EC1]

	2013	2012	2011
CREATION OF VALUE ADDED			
Revenue			
Power Supply	3,291,012,000	3,291,012,000	3,291,012,000
Energy transfer compensation	377,020,357	378,718,002	267,761,087
Cost reimbursements – unbound energy	132,328,557	128,136,896	93,378,828
Miscellaneous revenue (expenses)	(14,998,634)	(10,484,940)	(8,376,733)
	3,785,362,280	3,787,381,958	3,643,775,182
(-) Inputs purchased from third parties			
Materials	16,429,962	16,152,007	16,169,216
Third-party services	106,702,421	104,645,775	106,963,208
Other operating expenses	80,913,537	122,372,673	189,716,646
	204,045,920	243,170,455	312,849,070
GROSS VALUE ADDED	3,581,316,360	3,544,211,503	3,330,926,112
Value added received in transfers			
Financial revenues	25,240,357	51,544,219	114,483,476
VALUE ADDED TO DISTRIBUTE	3,606,556,717	3,595,755,722	3,445,409,588
VALUE ADDED DISTRIBUTION			
Work compensation			
Direct compensation	319,684,107	298,282,562	297,180,181
Benefits	166,979,004	152,676,209	137,883,923
Post-employment benefits	43,921,855	424,962,959	206,010,554
Severance pay	22,365,649	74,640,560	59,857,085
FGTS (Government Severance Indemnity Fund for Employees)	7,084,133	7,260,064	7,769,518
	560,034,748	957,822,354	708,701,261
Government compensation			
INSS and IPS (Brazilian and Paraguayan Social Institute)	42,762,976	41,155,156	42,641,572
Royalties	528,810,294	523,229,326	484,678,258
Energy transfer compensation	377,020,357	378,718,002	267,761,087
	948,593,627	943,102,484	795,080,917
Remuneration of third-party capital			
Debt charges	960,998,877	1,030,007,341	1,093,687,934
Adjustments for inflation	(140,797,875)	(56,155,222)	(20,745,178)
Other financial expenses	7,766	67,569	28,129
	820,208,768	1,086,230,132	1,072,970,885
Remuneration of company capital			
Capital returns	48,139,048	47,789,688	47,149,750
Management and supervision fee reimbursement	40,677,714	40,248,410	37,282,944
	88,816,762	88,038,098	84,432,694
Profit for the year	1,188,902,812	520,562,654	784,223,831
VALUE ADDED DISTRIBUTION	520,562,654	3,595,755,722	3,445,409,588

* Binational data.

Royalties

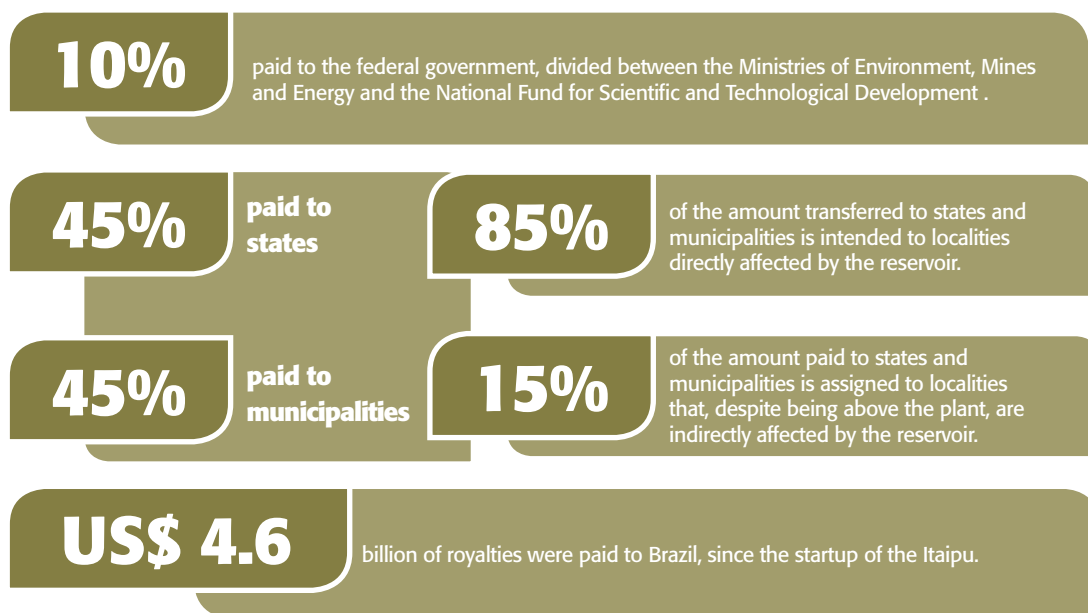
Itaipu compensates the Brazilian and Paraguayan governments for the use of the hydraulic potential of the Paraná River. The amount varies according to the energy production and the compensation is done monthly, always based on the energy generated two months before (the payment made in December refers to the energy generated in October, for example).

The total royalties paid by Itaipu to the two countries since 1985 is of US\$ 8.8 billion. Of this amount, US\$ 258.9 million were paid to Brazil in 2013, US\$ 12.2 million more than paid in the previous year.

In Brazil, the transfers to the beneficiaries are administered jointly by the Brazilian Electricity Regulatory Agency (Aneel), the National Treasury Secretariat and the Ministry of Mines and Energy which distribute the electricity to municipalities, states and federal agencies that are entitled to receive compensation, as provided in the Law on Royalties.

The surrounding cities, which are directly affected by the reservoir (fifteen in Paraná and one in Mato Grosso do Sul), are the most benefited by the royalties and received US\$ 99 million compensation in 2013. Some of these cities have the best human development indices (HDI) of Paraná: Entre Rios do Oeste, Marechal Cândido Rondon and Pato Bragado occupy the fourth, eighth and eleventh places in the ranking respectively.

The Government of Paraná was compensated with US\$ 98.3 million and the Government of Mato Grosso do Sul with US\$ 2.3 million. States and municipalities located above the reservoir, indirectly affected, received US\$ 33.4 million. [G4-EC8]



Economic Dimension

Distribution of royalties paid by Itaipu to the Brazilian Treasury in the last three years (in thousand US\$)

[G4-EC8]

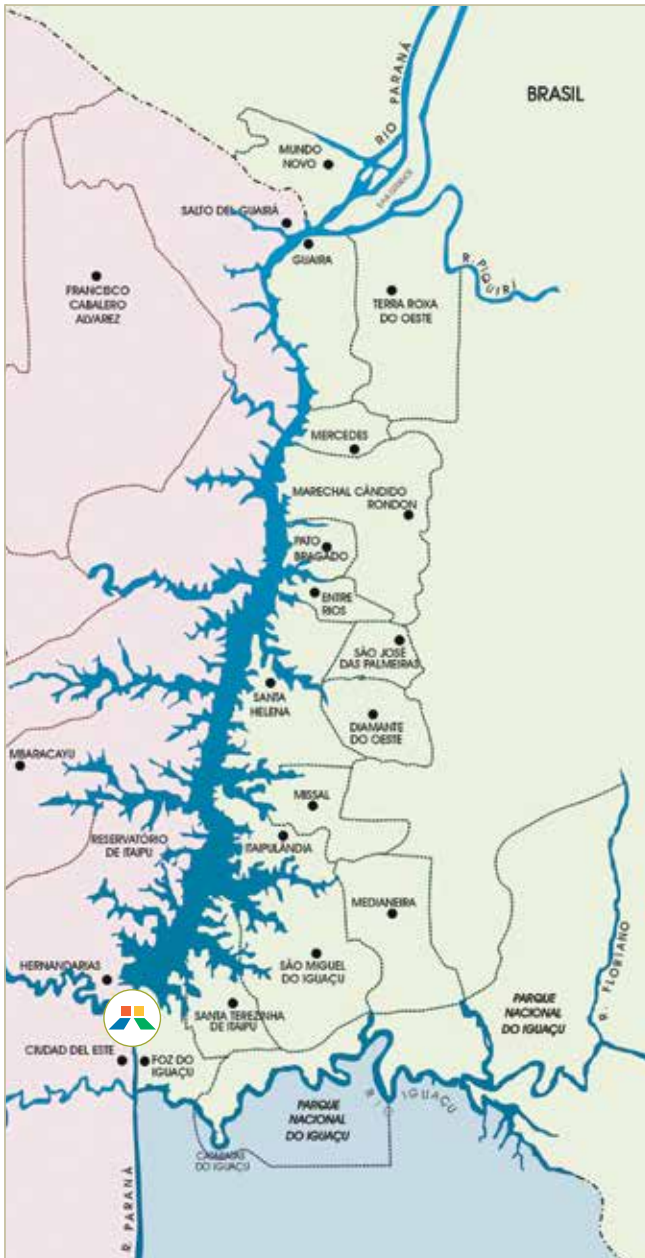
	2013	2012	2011	Accumulated 1991-2013
Ministry of the Environment	7,767.40	7,401.20	6,685.30	64,610.30*
Ministry of Mines and Energy	7,767.40	7,401.20	6,685.30	64,610.30*
National Science and Technology Development Fund	10,356.50	9,868.40	8,913.70	86,147.00*
Paraná State Government	98,308.70	93,673.80	84,613.50	1,502,557.60
Mato Grosso do Sul State Government	2,318.70	2,209.40	1,995.70	33,220.50
Other states indirectly affected	15,883.40	15,134.60	13,670.70	244,089.00
Municipalities indirectly affected	17,476.60	16,652.70	15,042.00	265,968.00
Foz do Iguaçu	19,045.30	18,147.30	16,392.00	290,789.40
Santa Terezinha de Itaipu	3,953.50	3,767.20	3,402.80	60,364.60
São Miguel do Iguaçu	8,578.00	8,173.60	7,383.10	143,438.50
Itaipulândia	16,958.90	16,159.40	14,596.40	246,469.80
Medianeira	109.50	104.40	94.30	1,672.00
Missal	3,780.90	3,602.70	3,254.20	57,728.50
Santa Helena	24,887.90	23,714.50	21,420.70	379,997.00
Diamante do Oeste	530.30	505.30	456.40	8,097.00
São José das Palmeiras	183.10	174.50	157.60	2,795.60
Marechal Cândido Rondon	5,287.80	5,038.50	4,551.20	87,623.10
Mercedes	1,823.00	1,737.10	1,569.10	26,494.70
Pato Bragado	4,441.40	4,232.00	3,822.70	64,548.40
Entre Rios do Oeste	3,104.30	2,958.00	2,671.90	45,116.70
Terra Roxa	149.10	142.20	128.40	2,277.30
Guaíra	4,813.20	4,586.30	4,142.60	73,489.40
Mundo Novo	1,388.00	1,322.50	1,194.60	21,129.90
Total**	258,912.90	246,706.80	222,844.20	3,953,185.60

Source: Itaipu Financial Department

* Accumulated 2004 -2013.

** The distribution percentage of royalties was established in 1991. Before that, Itaipu paid US\$ 614,561.7 thousand to the Brazilian Treasury, having paid a total of US\$ 4.6 billion of royalties from the beginning of the operation of the company.

Itaipu Reservoir



Economic Dimension

Supply Chain

Itaipu is a legal entity of public international law; therefore, its acquisition processes should be performed by means of bids. The Treaty establishes its own rules for the procurement of services and equipment acquisition, the General Rule for Bids (NGL).

The new version of the NGL was implemented in January 2013, and its main characteristic is the alignment with corporate strategies, with the possibility of selecting the proposals combining economic advantage for the enterprise and regional sustainable development. Another significant point of the rule is to encourage the acquisition from or hiring of small, medium and micro-enterprises of Brazil and Paraguay.

About 9% of the acquisitions made in binational processes were from the Brazilian market. The purchases volume in the domestic market, made by the Brazilian side, reaches 62% of the total purchases of the company, and 80% refer to services contracts, which indicates significant incidence of outsourced employees in the supply chain of Itaipu.

During the period, no occurrences of child labor, hazardous work for young people, forced or compulsory labor were recorded.

Although Itaipu does not act directly on the monitoring of possible human rights violations by suppliers, bid processes require the applicant to sign a statement that the company: hires young people from 14 years just as apprentices; does not employ children under 18 years; uses no operations identified as having significant risk of incidents of forced labor, slave labor or related to sexual exploitation; and respects gender equity.

[G4-12; EC9; SO9; SO10; HR5; HR6]

US\$ 145 million was the total volume of purchases from Itaipu in 2013.

53% of payments were made to Brazilian suppliers.

Approximately **50%** of Brazilian purchases were made from suppliers of Paraná.

The supplier registration had 1,312 companies able to contract with Itaipu in 2013.

64% of the registered companies were services providers.

US\$ 17.3 million was the purchases volume with suppliers of the Paraná Watershed 3 (BP3), area of influence of Itaipu.

Sustainable Supply Chain

In March we started to use the Supplier Evaluation System, which requires Itaipu managers to periodically review service providers with prevailing contracts. The system will support the work of the Committee for Internal Assessment and Management of the Supplier Development Program (Desfor), introduced in April with the mission of identifying the development needs of suppliers and establishing lines of action to meet these demands.

Desfor is a binational program that aims to improve management and production practices of suppliers. In October, in an innovative initiative, Itaipu launched and distributed the primer "Gender Equality: how to implement it in corporate management" to its suppliers, with versions in Portuguese and Spanish.

The material has been prepared based on the Women's Empowerment Principles, launched by the United Nations Global Compact, UN Women and adopted by Itaipu since 2010. The objective of the publication is to guide enterprises to adopt practices of gender equality.

Itaipu also launched the Sustainable Procurement Program, which aims to create a methodology and encourage employees to consider sustainability criteria in procurement. Such requirements will be mandatory in the purchasing process, gradually until 2020, ranging from the technical specification of the goods and contracted services to the supplier qualification and compliance with contractual obligations.

In 2013 the program acquired, on an experimental basis, coffee break services, asphalt paving, the purchase of printers and cartridges and insulating oil. Several workshops with managers, superintendents and demanders of purchases were made during the year and the initiative, which began on the Brazilian side, was also adopted by the Paraguayan side.

In December, the Sustainable Procurement Committee, composed of 14 members representing all Brazilian and Paraguayan Chief Offices, was created; it will monitor and support the program. The first task of the group is to analyze and validate the mapping of critical materials and services, which present operational risks for the business and are related to sustainability. (+)



Social Dimension - Human Resources

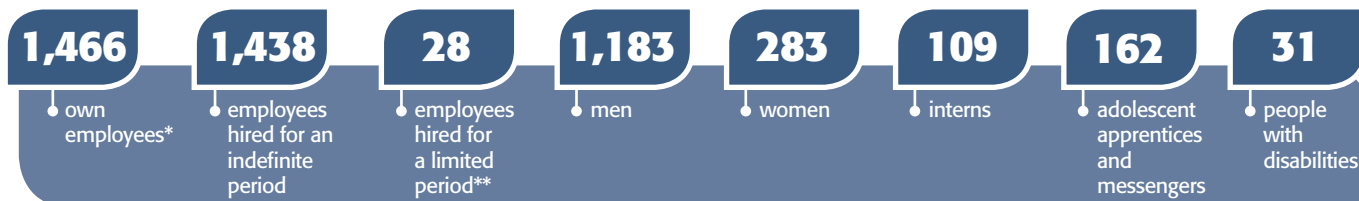
Until 2020 Itaipu wants to consolidate itself as the power generator with the best operating performance and best sustainability practices in the world. In order to coordinate with strategic corporate goals, the company adopted the Integrated Personnel Management System. Comprising Human Resources systems which are based on the Competency Management Model, binationally approved, it aims to develop the employees in knowledge and skills that are essential for the implementation of corporate strategies, and also the culture of the processes and results.

Among the priority actions there is the consolidation of the Performance Management System (PMS), which in 2013 allowed the assessment of 84% of employees; implementation of the Integrated Management System for Health and Safety; promotion of employees' welfare; the project of Corporate Education for Sustainability and the process of improving the organizational climate management.

A highlight was the approval of the new Career and Compensation Program by Skills, which after five years of planning will go into effect in admissions made in Brazil and Paraguay in 2014. Other employees may choose whether they remain in the Career and Salary Plan or migrate to the new model. Together with the PMS and the Corporate Education, the goal is to modernize and provide more transparency for the career prospects in the company.

For the first time, in 2013, Itaipu and the unions negotiated a two years Collective Bargaining Agreement for the Brazilian side. Besides being an indicator of the good relationship of Itaipu with the trade unions, the fact will allow the company Labor Relations Committee to have more time to review the claims and to propose solutions that meet both the working class as the strategic goals of the organization.

Profile of Itaipu workers in 2013 [G4-10]



* Includes 26 employees assigned to other organs and 1 employee leave for health reasons.

** Employee hired for a limited period is the one whose term of work is specified in the contract document signed with Itaipu. It includes 16 employees required of other federal, state or municipal agencies, the Chief Officers and Counselors.

Labor Practices

During the construction time, Itaipu gathered several professionals and experts from the electricity sector. However, the company only formed its own staff in 1987. Though the Treaty does not establish procedures for the hiring of staff, in 2005 the company began to adopt selection processes with the objective of democratizing the admission into the organization, and in 2006 the first admissions in this model were made.

Management positions are occupied, preferably by career employees. However member of Supervisory Board and Chief Officers are appointed by the federal government.

The 22nd edition of the New Employee Integration Program in 2013 was a success. With the entry of 21 new employees, more than half of Brazil's workforce was admitted to the company through a selection process.

Since the implementation of the system, 788 employees left the company through the Permanent Voluntary Retirement Program and the average age of workers went from 48 to 42 years. These numbers indicate that employees who formed the initial staff are retiring and the challenges of the company are to manage the knowledge and support the two generations in order to work in a harmonious environment, ensuring the operational excellence of Itaipu.

Among the major benefits offered to employees there are: medical and dental health insurance, with national coverage for employees and their dependents; educational assistance (reimbursement or agreement); group life insurance; and private pension plans by compliance, maintaining the health insurance in retirement. A maternity or paternity leave without job and salary loss is guaranteed in the Collective Bargaining Agreement five days for men and up to six months for women.

Periodically the company conducts organizational climate surveys, and the last edition was in 2013 and was attended by 71.92% of active employees. The overall favorability index was 74.9%.

In 2013 the Ombudsman Office began to receive internal demands, registering 15 demonstrations. Conflict issues in labor relations or human rights violation are received and processed by the Ethics Committee.

There are four main communication channels for the internal stakeholders: the electronic newsletter RH Informa, intranet, [online newspaper page \(named JIE\)](#) and wallpaper Itaipu, the JIM. [G4-LA16]

Profile of Itaipu workers in 2013 [G4-10]

**Foz do Iguaçu
Santa Helena
and Guairá**

- 1,068 men
- 207 women
- 6 men and 4 women, hired for a limited period*
- 94 interns, being 64 women

Curitiba

- 93 men
- 65 women
- 14 men and 4 women, hired for a limited period*
- 15 interns, being 12 women

Brasília

- 2 men
- 2 women

São Paulo

- 1 women

80%

white

1.8%

yellow

2.1%

black

16%

mixed race

0.2%

indigenous

100%

of employees are covered by the Collective Bargaining Agreement signed between Itaipu and unions. [G4-11]

21%

of management positions are held by women.

31 to 50

years is the age range of 60% of employees. [G4-LA12]

14.6%

is the greatest average ratio difference between the basic salary of men and women and was recorded in the management category.

93

employees were hired, among whom 24 were women.

74

employees were dismissed, and 62 of them were dismissed through the Permanent Voluntary Retirement Program.

22

years was the average length of service of employees who were dismissed in 2013 (+)

* Employee hired for a limited period is the one whose term of work is specified in the contract document signed with Itaipu. It includes 16 employees required of other federal, state or municipal agencies, the Chief Officers and members of Supervisory Board.

Social Dimension - Human Resources

Composition of governance bodies and employees per employee category [G4-LA12]

Gender	Supervisory Board*	Chief Officers*	Management			College degree			No college degree		
	2013	2013	2013	2012	2011	2013	2012	2011	2013	2012	2011
Men	7	4	99	98	96	423	406	409	650	657	679
Women		1	26	27	26	151	144	147	105	103	104
Total	7	5	125	125	122	574	550	556	755	760	783

Age	Supervisory Board*	Chief Officers*	Management			College degree			No college degree		
	2013	2013	2013	2012	2011	2013	2012	2011	2013	2012	2011
Under 30				1	1	68	71	82	74	88	105
Aged 30 to 50		1	60	64	61	359	342	337	463	434	436
Over 50 years of age	7	4	65	60	60	147	137	137	218	238	242

Race	Supervisory Board*	Chief Officers*	Management			College degree			No college degree		
	2013	2013	2013	2012	2011	2013	2012	2011	2013	2012	2011
White	6	5	115	115	117	481	465	470	566	571	589
Yellow						22	21	20	4	4	4
Black	1		1	1		6	6	6	23	24	27
Mixed Race			8	8	4	64	58	60	161	160	162
Indigenous			1	1	1	1			1	1	1

* Data of 2012 and 2011 are the same of 2013.

Total number and rate of new employee hires and employee turnover by age, gender and region* (+) [G4-LA1]

Male		Employees			Hired			Dismissed			Hired and Dismissed at same year ¹		Turnover rate (%)		
		2013	2012	2011	2013	2012	2011	2013	2012	2011	2013	2012	2013	2012	2011
Curitiba	Under 30 years of age	2	4	5	1	2									
	Aged 30 to 50	55	56	55	3	4	3	2					3.64		
	Over 50 years of age	36	37	36			1	7	5	9			19.44	13.51	25.00
	Total	93	97	96	4	6	4	9	5	9			9.68	5.15	9.38
Foz, Santa Helena and Guairá	Under 30 years of age	98	116	136	24	1	22		1	2		1		0.86	1.47
	Aged 30 to 50	654	617	616	40	3	26	2	3	6	1		0.31	0.49	0.97
	Over 50 years of age	316	321	326	1	56	2	47	56	59			14.87	17.45	18.10
	Total	1,068	1,054	1,078	65	60	50	49	60	67	1	1	4.59	5.69	6.22

*Does not include members of Supervisory Board, chief officers and employees of limited period (ordered from other federal, state and municipal agencies).

¹ No employees hired in 2011 were dismissed that same year.

Female		Employees			Hired			Dismissed			Turnover rate (%)				
		2013	2012	2011	2013	2012	2011	2013	2012	2011	2013	2012	2011		
Curitiba	Under 30 years of age	1	2	4											
	Aged 30 to 50	46	46	46	2	1	1		1				2.17		
	Over 50 years of age	18	19	16				5	1	7			27.78	5.26	43.75
	Total	65	67	66	2	1	1	5	2	7			7.69	2.99	10.61
Foz, Santa Helena e Guairá	Under 30 years of age	41	38	43	12	5	5	1	2	1			2.44	5.26	2.33
	Aged 30 to 50	118	112	108	10	4	10	3					2.54		
	Over 50 years of age	48	46	49				7	9	13			14.58	19.57	26.53
	Total	207	196	200	22	9	15	11	11	14			5.31	5.61	7.00

No female employees were hired and dismissed in the same year in 2013, 2012 and 2011.

Social Dimension - Human Resources

Career, compensation and gender equality

None of the positions in the company has restrictions on hiring women and Itaipu's salary policy establishes the basic salary and compensation considering the position's specificity and qualification. For management positions, the company grants a non-permanent bonus, which is not attached to the basic salary.

The fees for members of Supervisory and Executive Boards are set by the governments, represented by Eletrobras and Ande, by mutual agreement, as provided in Annex A of Itaipu's Treaty. There is no salary difference between them, except for the General Director.

Over the past three years, the average basic salary of women presented a greater variation in managing and academic categories when compared to men. In the case of the non-college degree category, the variation was lower due to retirement of female employees with average basic salary greater than the male average basic salary, because of the time they remained in the company.

The hiring of employees after January 2014 will be within the parameters of the Career and Compensation Program (PCR), approved in December by both countries. Employees hired prior to December 31, 2013 may choose to remain in the Career and Salary Plan.

The change is aligned with corporate strategies that aim at developing the necessary skills to maintain the high level of motivation, commitment and performance of employees. With the adoption of Competency Management System (PMS), the PCR will enable career growth with transparency and meritocracy.

With the new plan, the main change occurs in the organization of functional roles, which no longer focus on the description of tasks and start to value the results. Employees, regardless of gender, presenting superior performance in the PMS will be

eligible for promotions in the PCR. Furthermore, the system allows the identification of skills that need to be developed via Corporate Education Program. [G4-51; 52; 53; 54; 55]

Gender Equality Incentive Program

Itaipu develops affirmative actions that favor gender equality in the workplace, in communities of its influence area and in society in general since 2003. In the Brazilian electricity sector, the plant is a pioneer in the implementation of a binational Gender Equality Policy, in 2011.

In 2013, 19% of the staff was of women, among whom 26 were managers - which corresponds to an increase of 11% in the presence of women in management positions in the last decade. The program is coordinated by a committee formed by men and women of all boards, foundations maintained by Itaipu and unions. The members give opinions, propose and implement actions and also monitor the implementation of the policy in the company.

As a result of the commitment and progress of the program, Itaipu was awarded, in March 2013, with the Women's Empowerment Principles Leadership award of UN Women and the United Nations Global Compact. In October, the company launched the WEPS Brazil Award 2014, aiming to promote a culture of gender equality among Brazilian companies.

Itaipu also released a primer on how to adopt practices of gender equality in corporate management. The material was distributed to the suppliers of the entity. [G4-LA12]

Salary and compensation for men and women [G4-LA13]

	2013			2012			2011		
	Ratio of basic salary	Average basic salary* (R\$)		Ratio of basic salary	Average basic salary* (R\$)		Ratio of basic salary	Average basic salary* (R\$)	
	Women / Men	Men	Women	Women / Men	Men	Women	Women / Men	Men	Women
Chief Officers**	100			100			100		
Managers	85.4	14,742.14	12,595.45	84.7	13,654.60	11,559.31	84.1	13,116.14	11,035.85
College degree	87.3	8,125.13	7,093.06	87.4	7,566.03	6,613.21	85.1	7,169.97	6,099.50
No college degree	99.7	4,418.53	4,404.24	101.8	4,152.98	4,228.49	102.9	3,933.01	4,047.10

Because there are no Brazilian women on the Supervisory Board, the ratio is zero.

* The values for the salaries of members of the Boards will not be disclosed for security reasons.

There is no difference in the Chief Officers' salaries, with the exception of the General Director, whose duties are differentiated.

** For employees in manager positions, the Complementary Function Bonus was added to the value of the basic salary.

Health and Safety

Existing occupational risks are identified and solved through the Prevention and Environmental Risks Program. In addition, employees are encouraged to participate in working groups, committees and commissions that propose and develop process improvements. These bodies act in an advisory or deliberately manner and are composed of representatives of all areas and hierarchical levels.

In 2013, 17 work-related injuries were recorded. Despite the reduction of three occurrences when compared to the previous year, the amount of working days lost increased from 79 to 118. In this year, the monitoring of occupational indicators of service provider workers of Itaipu was also initiated, and 14 accidents with 80 working days lost were recorded.

Based on technical expertise and reports issued by a specialized company, Itaipu found that some areas and jobs were characterized as unhealthy due to biological risk. As a result, 14 employees that work at the Veterinary Hospital, in the Environmental Laboratory and Occupational Medicine have received the Insalubridy Premium.

With the Occupational Health Medical Control Program, the company periodically performs medical examination of employees for individual monitoring of the workers' health. And with the Reviving Program, employees participate in preventive and curative activities, aimed at continuous improvement of quality of life (learn more on page 54).

Although the relevant training in health and safety are made by contracted companies, Itaipu's security, safety, health and environment standards are presented to the service providers when they begin their activities at the binational. Of 746 employees of service companies that acted in Itaipu in 2013, 164 participated of the Integration Seminar, including temporary workers (substitutes for holiday periods), in other words, 22%.

The percentage of trained people declined because there was a decrease in the amount of workers starting activities in the company (there were 375 in 2012). Created in 2008, the Seminar is foreseen in a contractual clause and has already registered 1,476 participants. [G4-10; LA6; LA7; EU18]

Social Dimension - Human Resources

Recycling on the Regulatory Standard 10 (NR10)

Issued by the Ministry of Labor and Employment, the NR10 establishes safety standards for workers who work with electricity and on electrical facilities, and the recycling should be done every two years. In 2013, about 30% of all Brazilian staff attended the training, which brought together 435 employees from all areas, especially the operation and maintenance sectors, which concentrate the largest number of employees under electrical risk. The seminar had 16 hours of online training and 8 hours of classroom training, with an adapted content to the public of each of the 18 classes. [G4-LA7]

Committees

- Internal Committee on Accident Prevention (Cipa)
- Permanent Work Group for Electricity Safety
- Binational Commission on Electrical Risk Hazards
- Hearing Conservation Program Committee
- Emergency Action Plan Committee
- Standing Committee of People with Disabilities

Specific clauses in the Collective Bargaining Agreement [G4-LA8]

- Supply and mandatory use of personal protective equipment
- Analysis and study of electromagnetic fields
- Additional for hazardous work, insalubrity and painfulness
- Ergonomic and technical survey of the environmental conditions in the workplace
- Right to refuse unsafe work
- Periodical surveys of health and safety with the participation of workers' representatives

Rates of injury, occupational diseases, working days lost, absenteeism, and number of work-related fatalities, by gender [G4-LA6]

	2013			2012		2011	
	Men	Women	Service Providers ⁴	Men	Women	Men	Women
Injury rate¹	4.59	2.07	13.16	1.11	0.34	5.96	2.01
Working days lost rate²	28.49	2.07	75.22	11.61	1.69	124.67	8.03
Absenteeism rate³	2.74	3.27	NA	2.49		2.52	
Fatalities	0	0	0	0	0	0	0
Occupational disease rate	0	0	0	0.07	0	0.46	0

For calculation purposes, we considered only those employees hired for an indefinite period. Data could not be reported by region.

¹ Includes small lesions, representing all accidents with lost working days. The accident statistics are recorded according to NBR14280.

² Working days lost are represented as calendar days and the count starts the day after the accident.

³ The calculation is based on total hours worked (scheduled) and does not include maternity and paternity leave and election compensation.

⁴ Itaipu has no control of service providers by gender.

NA – Not available data, Itaipu has no control of the absences of service providers.

Professional development

In order to develop the employee with essential knowledge and skills for the implementation of the business strategy, Itaipu has corporate and specific training programs. Additionally, it maintains the Itaipu Corporate University that focuses on Research, Development and Innovation and knowledge management with long-term training.

With the update of the Performance Management System (PMS), the demands of training and qualification can be defined in the Individual Development Plan, which is the step after the performance evaluation. The cycle was from August/2012 to July/2013 and evaluated 999 male employees (84%) and 228 female employees (81%), totaling a performance analysis of 84% of the workforce.

Employees on probation are not valued through the PMS, but through the New Employee Assessment.

In 2013, employees participated in 83,771 training hours, about 10% less than in the previous year. From the 71,735 hours of training done by male employees, half were performed by employees of the no college degree category.

On the other hand, female employees, who make up 19% of the workforce of the company, participated in 12,036 training hours, of which 7,431 were intended for the college degree

category, representing 53% of women in Itaipu. The largest workload reduction in the last year was among women with no college degree.

As the management model of Itaipu provides that the initiatives of the company should be conducted through programs, activities and projects, about 500 workers, from Brazil and Paraguay, have been trained in Project Management between the years of 2009 and 2012. In 2013, recycling trainings on the methodology were conducted, in which 100 employees participated. The initiative is the result of a partnership between the Human Resources and the Corporate Planning, with the Itaipu Technological Park Foundation and the Pontifical Catholic University of Paraná.

Security workers (own employees and subcontractors) attended the mandatory recycling for security guards in order to execute the job that includes aspects of Human Rights. Besides recycling, they attended the annual lecture on Human Rights. [G4-LA11; HR2; HR7]

Average training hours per year, per employee, by gender and by employee category* [G4-LA9]

	2013			2012			2011		
	Men	Women	Average per Employee	Men	Women	Average per Employee	Men	Women	Average per Employee
Management	75.71	68.58	74.22	82.8	77.41	81.63	48.97	72.35	53.95
College degree	68.25	49.21	63.24	70.98	62.81	68.84	67.44	49.18	62.61
No college degree	54.42	26.88	50.59	54.07	82.24	57.88	60.14	20.6	54.88

* No training for Boards was given in the last three years.

Social Dimension - Human Resources

Retirement

Itaipu adopts the Permanent Voluntary Retirement Program (PPDV) as a way of regulating this issue on the Brazilian side of the company. Employees leave the company when the requirements of the private pension, from the Itaipu-Brasil Foundation of Social Security and Social Work (Fibra), are 100% complete.

In addition to receiving the specific indemnification of the PPDV, employees have the right to receive the severance pay

of a termination without cause and 40% of the balance of the Government Severance Indemnity Fund for Employees (FGTS). The company also develops the Thinking about Retirement Program, which helps employees and their spouses get ready to end their careers, with voluntary participation. A total of 62 employees retired in 2013.

Percentage of employees eligible to retire in the next five or ten years* [G4-EU15]

		Base-year 2013		Base-year 2012		Base-year 2011	
		2014 - 2018	2014 - 2023	2013 - 2017	2013 - 2022	2012 - 2016	2012 - 2021
Boards		17%	17%	17%	17%	17%	17%
Managers	Curitiba	30%	74%	29%	71%	34%	78%
	Foz, Santa Helena and Guaira	32%	74%	30%	73%	29%	67%
College degree	Curitiba	24%	51%	24%	51%	19%	49%
	Foz, Santa Helena and Guaira	17%	30%	16%	32%	16%	34%
No college degree	Curitiba	32%	60%	32%	49%	31%	51%
	Foz, Santa Helena and Guaira	24%	41%	25%	44%	24%	45%
Total (includes all regions and functional categories)		22%	41%	23%	43%	22%	44%

*Data are based on the limit date of stay at Itaipu, which includes the date of retirement benefit at Fibra and also the date chosen by the employee in the PPDV.

Private pension

Fibra was created by Itaipu in 1988 to provide additional pension for their employees. The membership is voluntary and 99% of employees joined the plan.

Employees contribute monthly, and the values are calculated according to salary level and actuarial criteria. Already retired participants contribute 10% of the benefit value. The binational, as a regular contribution, transfers 15% of the payroll and another 2.32%, related to the cost of covering the previous service time of the founder participants.

The benefits are: retirement by contribution time, disability retirement, special retirement, retirement by age, pension, temporary death benefit and seclusion and funeral aid.

In Paraguay, the retirement and pension program for employees is managed by the Caja Paraguaya de Jubilaciones y Pensiones del personal de la Itaipu Binacional (Cajubi). In February 2013, the Supervisory Board of Itaipu approved an increase in the mandatory monthly contributions from the sponsor and active participants in order to eliminate the potential of generating future funding shortfall of the benefit plan. [G4-EC3]

Fibra in numbers

	2013	2012	2011
People benefited directly	6,935	6,819	6,834
Active participants in the Foundation ¹	1,490	1,473	1,498
Retirees assisted by the pension plan ¹	1,308	1,266	1,204
Beneficiaries assisted by the pension plan ¹	208	191	180
Benefits paid in continued income	141,6 million	126,5 million	109,9 million
Benefits paid since its establishment ²	1,582 million	1,307 million	1,160,6 million
Social security contributions ³	67,4 million	60,3 million	56,2 million
Technical Reserves (net assets)	2,460 million	2,391 million	2,094 million
Technical Reserves (actuarial liabilities)	2,614 million	2,332 million	2,019 million

Source: Fibra Annual Report 2013 (base date 12/31/13).

¹ Data extracted from the Financial Statements (note 20) whose base date is 11/30/13.

² Corrected by the National Consumer Price Index (INPC).

³ Received from Sponsors and Participants.

Social Dimension - Human Resources

Programs developed for employees (+)

Name of the Program	<u>Reviving</u>	<u>Gender Equality Incentive</u>	<u>Volunteer Force</u>
Goal	To implement actions aiming the awareness of Itaipu's employees and their dependents on the importance of a healthy and balanced personal and professional life.	Promote the equitable inclusion of men and women in participation and internal and external decision processes, in order to build a culture of respect for diversity.	Motivate employees for volunteer activities in social institutions, kindergartens and schools.
Benefited	Employees and their families.	Itaipu employees and society.	Itaipu employees, their families and people that are benefited with voluntary actions.
Investment	US\$ 266.90 thousand	US\$ 12.77 thousand	US\$ 61.93 thousand
Main stakeholders	Partners in the implementation of activities, such as Industrial Social Services, Municipal Health Secretariat, Ministro Costa Cavalcanti Hospital, higher education institutions and NGOs.	Secretariat of Policies for Women of the Presidency of Brazil, Standing Committee for Gender Issues of the Ministry of Mines and Energy and Related Companies, Companies of the Cycle to Strengthen Gender and Race Equality in the World of Work, UN Women, International Labor Organization; City Hall of Foz do Iguaçu and entities of the organized civil society.	Social organizations, municipalities and private companies.
Main results in 2013	<ul style="list-style-type: none"> - 221 employees participated of the Challenge Day at Itaipu. - 592 employees participated of activities offered in the Wellness Area assembled to celebrate 19 years of the program. [G4-LA7] 	<ul style="list-style-type: none"> - Launching of the WEPs Brazil 2014 Award that seeks to recognize the best practices of gender equality. - Launching of the primer on implementing equality in business management. - 223 employees participated in workshops to assess ten years of the program. [G4-LA12] 	<ul style="list-style-type: none"> - 500 participations in activities throughout the year. - 583 students from schools in Foz do Iguaçu and 161 volunteers took part of the sixth edition of Integration Contest. - 9 projects of volunteer employees received financial support from Itaipu. [G4-EC7; SO1]

Name of the Program	<u>Thinking Ahead for Retirement</u>	<u>Internships</u>	<u>Initiation and Incentive to Work</u>	<u>Permanent Voluntary Retirement Program</u>
Goal	Support Itaipu employees in the preparation for retirement.	Provide technical and scientific expertise in the area of training for undergraduates and vocational high school students.	To offer young people the opportunity to enter the labor market in agreement with the Law of Learning.	Provide financial incentives to retirement eligible employees.
Benefited	Employees near retirement and their spouses.	University students from all over Brazil and students of vocational high school.	Young people, between 16 and 18 years old, of low-income families and enrolled in primary or secondary education in public schools and with good school performance.	Employees about to retire.
Investment	US\$ 25.15 thousand	US\$ 830.65 thousand	US\$ 1.26 million	
Main stakeholders	Lecturers with expertise in programs preparing for retirement.	Institutions of higher education.	Guarda Mirim in Foz do Iguaçu and Association of Family Education of Paraná (AEFES-PR).	Itaipu-Brasil Foundation of Social Security and Social Work (Fibra).
Main results in 2013	<ul style="list-style-type: none"> - 89 people, 75 in Foz do Iguaçu and 14 in Curitiba, attended the 5th Passage Seminar. - The training is of 24 hours. - 453 people, including employees and spouses or family members have participated of the program. 	<ul style="list-style-type: none"> - 52 holiday apprenticeship jobs are offered and attract students from all regions of the country. - 378 students, of 19 undergraduate courses, worked as interns at Itaipu during the year 2013. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - 315 young people performed administrative tasks in the offices of Curitiba and Foz do Iguaçu throughout the year. - 7 trainings were given to address issues such as sexuality, drugs and computer sciences. - 73 poor families of Foz do Iguaçu received basic food items collected by young people. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - 62 employees left the company through the program, which represents 84% of terminations in the year. - 54 employees who joined the program were male and 12 were female.



Social Dimension - Society

From the time of its construction, Itaipu spontaneously performs a series of initiatives that benefit the western region of Paraná and the population of the Triple Frontier (Argentina, Brazil and Paraguay). In the planning and execution of actions, the company adopts various agreements, treaties and national and global conventions such as the UN Global Compact and the Earth Charter as references, and also seeks to cooperate with the strengthening of public policies established by the Federal Government for coping with regional problems.

Itaipu's commitment to sustainable development is included in the Business Plan and also integrates the Sustainability Policy. In 2013, US\$ 25.6 million were allocated to initiatives in health, education, culture, tourism, professional training and infrastructure, targeted to children, adolescents, adults and seniors in social vulnerability.

The relationship with the community happens through programs, projects and actions, through mobilization and partnerships with federal, state and municipal governments, nonprofit organizations and public and private institutions. The demands are met according to the convergence with the corporate mission and the annual budget availability.

Itaipu also plays an important role in articulating and obtaining state, federal and other governmental public resources to consolidate the region into a major touristic, academic and scientific center and increase the local economy.

Among the initiatives there is the creation of the Federal University of Latin American Integration (Unila) in Foz do Iguaçu, currently offering 16 undergraduate programs, with 1,400 students of ten different countries; the renovation of the city's airport, which will increase the operational capacity of 2.7 million to 3.9 million passengers per year; the implementation of improvement projects at the Stadium of Flamengo in order for it to be the Training Center of the South Korean national team during the 2014 FIFA World Cup; and the duplication of the BR-469 Highway, the Waterfalls Road, between the access to Argentina and the gates of the Iguaçu National Park.

Moreover, in 2013, Itaipu paid US\$ 258.9 million royalties, equally to Brazil and Paraguay. In Brazil, US\$ 199.7 million were allocated to the governments of two states and 16 municipalities that are directly affected by the plant's reservoir.

Based on its Sponsorships Policy, Itaipu supports projects related to energy, sustainability, technology, environmental responsibility, sport, culture and education, among others, which strengthen the institutional image and promote tourism in the region. A committee meets periodically to review submitted requests. In 2013, the company received 771 proposals, of which 362 were answered. [G4-EC7; ECB; SO1]

First social initiatives

Most of the population affected by the expropriation for the construction of the plant was relocated. The others were assisted by Itaipu in the acquisition of new properties, and the National Institute for Colonization and Agrarian Reform was responsible for the development and monitoring of the families resettlement projects.

Altogether, 6,913 rural and 1,606 urban properties were expropriated, an area of 101,092.5 hectares. The indemnity cost was of US\$ 208 million and 99.8% of expropriations were carried out amicably.

At the peak of construction, between 1974 and 1982, Itaipu built nine thousand houses, schools and hospitals to assist approximately 40 thousand workers who worked in the construction and support offices in Brazil and Paraguay. At that time, Foz do Iguaçu's population increased from 20,000 to 101,000 inhabitants.

At the end of the works, when conducting the gradual demobilization, the organization supervised the payment of labor indemnities and unemployment insurance of Itaipu's service providers. Subsequently, the company facilitated the sale of its houses to workers who lived there. [G4-EU22]

Agreement will boost the western region of Paraná

Aiming to strengthen the productive units, generate jobs and improve regional infrastructure, Itaipu, the Itaipu Technological Park Foundation (ITP) and the Brazilian Development Bank (BNDES) signed a financial cooperation agreement in the amount of R\$ 50 million. The validity of the agreement is of five years and half of the amount will be invested by BNDES.

Of the amount, R\$ 10 million will be allocated for the development of sanitation projects and the improvement and modernization of municipal management in the western region. Another R\$ 21 million will be available for the purchase

of goods and hiring staffs for managing collective enterprises that are related to family farming, fishing, crafts and collecting recyclable material, upon proposals of cooperatives or associations.

The installation of the Municipal Market of Foz do Iguaçu is also planned. The ITP will provide an online platform with information about the progress of approved projects and accountability.

Social programs developed or supported by Itaipu (+)

Name of the Program / Action	<u>Outreach Electricity</u>	<u>Tourism Incentive</u>	<u>Itaipu Technological Park Foundation (ITP)</u>
Goal	Contribute to the social inclusion in the community, promoting social rights and social and economic development of the residents of the region of Village C.	Increase the development of tourism in Foz do Iguaçu, generating income and jobs.	To foster the creation and distribution of scientific and technological knowledge and the development of the Paraná Watershed 3 (BP3) region.
Benefited	The whole community of the Village C neighborhood, located near the plant and the Bela Vista Biological Sanctuary.	Residents of the region and tourist of Foz do Iguaçu.	Graduation and post-graduation students, students of vocational education and public schools in the region, and young workers.
Investment	US\$ 99.98 thousand	US\$ 1.89 million	US\$ 5.29 million
Main stakeholders	City Hall, Federal Government, Unioeste University and Funcriança.	City Halls, Tourism and ITP Foundation.	Federal, state and municipal governments, universities, incubated companies, public schools and nonprofit institutions.
Main results in 2013	<ul style="list-style-type: none"> - 3 courses conducted by Pronatec and 5 vocational trainings developed with support from Itaipu. - Approximately 200 people attended the first Jobs Fair held at the Community Center. - Approximately 560 children and young people participated of activities offered after school at the Community Council. [G4-EC1; EC8; SO1]	<ul style="list-style-type: none"> - The Integrated Tourism Management of Foz do Iguaçu was made official, with the participation of Itaipu. - 952,812 tourists visited Itaipu. - Foz do Iguaçu is the most visited city among non-capital Brazilian cities, according to the ranking of the Ministry of Tourism. [G4-EC1; EC7; EC8; SO1] 	<ul style="list-style-type: none"> - 3,500 students attend classes of three universities that are installed on site. - 17 incubated companies in the areas of management, environment, information technology, tourism, energy and industrial automation. - 34,000 students from the region visited the Science Station and Astronomy Hub. [G4-EC1; EC7; EC8; SO1]

Social Dimension - Society

Social programs developed or supported by Itaipu (+)

Name of the Program / Action	<u>Ministro Costa Cavalcanti Hospital (Itaipuapy Foundation)</u>	<u>Medicinal Plants</u>	<u>Health on the Border</u>
Goal	Provide quality hospital care.	Provide access and rational use of medicinal and phytotherapy plants to the BP3 population, promoting the sustainable use of biodiversity and the development of the production chain involving local actors.	Strengthen public policies that guarantee equal treatment for all people in quality hospital care.
Benefited	About 430 thousand inhabitants of nine municipalities of the Paraná Watershed 3 (BP3).	Family farmers, indigenous people, <i>Quilombola</i> , students, teachers, researchers, health professionals, SUS patients, employees and workers of Itaipu's service providers.	Residents of the border region between Brazil, Paraguay and Argentina.
Investment	US\$ 4.45 million	US\$ 137.60 thousand	US\$ 306.99 thousand
Main stakeholders	Federal, state and municipal governments, research institutions.	City halls, health professionals and community leaders.	Public and private institutions and health professionals in Brazil, Paraguay and Argentina.
Main results in 2013	<ul style="list-style-type: none"> - 10 thousand patients were assisted through the Unified Health System (SUS) in the Oncology Center. - 202 beds are available, 122 are for SUS patients. - 1,300 professionals working in the hospital. [G4-EC7] 	<ul style="list-style-type: none"> - 138 kg of dehydrated medicinal herbs were provided to 27 health facilities in the region. - 21,000 seedlings of various species produced in the nursery of Itaipu, were donated. - 15 gardens of medicinal plants were implanted. [G4-EC1; EC7; SO1] 	<ul style="list-style-type: none"> - On average, 120 people took part of the workshops for the preparation of projects and campaigns. - The creation of a website with health indicators in the region was approved. [G4-EC1; EC7; SO1]

Name of the Program / Action	<u>Solidary Recycling</u>	<u>Sustainability of the Indian Communities</u>	<u>Patronato Municipal de Foz do Iguaçu</u>
Goal	Promote social inclusion and increase the income of recyclable waste collectors and their families.	Promote actions in the agricultural and infrastructure area, integrated to the promotion and appreciation of the Guarani culture.	Provide care to inmates, ex-convicts and their families, aiming the reintegration into the labor market, vocational training and legal assistance.
Benefited	Recyclable waste collectors of 53 municipalities of Paraná.	Nearly 1,340 indigenous people living in three villages in the municipalities of São Miguel do Iguaçu and Diamante D'Oeste.	Sentenced to probation, serving time in the open system (community services) or ex-convicts and their families.
Investment	US\$ 82.29 thousand	US\$ 153.39 thousand	US\$ 17.82 thousand
Main stakeholders	City Halls, collectors associations and cooperatives, Public Prosecutor's Office and other government agencies.	City Halls, leaders of villages, government agencies and universities.	State Government, City Hall, Unioeste University and public and private companies.
Main results in 2013	<ul style="list-style-type: none"> - 1,100 collectors were assisted, organized in 40 associations and 5 cooperatives. - 1,620 hand trolleys have been donated by Itaipu since 2003, including motorized trolleys. - 42 presses, 32 scales and 4,881 uniform kits were donated since the program's creation. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - 163,000 kg of food produced in the villages were sold. - 10 thousand pieces of crafts produced by artisans were sold. - 4,000 kg of fish produced in cages in the village of São Miguel do Iguaçu. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - Reform of the Criminal Patronage Headquarters. - Implementation of the Guidance and Legal Support Center, with Unioeste. - Form carpenter and structure builder training for 160 ex-convicts, promoted in partnership with the National Service for Industry and ProvoPar (organization for Social Assistance), for the construction of Unila University. [G4-EC1; EC8; SO1]

Social Dimension - Society

Social programs developed or supported by Itaipu(+)

Name of the Program / Action	<u>Beira Foz Project</u>	<u>Integration Project</u>	<u>Financial Education</u>
Goal	Create a safe environment on the edge of the Paraná and Iguazu rivers, through urban renewal.	Enhance the educational process and promote digital inclusion for public school students in Foz do Iguazu.	Provide knowledge and training on topics related to financial planning.
Benefited	Residents of Foz do Iguazu and the tri-border region.	300 students from the 2 nd to the 5 th grade of the public school Padre Luigi Salvucci, located in Village C.	Students, the community of Foz do Iguazu, Santa Helena and Guaira, and Itaipu employees.
Main stakeholders	Council for Economic and Social Development of Foz do Iguazu (Codefoz), ITP Foundation, ministries, public and private companies.	City Hall, teachers and Itaipu Technological Park Foundation (ITP).	City Halls, teachers, non-governmental organizations, and specialized consulting firms.
Main results in 2013	<ul style="list-style-type: none"> - The revitalization project of the International Friendship Bridge, which connects Brazil and Paraguay was completed and delivered to the responsible body. - Public notice for hiring a company to perform the works on the bridge. [G4-EC7] 	<ul style="list-style-type: none"> - 32 teachers were trained to use educational software developed at ITP. - 105,000 activities with students were done with netbooks. [G4-EC8; SO1] 	<ul style="list-style-type: none"> - 16 public schools were assisted in three municipalities, totaling 2,912 benefited students. - 41 teachers were trained. - 800 participations, approximately, in courses and lectures throughout the year, in the three cities. [G4-EC8; SO1]

Name of the Program / Action	<u>Child and Teenager Protection (PPCA)</u>	<u>Meninos do Lago (Lake Boys / Project of PPCA)</u>	<u>Velejar é Preciso (Sailing is needed / Project of PPCA)</u>	<u>Jovens Atletas – Campeões do Futuro (Young Athletes - Champions of the Future / Project of PPCA)</u>
Investment	US\$ 347.98 thousand			
Goal	Articulate and promote actions and campaigns aimed at social inclusion and the fight against children and adolescents violence.	Develop the practice of canoeing, to improve school performance, and to discover and encourage new talents.	Develop the practice of sailing in Foz do Iguaçu, training athletes that are able to participate in national and international competitions.	Develop sport activities in order to promote citizenship and start a career in in several athletic modalities.
Benefited	Children, adolescents and their families who live in the tri-border region at risk and social vulnerability.	Children and adolescent public school students, residents of the Village C and Morumbi neighborhoods.	Children and adolescent public school students living in the Três Lagoas neighborhood.	Children and adolescent public school students in a situation of social vulnerability.
Main stakeholders	Nonprofit organizations, international organizations, local governments and public and private companies.	Meninos do Lago Institute, Brazilian Canoe Confederation and Canoe Federation of Paraná.	late Clube Lago de Itaipu.	City Hall and Athletics Institute of Foz do Iguaçu.
Main results in 2013	<ul style="list-style-type: none"> - The Tri-National Campaign to Combat Sexual Exploitation of Children and Adolescents was launched and has the support of the TV show host Xuxa Meneghel. - The Municipal Plan to Combat Sexual Violence of Children and Adolescents was structured. - 96 young people were trained by the Trilha Jovem Program. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - 50% of the Brazilian Canoe Slalom team consists of athletes participating in the project. - Winner of the Orgulho Paranaense (Pride of Paraná) 2013 Award in the category "Sports Federation". - 389 athletes have participated in the project since its creation in 2009. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - 130 athletes participated of the project. About 400 children have been benefited. - 1 athlete (13 years old) joined the national sailing team. - 17 sailors took part in the 10th edition of the Mercosur Sailing Championships, and won 4 trophies in the first 10 places. [G4-EC1; EC8; SO1] 	<ul style="list-style-type: none"> - 14 athletes finished the year ranked among the top 20 in the national ranking of the Brazilian Confederation of Athletics. - 650 children and adolescents have participated in the project since 2008. - Itaipu supported the project with uniforms, equipment and food supplements, in addition to sponsoring the trip to competitions. [G4-EC1; EC8; SO1]



Environmental Dimension

Caring for the environment is a premise of Itaipu prior to its construction. When the governments of Brazil and Paraguay signed the treaty that led to the company in 1973, the issue already had the attention of countries. The Basic Plan for Conservation of the Environment was the first document that guided the company's actions for conservation of flora, fauna and care with water, raw material of the business.

In 2003, Itaipu strategically assumed the role of inducing agent for sustainable development in its region of influence, Paraná Watershed 3 (BP3). Since then, the company develops extensive environmental initiatives, aiming to raise awareness of the need to change the way man relates to the environment.

The initiatives are set out in the Business Plan and are aligned with the Strategic Objectives and the Sustainability Policy. Environmental laws, national and international documents such as Agenda 21, the Earth Charter, UN Global Compact and the Kyoto Protocol guide the planning and implementation of programs and actions.

Itaipu is the liaison with all political, economic, social, environmental and cultural actors of the watershed, dividing responsibilities, sharing knowledge and joining forces. Through Participatory Management, municipal and thematic management committees plan and guide the implementation and evaluate initiatives.

In 2013, Itaipu did not register fines or monetary sanctions due to of non-compliance with environmental laws and regulations. Altogether, the company invested US\$ 20 million in environmental initiatives.

Practices and commitments

Tracking global trends in sustainability, Itaipu searches to proactively reduce and reset the base effects of production processes on the environment. The Environmental Education program, for example, stimulates and educates employees and community to change habits and adopt sustainable practices.

To conserve water, the company uses the hydraulic potential without causing changes in its quality and quantity. The company also avoids waste, employing reuse systems.

Regarding climate change, the binational set a goal of reducing 5% of the electricity consumption of the organization and 3% of the volume of gasoline and diesel used between 2013 and 2015. Therefore, 78% of the fleet vehicles are driven with ethanol or electricity. The company also invests in research with prototypes of electric vehicles and electric energy production from renewable sources such as hydrogen and biogas.

Environmental Dimension

With the Sustainable Procurement Program, the organization guides its employees to prioritize social and environmentally friendly products (learn more on page 41). The tailings produced are discarded according to applicable standards (Law 12,385) and recyclable solid waste is donated to cooperatives.

Regarding the commitment to biodiversity, Itaipu invests material, financial and human resources to conserve its protected area, to protect and restore degraded areas of third-

parties and performs reproduction studies of local species of threatened flora and fauna, action that favors genetic diversity.

The company also maintains facilities for conservation of endangered species of animals and plants. It also invests in research for the reproduction and survival of rare species in the region, like the harpy, largest bird of prey in South America. [G4-EN27; EN29]

Total environmental protection investments and expenditures, by type (in US\$) [G4-EN31]

Type of expenditure	2013		2012		2011	
	Operations (internal expenses)	Investments (in external projects)	Operations (internal expenses)	Investments (in external projects)	Operations (internal expenses)	Investments (in external projects)
Waste collection, treatment and disposal	312,625.23	100,374.36	235,489.42	170,965.30	-	307,542.24
Rehabilitation of degraded areas and protection of areas	-	1,122,019.50	-	2,675,052.25	-	3,963,943.84
Biodiversity conservation	397,758.43	34,138.43	474,102.33	-	457,161.05	43,605.80
Environmental management (company personnel, environmental department costs)	14,060,128.28	573,978.75	8,446,853.75	26,616.60	8,436,318.96	276,899.48
Research and development	15,959.64	2,565,487.31	9,492.18	1,774,626.59	-	856,007.14
Reservoir sediments monitoring	34,856.20	-	14,077.72	-	18,545.02	-
Underground water diagnoses	-	-	7,672.34	-	4,677.07	-
Reservoir water quality monitoring	29,065.58	120,372.48	86,850.60	21,712.65	144,440.50	36,110.12
Others	-	725,689.57	13,435.21	23,698.81	79,283.18	-
Total	14,850,393.36	5,242,060.40	9,287,973.55	4,692,672.20	9,140,425.78	5,484,108.62

Cultivating Good Water

In 2003, with the expansion of the institutional mission, Itaipu took the lead on sustainable regional development. In this context the Cultivating Good Water program (CAB, in Portuguese) was created, consisting of various programs and actions implemented throughout the region of the Paraná Watershed 3 (BP3), which covers 28 municipalities of the western region of Paraná and 1 municipality of Mato Grosso do Sul (area of about 8,000 km²). The goal is to identify and solve regional problems through collective participation and shared responsibility with the community.

The CAB is inspired by the policies of the Federal Government, mainly by the guidelines of the National Conferences on the Environment and the National Water Resources Plan, and also by planetary documents such as the Earth Charter, Agenda 21, Millennium Development Goals, the Kyoto Protocol and Treaty on Environmental Education for Sustainable Societies and Global Responsibility, among others.

The actions follow a business model that is structured on four strategic axes: Management by Programs, Territorial Information Management, Environmental Management and Participatory Management.

Activities are planned, implemented and evaluated by committees composed of government agencies, nonprofit

organizations, private companies and representatives of Itaipu. There are 29 legally constituted municipal management committees and 10 action management committees. The main pillar of the program is environmental education, in which volunteer teachers bring information to residents of the region. In 2013 US\$ 2.14 million were invested in the initiative.

World reference

After ten years, the experiences of CAB earned several national and international awards. Thanks to its connection with planetary documents and to community involvement, the program itself is a methodology that can be replicated elsewhere.

The actions are inspiring the implementation of a similar project in the Yaciretá power plant, managed by Argentina and Paraguay and located on the Paraná River (about 400 km downstream of Itaipu). In 2013, during the opening of the 11th edition of the Cultivating Good Water Meeting, representatives of Guatemala and the Dominican Republic signed cooperation agreements with Brazil and Paraguay to share the methodology of the program. Authorities of Chile, Uruguay, Panama, Colombia and Spain also expressed their interest. (+) [G4-EC1; EC7; EC8; EN27; SO1]

Implantation methodology



Environmental Dimension

Action axes of Cultivating Good Water Program

Cultural

Promotion of cultural and behavioral change in the community, focusing on consolidating a culture of care and enhancement of the cultural and natural heritage of the region.

Natural resources

Aimed at water and soil conservation, restoration and preservation of biodiversity. These actions consist on restoration of riparian forests, reforestation, water and aquatic species monitoring, environmental assessment and maintenance of protected areas such as wildlife corridors and refuges.

Local economy

Encouragement to sustainable agriculture development, to production diversification and consumption of regional foods, especially organic, whose production is also stimulated, to production of fish, to creation of associations and the use of sustainable techniques.

Social inclusion

Participation in promoting citizenship and sustainability of vulnerable groups, including fishermen, Indigenous, *Quilombolas*, agrarian reform settlers and recyclable waste collectors.

Research and technology

Development of initiatives and social technologies that extend and disseminate local knowledge, such as projects that minimize waste of natural resources or projects of energy efficiency, conservation and reproduction of regional flora and fauna, production of herbal products, projects that focus on the production chain of fishery and aquaculture, as well as free software for managing territorial region information.

Water

Itaipu's reservoir is directly influenced by rivers and tributaries born in 28 municipalities of Paraná and 1 of Mato Grosso do Sul. The lake, in addition to storing the raw material for energy generation, also supplies 70% of the local population and is used for navigation, irrigation, fishery activities, leisure and tourism.

Given the strategic, economic, social and environmental importance of water resources, the company is dedicated to the conservation, protection and restoration of springs, streams and riparian areas. Another line of action of Itaipu is the control of soil erosion in the watershed through proper planting techniques shared with farmers.

The initiatives also aim to contribute to the reduction of water pollution from pesticides and agricultural inputs. Likewise, it aims the elimination of pollution points, mainly effluents from agricultural activities, since the region has several dairy, poultry and pig farms that consume significant amounts of water and generate large amounts of waste.

Water quality is monitored regularly by technicians from Itaipu in partnership with the Environmental Institute of Paraná.

Water consumption and withdrawal

Most of the water used by Itaipu moves the turbines to produce electricity (non-consumptive use). Altogether, 349 billion cubic meters of water were used in this way, without significant change in quantity and quality.

The volume of water used in offices (consumptive use) showed little change over the last two years. However, the amount of water used in the Bela Vista Biological Sanctuary (BVBS) increased by 20%, due to the installation of pumps in animal enclosures that run 24 hours. The new equipment replaced pumps that worked only eight hours a day.

One way to reduce the water withdrawal is through the use of a filtration system in seven animal enclosures of BVBS. Another initiative is the installation of rainwater storage tanks, which is used in about 80% of the washing of fleet vehicles.

The water used in the plant facilities receives treatment and a portion is discharged in the River Pomba Cuê. The flow rate and volume of the river are sufficient to mitigate any negative environmental impacts from that disposal. Even though, Itaipu monitors water quality at different points of the river.

In 2013 there were 20 septic tanks on the facilities of Itaipu. Three of them, from the Visitors Reception Center, were eliminated. The goal is to suppress the others in the next three years.

Total water withdrawal by source, for non-consumptive use (m³) [G4-EN8]

Source	Type	Catchment	Consumption	2013	2012	2011
Paraná River / Itaipu Reservoir	Surface	Itaipu	Turbines	349,168,579,200	344,470,233,600	325,706,832,000
			Spilled	10,102,752,000	11,901,427,200	75,989,059,200
			Cooling*	365,868,058	365,868,058	365,868,058
Total				359,637,199,258	356,737,528,858	402,061,759,258

* Calculation estimated based on the operation of 18 machines, which is Itaipu's standard.

Environmental Dimension

Total water withdrawal by source, for consumptive use (m³) [G4-EN8]

Source	Type	Catchment	Consumption place	2013	2012	2011
Paraná River / Itaipu Reservoir	Surface	Itaipu	Offices of the plant (Brazilian side)	102,617	124,481	123,971
			Industrial Area	214,274	231,621	210,677
			Bela Vista Biological Sanctuary	210,240	175,744	146,000
Rivers Cayguava, Piraquara and Iraí		Sanepar	Foz do Iguaçú (including offices, ITP and Unila)	41,775	57,909	43,862
			Itaipu	Curitiba	3,970	4,409
Precipitation ¹				Foz do Iguaçú	1,104	-
Total				578,264	601,207	531,288

¹ Rainwater Catchment System installed in 2012, with an estimated volume recorded from 2013 on.

Percentage and volume of recycled water (in m³) [G4-EN10]

Source	2013	2012	2011
Volume of recirculated water ¹	484,445	590,282	298,080
Volume of reused water ²	5,388	7,043	-
Total	489,833	597,325	298,080
Total volume of withdrawn water	578,264	601,207	531,288
Percentage	84.7%	99.3%	56.1%

¹ Four animal enclosures of the Bela Vista Biological Sanctuary have installed water meters. In the other, the volumes were estimated by the flow curve and operating time of the filtering pump.

² Includes treated effluent from the Sewage Treatment Plant (STP) and the volume of rainwater catchment system installed in late 2012 on the Brazilian side of the company, which became part of the amount of reused water in 2013.

Total water discharge by quality and destination (in m³)* [G4-EN22]

Type of destination	2013	2012	2011
Surface Waters	108,436	148,307	148,664
Soil infiltration	133,325	112,392	104,874
Recirculation	122,923	124,537	86,865
Evaporation ¹	146,742	147,644	130,135
Total	511,426	532,880	470,538

Treatment method	2013	2012	2011
STP/septic tanks	237,062	263,599	217,402
Soil infiltration	115,873	54,813	53,146
No treatment	11,749	74,808	78,417
Evaporation	146,742	147,644	130,135
Total	511,426	540,864	479,100

* The effluent measurement is made in the STP entry. All other figures are estimates from the consumption of water on the Brazilian side and the industrial area. Water losses occur in the water supply system and not in sewage collection, for this reason, in 2013, a methodology change was made and the water that previously was considered as untreated began to be reported as infiltration. Data from 2012 and 2011 have been restated for comparative equivalence of parameters.

¹ Part of the water produced by the industrial area's Water Treatment Plants is used as replacement at Evaporation Centers.

Electricity and fuel

The electricity consumed on the facilities of the plant is produced by the company itself. The other offices are supplied with electricity purchased from local distributors.

The goal of reducing consumption by 5% until 2015, besides meaning a decrease in operating costs, is a commitment of Itaipu, aligned with the Eletrobras Declaration of Commitment on Climate Change, established in May 2012.

The company has an Internal Commission for Energy Conservation composed of representatives from several sectors and responsible for proposing actions to optimize and reduce electricity consumption.

In the office of Curitiba, the saving of about 64 thousand kWh is due to the new air conditioning units and infrastructure improvements, such as replacement of bulbs and electrical wiring. In Foz do Iguaçu, the installation of insulation blankets on the roof of some offices reduced the use of air conditioners, the main electricity consumer.

On the subject of fuel, the goal of Itaipu is to reduce the total consumption of gasoline and diesel by 3% until 2015. The use of gasoline in fleet vehicles fell 33%, and despite the increase of 15% in diesel consumption, the company reached the set target. Diesel volumes presented occasional variation in 2013 due to the refueling of emergency system generators of the plant, done every two years and that demand 30 thousand liters.

In 2013, Itaipu sold the last two vehicles that were driven exclusively by gasoline. The 250 cars have flex-fuel, diesel or electric engines. The gas stations with which Itaipu has agreements are oriented to primarily supply vehicles with ethanol, and the use of gasoline is only released to the employee with an approved justification by his manager.

In order to reduce the consumption of cooking gas (PLG) in the kitchens and gas showers, two solar water heating systems were installed in offices of Foz do Iguaçu. Both are being tested, but it is expected to equip other buildings with the system. [G4-EN5; EN6; EN30]

Energy consumption within the organization [G4-EN3]

	Source	2013	2012	2011
Fuel				
Ethanol (liters)	Renewable	275,159	240,803	276,167
Electric Energy ¹ (MWh)	Renewable	155.72	60.2	-
Diesel (liters)	Non-renewable	205,137	177,213	244,490
Gasoline (liters)	Non-renewable	41,986	62,672	65,292
PLG (kg) ²	Non-renewable	5,156	169	156
Electricity (kWh)				
Hydraulic (acquired) ³	Renewable	1,834,003	2,230,969	2,421,314
Hydraulic (own generation) ⁴	Renewable	102,570,000	102,487,000	100,160,000
Wind ³	Renewable	17,505	16,143	10,357
Thermal ³	Non-renewable	411,892	270,059	139,681
Nuclear ³	Non-renewable	68,349	81,104	84,180

¹ Electricity used as fuel in the electric vehicles fleet of the company.

² Data began to be reported in 2013. For the years 2011 and 2012 amounts are reported in units (cylinders of 13 and 45 kg).

³ Energy acquired by Itaipu from electric energy providers to supply the offices located outside the plant area.

⁴ Electricity generated and consumed by Itaipu in the facilities of the plant.

Environmental Dimension

Energy consumption outside the organization* [G4-EN4]

Fuel	Source	2013	2012	2011
Aviation fuel (km)	Non-renewable	7,722,410	9,257,906	10,606,374

* Air travel of passengers and cargo.

Energy intensity (GJ/km²)* [G4-EN5]

2013	2012	2011
290.5	290	287

* Relationship between the energy consumed by the company (electric energy and fuel) and the reservoir area.

** The relationship between used (GJ) and generated energy (GJ) is 0.0011.

Emissions

In its operational processes, Itaipu does not emit significant amounts of ozone-depleting substances or atmospheric pollutants. The carbon sequestrations of the organization in 2013 are sufficient to mitigate its emissions for a period of 243 years of operation.

Sulfur hexafluoride (SF6) is the only relevant gas in Itaipu, which is related to global warming. The substance is used for the isolation of the electric field at the substation plant and fugitive emissions are within standards and limits.

Itaipu has been renewing the vehicle fleet to reduce emissions of employees transport since 2006. The increased use of ethanol as a fuel and the decrease in employees' trips contributed to avoid the emission of 426 tons of CO₂eq. The 34 vehicles and electric prototypes drove 155,718 km, the same as four times the Earth circumference at the equator, and avoided emissions of 18.03 tons of CO₂.

The reforestation done by the company, besides restoring ecosystems and constituting an important link between protected areas and relevant forest fragments (Biodiversity

Corridor), is the main form of Greenhouse Gases (GHG) sequestration. Although the sequestration volume is greater than the emission, Itaipu invests in technologies and renewable energy projects, such as hydrogen production from water, biogas and development of electric vehicles prototypes, including batteries and charging systems.

The weather events due to global warming directly influence the hydrological cycle. If significant changes occur in the Paraná River Basin upstream (above) Itaipu, they may impact the reservoir level and the operational and economic performance of the company. The Paraná River Basin, which supplies Itaipu's reservoir, covers the states of Paraná, Goiás, Minas Gerais, São Paulo, Mato Grosso do Sul and the Federal District. [G4-EC2]

Total direct and indirect greenhouse gas emissions, by weight (t CO₂eq.) and other relevant indirect emissions of greenhouse gases, by weight (+) [G4-EN15; EN16; EN17; EN18; EN19]

	2013	2012	2011
Scope 1 (direct emissions)	8,083.22	8,303.33	7,726.12
Scope 2 (electricity consumption)	201.43	148.58	67.90
Scope 3 (other indirect emissions)	1,761.35	1,996.85	2,271.67
Total	10,046.01	10,448.76	10,065.69
Sequestration (biomass)	2,454,940	2,384,610	4,630,421
Annual Balance (emissions-sequestration)*	-2,444,894	-2,374,161	-4,620,355
Electricity generation (MWh)	98,630,035	98,287,128	92,245,539
Emission / generation factor (tCO₂eq./MWh)	0.000102	0.000106	0.000109

* The negative sign indicates that carbon sequestration was greater than the emissions recorded in the period.

Materials and waste management

In consonance with the Sustainability Management System, the company has strived to enhance control over the use of materials, especially those that have the greatest impact on the environment. The offices of Curitiba and Foz do Iguaçu reduced their consumption by 731,730 plastic cups and 3,376 packages of sulfite paper, an amount of 500 cups and 2.3 packages of paper for each employee of the Brazilian side.

In 2013, 83 thousand liters of regenerated lubricant oil were used, against 45 thousand liters in 2012. The re-refining procedure consists on filtering and additivation for the recovery of the physicochemical properties of the substance, which is used in the equipment. Recycling is done since 2001 and the volume varies annually according to replacement demand of the equipment.

Annual variations presented in the waste table occur due to the need to store them until the formation of representative batches. Subsequently, the bidding process for hiring a company that will do the environmentally correct disposal of industrial waste is started. [G4-EN1; EN23]

Environmental Dimension

Supplies used by weight or volume [G4-EN1]

Supplies used	2013	2012	2011
Chemical materials (kg)	169,920	164,730	153,675
Oils/Lubricants (l)	11,651	56,291	55,961
Resins (l)	800	1,177	1,378
Solvents/Varnish (l)	34,565	34,751	34,058
Batteries (units)	14,629	15,231	17,205
Tires (units)	971	973	983
Light bulbs (units)	43,207	46,590	49,274
Sulfite paper - packages (units)	25,421	27,607	28,797
Disposable cups (units)	5,815,020	6,236,500	6,546,750
Cartridges and toner (units)	5,649	5,715	6,341
Wood (m ³)	137	166	124

*Data are binational.

Total weight of waste by type and disposal method (t) [G4-EN23]

Hazardous waste	2013	2012	2011	Disposal
Fluorescent bulbs	12.10	12.54	1.71	Decontamination
Miscellaneous industrial resins		4.50	2.00	Co-processing
Used lubricating oil	73.04	39.60	34.85	Regeneration
	52.80		23.76	Re-refinement
Used naphthenic-type insulating mineral oil			31.07	Re-refinement
Miscellaneous metal scrap	176.10	157.10	542.92	Recycling
Various electrical material scrap		3.82	26.00	Recycling
Tires	5.01	17.27	3.37	Recycling
Hospital Waste	1.92	2.73	0.79	Incineration
Air filters	1.84	4.76	NA	Recycling
Oil filters		5.60	NA	Recycling
Oil sludge		10.46	NA	Co-processing
Fiberglass insulation		2.80	NA	Recycling
Total	322.81	261.18	666.47	
Non-hazardous waste	2013	2012	2011	Disposal
Recyclables (paper, cardboard, plastic)	92.33	88.95	90.41	Recycling
Styrofoam	0.75	0.44	0.75	Recycling
Aluminum	1.15	0.58	0.66	Recycling
Organic waste	442.93	456.98	405.81	Landfill
Total	537.16	546.95	497.63	

*Data are binational.
NA – Not available data.

Preserving biodiversity

Itaipu is a fully installed facility since 2007, when the assembling of the last two generating units was finished. Since it was established, the binational significantly invests in biodiversity preservation.

The reservoir formation occurred in 1982. Five years later, Itaipu initiated the monitoring of commercial fishing in the reservoir, in partnership with the Center for Research in Limnology, Ichthyology and Aquaculture (Nupelia) of the Public University of Maringá and the Fishermen Colonies of the region. Currently, the monitoring is carried out exclusively by the technical staff of Itaipu with the support of fishing colonies.

Monitoring results show a relative stability in fish catches over the years. They also constitute the longest series available on inland fisheries in Brazil, which helps understand the dynamics of fish stocks in tropical reservoirs.

Of the 193 already identified fish species in the reservoir and in the Spawning Channel, about 70 are exploited in commercial fishing activities. Each fisherman has captured, on average, 11-12 kg of fish a day, considering that the armado (*Pterodoras granulosus*) and curimba (*Prochilodus lineatus*) are the most abundant species in fishing with nets.

Another important tool is the fish marking, work done in partnership with the Yacyretá Powerplant, the State University of West Paraná (Unioeste) and Energy Company of São Paulo (CESP). Since 1997, more than 46,000 fish of 48 species were marked and released. When these fish are recaptured by fishermen, the marking helps identify the migratory routes and living area of the evaluated species, relevant data for biodiversity conservation.

In the Spawning Channel, 211 fish of 11 species received an implant called PIT-Tag (Passive Integrated Transponder). The device allows to record the date and time that the fish passed by the five antennas installed along 10.3 km of the largest fish transposition system in the world.

The monitoring also includes systematic redemption operations of fish in the generating units. Constantly improving, the activity reduces the impact of the maintenance of turbines on fish.

In partnership with the Environmental Institute of Paraná, Itaipu also conducts periodic monitoring to assess the water quality in the reservoirs, such as balneability and assessing the amount of sediment. Another example is the constant monitoring of the presence of the golden mussel (*Limnoperna fortunei*) in the reservoir, exotic species that can lead to environmental imbalances and clog smaller pipes.

In 2013, the monitoring of the mussel (larvae and adults) in the structures of the dam showed no significant changes when compared to the history observed since 2001. Inconveniences generated by their presence are mitigated by the application of routine protocols.

Besides monitoring, the company develops breeding activities of pacu, yellow tail lambari and piau-três-pintas, directed to the project Production of Fish in Our Waters, that assists fishers colonies and associations, 160 indigenous families, settlers of the agrarian reform and riparian people. In 2013, 76 thousand pacu fingerlings were given to fish farmers, the amount that can generate approximately 70 tons of fish over a period of six months.

The binational also develops initiatives to maintain the reservoir native fish stocks. More than seven million fingerlings, from nine species, have been produced by the Aquaculture Station, on the Paraguayan side of the plant. The production respects the period of natural reproduction and the release occurs between the months of January and April. [G4-EN11; EN13; EU13]

Fauna and flora

For the construction of the largest electricity generating plant in the world, 101,092.5 hectares were expropriated, corresponding to 250,000 football fields. Of this total area, 57% is underwater and constitutes aquatic ecosystems and 43% are of areas intended to protect the reservoir. Of the 34 thousand hectares of protected areas in the Brazilian side, 18 thousand were already devastated due to agricultural activities in the region in the period preceding the formation of the reservoir.

Since the formation of the reservoir and even before being law, Itaipu acquired and maintains a protective range along its entire length, with a total area of 586.99 km². Currently almost all of the Brazilian side protection range is reforested. About three million seedlings were designed for restoration of riparian forests of the Paraná Watershed 3 (BP3).

Itaipu, together with public and private agencies, helps restore the Biodiversity Corridor of Santa Maria, which is 13 km long (lineal) and interconnects the riparian zone of Itaipu's reservoir to Iguazu National Park (in Foz do Iguazu). This initiative strengthens the consolidation of the Biodiversity Corridor of the Paraná River.

The company also maintains the Bela Vista Biological Sanctuary (BVBS), Santa Helena Biological Refuge (SHBR) and the one in Maracaju, which is administered by both countries. The BVBS, established in 1984, houses a zoo, a forest nursery, a veterinary hospital, a germplasm bank, a medicinal garden, a reception center for visitors, ichthyofauna monitoring laboratories and breeding of wild animals, in which were born 905 animals of 44 species.

Regarding endangered animals that are included in official conservation lists, Itaipu has seven species of fish. In 2013, 21 animals were born: two tapirs, two margays, seven pygmy brockets, a marsh deer, a vinaceous-breasted amazon and six bare-faced curassows.

In late 2013 and early 2014 two harpies were born, the largest bird of prey in South America. The BVBS was consolidated as the main reproduction project of species of the southern region of the country, with 20 birds, of which 15 were born there. The first couple of harpies was formed in 2005 and was only able to reproduce successfully from 2009 on.

Regarding biodiversity of regional flora, seeds of four endangered species that are included in the official lists have been collected: pau-marfim, cedar, catiguá-branco and palm heart. The amendoim-bravo, besides having its seed collected, was produced at the nursery. The cabreúva was also produced in the nursery and the spiny miracle-plant was cultivated in the medicinal garden of the property. (+)

[G4-EN11; EN13; EU13]

Number of species in conservation lists with habitats in areas affected by operations, by level of extinction risk in 2013 (+) [G4-EN14]

International Union for Conservation of Nature and Natural Resources (IUCN)				
	Endangered (EN)	Vulnerable (VU)	Near threatened (NT)	Total
Plants	brazilwood; peroba-rosa; pau-marfim; cedar; piúna	catiguá-branco	amendoim-bravo	7
Mammals	golden lion tamarin	tapir; marsh deer; tiger cat; white-lipped peccary; giant anteater	margay; jaguar	8
Birds	vinaceous-breasted amazon	black fronted piping guan	harpy; blue-winged macaw	4
Reptiles		yellow-footed tortoise; chaco tortoise		2
Total	7	9	5	21

National list				
Plants*	brazilwood; palm heart			2
	Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)	Total
Mammals	brown howler	golden lion tamarin	marsh deer; tiger cat; giant anteater; margay; jaguar; ocelot; pygmy brocket	9
Birds			vinaceous-breasted amazon	1
Fish		piracanjuba; catfish	cará	3
Total	1	3	9	15

*The list of plant species presents no threat categories.

State list						
	Rare	Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (VU)	Total
Plants	peroba-rosa; pau-marfim; cabriuva; spiny miracle-plant; timbó					5
Mammals		marsh deer; giant anteater; jaguar	tapir; black howler; paca	tiger cat; margay; brown howler; collared peccary; ocelot; pygmy brocket		12
Birds		red-and-green macaw; blue-and-yellow macaw; harpy; bare-faced curassow	blue-winged macaw		vinaceous-breasted amazona; red-ruffed fruitcrow	7
Fish			piracanjuba	catfish; cará; bagre-sapo; golden dorado; gilded catfish	tiger catfish	7
Total	5	7	5	11	3	31

Environmental Dimension

Environmental programs and actions (+)

Name of the Program / Action	<u>Watershed Management</u>	<u>Environmental Monitoring and Assessment</u>	<u>Environmental education</u>	<u>Biodiversity, our heritage</u>
Goal	Implement environmental recovery and preservation actions in the Paraná Watershed 3 (BP3) region.	Assess the effectiveness of conservation programs, multiple viable uses and lead actions that must be taken.	Sensitize, educate and change people's behavior towards sustainable practices.	Ensure the perpetuation and genetic variability of species of flora and fauna (aquatic and terrestrial).
Benefited	BP3 residents.	BP3 residents.	BP3 residents and Itaipu employees.	Inhabitants of the western region of Paraná.
Investment	US\$ 778.8 thousand	US\$ 145.32 thousand	US\$ 566.05 thousand	US\$ 848.40 thousand
Main stakeholders	Institutions of technical assistance and training.	Education and research institutions, analysis laboratories and internal stakeholders.	Non-profit organizations, civil society, education institutions and municipal education departments.	National and international educational and research institutes, supervisory and conservation bodies, municipalities, NGOs, farmers and riparian people.
Main results in 2013	<ul style="list-style-type: none"> - 147 basins/watersheds assisted and 28 active agreements. - 136 km of suitable/graveled roads. - 4 water supply facilities delivered in the city of Marechal Cândido Rondon. - 20 distributors of waste delivered. - 35 tons of coverage seed (green manure). [G4-EC1; EN11; EN13; EN27; SO1] 	<ul style="list-style-type: none"> - Evaluation of water quality in 45 points in the reservoir and tributaries. - Monitoring of balneability in 16 tourist terminals. - 10 bulletins on bathing water quality in eight artificial beaches of the reservoir were issued. [G4-EC1; EN11; EN13; EN27; SO1] 	<ul style="list-style-type: none"> - 30 trainings for teachers in ecopedagogy projects. - 2 cases of Itaipu make up the book "Encontros e Caminhos" (Encounters and Paths) for the training of environmental educators. - 997 people participated in awareness raising actions through the cycles of the Workshops about the Future. [G4-EC1; EN27; SO1] 	<ul style="list-style-type: none"> - 156,190 seedlings produced and designed for reforestation in BP3. - 15 harpies born in Bela Vista Biological Sanctuary since 2009. - Tagging of 1,537 fish. - 6 studies released national and internationally about wild fauna conservation, performed with team's contribution or use of Itaipu's animals center. [G4-EC1; EN11; EN13; EN27; EU13]

Name of the Program / Action	<u>More fish in our waters</u>	<u>Sustainable Rural Development</u>	<u>Electric vehicle</u>	<u>Renewable Energy Platform</u>
Goal	Strengthen fishery in the reservoir and promote sustainable farming.	Develop family farming by promoting diverse organic food production and the development of rural tourism.	Foster research and innovation in technology in order to develop mobility solutions.	Demonstrate the technical, economic and environmental feasibility of using renewable sources, with emphasis on Biogas Distributed Generation.
Benefited	Fishermen colonies, indigenous and agrarian reform settlers.	Family farmers, indigenous, <i>Quilombolas</i> and agrarian reform settlers.	Public and private enterprises, national and international companies and educational and research institutions.	BP3 residents.
Investment	US\$ 69.81 thousand	US\$ 495.44 thousand	US\$ 536.38 thousand	US\$ 1.75 million
Main stakeholders	Government agencies, fishermen colonies and technical assistance institutions.	Technical assistance institutions, universities, research institutes, farmers' cooperatives and NGOs.	Kraftwerke Oberhasli (KWO), Fiat Automobiles, national and international, public and private companies, educational and research institutions.	Small landowners, research and technical assistance, institutions, government bodies, UNIDO and Itaipu Technological Park (ITP).
Main results in 2013	<ul style="list-style-type: none"> - 70 tons of fish will be produced in the 2013-2014 cycle. - 40 cages are installed in an Indigenous community. - 76,000 fingerlings were produced by Itaipu and delivered to fishermen. [G4-EC1; EC8; EN11; EN13; EN27; SO1] 	<ul style="list-style-type: none"> - 2,892 individual assistances at farms. - 1,406 families benefited. - 256 group activities that included courses, field days, meetings and lectures. - 65 certified organic farmers. [G4-EC1; EC8; EN11; EN13; EN27; SO1] 	<ul style="list-style-type: none"> - 1 prototype of the car Palio Weekend was designed to Buzios (RJ) and another to the National Park of Iguauçu (PR) (commodatum). - 32 all-terrain vehicle of Renault will be assembled at Itaipu in order to move within the plant. - 1st recharge station for electric vehicles outside the premises of the Itaipu was inaugurated. [G4-EC1; EC2; EC8; EN27; SO1] 	<ul style="list-style-type: none"> - 7 installed Demonstration Units produced 652,723 kWh of electricity. - 16 entities comprise the International Renewable Energy Center opened at Itaipu Technological Park. - 3 new signed agreements will benefit 72 farms, 39 of Toledo and 33 of Marechal Cândido Rondon. [G4-EC1; EC2; EC8; EN11; EN13; SO1]



GENERAL STANDARD DISCLOSURES	Reason	External verification	Page
Strategy and Analysis			
G4-1 Provide a statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability		92	04
G4-2 Provide a description of key impacts, risks, and opportunities			19, 24
Organizational Profile			
G4-3 Report the name of the organization		92	11
G4-4 Report the primary brands, products, and services		92	11
G4-5 Report the location of the organization's headquarters		92	11
G4-6 Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report		92	11
G4-7 Report the nature of ownership and legal form		92	10, 11
G4-8 Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)		92	14
G4-9 Report the scale of the organization		92	10, 11
G4-10 Employees profile		92	43, 45, 49
G4-11 Report the percentage of total employees covered by collective bargaining agreements		92	45
G4-12 Describe the organization's supply chain		92	40
G4-13 Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain		92	21, 22
G4-14 Report whether and how the precautionary approach or principle is addressed by the organization		92	19, 24
G4-15 List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses		92	27
G4-16 List memberships of associations and national or international advocacy organizations		92	27
Identified Material Aspects and Boundaries			
G4-17 List all entities included in the organization's consolidated financial statements or equivalent documents	Itaipu has no consolidated financial statement or equivalent document, since it does not have any investments with lucrative purposes in other entities.	92	08
G4-18 Explain the process for defining the report content and the aspect boundaries		92	09
G4-19 List all the material aspects identified in the process for defining report content		92	09
G4-20 For each material aspect, report the aspect boundary within the organization	Itaipu does not list the relevance of the Aspects by entities groups, according to reason of G4-17.		09
G4-21 For each material aspect, report the aspect boundary outside the organization			09
G4-22 Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements		92	08, 09
G4-23 Report significant changes from previous reporting periods in the Scope and Aspect Boundaries		92	08, 09

Technical information

GENERAL STANDARD DISCLOSURES	Reason	External verification	Page
Stakeholder Engagement			
G4-24 Provide a list of stakeholder groups engaged by the organization		92	28, 29
G4-25 Report the basis for identification and selection of stakeholders with whom to engage		92	27
G4-26 Report the organization's approach to stakeholder engagement		92	09, 28, 29
G4-27 Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns			09
Report Profile			
G4-28 Reporting period (such as fiscal or calendar year) for information provided		92	08
G4-29 Date of most recent previous report		92	08
G4-30 Reporting cycle		92	08
G4-31 Provide the contact point for questions regarding the report or its contents		92	96
G4-32 a. Report the 'in accordance' option the organization has chosen b. Report the GRI Content Index for the chosen option c. Report the reference to the External Assurance Report		92	08 81 92
G4-33 Report the organization's policy and current practice with regard to seeking external assurance for the report		92	08
Governance			
G4-34 Report the governance structure of the organization		92	21 - 23
G4-35 Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees		92	23
G4-36 Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body		92	23
G4-37 Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics		92	09
G4-38 Report the composition of the highest governance body and its committees		92	21 - 23
G4-39 Report whether the Chair of the highest governance body is also an executive officer		92	23
G4-40 Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members		92	23
G4-41 Report processes for the highest governance body to ensure conflicts of interest are avoided and managed		92	23
G4-42 Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts		92	23
G4-43 Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics		92	23

GENERAL STANDARD DISCLOSURES	Reason	External verification	Page
Governance			
G4-44 Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics	The company does not have formal mechanisms to evaluate the performance of the highest governance body.	92	
G4-45 Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities		92	23
G4-46 Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics		92	24
G4-47 Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities		92	23
G4-48 Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material aspects are covered		92	08
G4-49 Report the process for communicating critical concerns to the highest governance body		92	26
G4-50 Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them		92	26
G4-51 Report the remuneration policies for the highest governance body and senior executives		92	48
G4-52 Report the process for determining remuneration		92	48
G4-53 Report how stakeholders' views are sought and taken into account regarding remuneration		92	48
G4-54 Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country	For security reasons, directors' compensations are not disclosed and the ratio cannot be reported.	92	48
G4-55 Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country	The compensation of directors is set by governments (Eletrobras and Ande), as provided in Annex A of the Treaty.		48
Ética e integridade			
G4-56 Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics		92	10, 26
G4-57 Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines		92	26
G4-58 Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines		92	26

Technical information

SPECIFIC STANDARD DISCLOSURES	Reason	External verification	Page
ECONOMIC CATEGORY			
Economic Performance			
DMA – Management approach		92	31, 32
G4-EC1 Direct economic value generated and distributed		92	33 - 36, 55, 59 - 61, 63, 67, 78, 79
G4-EC2 Financial implications and other risks and opportunities for the organization's activities due to climate change		92	72, 79
G4-EC3 Coverage of the organization's defined benefit plan obligations		92	53
Indirect Economic Impacts			
DMA - Management approach		92	37, 57, 58, 67
G4-EC7 Development and impact of infrastructure investments and services supported		92	54, 57, 59, 60, 62, 67
G4-EC8 Significant indirect economic impacts, including the extent of impacts			37 - 38, 55, 57, 59, 61 - 63, 67, 79
Procurement Practices			
G4-EC9 Proportion of spending on local suppliers at significant locations of operation			40
ENVIRONMENTAL CATEGORY			
Materials			
DMA – Management approach			73
G4-EN1 Materials used by weight or volume	Itaipu has no equipment containing Chlorinated Biphenyls (PCBs).		73, 74
Energy			
DMA – Management approach		92	71
G4-EN3 Energy consumption within the organization		92	71, 72
G4-EN4 Energy consumption outside of the organization			72
G4-EN5 Energy intensity		92	71
G4-EN6 Reduction of energy consumption		92	71
Water			
DMA – Management approach			69
G4-EN8 Total water withdrawal by source			69, 70
G4-EN10 Percentage and total volume of water recycled and reused			70
Biodiversity			
DMA – Management approach		92	67, 75, 76
G4-EN11 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		92	75, 76, 78, 79
G4-EN13 Habitats protected or restored		92	75, 76, 78, 79
G4-EN14 Total number of IUCN red list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk			77
Emissions			
DMA – Management approach			72
G4-EN15 Direct greenhouse gas (GHG) emissions (scope 1)			73
G4-EN16 Energy indirect greenhouse gas (GHG) emissions (scope 2)			73

SPECIFIC STANDARD DISCLOSURES	Reason	External verification	Page
G4-EN17 Other indirect greenhouse gas (GHG) emissions (scope 3)			73
G4-EN18 Greenhouse gas (GHG) emissions intensity			73
G4-EN19 Reduction of greenhouse gas (GHG) emissions			73
Effluents and Waste			
DMA – Management approach			69
G4-EN22 Total water discharge by quality and destination			70
G4-EN23 Total weight of waste by type and disposal method	Itaipu has no equipment containing Chlorinated Biphenyls (PCBs).		73, 74
Products and Services			
G4-EN27 Extent of impact mitigation of environmental impacts of products and services		92	66, 67, 78, 79
Compliance			
G4-EN29 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		92	66
Transport			
G4-EN30 Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce		92	71
Overall			
G4-EN31 Total environmental protection expenditures and investments by type		92	66
Environmental Grievance Mechanisms			
G4-EN34 Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms		92	26
SOCIAL CATEGORY			
LABOR PRACTICES AND DECENT WORK			
Employment			
DMA – Management approach		92	43, 44
G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender and region			47
Occupational Health and Safety			
DMA – Management approach		92	49
G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender			49, 50
G4-LA7 Workers with high incidence or high risk of diseases related to their occupation			49, 50, 54
G4-LA8 Health and safety topics covered in formal agreements with trade unions			50
Training and Education			
DMA – Management approach		92	51
G4-LA9 Average hours of training per year per employee by gender, and by employee category			51
G4-LA11 Percentage of employees receiving regular performance and career development reviews, by gender and by employee category		92	51

Technical information

SPECIFIC STANDARD DISCLOSURES	Reason	External verification	Page
Diversity and Equal Opportunity			
DMA – Management approach		92	44, 48, 51
G4-LA12 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity		92	45, 46, 48, 54
Equal Remuneration for Women and Men			
DMA – Management approach		92	48
G4-LA13 Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation		92	49
Labor Practices Grievance Mechanisms			
G4-LA16 Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms		92	26, 44
HUMAN RIGHTS			
Investment			
G4-HR2 Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained			51
Non-discrimination			
G4-HR3 Total number of incidents of discrimination and corrective actions taken		92	26
Child Labor			
DMA – Management approach		92	40
G4-HR5 Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor		92	40
Forced or Compulsory Labor			
DMA – Management approach		92	40
G4-HR6 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor		92	40
Security Practices			
G4-HR7 Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations		92	51
Indigenous Rights			
G4-HR8 Total number of incidents of violations involving rights of indigenous peoples and actions taken	There were no reports of violations of indigenous rights in 2013, as in previous years.	92	
Assessment			
G4-HR9 Total number and percentage of operations that have been subject to human rights reviews or impact assessments	In 2013, Itaipu hired a consulting company that will conduct the assessment of human rights throughout 2014.	92	

SPECIFIC STANDARD DISCLOSURES	Reason	External verification	Page
Human Rights Grievance Mechanisms			
DMA – Management approach		92	26, 40
G4-HR12 Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms		92	26
SOCIETY			
Local Communities			
DMA – Management approach		92	27, 57, 65
G4-SO1 Percentage of operations with implemented local community engagement, impact assessments, and development programs		92	54, 55, 57, 59 - 63, 67, 78, 79
Anti-corruption			
G4-SO3 Total number and percentage of operations assessed for risks related to corruption and the significant risks identified		92	26
G4-SO4 Communication and training on anti-corruption policies and procedures		92	26
G4-SO5 Confirmed incidents of corruption and actions taken		92	26
Compliance			
G4-SO8 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	No accounting records of penalties or fines of significant value or non-monetary sanctions for noncompliance with laws and regulations.	92	
Supplier Assessment for Impacts on Society			
DMA – Management approach		92	40, 41
G4-SO9 Percentage of new suppliers that were screened using criteria for impacts on society		92	40
G4-SO10 Significant actual and potential negative impacts on society in the supply chain and actions taken		92	40
Grievance Mechanisms for Impacts on Society			
G4-SO11 Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms		92	26
PRODUCT RESPONSIBILITY			
Marketing Communications			
G4-PR7 Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	There were no cases of non-compliance.		
GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR			
Organizational profile			
G4-EU1 Installed capacity, broken down by primary energy source and by regulatory regime		92	17
G4-EU2 Net energy output broken down by primary energy source and by regulatory regime		92	13
G4-EU3 Number of residential, industrial, institutional and commercial customer accounts	Not applicable - Itaipu has no direct end customers such as households, industries and commercial facilities.		

Technical information

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR*	Reason	External verification	Page
G4-EU4 Length of above and underground transmission and distribution lines by regulatory regime	Not applicable - Itaipu is not an electricity transmission and distribution company. However, it has 75.2 km of transmission lines of 500 kV, which are used to connect to substations that carry energy to the electrical systems of Brazil and Paraguay. In addition, the plant has internal distribution systems of 13.8 kV supplying their offices and ancillary facilities within the area of the plant, including the ITP.		
G4-EU5 Allocation of CO ₂ E emissions allowances or equivalent, broken down by carbon trading framework	Itaipu does not participate in the carbon market and has no projects that enable the obtainment of credits. The reforestation of the reservoir protection border and the biological refuges integrate the company's plans from the beginning of its activities, regardless of obtaining carbon credits.		
Availability and Reliability			
DMA – Management approach		92	15
G4-EU10 Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	Itaipu is already at maximum capacity.		
Demand-Side Management			
DMA – Management approach	Not applicable - Itaipu is a generation company and does not develop programs of this scope. Such initiatives are developed by Eletrobras and distributors.		
Research and Development			
DMA - Management approach		92	59, 67, 72, 78, 79
Plant Decommissioning			
DMA - Management approach	Not applicable - Itaipu has no nuclear units.		
System Efficiency			
G4-EU11 Average generation efficiency of thermal plants by energy source and by regulatory regime	Not applicable - Itaipu has no thermal units.		
G4-EU12 Transmission and distribution losses as a percentage of total energy	Not applicable - Although having transmission assets to connect to the system that transports its energy to load centers, Itaipu is not in the business of distribution.		
Biodiversity			
G4-EU13 Biodiversity of offset habitats compared to the biodiversity of the affected areas		92	75, 76, 78
Employment			
DMA - Management approach		92	49 - 51
G4-EU15 Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region			52

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR*	Reason	External verification	Page
G4-EU17 Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	Itaipu has no employees of companies that provide services to Itaipu in activities directly related to power generation.		
G4-EU18 Percentage of contractor and subcontractor employees that have undergone relevant health and safety training			49
Local Communities			
DMA - Management approach	Not applicable - Itaipu is a fully installed enterprise since 2007 and therefore does not generate further displacement.	92	14
G4-EU22 Number of people physically or economically displaced and compensation, broken down by type of project	Not applicable - Itaipu is a fully installed enterprise and therefore does not generate further displacement.		58
Disaster/Emergency Planning and Response			
DMA - Management approach		92	19
Access			
DMA - Management approach	Not applicable - Itaipu has no direct end customers because it is a power generating plant.		
G4-EU26 Percentage of population unserved in licensed distribution or service areas	Not applicable – Itaipu does not act in power distribution.		
G4-EU27 Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	Not applicable – Itaipu does not act in power distribution.		
G4-EU28 Power outage frequency	Not applicable – Itaipu does not act in power distribution.		
G4-EU29 Average power outage duration	Not applicable – Itaipu does not act in power distribution.		
G4-EU30 Average plant availability factor by energy source and by regulatory regime			15
Provision of Information			
DMA - Management approach	Not applicable - Itaipu is not a distribution company and therefore does not directly handle with end consumers.		
Customer Health and Safety			
G4-EU25 Number of injuries and fatalities to the public involving company assets including legal judgments, settlements and pending legal cases of diseases	Not Applicable - There were no reports of injuries, deaths or illnesses in the community.		

Global Compact Principles



1 - Businesses should support and respect the protection of internationally proclaimed human rights

- Itaipu participates in national and international organizations and/or endorses human rights initiatives.
- Maintains complaint channels such as the Ombudsman Office, the Contact Us and the Ethics Committee.
- Offers its employees benefits such as medical, dental and educational assistance.
- Stimulates the action of committees designed to ensure the health and safety of workers.
- Adopts social clauses in suppliers' contracts.
- Develops the Reviving Program.
- Develops the Volunteer Force Program.
- Develops the Gender Equality Incentive Program.
- Develops the Initiation and Incentive to Work program.
- Created the Ministro Costa Cavalcanti Hospital and participates in its management.
- Develops the Health on the Border Program.
- Performs actions that encourage the use and production of Medicinal Plants.
- Develops the Sustainability of Indian Communities Project.
- Performs improvements in a *Quilombo* community.
- Sponsors actions of social reintegration of ex-convicts and encourages their hiring by supplier companies.
- Develops the Child and Teenager Protection Program.
- Supports initiatives to fight against sexual exploitation of children and adolescents.



2 - Businesses should make sure they are not complicit in human rights abuses

- Performs an annual seminar on Human Rights for security professionals (employees and employees of companies that provide services to Itaipu).
- In the bidding processes, Itaipu includes social clauses on contracting young people, forced labor or slave labor and respecting gender equality.
- Determines that the contracted service providers should prove the payment of wages, overtime, thirteenth salary, advance notice and other charges; the contract may be terminated in case of breach.



3 - Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

All employees have union representation and are covered by the Collective Bargaining Agreement.



4 - Businesses should uphold the elimination of all forms of forced and compulsory labour

- Develops the Initiation and Incentive to Work Program.
- Develops the Sustainability of Indian Communities Program.
- Develops the Program for Child and Teenager Protection Program.
- Includes social clauses on the supplier selection process.
- Determines that the contracted service providers should prove the payment of wages, overtime, thirteenth salary, advance notice and other charges; the contract may be terminated in case of breach.
- Requires the Statement on Knowledge and Fulfillment of Social Commitments of its suppliers.



5 - Businesses should uphold the effective abolition of child labour

- Uses social criteria when selecting suppliers.
- Develops the Program for Child and Teenager Protection Program.
- Requires the Statement on Knowledge and Fulfillment of Social Commitments of its suppliers.



6 - Businesses should uphold the elimination of discrimination in respect of employment and occupation

- Has selection processes for the formation of the staff since 2005.
- Adopts wage policies and education programs that are independent of gender.
- Has a Code of Conduct.
- Has Policies and Guidelines for Gender Equality since 2011 and a Committee of Gender Equality.
- Has a Standing Committee of People with Disabilities since 2012.



7 - Businesses should support a precautionary approach to environmental challenges

- Develops the Cultivating Good Water program, with the participation of many partners - participative management.
- Has goals for reducing energy and fossil fuels consumption.
- Performs proper disposal of waste and uses recycled materials.
- Develops the Environmental Education Program.
- Restores and conserves water resources, riparian areas around the reservoir and in the Paraná Watershed 3 (BP3) region.
- Restores and conserves aquatic ecosystems, including fishery monitoring in the reservoir.
- Renewable Energy Platform.
- Electric Vehicle Project.



8 - Businesses should undertake initiatives to promote greater environmental responsibility

- Sustainability Policy and Sustainability Management System.
- Keeps the Itaipu Technological Park Foundation (ITP).
- In addition to the programs, projects and actions carried out in the social and environmental areas, the company acts as an articulator to formalize partnerships with governments, third sector and public and private companies in actions aimed at the socio-economic and sustainable development of the region of influence.



9 - Businesses should encourage the development and diffusion of environmentally friendly technologies

- Keeps the Itaipu Technological Park Foundation (ITP).
- Through the Renewable Energy Platform, conducts research with emphasis on Distributed Biogas Generation.
- Encourages research and development of mobility solutions, especially prototypes of electric vehicles and their components.
- Adopts computer technologies that reduce the use of paper.



10 - Businesses should work against corruption in all its forms, including extortion and bribery

- Has a Code of Conduct and maintains complaint channels such as the Ombudsman Office and Contact Us.
- Accession to the Sarbanes-Oxley Act (SOX).
- Submits procedures and documents to the assurance of Internal Audit and external companies' audit.
- Uses management information systems.
- Follows the General Rule for Bids (NGL), which governs the hiring of services and purchase of products and conducts binational electronic bids.

INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT [G4-32]

To the Board of Directors and other stakeholders of Itaipu Binacional Curitiba - PR

Introduction

We were hired by Itaipu Binacional (“Itaipu” or “Company”) to apply limited assurance procedures to the information disclosed in the 2013 Sustainability Report of Itaipu Binacional, related to the year ending on December 31st, 2012.

Management’s responsibilities of Itaipu

The management of Itaipu is responsible for preparing and properly presenting the information contained in the 2013 Sustainability Report according to the Sustainability Report Guidelines issued by the Global Reporting Initiative – GRI (GRI-G4), along with the GRI Electric Utilities Sector Supplement and the internal controls the company deems necessary for such information to be prepared free of relevant distortions, whether caused by fraud or error.

Independent auditors’ responsibilities

Our responsibility is to provide a conclusion about the information contained in the 2013 Sustainability Report, based on our limited assurance work performed according to Technical Notice (Comunicado Técnico - CT) 07/2012, approved by the Brazilian Federal Accounting Board, and prepared based on NBC TO 3000 (Assurance Engagements other than Audits and Reviews), issued by the Brazilian Federal Accounting Board – CFC, which is equivalent to the international ISAE 3000 standard, issued by the International Federation of Accountants, applicable to non-financial historical information. Those standards demand compliance with ethical requirements, including independence requirements, and that the efforts are carried out in order to provide limited assurance that the information disclosed in the 2013 Sustainability Report, taken as a whole, is free of relevant distortions.

Limited assurance work carried out according to NBC TO 3000 (ISAE 3000) mostly comprises asking questions to the Company’s

management and other staff involved in the preparation of the information contained in the 2013 Sustainability Report, as well as the use of analytical procedures to obtain evidence enabling us to reach a conclusion in the form of limited assurance about the information taken as a whole. Additionally, limited assurance engagements also require the use of additional procedures when independent auditors become aware of issues leading them to believe the information contained in the 2013 Sustainability Report may present relevant distortions when taken as a whole.

The procedures were chosen based on our understanding of the aspects related to the compilation, materiality and presentation of the information contained in the 2013 Sustainability Report, other work-related circumstances, and our consideration about areas and processes associated with the material sustainability information disclosed in the 2013 Sustainability Report, where relevant distortions may be found. The procedures included:

- (a)** planning the work, considering the materiality of the aspects and topics for Itaipu activities, the relevance, volume of quantitative and qualitative information, and the operating systems and internal controls on which the preparation of the information contained in the 2013 Sustainability Report was based;
- (b)** understanding the calculation methodology and procedures to compile the indicators, through interviews with the managers responsible for preparing the information;
- (c)** understanding the reporting process and the management of material aspects and performance indicators;
- (d)** applying analytical procedures to quantitative information and asking about qualitative information and their correlation to the indicators disclosed in the information contained in the 2013 Sustainability Report;
- (e)** analyzing of evidence supporting the quantitative and qualitative disclosures in the 2013 Sustainability Report;

(f) comparing the financial indicators against the financial statements and/or accounting records; and

(g) analyzing the reasonableness of justifications for the defaults for non-disclosure in the 2013 Sustainability Report of performance indicators associated with the material aspects pointed in the materiality definition process undertaken by the Company.

We believe the information, evidence and results obtained by our efforts are sufficient and appropriate to validate our conclusion in the limited form.

Scope and limitations

The procedures used in a limited assurance engagement are substantially less comprehensive than those used in a reasonable assurance engagement. Consequently, they do not enable us to be certain we have learned about all the topics that would have been identified in a reasonable assurance engagement meant to issue an opinion. In case we had worked with the purpose of issuing an opinion, we may have identified other topics and occasional distortions that might exist in the information contained in the 2013 Sustainability Report.

Non-financial data are subject to have more inherent limitations than financial data, given the type and diversity of the methods used to obtain, calculate or estimate such data. Qualitative interpretations regarding data materiality, relevance and accuracy are subject to individual assumptions and judgments. Additionally, the scope of our work did not include reviewing the data related to greenhouse gas emissions, and we in no way worked on data reported for previous periods, in the evaluation of the adequacy of its policies, practices and performance in sustainability, or regarding future estimates.

Conclusion

Based on the procedures used, as described in this report, we became aware of nothing that might have led us to believe the information contained in the 2013 Sustainability Report of Itaipu Binacional, had been compiled, in all relevant aspects, in a manner other than in accordance with the Sustainability Report issued by the Global Reporting Initiative – GRI (GRI-G4), along with the Electric Utilities Sector Supplement, and the records and files on which its preparation was based.

São Paulo, May 7th, 2014

KPMG Risk Advisory Services Ltda.
CRC 2SP023233/O-4



Eduardo V. Cipullo
Accountant CRC 1SP135597/O-6





Technical information

Focal Sustainability Points

Since 2007, when Itaipu adopted the Global Reporting Initiative (GRI) Guidelines to prepare Itaipu's sustainability reports, the "focal points of sustainability" help define the materiality, provide the data for the indicators and revise the document before the publishing.

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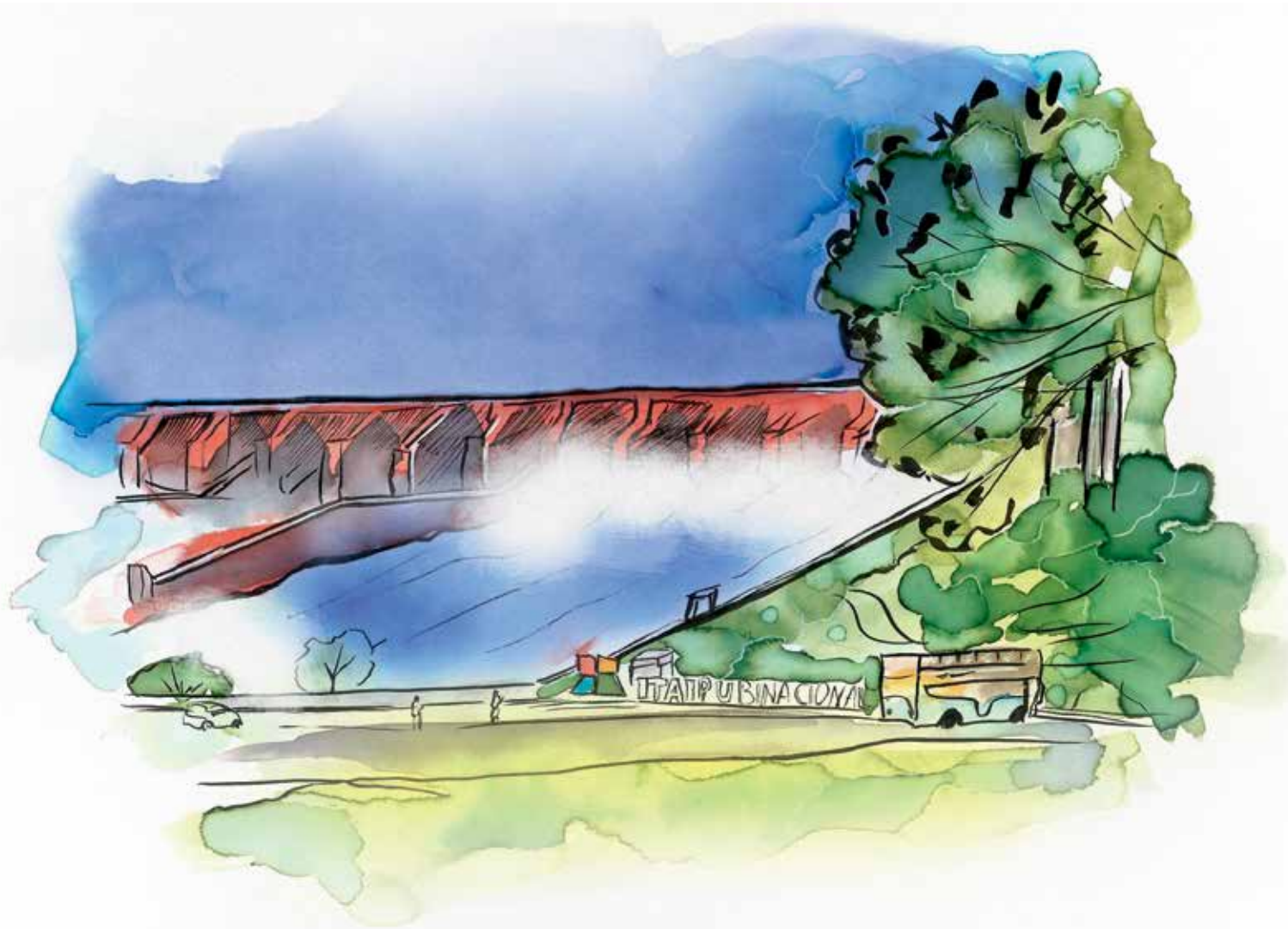
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