

SUSTAINABILITY
REPORT
2010



ITAIPU INTRODUCTION

GRI: 21; 22; 23; 24; 25; 26; 27; 28; 34; 48; EU1;

Itaipu Binacional is the largest water-based electricity generation company in the world.

It is a binational company that follows the recommendations of Public International Law.

It is located on the Paraná River, on the border between Brazil (Foz do Iguaçu) and Paraguay (Ciudad del Este).

85,970 GWh
was Itaipu's total power output in 2010.

USD 3.4 billion
was the revenue from the electricity services provided in the period.

14,000 MW
is the power plant's installed power, obtained from 20 generators.


1,502
employees, including seven Board members and six executive officers, made up the power plant's Brazilian staff in 2010.

DIPLOMATIC AGREEMENT GIVES RISE TO ITAIPU BINACIONAL

Itaipu Binacional originated from a diplomatic agreement between Brazil and Paraguay which led to the signature of the Itaipu Treaty in 1973. The document was created to regulate the harnessing of the Paraná River hydro power and set in motion the construction of the world's largest hydro power plant in terms of electricity generation.

Because it is a binational entity, it abides by a unique management system (read more about it on page 6). The Itaipu treaty sets forth that the company's ownership and management, as well as the right to purchase electricity to use it, are equally shared by Brazil and Paraguay. When one of the partners has surplus power, it is exclusively assigned to the other.

Itaipu is controlled by the Brazilian and Paraguayan governments, respectively represented by the companies Centrais Elétricas Brasileiras (Eletrobrás) and Administración Nacional de Electricidad (Ande) under absolutely equal conditions.

The power plant is located on the Paraná River, between Brazil and Paraguay. Itaipu is headquartered in Brasília and Asunción, and keeps offices in Curitiba, Guaira and Santa Helena, Paraná, and São Paulo. 

You can find the Itaipu Treaty and other documents at www.itaipu.gov.br, in the *Perfil Institucional* (Company Profile) link.

GREAT NUMBERS

7,744 meters
is the length of the Itaipu dam without the Hernandárias dike.

196 meters
is the height of the main concrete dam.

390 meters
is the width of the power plant spillway.

483 meters
is the length of the spillway.

1,350 Km²
is the area of the Itaipu reservoir at its regular level.

MISSION

"GENERATE QUALITY ELECTRICITY VIA SOCIAL AND ENVIRONMENTAL RESPONSIBILITY TO BOOST SUSTAINABLE ECONOMIC, TOURIST AND TECHNOLOGICAL DEVELOPMENT IN BRAZIL AND PARAGUAY".

VISION

"By 2020, ITAIPU BINACIONAL WILL HAVE CEMENTED ITSELF AS THE GENERATOR OF CLEAN, RENEWABLE ENERGY BOASTING THE BEST OPERATING PERFORMANCE AND THE BEST SUSTAINABILITY PRACTICES IN THE WORLD, WHILE DRIVING SUSTAINABLE DEVELOPMENT AND LOCAL INTEGRATION".

ESSENTIAL POLICIES AND GUIDELINES

- Binational integration
- Ethical values
- Business efficiency
- Responsible, participatory, transparent management
- Appreciation of human resources
- Social Commitment
- Environmental commitment

PARTICIPATION IN THE ELETROBRAS COMPANIES

The largest company in the Latin American electricity industry, Eletrobrás holds 50% of Itaipu's

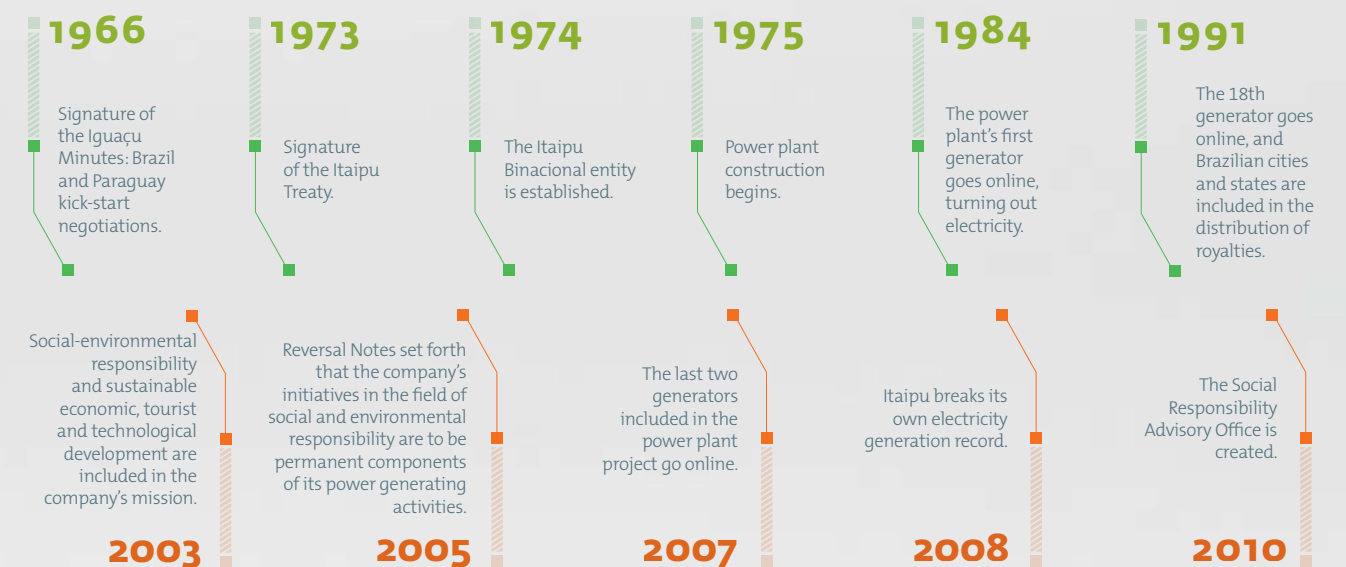
capital on behalf of the Brazilian government. The Eletrobrás companies encompass other power plants and electricity transmission and distribution companies, in addition to a research center, and total 39,453 MW in installed capacity in Brazil, equivalent to 37% of the overall Brazilian capacity.

POWER GUARANTEED IN THE LONG RUN

The comfortable circumstances Brazil is enjoying right now, with its economy stabilized and buoyant consumption, directly impacts power production. Data from the 2030 National Energy Plan (PNE 2030) estimate that the total electricity consumption in Brazil will be expanding at an average 4% a year (between 2005 and 2030). Such needs will be supplied mostly by power whose primary source is water. Water is Brazil's main energy source and supplies 88.8% of the country's demand.

That difference with respect to other countries is guaranteed by expansion plans that include the construction of approximately 400 new hydro power plants meant to supply the country's long-term needs.

TIMELINE





We are Itaipu Binacional, the largest generator of clean, renewable energy on the planet. In 2010, we were responsible for supplying 16% of the Brazilian energy needs and 71% of the Paraguayan market. Our power plant shows that it is possible to take advantage of hydro power in a sustainable way. We apply knowledge, efforts and investments in areas that do not have to do directly with our business but which affect the lives of people and the planet. We carry out environmental conservation projects and initiatives that drive social and economic development in the area, which encompasses not only Brazil and Paraguay but also Argentina.

We dedicate ourselves to programs aimed at protecting children and teenagers, improving public health conditions along the border, fighting violence, fostering women's empowerment inside and outside the company, and so forth. Through partnerships and investments in tourist activities, the city of Foz do Iguaçu now ranks as the 2nd Brazilian destination most visited by foreigners. More tourists mean more jobs and income for many people.

By 2020, we want to "have cemented ourselves as the generator of clean, renewable energy boasting the best operating performance and the best sustainability practices in the world, while driving sustainable development and local integration". We are confident we will achieve that vision because we work in collaboration with many partners in our quest for building a new human being. Several have been the paths charted, such as the implementation of Cultivating Good Water, a set of social and environmental programs founded on the concept of watershed-based management in the Paraná Watershed 3, where the power plant is located.

Along the same line is the installation of the Renewable Energy Platform, which combines water study centers and practical initiatives that turn animal waste and biomass into energy, not to mention financial returns for small farmers. On the technology trail, but still with the purpose of improving environmental conditions, we have developed the Electric Vehicle project and, in 2010, created the world's first hybrid electric bus, which brings together the high efficiency of electric engines and the benefits ethanol provides to the environment.

Such evolution also encompasses education. In the past few years, several teaching institutions have set up shop in the city, notably the Itaipu Technological Park (PTI), where undergraduate programs are offered, and the recent implementation of the Federal University of Latin American Integration (Unila), which will enable knowledge and solutions to reach not only local residents but youngsters from all across Latin America.

Keeping solutions always in mind, in 2010 we started building a 500 kV line that is going to add further security to the supply of power in Paraguay. That is not all, though. The Brazilian and Paraguayan governments added a clause to the Itaipu Treaty that addresses the calculation of the amount paid by Brazil to Paraguay for the power to which the latter is entitled but does not use. It is important to emphasize that the bill will not be paid by Brazilian consumers. As it has been done over the years, the amount is going to be paid by the National Treasury by means of receivables originating from the debt and interest paid by Itaipu.

Because we act locally while keeping the planet in mind, we have joined the Global Compact Brazilian Committee executive board in an effort to advance the sustainability movement among national companies.

It is such thinking and acting of ours that you are going to find in this 2010 Sustainability Report. For next year, our major challenge will be to, for the first time, report on our work in a binational manner.

Enjoy your reading!



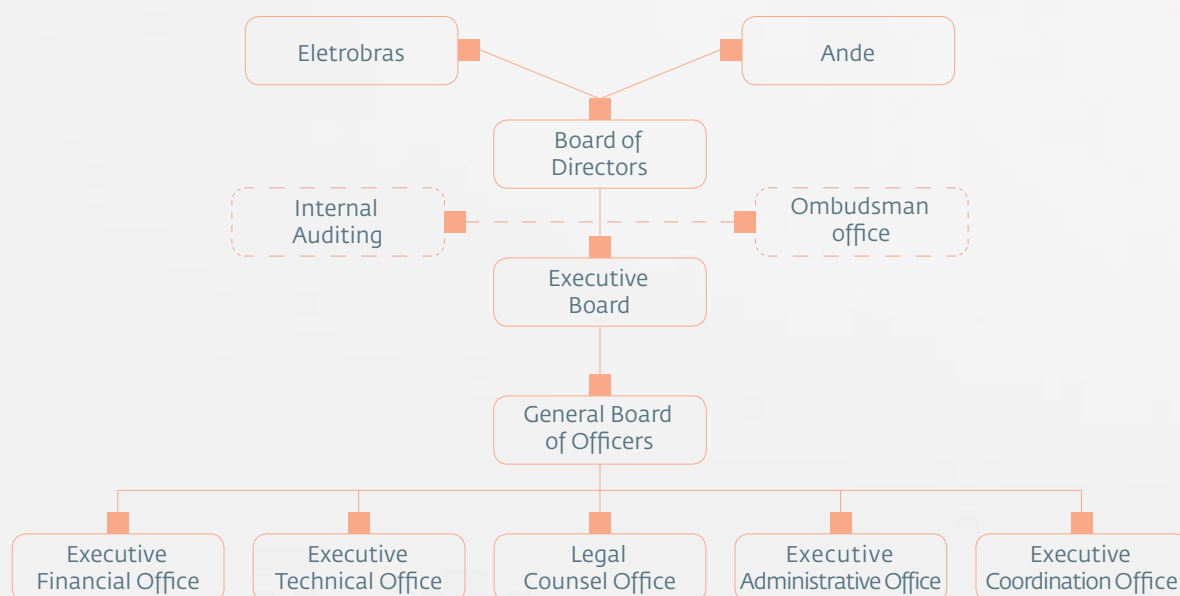
Jorge Miguel Samek
Brazilian General Director

HOW WE OPERATE

THE BOARD OF DIRECTORS IS THE TOP GOVERNANCE BODY AND, LIKE THE EXECUTIVE BOARD, IS STAFFED BY AN EQUAL NUMBER OF BRAZILIAN AND PARAGUAYAN MEMBERS.

GRI: 4.1; 4.2; 4.3; 4.6; 4.7; 4.9

GOVERNANCE FRAMEWORK



BRAZILIANS AND PARAGUAYANS: A SINGLE COMPANY

The partnership which started in the 1960s under absolutely equal conditions is consolidated on a daily basis from the simplest of jobs all the way up to the company's senior management offices. The Board of Directors is the top governance body and, like the Executive Board, is staffed by an equal number of Brazilian and Paraguayan members. There are six board members and one representative from the Ministry of Foreign Affairs. Without exception, each and every senior management member is appointed by the two countries' national governments.

The Board of Directors is a normative, governing, decision-making body. Some of their duties include complying with and enforcing the Itaipu Treaty, its annexes, and supplementary documents. They are also responsible for deciding on the essential guidelines, financial bases and supply of electricity services.

Additionally, they are in charge of examining the Annual Report, the Balance Sheet, and the Income Statement to be submitted along with their opinion to Eletrobras and Ande. The Board of Directors also approves the Strategic Plan and the Global Economic

Budget, and monitors the company's performance regarding several aspects at ordinary meetings held every two months.

ONE CHAIRMAN EVERY MEETING

At every meeting of the Board of Directors, the chairman is elected by the other members. The Brazilian and Paraguayan general directors take part in the meetings, they have a voice, but they cannot vote nor be elected to chair the meetings. Decisions require the majority of each country's board members to be in attendance, and vote parity is equal to the smallest national representation present. In case there is a lack of parity, the board members draw lots to see who will stay out of the voting session until the number of representatives is the same for both countries.

NUMBERS

7 are the members of the board of directors, including six board members and one representative from the Ministry of Foreign Affairs.

4 years

is the term the members of the Board of Directors remain in office, and they may be reappointed at the end of their contract.

100%

of the Board of Directors' members are non-executive, independent members.

Make-up of the Board of Directors and Executive Board

	Brazil	Paraguay
Members	Paulo Bernardo Silva * Celso Luiz Nunes Amorim Luiz Pinguelli Rosa João Vaccari Neto Alceu de Deus Collares José Antonio Muniz Lopes	Germán Domingo Fatecha Feliú Efraín Enríquez Gamón Carlos Alberto González Garabelli Franklin Rafael Boccia Romañach Osvaldo Román Romei Domingo Laino
Representative from the Ministry of Foreign Affairs	Antonio José Ferreira Simões	Héctor Lacognata

*On March 25, 2011, member Paulo Bernardo Silva was replaced by Roberto Átila Amaral Vieira.

General Directors	Jorge Miguel Samek	Gustavo Codas Friedman
Executive Technical Officer	Antonio Otelo Cardoso	Ruben Esteban Brasa Soto
Legal Counsel	João Bonifácio Cabral Júnior **	Eusébio Ramón Ayala
Executive Administrative Officer	Edésio Franco Passos	Constancio Mendoza Ortiz
Executive Financial Officer	Margaret Mussoi Luchetta Groff	Gladys Stella Benegas Cristaldo
Executive Coordination Officer	Nelton Miguel Friedrich	Pedro Benjamin Mancuello Pérez

**On April 27, 2011, legal counsel João Bonifácio Cabral Júnior retired and was replaced by Nildo José Lubke.

Make-up on December 31, 2010.

OMBUDSMAN AT YOUR SERVICE

Created in 2009, the Ombudsman office was set up as a communication channel between Itaipu and its outside audience. It is another tool to foster participatory, transparent management, besides helping improve the company's practices and processes. In a confidential manner, people can ask questions, file complaints, reports and compliments. The office can be contacted via the Itaipu website, by phone, mail, or in person by previously scheduling an appointment.

Contact: ouvidoria@itaipu.gov.br, telephone (45)3520-6800 or by mail to Ouvidoria da Itaipu Binacional – Centro Executivo - Av. Silvío Américo Sasdelli, s/n – Vila A – Caixa Postal 255 – CEP 85866-900 – Foz do Iguaçu – Paraná.

APPOINTMENT OF THE BOARD OF DIRECTORS

Each country's Federal Government appoints the members of the Board of Directors, as set forth in the Itaipu Treaty. The document does not make any demands or restrictions regarding the academic or professional background of those appointed.

EXECUTIVE BOARD

Itaipu is administrated by the Executive Board, which is also supposed to assist the Board of Directors. The Executive Board is staffed by an equal number of Brazilian and Paraguayan members, 12 in total, and comprises the executive technical, legal, administrative, financial, and coordination officers along with the general directors, who convene every fifteen days and remain in office for five years.

How WE OPERATE

IN 2010, ITAIPU WAS RESPONSIBLE FOR SUPPLYING 16% OF THE BRAZILIAN ELECTRICITY MARKET AND 71% OF THE PARAGUAYAN ELECTRICITY MARKET.

GRI:4.8;4.9;4.12;EC2;SO2;EU19;PG7;PG10

INTERNAL AUDITING

On a regular basis, Itaipu performs internal audits through teams staffed by Brazilian and Paraguayans who analyze the company's processes and procedures. The Internal Audit annual work plan is approved by the Board of Directors. Internal audits make it possible to evaluate internal controls, business processes and corporate governance, thus helping the administration improve management and procedures.

CODE OF ETHICS

An ethical conduct is included in Itaipu's essential policies and guidelines. In 2002, the company approved its Code of Ethics, which sets forth values, ethical principles, conduct standards and responsibilities that guide its work and which are expected from every agent who, directly or indirectly, comes to have any kind of relationship with the company. The Ethics Committee is responsible for analyzing cases of Code of Ethics violations and to properly escalate them to the company's authorities. [+](#)

TRANSPARENT MANAGEMENT

Although Itaipu does not specifically assess corruption-related risks, several procedures help ensure the lawfulness and transparency of the company and its financial procedures.

Especially the use of the access-controlled integrated corporate system (SAP), electronic auction-based purchases, internal audits, the creation of the Ombudsman office, the adoption of Sarbanes-Oxley (SOX) international standards, regular external audits, and the annual publication of the Sustainability Report, which is third-party assured. [+](#)

SHARED DECISION-MAKING PROCESS

The company is managed by both countries under equal conditions; hence, the important decisions regarding energy planning, power purchases and rates are made by representatives from Brazil and Paraguay and the entities that own Itaipu, Ande and Eletrobras.

These companies also take part in the Itaipu Electricity Purchase and Sale Contract Operation and Administration Committee (Cadop) and the Mixed Operating Committee (CMO).

MISSION PUT INTO PRACTICE

Itaipu's mission is continually disseminated not only among its employees but also among the company's several partners. "Generating quality electricity via social and environmental responsibility to boost sustainable economic, tourist and technological development in Brazil and Paraguay" has been a daily practice at the organization.

Managing Itaipu, a company that generates an essential asset, requires careful, result-oriented planning that at the same time respects the environment and the various audiences with whom the company has a relationship. The business plan includes nine strategic goals, which are put into practice by means of programs and actions connected to the global budget. Everything is set up based on the mission, and every program and action carried out directly helps fulfill it.

The business plan is regularly reviewed to ensure effective management. Itaipu's plans are organized in five-year cycles. Management monitoring ensures significant results such as the ones described in the course of this report. [+](#)

CLIMATE CHANGE

Itaipu carries out several actions related to the climate change topic. Programs like the Electric Vehicle and Renewable Energy Platform, for instance, help decrease the use of fossil fuels and the emission of pollutants, besides recovering and conserving the environment.

INFORMATION SECURITY

In 2010, Itaipu created the Information Technology, Automation Technology and Telecommunication Information Security Committee (TIC) and approved the TIC Information Security Policy. The purpose of such actions was to protect Itaipu information from all sorts of threats, like thefts, frauds or losses.

SUSTAINABILITY BASES

Itaipu's commitment to the development of strategies that incorporate sustainability at all levels of its operations is shown in the agreements, treaties and conventions which the company is a part of or has joined. Since 2008, the company has been a signatory of the United Nations Global Compact.

In 2010, Itaipu became a member of the new Brazilian Global Compact Committee Executive Board elected for the 2011-2012 term. Additionally, the company adhered to the Women's Empowerment Principles: Equality Means Business, an initiative by UN Women whose purpose is to foster gender equality in the workplace (read more about it on page 19).

Also last year, the company adhered to the Life Certification standards, and in 2011 applied for the first time the auditing plan, which assesses biodiversity conservation practices. Other sustainability-related topics were discussed at the Social-Environmental Responsibility Management Committee meetings.

The meetings led to the approval of three social projects.

Besides those initiatives, several documents steer Itaipu's actions toward a socially responsible, sustainable stance. Some of them are the National Pact for the Eradication of Slave Labor in Brazil, the Pact against the Exploitation of Children and Teenagers along Brazilian Highways, the Agenda 21, the Earth Charter, the Water Pact, the Kyoto Protocol, and the Treaty on Environmental Education for Sustainable Societies and Global Responsibility.

DEPARTMENT ESTABLISHED

In 2010, Itaipu created the Social Responsibility Advisory Office entrusted with suggesting social responsibility policies, guidelines, standards and procedures, in addition to consolidating information on the topic. The department is also responsible for preparing the Sustainability Report and developing social projects.



“MAINTAINING POWER PRODUCTION AND SUPPLY EXCELLENCE”
IS ONE OF ITAIPU’S STRATEGIC GOALS.

GRI: 2.10; EU2; EU6; EU21; EU30

THE FURNAS PACT

So as to help improve Eletrobrás’ management and corporate governance processes, in 2010 Itaipu signed the Furnas Pact along with all executive officers of the Eletrobrás companies. By signing it, Itaipu committed itself to the principles set forth and the implementation of an action plan aimed at improving sustainability practices. To develop such plan, the company has been working under its own schedule, suitable to the company’s circumstances deriving from its binational nature.

THE FURNAS PACT PRINCIPLES

- Clean, renewable energy;
- Rational use of resources;
- Energy efficiency;
- Sustainable R&D+I;
- Respect for human rights;
- Fostering sustainable development;
- Participatory citizen employees;
- Employee workplace and well-being conditions;
- Employee quality of life;
- Responsible purchases and partnerships;
- Dialogue and engagement;
- Value for the stakeholders;
- Commitment to ethics and transparency;
- Sustainability management;
- Risk Management.

2010 Awards

Award	Presented by	Award-Winning Project/Action
Best Practices of the 65 Destinations Inducing Local Tourist Development	Ministry of Tourism	Special Tour – Roaming the heart of the Itaipu Hydro Power Plant
2010 ANA Award	Brazilian Water Agency	Cultivating Good Water Program
2010 Chico Mendes Award	Instituto Chico Mendes	Cultivating Good Water Program
Clean Tech & New Energy Award	British magazine The New Economy	PCultivating Good Water Program, Renewable Energy Platform, Electric Vehicle, and Itaipu Technological Park
2010 Fundação COGE Award	Fundação COGE	Electric Vehicle for Urban Foragers project
2010 Top of Marketing Grand Prix	Association of Brazilian Sale and Marketing Leaders - Paraná chapter (ADVB-PR)	Iguaçu Destination case – Integrated Tourism Management
2010 Challenge Bibendum	Michelin	Electric Vehicle
3rd Pro Gender Equality Seal	Office of the President of the Republic's Office for Women's Policies	Ações de promoção da equidade de gênero

In 2010, Itaipu’s 2008 Sustainability Report finished second in the “Most efficient report” category and third in the “Civil Society” category at the GRI Reader’s Choice Awards. The awards were presented in Amsterdam at the GRI Conference.

GUARANTEED ENERGY

Itaipu guarantees the generation of electricity by means of ongoing planning and strict production processes. The results can be seen in its generators’ high rate of availability. Added to that, favorable meteorological conditions in the southeast – plenty of rain, which keeps the Itaipu reservoir full – have helped the power plant turn out more than its guaranteed annual power (75,000 GWh/year).

It is the demand that establishes Itaipu’s generation.

Because the Brazilian electricity system is interconnected and controlled by the National System Operator (ONS), the amount of power generated does not depend exclusively on generation capabilities.

Given the uniqueness of the Brazilian system, at certain times Itaipu generates less energy than it is capable of. An example of that took place in 2010, when restrictions imposed on Furnas’ 60Hz transmission system, associated to Itaipu, led the power plant to generate power below its expectations.

Itaipu’s Maintenance Plan, which encompasses short-, medium- and long-term actions, ensures it is able

to turn out power. The actions include preventative maintenance at the power plant facilities, generators and their ancillary systems, in addition to transmission and transformation equipment.

NUMBERS

94.19%

was the rate achieved by the generators in 2010, meaning the percentage of time kept during which they remained available for operation or in operation.

EMERGENCY ACTION PLAN

Itaipu has an Emergency Action Plan (PAE) management group in charge of preparing contingency plans and keeping them up to date. Contingencies include fire and/or explosions, flooding and evacuation needs. Contingency mapping may vary according to the start of a new project, regarding which contingency plans are prepared and deactivated after they are completed. It is up to PAE managers to coordinate test simulations and training in such plans.

Average power plant availability

	2010	2009	2008
Generator availability rate (%)	94.19%	94.50%	94.23%

Net power generated

	2010	2009	2008
Water-based	85,303(GWh)	91,239(GWh)	94,345(GWh)
Regulatory system	Paraguay - 7,272 Brazil - 78,031	Paraguay - 7,348 Brazil - 83,891	Paraguay - 7,760 Brazil - 86,585

How WE OPERATE

BASED ON TRANSPARENCY, ETHICS AND RESPECT, AND BY USING DIALOGUE AS ITS MAIN TOOL, ITAIPU HAS BUILT A HEALTHY RELATIONSHIP WITH ITS STAKEHOLDERS.

GRI:4.11;4.13;4.14;4.15;4.16

GREATER RELIABILITY

In 2010, Itaipu started implementing the new SCADA System, used by the power plant to oversee and control its generation and transmission. The retrofitted system is going to ensure greater reliability for the decision-making process regarding the power plant's maintenance.


PROVEN SAFETY

Every four years, the performance of Itaipu's building structures is evaluated by a group of international experts on dam engineering. The evaluation carried out in 2010 once again proved that the power plant's structural and physical safety is excellent.

THE PRECAUTIONARY PRINCIPLE

The Precautionary Principle is widely applied as to the dam breaking risk, given that Itaipu is considered an already stabilized power plant. In that regard, the company has procedures in place to monitor the safety of the dam, such as: use of countless instruments, observation, use of seismometers, visual inspections, and technical inspections by international experts.

RESEARCH & DEVELOPMENT

Itaipu carries out Research and Development (R&D) actions advised by Universidade Corporativa Itaipu (UCI). The activities are managed by the interested departments and performed via agreements with partner institutions, especially Fundação Parque Tecnológico Itaipu. Noteworthy work includes the Dam Safety Applied Research developed to assess dam behavior and safety by measuring and evaluating watershed management data, distributed power, and electricity distribution and transmission technologies. 

REPAIRS TO U06

During maintenance performed on generator number 6 (U06) last year in September, technicians found cracks on the turbine wheel. To diagnose and solve the problem, U06 is going to remain offline until the beginning of 2012. Over such time, the generator will be completely taken apart and the necessary repairs will be made so that it may safely resume operations. The entire procedure is being documented according to the knowledge management methodology.

NEW TRANSMISSION LINE

In 2010, Itaipu started another important job for the Paraguayan government. It is the implementation of the Paraguayan 500 kV Transmission System meant to connect the Itaipu power plant to the city of Villa Hayes, close to Asunción. Construction is estimated to start in July 2011 and finish in December 2012. The project will ensure Paraguay's supply of electricity and economic development.

STAKEHOLDER ENGAGEMENT

The stakeholders with whom Itaipu establishes closer relationships are selected based on the social-environmental programs the company carries out. Some of the audiences prioritized are Paraná Watershed 3 (BP3) communities, associations, cooperatives, private institutions and governmental agencies.

Each group has representatives in management committees or multidisciplinary networks, which allows for a crosswise social dialogue with all social players. Similarly, employees take part in in-house committees that discuss work relations.

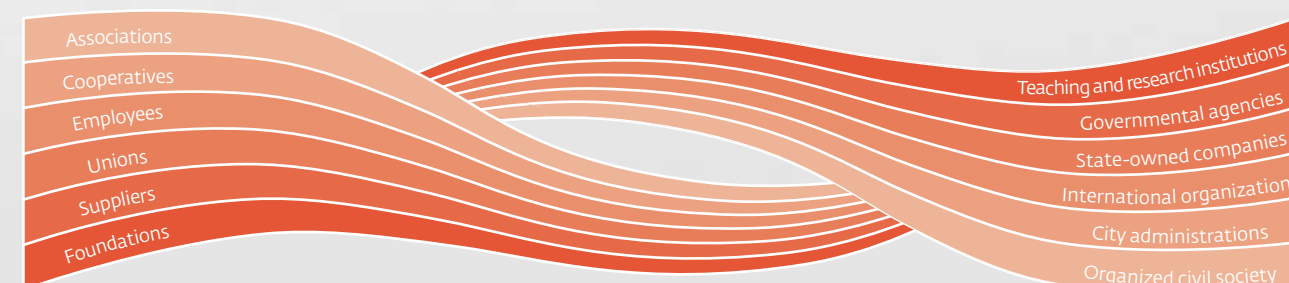
With foundations and teaching and research institutions, the relationship takes place mostly via research support and partnerships in projects that

give people the chance to access education systems. Other stakeholders are still at different engagement levels, as is the case of suppliers – currently being mapped out by the company.

Itaipu communicates with its stakeholders by means of direct contacts, meetings, lectures, emails, phone calls, and so forth. In the effort to make such relationship closer, social networks cemented themselves as communication tools in 2010.


Besides Twitter (www.twitter.com/usina_itaipu), the YouTube channel (www.youtube.com/itaipubinacional) is now up and running. The company joined Facebook in 2011, and other social networks are undergoing strategic assessments.

Our stakeholders



PARTICIPATION IN ASSOCIATIONS

Itaipu is a member of several national and international organizations helping initiatives be carried out in various fields. The company holds a seat at the Brazilian Global Compact Committee, the International Hydropower Association (IHA), the Brazilian Committee for Dams, the Eletrobrás System

Senior Council (Consize), Coge Foundation Board of Curators, and others. Additionally, it takes part in the Brazilian Association of Electricity Generating Companies (ABRAGE) and is a founding member of the River Plate Basin Knowledge and Social-Environmental Care Center. 

How WE OPERATE

FINANCIAL BALANCE AND RESPONSIBLE CONSUMPTION BECAME THE FOCUS OF ATTENTION OF THE FINANCIAL EDUCATION PROJECT IN 2010, WHICH BENEFITS EMPLOYEES, INTERNS, TEENAGE APPRENTICES, SERVICE PROVIDERS, AND FAMILY MEMBERS.

PR 6

ADVERTISING REGULATIONS

Itaipu's entire marketing communications are based on the rules regulating the Brazilian advertising market. The company abides by the guidelines of the Advertising Self-Regulating Council and the recommendations from the Standard Regulations Executive Council (Cenp).

SPONSORSHIP POLICY

Sponsorships have taken on an increasingly more prominent role in corporate communication and marketing strategies, and are an important tool in one's relationship with their stakeholders. Aware of that, in 2010 Itaipu created the Sponsorship Policy. Based on specific procedures, a technical committee analyzes the requests submitted and issues opinions. The initiative helps identify and disseminate good practices to improve the processes and mechanisms to be adopted to examine, select and evaluate sponsorship actions.

NUMBERS

USD 4.8 million

was the amount of sponsorships granted by Itaipu in 2010.

CORPORATE IMAGE

In 2010, two surveys were carried out about Itaipu's corporate image. One survey was carried out among the Foz do Iguaçu population and heard 682 residents, and the other among business and political leaders from the surrounding cities, with 352 representatives. To 91.2% of those living in Foz do Iguaçu, Itaipu's image is seen as great or good. Among surrounding city leaders, the rate reaches 95.46%. The margin of error is 5%.

NUMBERS

93.4%

of Foz do Iguaçu residents consider Itaipu important or very important for the city's development.

97.15%

of the business and political leaders from surrounding cities consider Itaipu important or very important for local development.



WHERE OUR POWER COMES FROM

IN 2010, THERE WERE NO EVENTS CHARACTERIZING OBSTRUCTIONS TO ONE'S FREEDOM OF UNION, ASSOCIATION AND/OR COLLECTIVE BARGAINING. IN THE EVENT OF A STRIKE, THE COMPANY HAS A CONTINGENCY PLAN LISTING THE NAMES OF EMPLOYEES DEEMED ESSENTIAL FOR THE OPERATION.


EC7; LA1; LA3; LA4; LA5; EU16; EU17; EU18; HR4; HR5; PG1; PG2; PG3; PG6

BRAZILIAN EMPLOYEES

In Brazil, employees total 1,502 people – including executive officers and board members. Men are the majority, 81.2%, they add up to 1,220. Most employees (60%) range between 30 and 50 years old. Among women, that age bracket concentrates 63.5% of the female workforce: 179 of the 282 female employees.

Since 2005, Brazilian employees have been recruited by means of a public selection process, and hence there are no policies concentrating admissions in the local community. On their part, executive officers and board members are appointed by the Brazilian Federal Government.

Itaipu has been updating its people management approach over the past few years. Besides better conditions for employees, doing that helps improve the plant's business performance as goals and objectives are reached.

With the welfare of all its employees in mind, the company offers a host of benefits. Some of them include healthcare plans encompassing dependents, group life insurance, a private pension plan that extends the healthcare plan into retirement, and quality of life programs. 

Total employees

	! Determined (*) (**)			? Undetermined (**)			= Total		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Foz do Iguaçu, Santa Helena and Guaíra - PR	11	13	14	1,292	1,269	1,274	1,303	1,282	1,288
Curitiba - PR	18	18	16	175	176	178	193	194	194
Brasília - DF	0	0	1	4	4	4	4	4	5
São Paulo - SP	0	0	0	2	2	2	2	2	2
Total	29	31	31	1,473	1,451	1,458	1,502	1,482	1,489

* Includes board members, executive officers and also employees called in from other federal, state or city agencies.

** Undetermined employees are those whose employment term is not included in the work agreement signed with Itaipu. Determined employees are those whose employment agreement term is set forth.

SERVICE PROVIDERS

Itaipu has no outsourced employees. The services considered as provided by third parties are organized independently, totally disconnected from Itaipu, and do not directly interfere in the generation process, although they are permanent and necessary. Third-party security, catering, and cleaning services, among

others, are performed by employees from companies hired via bidding processes, which companies assume the risk of the activity and directly exercise their power to command and manage their employees. Their contracts are managed directly by the departments, and they are not centralized anywhere at Itaipu.

Trained service providers

	2010	2009
 Maintenance, cleaning, security and conservation	193	99

Data from 2008 are not available, as the indicator only started being monitored in 2009.

NUMBERS

100%

of employees, except executive officers and board members, are covered by the Collective Bargaining Agreement that complies with the International Labor Organization and was signed between Itaipu and the unions representing the workers.

RELATIONSHIP WITH THE IN-HOUSE AUDIENCE

The main channels of communication with employees are the newsletter *Jornal da Itaipu Mural* (JIM), *Jornal da Itaipu Eletrônico* (JIE) (online newsletter) and the intranet. In 2010 the intranet was redesigned to bring together navigability, dynamic contents and a standardized visual identity. Employees also have available the In-House Complaint Committee (CIR) and the Ethics Committee, which

they contact when they need to address specific issues of workplace conflicts and human rights violations. There were no reports of such cases in 2010.

NOTICES ON CHANGES

Itaipu's Collective Bargaining Agreement does not set forth a minimum timeframe for implementing the decisions made by the company. However, depending on their nature and impact, the timeframe is one of the mandatory items to be included in the list of employee-related arrangements. Significant operating changes or important decisions are usually communicated at least four weeks in advance.

WHERE OUR POWER COMES FROM

ITAIPU SPONSORED THE FIRST EDITION OF THE UN WOMEN'S EMPOWERMENT PRINCIPLES IN PORTUGUESE, AND ALONG WITH OTHER COMPANIES WILL BE DEVELOPING STRATEGIES TO PUT THEM IN PRACTICE.

LA 13; LA14; PG1; PG6

Diversity in the 2010 staff (%)

		Male						Female						Total					
		White	Yellow	Black	Mixed race	Native	Total	White	Yellow	Black	Mixed race	Native	Total	White	Yellow	Black	Mixed race	Native	Total
Board of Directors	Up to 30 years old	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Aged 30 to 50	28.6%	0%	0%	0%	0%	28.6%	0%	0%	0%	0%	0%	0%	28.6%	0%	0%	0%	0%	28.6%
	50+ years old	57.1%	0%	14.3%	0%	0%	71.4%	0%	0%	0%	0%	0%	0%	57.1%	0%	14.3%	0%	0%	71.4%
	Total	85.7%	0%	14.3%	0%	0%	100%	0%	0%	0%	0%	0%	0%	85.7%	0%	14.3%	0%	0%	100%
Executive Board	Up to 30 years old	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Aged 30 to 50	0%	0%	0%	0%	0%	0%	16.7%	0%	0%	0%	0%	16.7%	16.7%	0%	0%	0%	0%	16.7%
	50+ years old	83.3%	0%	0%	0%	0%	83.3%	0%	0%	0%	0%	0%	0%	83.3%	0%	0%	0%	0%	83.3%
	Total	83.3%	0%	0%	0%	0%	83.3%	16.7%	0%	0%	0%	0%	16.7%	100%	0%	0%	0%	0%	100%
Middle management	Up to 30 years old	0%	0%	0%	0%	0%	0%	1.6%	0%	0%	0%	1.6%	1.6%	0%	0%	0%	0%	1.6%	
	Aged 30 to 50	49.6%	0%	0%	1.6%	0.8%	52.0%	15.4%	0%	0%	0.8%	16.3%	65.0%	0%	0%	2.4%	0.8%	68.3%	
	50+ years old	27.6%	0%	0%	0%	0%	27.6%	2.4%	0%	0%	0%	2.4%	30.1%	0%	0%	0%	0%	30.1%	
	Total	77.2%	0%	0%	1.6%	0.8%	79.7%	19.5%	0%	0%	0.8%	20.3%	96.7%	0%	0%	2.4%	0.8%	100%	
College degree	Up to 30 years old	19.5%	1.1%	0%	1.1%	0%	21.6%	5.9%	0%	0%	0.9%	6.8%	25.4%	1.1%	0%	2.0%	0%	28.4%	
	Aged 30 to 50	33.3%	1.6%	0.9%	5.0%	0%	40.8%	13.6%	0.4%	0.2%	2.5%	16.6%	46.9%	2.0%	1.1%	7.5%	0%	57.4%	
	50+ years old	9.7%	0.4%	0%	1.1%	0%	11.1%	2.1%	0%	0%	0.9%	3.0%	11.8%	0.4%	0%	2.0%	0%	14.1%	
	Total	62.4%	3.0%	0.9%	7.2%	0%	73.5%	21.6%	0.4%	0.2%	4.3%	26.5%	84.1%	3.4%	1.1%	11.4%	0%	100%	
No college degree	Up to 30 years old	14.3%	0%	0.5%	3.8%	0%	18.6%	2.9%	0%	0.1%	0.2%	3.2%	17.1%	0%	0.6%	4.1%	0%	21.8%	
	Aged 30 to 50	39.5%	0.5%	2.0%	12.0%	0.1%	54.2%	6.4%	0%	0.1%	1.5%	8.1%	46.0%	0.5%	2.1%	13.5%	0.1%	62.2%	
	50+ years old	10.7%	0%	0.6%	2.5%	0.1%	13.9%	1.6%	0%	0%	0.5%	2.1%	12.3%	0%	0.6%	3.0%	0.1%	16.0%	
	Total	64.4%	0.5%	3.1%	18.3%	0.2%	86.6%	10.9%	0%	0.2%	2.2%	13.4%	75.3%	0.5%	3.3%	20.6%	0.2%	100%	
Total	Up to 30 years old	14.9%	0.4%	0.3%	2.5%	0%	18.0%	3.9%	0%	0.1%	0.5%	4.4%	18.8%	0.4%	0.3%	2.9%	0%	22.4%	
	Aged 30 to 50	37.8%	0.9%	1.4%	8.5%	0.1%	48.7%	9.9%	0.1%	0.1%	1.8%	11.9%	47.7%	1.0%	1.5%	10.3%	0.1%	60.6%	
	50+ years old	12.2%	0.1%	0.4%	1.7%	0.1%	14.5%	1.9%	0%	0%	0.6%	2.5%	14.0%	0.1%	0.4%	2.3%	0.1%	17.0%	
	Total	64.9%	1.4%	2.1%	12.6%	0.2%	81.2%	15.6%	0.1%	0.2%	2.9%	18.8%	80.5%	1.5%	2.3%	15.5%	0.2%	100%	

PRO-DIVERSITY ACHIEVEMENTS

Itaipu has been carrying out affirmative actions in favor of gender equality since 2003. Since then, besides creating the Gender Equality Fostering Program, the company has advanced the topic at several internal and external forums.

In the first half of 2011, Itaipu set forth the Gender Equality Policy and Guidelines. The document is the product of two years' work by the Gender Equality Committee and contains 19 goals and 62 actions. The guidelines are to be evaluated annually and reviewed every two years.

Another important step was the company's adhesion to the Women's Empowerment Principles: Equality Means Business. The initiative was launched in March by the Entity for Gender Equality and the Empowerment of Women (UN Women) and the Global Compact, also from the United Nations. Itaipu was the 39th company in the world to adhere to the

document. Stemming from Itaipu's hard work in the field of gender, the company sponsored the first Brazilian edition of the document. The launch took place in Foz do Iguaçu in September and was attended by then-president Luiz Inácio Lula da Silva, several ministers and UN Women representatives for Latin America and the Global Compact in Brazil.

WOMEN'S EMPOWERMENT PRINCIPLES - UN

- Leadership fosters gender equality;
- Equal opportunities, inclusion instead of discrimination;
- Health, safety and the end of violence;
- Education and training;
- Enterprise development and supply chain and marketing practices;
- Community leadership and engagement;
- Transparency, measurements and reports.

Base salary ratio between women / men (%)

	Board of Directors	Executive Board	Middle management	College degree	No college degree	
2010	-	99.3	79.3	83.5	107	2010
2009	-	99.3	79.8	84.2	107	2009
2008	-	99.3	80.4	81.6	107	2008

*This value is null as there are no women in the Board of Directors.



GRI GENDER WG

In 2010, Itaipu took part in the international work group created by the Global Reporting Initiative (GRI) to review the gender indicators included in the current version of its Sustainability Reporting Guidelines. The meeting brought together experts from 18 countries and resulted in the publication of “Embedding Gender in Sustainability Reporting – A Practitioner’s Guide”.

INCLUDING PEOPLE WITH A DISABILITY

Since 2008, when Itaipu started allocating job openings for people with a disability in its public selection processes, the company has been doing its best to include such people in its staff. Their inclusion depends on their being approved in the process.

Today, 25 people with a disability work for the company. Although the number is still below the one required by law, which according to the company’s size is 75 people, the amount of workers in this category has been gradually increasing. In 2009 Itaipu employed 21 people with some kind of disability; in 2010, the company hired another four.

PERFORMANCE AND COMPENSATION

Ensuring favorable conditions for people to develop and grow professionally is one of Itaipu’s premises. To meet one of its employees’ needs, the company implemented the first cycle of the Performance Management System and is finalizing the new Career and Compensation Plan, whose completion is expected for 2011.

Both aim at ensuring equal treatment. To that end, employees are regularly evaluated for their skills and the results they achieve. The analyses performed by managers are made available through the system and will provide inputs for their individual career plan.

Employees have access to training programs to develop their skills. In the second half of the year, the company started preparing the Annual Education Plan that is going to systematize the planning of educational actions connected to its business challenges and needs.

Employees are further aided by partnerships set up between Itaipu and research and technology institutions, besides allowances to pay for training and refresh programs attended outside the company. Managers and supervisors take part in actions dedicated to their roles.

NUMBERS

USD 1.4 million

was the amount invested by Itaipu in training in 2010.

OF THE 12 DISCRIMINATION LAWSUITS FILED WITH LABOR COURTS, SEVEN WERE DENIED AND DISMISSED; ANOTHER FIVE REMAIN UNDERWAY.

LA12;LA13;EU14;EC5;HR3;HR8;SO3;PG1;PG2;PG3;PG4;PG5;PG6;PG10

Variation of the minimum salary* ratio in relation to the lowest salary paid

Place	Lowest hourly base salary (BRL)		Ratio of the lowest salary paid over the national minimum salary		Variation against the national minimum salary	
	2010	2009	2010	2009	2010	2009
Foz do Iguaçu, Santa Helena and Guaíra - PR	9.27	8.73	290.86%	300.23%	190.86%	200.23%
Curitiba - PR	13.29	12.03	416.96%	413.84%	316.96%	313.84%
Brasília - DF	14.19	12.84	445.30%	341.86%	345.30%	241.86%
São Paulo - SP	29.81	27.67	935.28%	951.95%	835.28%	851.95%

*Itaipu does not use the minimum salary as a parameter for compensation purposes but on an hourly basis the amount of the minimum salary on December 31, 2010 was BRL 3.19. The standard monthly hours used for the calculation are 160.

CAREER DEVELOPMENT

From March to October 2010, 100% of security employees and service providers were trained in the use of self-defense techniques, where the use of firearms must be the last resource employed.

TOPICS UNDER DEVELOPMENT

The topic of corruption was discussed at several training sessions held at Itaipu; however, there were no specific events on the matter. The same stance has been adopted with respect to the issue of human rights, except when it comes to corporate security officers. The topic was included in several programs and actions carried out by Itaipu; however, no specific training was provided.

NUMBERS

93.48%

of employees (except board members and executive officers) were provided with at least one performance assessment in the course of 2010.

WHERE OUR POWER COMES FROM

IN 2010, AS A RESULT OF RETIREMENT OR TERMINATION, 99 PEOPLE LEFT ITAIPU.

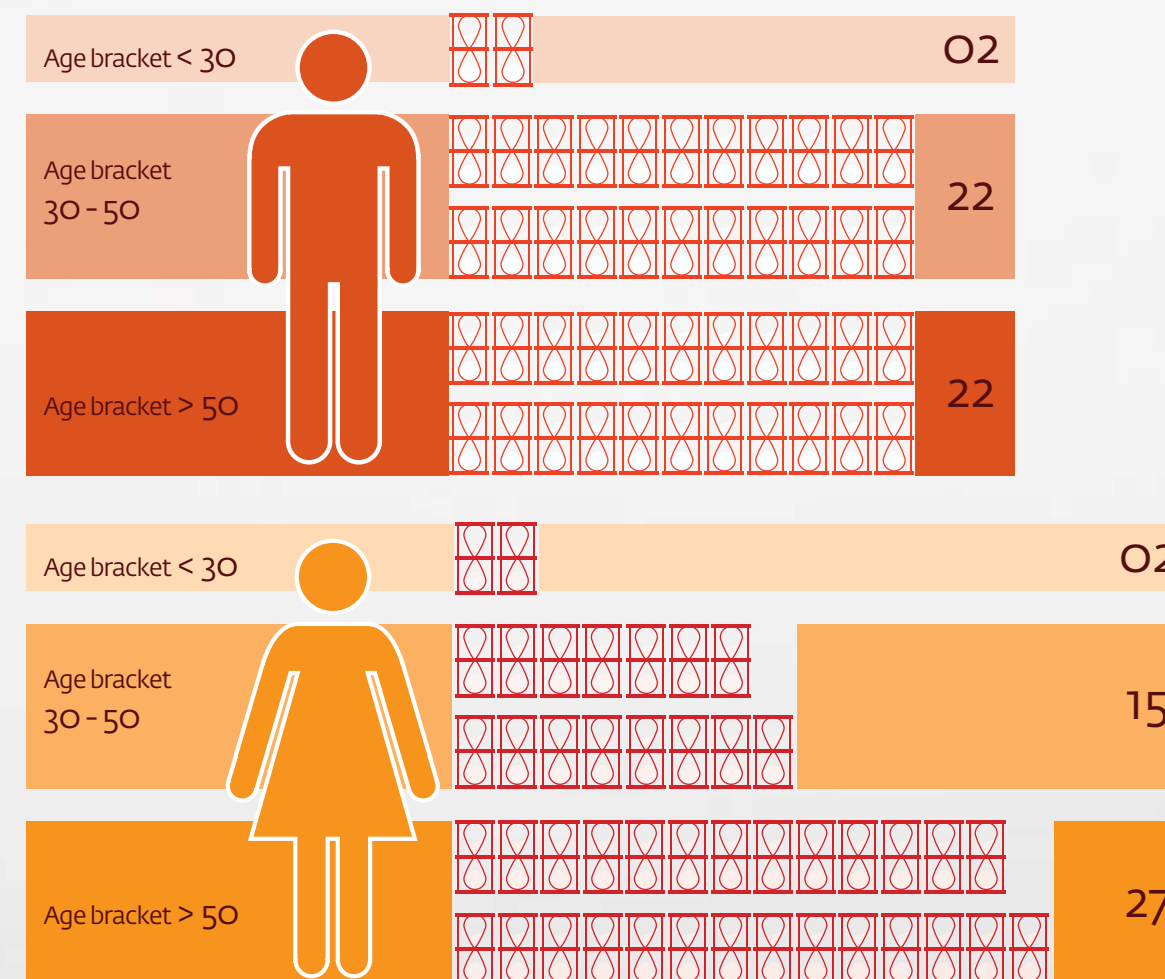
LA2;LA10;PG6

Total employee number and turnover rate (2010)

		Male			Female			Total		
		Employees*	Employees who left the company	Turn over rate	Employees*	Employees who left the company	Turn over rate	Employees*	Employees who left the company	Turn over rate
Brasília - DF	Up to 30 years old	0	0		0	0		0	0	
	Aged 30 to 50	1	0		2	0		3	0	
	50+ years old	1	0		0	0		1	0	
	Total	2	0		2	0		4	0	
Curitiba - PR	Up to 30 years old	13	1	0.08	8	0		21	1	0.05
	Aged 30 to 50	70	1	0.01	53	1	0.02	123	2	0.02
	50+ years old	20	3	0.15	11	4	0.36	31	7	0.23
	Total	103	5	0.05	72	5	0.07	175	10	0.06
Foz do Iguaçu, Santa Helena and Guaira - PR	Up to 30 years old	258	4	0.02	58	1	0.02	316	5	0.02
	Aged 30 to 50	654	9	0.01	117	4	0.03	771	13	0.02
	50+ years old	181	64	0.35	24	7	0.29	205	71	0.35
	Total	1,093	77	0.07	199	12	0.06	1,292	89	0.07
São Paulo - SP	Up to 30 years old	0	0		0	0		0	0	
	Aged 30 to 50	0	0		1	0		1	0	
	50+ years old	1	0		0	0		1	0	
	Total	1	0		1	0		2	0	
Total by age bracket	Up to 30 years old	271	5	0.02	66	1	0.02	337	6	0.02
	Aged 30 to 50	725	10	0.01	173	5	0.03	898	15	0.02
	50+ years old	203	67	0.33	35	11	0.31	238	78	0.33
	Total	1,199	82	0.07	274	17	0.06	1,473	99	0.07

*Number of employees in December 2010, except those holding an employment agreement in force for a determined timeframe.

Average employment time (in years) of those leaving the company in 2010, by gender



Average hours of training per year per employee by employee category

Category	2010	2009	2008
Board of Directors / Executive Board	1.85	1.90	10.17
Middle management	63.62	100.20	100.95
College degree	45.46	91.90	85.44
No college degree	76.85	63.70	45.19



THE REVIVE PROGRAM ALSO FOSTERS WELLNESS BY MEANS OF HEALTHY HIKES, QUICK MESSAGES AND INDIVIDUAL ASSESSMENTS.

LA6; LA7; LA8; LA9; EU16; EC9; PR1; PG1

TAKING CARE OF HEALTH AND SAFETY

The health and safety topic is a priority for Itaipu. Indicator monitoring and implementing preventative actions to reduce risks are topics discussed by dedicated committees: In-House Committee on Workplace Accident Prevention; Permanent Work Group on Electricity Safety; Binational Committee on Electric Hazards; Emergency Action Plan Committee; Committee on Accessibility Studies, and Hearing Conservation Program.

- Use and availability of personal protective gear;
- Committees staffed by governance and employee representatives;
- Participation of workers' representatives in inspections and accident investigations;
- Training and education.

IMPACT TRACKING AND MONITORING

Employee health and safety impacts are thoroughly tracked and monitored, especially for those working on hazardous activities, according to the Electric Hazard Pay Regulations. Improvement procedures are permanently discussed by the departments, in Collective Bargaining Agreements, and at specific training regarding the Regulatory Standards under Ordinance 3214/78.

NUMBERS

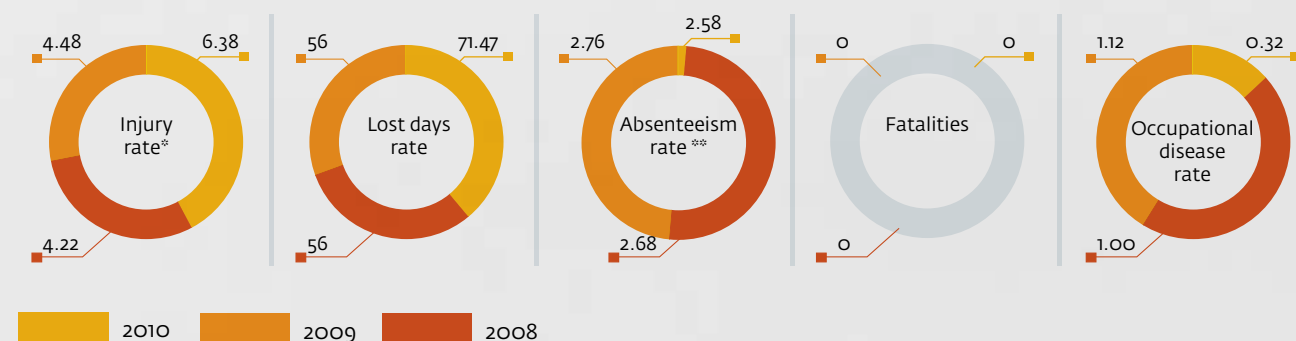
100%

of employees are represented in management committees.

TOPICS INCLUDED IN THE CBA:

- Complaint system;
- Right to refuse unsafe work;
- Regular inspections;

Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region



* Includes minor injuries, representing all lost time accidents.

** The calculation is based on the total hours worked (scheduled) and does not include maternity and paternity leaves and election duty offsetting. Itaipu records its accident statistics in compliance with NBR14280. Lost days are represented as calendar days and counted starting on the day following an accident.

REVIVE: FULL HEALTHCARE

Actions dedicated to raising employees' and their dependents' awareness of how important quality of life is are carried out by the Revive program. The initiatives' priority is prevention and cure, both in terms of physical health and social and emotional aspects. To do that, it offers programs related to physical activities, the Substance Abuse Prevention and Treatment Program (against alcohol, tobacco and other drugs), the Diabetes Affinity Group, and the Cancer Outreach Group. ⊕

NUMBERS

USD 151,000

was how much Itaipu invested in the Revive Program in 2010.

826

workers, including employees, interns, apprentices and third-party service providers took part in workplace exercise groups in 2010.

312

employees, 222 in Foz do Iguaçu and 90 in Curitiba, used the three Revive Gyms.

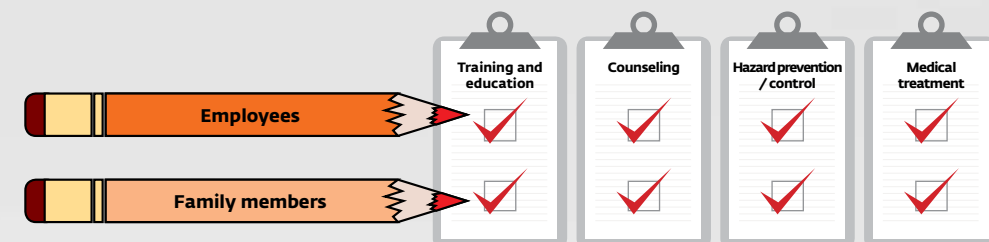
2.36 tons

of gelatin were collected at the Taking Care of Living Campaign and donated to entities looking after cancer patients.

FINANCIAL EDUCATION

In 2010, a total of 1,526 people, including employees, interns and teenage apprentices, took part in activities

Serious illness assistance programs offered



At Itaipu there are no workers involved in occupational activities that carry a high rate or great hazard of specific illnesses. Itaipu does not offer serious illness assistance programs to the community.

WHERE OUR POWER COMES FROM

ITAIPU HELPS RUN FUNDAÇÃO ITAIPU-BR DE PREVIDÊNCIA E ASSISTÊNCIA SOCIAL (FIBRA) BY HAVING ITS EMPLOYEES TAKE PART IN THE MAIN DECISION-MAKING BODIES.

EC3;LA11;EU15

to BRL 10,000 for each initiative in 2010. Itaipu has helped 38 projects be carried out, in a total of BRL 218,000 invested.

REACHING OUT TO HAITI

In 2010, Itaipu launched the Reaching Out to Haiti Committee, whose purpose is to raise funds to help Haitians after the earthquake that devastated the country. With the aid of employees, partners and the community, the campaign raised about BRL 108,000.00, which were forwarded to three reconstruction projects: Clean Block; renovation of the Blessing Hands Orphanage, which serves approximately 50 at-risk kids; and construction of a multi-purpose sports court in the underprivileged area of Bel Air.

GUARANTEED RETIREMENT

Since 1988, employees may join the closed private pension fund run by *Fundação Itaipu-BR de Previdência e Assistência Social* (Fibra). Adherence reaches 99% of employees.

Fibra in numbers

Indicator	2010	2009	2008
People benefited directly	6,608	6,644	6,650
Active participants in the Foundation	1,523	1,502	1,513
Retirees assisted by the pension plan	1,128	1,048	995
Beneficiaries assisted by the pension plan	164	154	140
Amounts in BRL millions			
Continued income benefits	95.2	84.9	74.4
Benefits paid since its establishment*	976	821	740
Social security contributions	27.6	26.3	21.2
Taxes paid to the government	13.8	12.2	11.5
Technical reserve (net assets)	1,960	1,730	1,530
Mathematical reserve (actuarial liabilities)	1,810	1,570	1,400

*Adjusted at the Brazilian Consumer Price Index (INPC).

Some of the benefits offered by Fibra include retirement funds per contribution time, disability, age, and especially pensions, a temporary special benefit for death, and confinement and funeral allowances. The foundation is supported by contributions from Itaipu – 15% over the payroll, plus 2.32% from the funds provided at the time it was set up –, the participants, according to their salary bracket, and those covered, who contribute 10% over the benefits.

To maintain the regular payments of its benefits, Fibra develops a strategic management process that is a benchmark for the industry and ensures the plan's sustainability and continuity over time. As a result of this commitment, ongoing improvements are made to the services provided to participants and their dependents, to its internal processes and to the skills of its personnel.






In 2010, for instance, an organizational restructuring was carried out and made processes clearer. The new duties made operations faster and more flexible. +

GEARING UP FOR RETIREMENT

Employees enjoy support from Itaipu by means of the Thinking about Retirement Program (PRA) as they near the end of their careers. Lectures and debates on topics like health, quality of life, entrepreneurship, and financial and family

planning are PRA actions. Employee participation in the program is voluntary. In 2010, 48 people retiring in the second half of 2010 or the first half of 2011 were provided with that support. +

Percentage of employees eligible to retire in the next 5 and 10 years

Category	Area	2011-2015	2011-2020
	Brasília - DF	0%	0%
	Curitiba - PR	23%	23%
	Foz do Iguaçu, Santa Helena and Guaíra - PR	0%	0%
	São Paulo -SP	0%	0%
	Total	23%	23%
	Brasília - DF	100%	100%
	Curitiba - PR	33%	67%
	Foz do Iguaçu, Santa Helena and Guaíra - PR	28%	66%
	São Paulo -SP	0%	0%
	Total	30%	67%
	Brasília - DF	0%	0%
	Curitiba - PR	20%	52%
	Foz do Iguaçu, Santa Helena and Guaíra - PR	14%	35%
	São Paulo -SP	0%	0%
	Total	15%	38%
	Brasília - DF	0%	0%
	Curitiba - PR	27%	51%
	Foz do Iguaçu, Santa Helena and Guaíra - PR	25%	47%
	São Paulo -SP	100%	100%
	Total	25%	47%
	Brasília - DF	25%	25%
	Curitiba - PR	24%	52%
	Foz do Iguaçu, Santa Helena and Guaíra - PR	21%	44%
	São Paulo -SP	100%	100%
	Total	22%	45%

OUR RELATIONSHIP WITH OUR SURROUNDINGS

THE ITAIPU TECHNOLOGICAL PARK (PTI) WORKS ON THE FIELDS OF EDUCATION, SCIENCE AND TECHNOLOGY, ENTREPRENEURSHIP, CORPORATE EDUCATION, RESEARCH AND DEVELOPMENT, AND KNOWLEDGE MANAGEMENT.

EC8

ACTIONS BENEFIT RESIDENTS IN THE THREE-NATION AREA

Since it was built, Itaipu has fostered social and economic development in western Paraná and along the three-nation border: Brazil, Argentina and Paraguay. To that end, the company invests in infrastructure and social-environmental programs that benefit the community.

Itaipu does not do that by itself, though. It is through partnerships with governmental agencies, companies and non-governmental organizations that projects come true.

One of the main actions driving the local economy is tourism development. Since 2007, with the adoption of the Integrated Tourism Management, which brings together the City Tourism Department and the City Tourism Council – comprising 26 entities, including Itaipu –, Foz do Iguaçu has been standing out in the national scene.

The city is the second Brazilian destination most visited by foreign tourists and ranks among the five cities that host the most national and international events. To its favor there play the quality of hotels, the various leisure options in the three-nation area, and the significant increase in flights – from seven daily options in 2007 to 25 in 2010.

In such backdrop, Itaipu does not participate merely as a tourist spot but helps coordinate all the marketing actions of Destination Iguaçu, a campaign that advertises the local attractions. In 2010, there were approximately 100 local, national and international fairs.

NUMBERS

USD 1.8 million

was the amount invested by Itaipu in tourism in 2010.

347,935

tourists visited the Itaipu Tourist Complex in 2010, corresponding to 17.8% more than in the previous year.

ITAIPU TOURIST ATTRACTIONS

Itaipu's grandeur is impressive and can be seen on the panoramic or special tours, in addition to the nighttime lighting of the dam. However, the Itaipu Tourist Complex offers much more. There are also the Casemiro Montenegro Filho Astronomy Center, the Bela Vista Biological Sanctuary, and the Eco-museum, which was renovated in 2010 and tells the history of the power plant. [+](#)

TOURISM POLICY

To guide Itaipu's tourism-related actions and strengthen its relationship with the local tourist trade and the integrated management of tourism in Brazil, Paraguay and Argentina, the company has set forth a policy containing 16 guidelines. Each one includes a host of suggested and recommended measures to comply with the document. [+](#)

EDUCATION: A PATH TO INTEGRATION

Itaipu bets on education as a driver of growth and integration in Latin America. To that end, the company supports projects that foster teaching, research and technology, such as the Federal University of Latin American Integration (Unila) and the Itaipu Technological Park (PTI).

Aimed at attracting 10,000 students and 500 instructors from Latin American countries in five years, Unila will be a converging point for knowledge and discussion about the problems shared by the area. Its activities started in the second half of 2010.

While the Unila campus is not completed, students attend classes at the PTI. Last year, 207 students enrolled in six undergraduate programs in the fields of biology, economics, politics and sociology, renewable energies, civil engineering, and foreign affairs. The opening class was given by then-president of Brazil, Luiz Inácio Lula da Silva.

The PTI is another center churning out knowledge. Created in 2003, it coordinates actions dedicated to the fields of education, science and technology, and entrepreneurship. In collaboration with the Itaipu Corporate University (UCI), it operates on three pillars: corporate education, research and development, and knowledge management. [+](#)

NUMBERS

USD 2.8 million

was the amount invested by Itaipu in Unila in 2010.

NIEMEYER PROJECT

Nestled on the border between Brazil, Paraguay and Argentina, the Unila campus is going to cover an area of 38 hectares. The project is signed by architect Oscar Niemeyer and the place will likely become another tourist attraction in the area, thus helping advance the social and economic development of Vila C, a neighborhood adjacent to Itaipu and which is also going to include a housing complex for the university's students.

PTI, A CRADLE OF EDUCATION

Four schools carry out activities at the PTI: the State University of Western Paraná (Unioeste), the Open University of Brazil (UAB), the Technical School of Brazil (E-Tec), and the Federal University of Latin American Integration (Unila). In 2010, the schools set up at the PTI offered 25 undergraduate and graduate programs, totaling 1,250 seats. Overall, 197 graduates: 62 from Unioeste and 135 from UAB. [+](#)

SUPPORTING ENTREPRENEURSHIP

The PTI also encourages entrepreneurship by way of supporting Junior Companies, the Pre-Incubator, the Business Incubator and the Business Condominium, which in 2010 housed 28 companies. Not to mention meeting, through cooperation agreements, Itaipu's main Research, Development and Innovation (R&D+I) needs.

NUMBERS

USD 6.1 million

was the amount invested by Itaipu in the Itaipu Technological Park in 2010.



BETWEEN 2003 AND 2010, THE YOUNG GARDENER PROJECT TRAINED 216 YOUNGSTERS, AND 10% OF THEM WENT ON TO A TECHNICAL OR HIGHER ENVIRONMENTAL EDUCATION PROGRAM.

EC8;S01

HEALTH INVESTMENTS

Health has been one of the pillars of Itaipu's investments since the company was created. Itaipu works on two main focal points: quality medical-hospital care and strengthening public policies that ensure equal treatment for the entire population.

Through the Health on the Border program, Itaipu helps public and third-sector health institutions carry out projects aimed at developing preventative actions and health recovery, besides improving people's quality of life by benefitting the public healthcare system users and the population at large.

Through agreements, the company invests resources in Hospital Ministro Costa Cavalcanti (HMCC), created by Itaipu in 1979 and run by Fundação de Saúde Itaipu since 1994. A reference in high complexity fields like oncology and cardiology, the hospital serves the population from nine cities, approximately 430,000 people, and treats about 12,000 outpatients a month, most of them via the public healthcare system (SUS).

In 2010, with support from Itaipu, the HMCC built a clinical center, purchased equipment, and made improvements to its emergency services.

NUMBERS

USD 6.1 million

was how much Itaipu invested in the HMCC in 2010.

HEALTHIER DIET

The HMCC started including organic products in the meals served to its patients, employees and visitors in 2010. The foods, richer in nutrients and chemical pesticide-free, are provided by *Cooperativa Agroecológica*

e da Indústria Familiar (Coperfam), which brings together 230 farmer families residing in Marechal Cândido Rondon, a city in the Paraná Watershed 3. The first to benefit from healthier meals were the oncology department patients.

NUMBERS

7,504

people were admitted to the HMCC in 2010 via the public healthcare system, and 1,850 surgeries were performed.

HEALTH WG

The three-nation area faces common problems that require ongoing efforts from health authorities and the adoption of measures that go beyond territorial boundaries. In 2010, the Itaipu/Health Work Group, staffed by members from Brazil, Paraguay and Argentina, mobilized 1,122 representatives and technicians from institutions from the three countries to outline joint actions on prevention, awareness-raising, and training in endemic diseases, accidents and violence. The fields addressed included maternal, child, elderly, native persons', workers', and mental health. [+](#)

OPPORTUNITIES FOR YOUNG PEOPLE

Ensuring the respect for children's and teenagers' rights, encouraging personal and professional growth, and valuing the potential of education are some of the points on which the programs developed by Itaipu among youngsters focus. The company opens its doors to offer training and work opportunities by means of the Work Initiation and Incentive Program (PIIT) and the Internship Program.

At the PIIT, people aged between 16 and 18 years may choose to attend one of three programs. As underage or teenage apprentices, students perform administrative activities before or after school and get an allowance, transportation tokens, meal tickets, and medical and dental assistance.

Teenagers taking part in the Young Gardener program are trained in gardening and landscaping. They also perform activities related to participatory citizenship, social entrepreneurship and environmental education so they can be better prepared for the labor market.

Additionally, Itaipu also helps youngsters improve their career education.

In 2010, through the Internship Program, 334 students completed their one year-long school-mandated internship. Another 58 interned on their vacation for 20 days.

NUMBERS

USD 1.4 million

was how much Itaipu invested in the PIIT in 2010.

305

youngsters attended the PIIT in 2010.

PLUGGED IN – CHANNELS TUNED INTO CULTURE

The Plugged in project is the product of a partnership between Itaipu Binacional and Grupo Teatral Foz (a theater group). The initiative holds activities to train and educate teachers and operators of children's and teenagers' rights in art education.

In 2010, 1,265 people were benefited every month, including students and teachers from ten public schools in Foz do Iguaçu. [+](#)

PROTECTING CHILDREN AND TEENAGERS

Since 2003, Itaipu has been helping cater to at-risk children and teenagers on the border. Through the Child and Teenager Full Protection Program (PPCA), the company sets up agreements and transfers funds for the development of projects, such as the Lake Boys – a partnership with the Brazilian Canoeing Association, which benefits 80 at-risk teenagers.

The initiative is meant to train athletes for the 2016 Olympic Games. [+](#)

COMMITMENT TO FIGHTING VIOLENCE

In 2010, Itaipu signed the "Statement of Corporate Commitment to Fighting Sexual Violence against Children and Teenagers", an initiative carried out by the Brazilian National Department for Human Rights. The challenge taken on along with another 20 companies is to protect children and educate employees to avoid and prevent all sorts of negligence, discrimination, exploitation, violence and oppression against children and teenagers.

OUR RELATIONSHIP WITH OUR SURROUNDINGS

NATIVE FAMILIES HAVE BEEN RECLAIMING THEIR DIGNITY AND CULTURAL INDEPENDENCE AS A RESULT OF THE SUPPORT THEY GET TO MEET THEIR BASIC NEEDS (HEALTH, FOOD, HOUSING) AND THAT IS WHY THEY ARE ABLE TO TAKE BACK AND DISSEMINATE THE WAY THEY LIVE, WHICH ITAIPU MAKES A POINT OF FOSTERING.

HR9; SO1; SO5; PG1; PG2; PG3; PG4; PG5; PG6; PG7; PG8; PG9; PG10

OUTREACH POWER

In the neighborhood adjacent to Itaipu, Vila C, the Outreach Power program fosters the community's economic and social development. In 2010, the local Community Council was given USD 269,000 to invest in infrastructure and technical training, besides offering dance lessons and career training programs in the fields of personal care, baking, arts and crafts, and IT. Approximately 550 local residents were benefited every month. [+](#)

ENCOURAGING SPORTS

In 2010, Itaipu hosted the 4th Pan American Rafting Championship. The competitions took place on the Itaipu Channel, renowned as one of the best places in the world to go rafting and slalom canoeing. The company also sponsors the professional women's soccer team that represents Foz do Iguaçu in competitions, a.k.a. Foz Cataratas. The girls use the Itaipu Technological Park field for their technical and tactical drills and the Corporate Security gym for physical fitness.

NATIVE COMMUNITY SUSTAINABILITY

The permanent work carried out by Itaipu in the Tekohá Ocoy, Añetete and Itamarã villages of the Guarani ethnicity has made sure the native people's rights are not violated by the company. The program serves 260 families in the fields of food safety, farming and ranching, and culture appreciation. The partnership between Itaipu and the native communities ensured a zero child mortality rate. With support from the company, equipment was purchased to assist in cassava and corn growing, and technicians provided advice on cow's milk production, livestock raising, and beekeeping. [+](#)

NUMBERS

107,072 kg

of cassava and 87,866 kg of corn were turned out by the villages.

7,886 kg

of fish were farmed in netted tanks by the native communities with support from Itaipu.

26

houses were built according to the model picked by the community.

2,300

pieces of traditional arts and crafts were sold in 2010.

INCENTIVE TO PUBLIC POLICIES

Itaipu's relationship with the Brazilian government results in great contributions to the social, economic and environmental development of the area where it is located. Several initiatives and projects carried out by the company help advance public policies and generate higher quality of life for the local population. [+](#)



TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

CAB IS A PERMANENT PARTICIPATION MOVEMENT IN WHICH ITAIPU WORKS ALONGSIDE THE SOCIETY TO CHANGE THE LATTER'S VALUES: THE WAY PEOPLE ARE, FEEL, LIVE, PRODUCE AND CONSUME, BASED ON THE ETHICS OF PROTECTING NATURAL RESOURCES AND LIVING BEINGS IN GENERAL.

EN26; EN28; EN30; PG7; PG8; PG9

AN ENVIRONMENTAL MANAGEMENT PIONEER

When Itaipu's project got off the ground in the 1970s, environmental laws were much different than the ones we have today; nevertheless, several were the studies conducted and many were the precautions taken to implement the world's largest power plant. Over the years, concern for natural resources increased and in 2003 the topic was added to the company's mission.

Protecting the water, the raw material for Itaipu's business, is a priority. That is why the company created the Cultivating Good Water program (CAB), which sets forth criteria and conditions to guide social-environmental actions related to the conservation of natural resources by local populations, which actions focus on the quality and quantity of water and on people's lives.

Nationally and internationally renowned, CAB includes about 20 programs and 66 social-environmental actions carried out in Itaipu's area of influence, the Paraná Watershed 3 (BP3). The area encompasses 29 cities and covers approximately 8,000 km² where more than 1 million people live.

To make it possible to implement the actions and ensure the initiatives are effective, Itaipu employs the Watershed-Based Management concept. The work is carried out in BP3 cities by means of 29 management committees created in 2003 and legally institutionalized in 2009. The committees are staffed by representatives from various sections of society and are in charge of planning and managing the BP3 water resources.

MODEL APPLIED

Itaipu's environmental management model is based on four principles: Environmental Management, Watershed-Based Management, Territorial Information Management and Participatory Management through the establishment of internal and external management committees (city and theme-based).

RESOURCES INVESTED

In 2010, USD 25.9 million were invested in environmental protection. The investments made and compliance with environmental laws made sure no fines or non-monetary sanctions were issued against Itaipu.

Total environmental protection expenditures and investments by type (USD)

Type of disbursement	\$ 2010		\$ 2009		\$ 2008	
	Operations (internal expenditures)	Investments in third-party projects	Operations (internal expenditures)	Investments in third-party projects	Operations (internal expenditures)	Investments in third-party projects
Waste collection, treatment and disposal	221,050.26	1,165,663.94	198,731.13	-	181,168.68	-
Rehabilitation of degraded areas and protection of areas	-	4,409,603.45	-	1,416,848.85	203,977.57	1,447,275.70
Biodiversity conservation	368,483.39	154,427.50	297,570.10	197,896.08	320,622.83	192,668.54
Environmental management (company personnel, environmental department costs)	18,654,311.33	N/A	16,138,962.45	N/A	18,514,245.06	N/A
Research and development	-	499,949.17	3,705.56	257,392.10	-	173,431.77
Reservoir silt monitoring	14,491.91	-	12,857.33	-	9,644.02	-
Underground water diagnosis	92,209.02	-	-	-	-	-
Reservoir water quality monitoring	254,988.51	55,425.26	209,315.50	-	259,468.76	-
Others	18,052.03	-	63,011.30	2,674.47	45,945.51	19,476.40
Total	19,623,586.45	6,285,069.32	16,924,153.37	1,874,811.50	19,535,072.43	1,818,744.37



CAB AS A ROLE MODEL

The Yacyretá hydro power plant built in collaboration by Argentina and Paraguay drew inspiration from the Cultivating Good Water program to develop its Cultivando Y Porã. The program employs methods, principles and actions like the ones developed by CAB. Itaipu and Yacyretá had already been cooperating in a few environmental initiatives such as monitoring migratory fish in the Paraná River. [+](#)

NUMBERS

4,000

people from various sections of society attended the “7th Cultivating Good Water +8 – We are the change we want for the planet” meeting in 2010.

CHANGE-ORIENTED ENVIRONMENTAL EDUCATION

The foundation on which the Cultivating Good Water program is developed lies in environmental education. The actions are meant to educate, raise awareness and change the community’s behavior toward sustainable practices. In that regard, Itaipu offers the Environmental Educator Training program (FEA) in the Paraná Watershed 3 (BP3), which teaches social players to reflect, build a participatory diagnosis of the area, and design actions to mitigate problems. In 2010, 4,190 people attended FEA through the Learning Communities. [+](#)

FROM INSIDE OUT

Itaipu’s environmental education actions involve employees from the company’s various departments. Through the Corporate Environmental Education network, volunteer employees help coordinate, share information and educate others on waste sorting. Additionally, they encourage employees to take part in social-environmental events and hold lectures

and technical visits to the Cultivating Good Water programs.

NUMBERS

USD 1.9 million

was the amount invested in environmental education in the area of influence.

MULTIPLE USES OF WATER

Water is the most important natural resource to and for Itaipu. The power plant reservoir holds a total of 29 billion cubic meters of water. However, all of the company’s efforts to ensure the quality of this natural resource go beyond the need to get its turbines turning.

The Itaipu reservoir water is used to supply the local population, for navigation, irrigation and animal thirst-quenching, for leisure on the manmade beaches, and as a source of income through fish farming and tourism. The multiple uses are possible because Itaipu invests in the conservation and monitoring of the area and ecosystem that surround it.

In collaboration with the Paraná Environmental Institute (IAP), the company keeps 45 water sampling stations between the reservoir, the Water Parks and the Paraná River Watershed (BP3). To make monitoring more effective, Itaipu carries out the Participatory Monitoring project to train community agents that help control the quality of rivers in local micro watersheds. By the end of last year, 496 had been trained.

Monitoring conducted in the BP3 has made it possible to identify 180 fish species in the reservoir and its main tributaries. Of those, 113 had been identified before the reservoir was filled and all can still be found in the area.

NON-CONSUMPTIVE USE OF WATER

Most of the water used by Itaipu is used for non-consumptive applications, that is, it does not undergo any significant changes as to its quantity or quality. The water used to turn the turbines which was spilled – release by the spillway – and used for cooling totaled 410,987,570,458 m³. In turn, the total water actually

consumed by Itaipu reached 526,930 m³.

NUMBERS

473

campaigns monitoring the quality of water in BP3 micro watershed rivers involved 496 volunteers in 2010.

Total water withdrawal by source (m³)

Source	Type of source	Company that harvested it	Used in	2010	2009	2008
Paraná River/Itaipu Reservoir	Surface	Itaipu Binacional non-consumptive use	Turbines	302,097,254,400	320,325,580,800	324,350,388,000
			Spilled	108,524,448,000	60,787,756,800	12,299,040,000
			Cooling	365,868,058	365,868,058	413,121,600
		Itaipu Binacional consumptive use	WTS 2 (CHI-ME)	114,846	109,199	104,905
			Technical WTSs	223,034	260,412	263,245
			Raw Water (Portinho)	146,000	146,000	146,000
Paraná River/Itaipu Reservoir	Surface	Sanepar	Foz do Iguaçu-PR	38,342	55,504	126,058
Serra Geral Aquifer	Underground		Santa Helena-PR	125	-	-
	Underground		Guaíra-PR	0	-	324
Cayguava, Piraquara and Iraí Rivers	Surface		Curitiba-PR	4,413	4,726	4,729
-	-	Sabesp	São Paulo-SP	63	-	62
Torto and Santa Maria reservoirs	Surface	Caesb	Brasília-DF	107	151	161
Total °				410,988,097,388	381,479,781,650	337,063,195,084

*The total water includes the consumption at the Itaipu Technological Park (FPTI)/Unila, which is supplied by Itaipu.

TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

ITAIPU'S PRIMARY ENERGY CONSUMPTION INCLUDES THE USE OF FUELS.

A SIGNIFICANT INCREASE IN THE USE OF ETHANOL INSTEAD OF NON-RENEWABLE FUELS CAN BE SEEN.

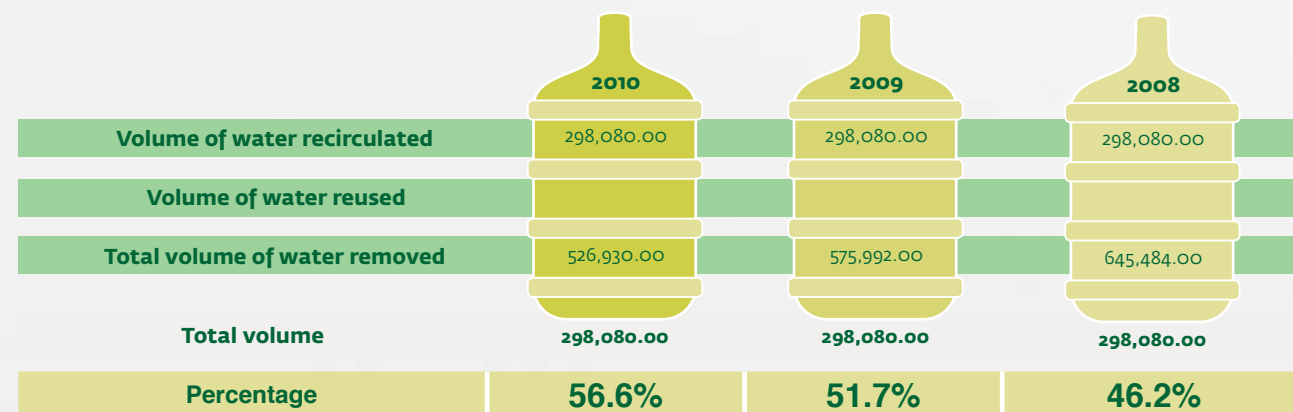
EN3; EN4; EN5; EN7; EN10; EN21; PG8; PG9

WATER RECIRCULATION

Some of the water consumed by Itaipu is recirculated in the animal enclosures at the Roberto Ribas Lange Zoo. It is estimated that in 2010 298,000 cubic meters of water were recirculated, representing 56.6% of the

total consumed by the company. For 2011, there are plans to install water meters so the actual volume of recirculated water can be calculated.

Percentage and total volume of water recycled and reused (m³)



The data are estimated.

WATER DISCHARGE

The volume of used water discharged directly by Itaipu is estimated based on water consumption. Of the total, 79% of the water is treated before it is finally discarded. The remaining portion (21%) is discharged on the soil and in the Paraná River

without compromising water quality, as stated by the monitoring the company performs at several points. Itaipu is currently implementing a waste water treatment system for the power plant offices, including waste water settling and treatment stations.

Total water discharge by destination and treatment method (m³)



The data are estimated.

ENERGY CONSUMPTION

Nearly all the energy used by Itaipu is generated by the company itself. Only the portion used at the offices located outside the power plant facilities needs to be purchased.

In 2010, 106,807 MWh were consumed, of which 103,779 MWh were generated by Itaipu itself. Another 3,024.7 MWh were purchased from local utilities to supply the offices in Brasília, Curitiba, Foz do Iguaçu, Santa Helena and São Paulo.

Regarding the electricity used by the power plant, it is not possible to see a trend given that such power is used in maintenance processes that vary from one year to the next, rendering comparisons not viable.

To decrease the amount of power used in its indoor facilities, the company has an Internal Energy Conservation Committee (Cice) in place. Staffed by representatives from several departments, Cice is responsible for proposing actions that streamline the use of electricity inside Itaipu.

In 2010, 1,627.608 MWh of electricity were saved by

replacing old bulbs with more efficient ones in street lighting and improving the efficiency of lighting, ventilation and air conditioning systems at the plant's powerhouse.

SAVING THROUGH VIDEOCONFERENCES

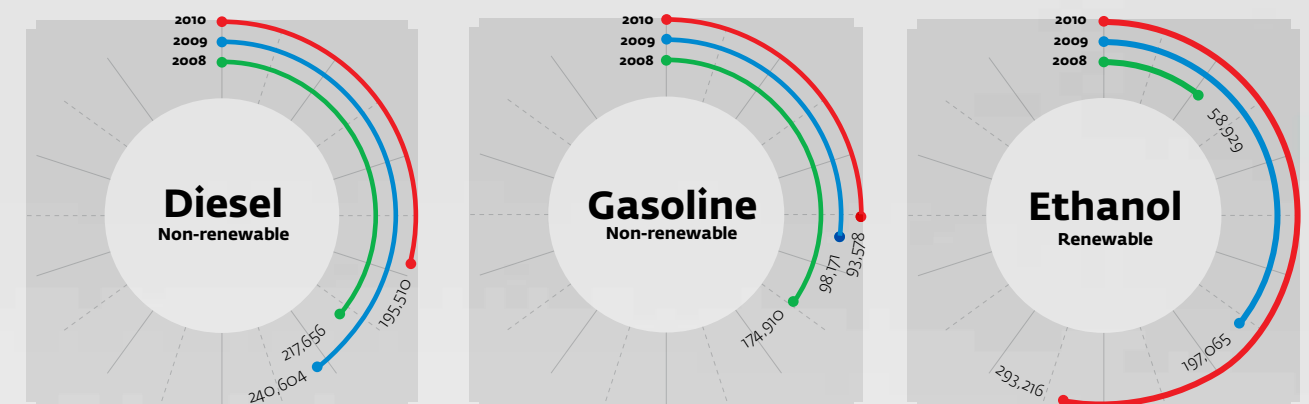
Itaipu makes use of videoconferences to hold meetings between its offices in Curitiba, Foz do Iguaçu, Brasília and Asunción.

The initiative helps decrease air travel. However, it is not possible to accurately determine the amount of energy saved by such procedure because the company does not yet have a control system detailing the trips avoided by holding virtual meetings.

Electricity generated and consumed by Itaipu (MWh)

Hydro power	2010	2009	2008
	103,779	103,554	104,404

Direct energy consumption broken down by primary energy source (l)



TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

THE RURAL GAS PIPELINE MAKES BIOGAS ECONOMICALLY VIABLE, REGARDLESS OF THE PRODUCTION SCALE, AND ENABLES ITS USE IN THE GENERATION OF THERMAL, ELECTRIC OR VEHICULAR ENERGY.





EN4;EC2;PG7;PG8

WATER-BASED ELECTRICITY

Because the Brazilian distribution system is interconnected, we are unable to accurately determine the origin of the indirect electricity Itaipu uses in its operations. Nevertheless, based on the electricity





generated in Brazil, it is possible to estimate that out of the 3,024,779 kWh of power used by the company, 2,695,078 kWh originated from renewable sources and 329,701 kWh from non-renewable sources.

Indirect energy consumption broken down by primary source (kWh)

Renewable source				Non-renewable source			
	2010	2009	2008		2010	2009	2008
 Water-based	2,686,004	3,149,753	2,126,678	 Thermal	238,958	125,044	195,079
 Wind	9,074	6,759	2,879	 Nuclear	90,743	98,007	74,864
Total renewable	2,695,078	3,156,512	2,129,557	Total non-renewable	329,701	223,051	269,944

Renewable and non-renewable sources	2010 (kWh)	2009 (kWh)	2008 (kWh)
Total	3,024,779	3,379,563	2,399,501

Electricity generated in Brazil (%)

	2010	2009	2008
 Water-based	88.80	93.20	88.63
 Thermal	7.90	3.70	8.13
 Nuclear	3.00	2.90	3.12
 Wind	0.30	0.20	0.12

Source: National System Operator.

RENEWABLE ENERGIES

In 2010, Itaipu approved the Industry Renewable Energy Policy and consolidated its initiative to encourage the use of renewable energy sources to foster sustained, decentralized development. The company's work follows the recommendations of the UN Intergovernmental Panel on Climate Change (IPCC) and is set up on three pillars: research and innovation; development; training and content dissemination; and participation in public policies.

From the innovation standpoint, a prominent initiative in 2010 was the implementation of Condomínio Ajuricaba in Marechal Cândido Rondon. The complex, set up as a cooperative condominium, connected 38 small farms via a gas pipeline that conveys biogas obtained from treated animal waste. Biogas generates electricity and the waste is used as a bio-fertilizer.

The technology has made small farms economically viable by generating energy from biogas. Besides making their farms more energy efficient, thus decreasing costs with energy purchases, the participants are able to sell the surplus power they generate and also obtain carbon credits (CDM).

Another benefit is increased crop and livestock productivity through the use of bio-fertilizers. The initiative boosts the rural economy, which has in bioelectricity a sustainable development vector.

CONDOMÍNIO AJURICABA

The Condomínio Ajuricaba project includes the installation of 38 biodigestors. The biogas they generate is transported through a 25.5 km long gas pipeline up to a micro thermal power plant, and can also be used to dry grains. The production is expected to guarantee farmers get extra income in

the approximate amount of BRL 270,000 a year from thermal, electric and vehicular energy, besides bio-fertilizers.

COLOMBARI EXPANDING

Granja Colombari, the first to make biogas in biodigestors with support from Itaipu, practically doubled its production in 2010. Starting at 3,000 pigs, the farm ended the year with nearly 5,000 animals, which is going to increase the amount of energy it generates. To do that, the farm got a BRL 150,000 loan from Financiadora de Estudos e Projetos (FINEP) to install another biodigestor and trade its 30 kVA generator in for a 100 kVA one.

After the improvements, its energy output is expected to reach between 32,000 and 35,000 kilowatts-hour/month. The farm uses approximately 7,000 to 7,500 kWh/month, and will sell the surplus to Copel.

NUMBERS

BRL 2,500

is Granja Colombari's approximate monthly income from the sale of surplus energy generated from biogas.

BRL 1,000

is the approximate amount saved by using bio-fertilizers obtained from the biogas generation process.

TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

DEVELOPING THE HYBRID ELECTRIC BUS IS AN INITIATIVE MEANT TO SUPPLY ITAIPU
WITH ENVIRONMENTALLY CORRECT MODES OF TRANSPORTATION.

EC2:PG7

SOCIAL TECHNOLOGIES

The Itaipu Renewable Energy Platform is Itaipu's and its partners' center to develop projects dedicated to social technologies. Set up at the Itaipu Technological Park, it operates under a matrix system along with institutions like the Itaipu Technological Park Foundation (FPTI), the Applied Technology and Innovation Institute (Itai), Copel, Sanepar, Cooperativa Lar, Ocepar, the Hydroinformatics Center and the Renewable Energy Observatory which together have implemented, on various scales, the biogas-based electricity generation demonstration units. [+](#)

NUMBERS

USD 1.8 million

was the amount invested in the Itaipu Renewable Energy Platform in 2010.

417,642 kWh

were generated by the five Biogas-Based Electricity Generation Demonstration Units in western Paraná in 2010.

ITAIPU AT COP16

At the 16th Climate Change Conference in Cancun, Mexico, Itaipu presented the "biogas savings" concept and this renewable source's potential to generate electric, thermal and automotive energy.

Using biogas makes it possible to decrease greenhouse gas emissions, one of the goals set by the Kyoto Protocol, discussed at COP16. The initiative is in line with the Federal Government's Low Carbon Emission Policy.

EDUCATION FOR SUSTAINABILITY

Itaipu believes that it is solely through education that the new renewable energy culture will make headway.

In that regard, the company is currently developing a Biogas Energy Training Center; in 2010, Itaipu made available the Renewable Energy Engineering undergraduate program at Unila, besides an online program called an Update on Biogas: ead.pti.org.br/wra/.

ELECTRIC VEHICLE

Since 2006, Itaipu has been working in collaboration with Swiss company KWO (Kraftwerke Oberhasli) and Italian automaker FIAT to develop the Electric Vehicle Project (EV). In 2010, the agreement was extended for another five years and Itaipu also created the Sustainable Electric Mobility Office, both as a result of advancements in the development of electric mobility technologies such as high capacity batteries and the hybrid bus. [+](#)

SODIUM BATTERIES

The batteries used in electric vehicles made by Itaipu, called Zebra, are sodium, nickel and chlorine based. Fully recyclable, one third lighter than conventional lead-acid batteries, and using raw materials abundant on the planet, they allow vehicles to run about 100 kilometers on a full load.

Mastering this technology will turn making the EV more viable, besides enabling a host of applications in the Electricity Industry.

NUMBERS

BRL 32 million

is the amount provided by *Financiadora de Estudos e Projetos* (FINEP), connected to the Ministry of Science and Technology, for the production of the technology applied to the EV battery.

HYBRID ELECTRIC BUS

In only four months, Itaipu and its partner companies developed the world's first hybrid electric bus, whose combustion engine is powered by ethanol. In that short time, the experts completed the stages of bus design, development, fabrication and validation. The prototype combines the high efficiency of an electric engine and ethanol's environmental benefits while decreasing greenhouse gases and optimally branching out the use of clean, renewable energy. The idea is to use the vehicle at the 2014 World Cup and the 2016 Olympic Games.

USE OF HYDROGEN

A partnership between Itaipu, Eletrobrás and the Itaipu Technological Park (PTI) promises to expedite the studies on the use of hydrogen. Their efforts are currently being formalized so that in the future they may be able to set up a hydrogen production prototype and create a study center. The water spilled by hydro power plants can be turned into hydrogen, which makes the new source quite an interesting one for a country whose grid is 88% water-based.

TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

THE COME-AND-GO PROJECT RELIES ON THE WORK OF VOLUNTEERS WHO OPERATE AS ENVIRONMENTAL EDUCATORS IN THEIR DEPARTMENTS TO DRIVE ATTITUDE CHANGE.

EN1;EN2;EN22;PG8;PG9

WASTE MANAGEMENT

Itaipu seeks to sustainably and efficiently manage the solid waste it generates. Besides properly disposing of the materials, the company seeks to raise its employees' awareness of sorting out trash and handing it over separately by type of waste. That way, it ensures environmentally correct disposal.

In that regard, since 1998 the Come-and-Go program seeks to foster trash sorting and increase the amount of recyclable materials separated by the company. The materials are donated to the Cooperative of

Foz do Iguaçu Environmental Agents and to Cooperativa Catamari, from Curitiba.

Additionally, since 2001 Itaipu has been regenerating the lubricating and insulating oils used in equipment. Instead of simply discarding them, which generates more waste, the company recovers their physical and chemical properties by means of filtering and additive blending processes. In 2010, 14,500 liters of oil were regenerated.

Waste disposal (t)

Hazardous waste	2010	2009	2008	Disposal
Fluorescent bulbs	7.86	7.92	6.15	Decontamination
Various industrial resins	12.86	11.84	NA	Incineration
Chlorine cylinders	*	NA	NA	Decontamination
Used lubricating oil	12.77	90.85	NA	Decontamination
Used lubricating oil	NA	NA	29.89	Sale
Used naphthenic-type insulating mineral oil	79.20	110.50	99.44	Sale
Various ferrous material scrap	240.21	16.58	408.72	Sale
Radium batteries	NA	NA	0.12	Sale
Hospital waste	1.59	1.29	0.85	Incineration
Total hazardous waste	354.49	222.40	136.45	
Non-hazardous waste	2010	2009	2008	Disposal
Recyclables (paper, cardboard, plastic)	103.33	105.78	84.15	Donation
Discarded dry paper filters	9.30	4.35	NA	Donation
Aluminum	0.49	9.86	14.69	Sale
Copper	NA	6.72	12.00	Sale
Organic waste	326.72	258.17	234.37	Landfill
Empty printer cartridges	NA	0.07	NA	Donation
Total non-hazardous waste	439.84	384.95	345.21	

*Chlorine cylinders were reported by the unit, totaling 90. NA – Not Available

GREATER CONTROL OVER THE USE OF MATERIALS

Itaipu has been seeking to improve its controls over the use of materials. Until 2009, the information presented referred to total numbers. In 2010, refined control methods made it possible to present the

amount of materials most used in the course of the year and which carry greater environmental impact, as shown in the table below.

Materials used by weight or volume

Materials used/purchased	2010
Chemical materials	142,011 kg
Lubricating oils	29,649 l
Resins	1,700 l
Solvents / varnish	9,294 l
Batteries	231 un.
Tires	2,978 un.
Light bulbs	21,405 un.
Sulfite paper - pack	28,264 un.
Disposable cups	6,341,250 un.
Water bought in 20 l bottles	21,520 un.
Cartridges and toner	5,274 un.

TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

EVERY ITAIPU ACTIVITY IS THOROUGHLY PLANNED TO PREVENT ANY IMPACTS ON BIODIVERSITY.

EC9; EN2; EN12; EN13; EN14; EU13; PG8; PG9

OUTREACH TRASH SORTING

The Outreach Trash Sorting initiative started in the Paraná Watershed 3 (BP3) and has been expanding its range of action across the nation. The initiative offers supports to recyclable material urban foragers and is meant to formally include the workers in city public management of solid waste. The actions carried out seek to strengthen urban foragers' organization (political and administrative independence); infrastructure and fund raising; partnership fostering; social work and recyclable material sale support. ⁺

ELECTRIC CART

In collaboration with company Blest Engenharia and the National Movement of Recyclable Material Urban Foragers (MNCMR), Itaipu has developed an electric cart to be used by the foragers. The social technology allows workers to haul up to 300 kilos of materials, while feeling they are handling a mere 10 kilos of cargo. The initiative has helped improve the quality of life and increase the income of those assisted. By the end of 2010, 100 electric vehicles were provided to foragers in several Brazilian cities.

COMMITMENT TO BIODIVERSITY CONSERVATION

Since the power plant was created, significant investments have been made in biodiversity conservation. An example of that is the Biodiversity, Our Heritage program, an initiative that carries out conservation actions and environmental monitoring projects, in addition to biodiversity research.

The 1984 creation of areas protected by the Bela Vista Biological Sanctuary (RBV), covering 1,908 hectares, and the Santa Helena Biological Sanctuary (RSH), covering 1,483 hectares, was meant to bring together the greatest diversity possible in terms of local animals and plants, and thus make it possible to study the species threatened.

The RBV also stands out as one of the attractions at the Itaipu Tourist Complex and as a venue dedicated to environmental education. It includes the Roberto Ribas Lange Zoo, which houses 210 specimens of 55 species. The enclosures are designed to ensure the animals are comfortable, which animals are allocated to management and conservation projects whenever possible.

The Bela Vista also features Itaipu Binacional's Wild Animal Nursery (Casib). There are over 180 animals of 31 different species of mammals, birds and reptiles, including native species. Since it was created, more than 863 animals of 43 species have been born there, most prominently threatened ones like harpy eagles, ocelots, margays, tiger cats, pygmy brockets and marsh deer.

BIODIVERSITY CORRIDOR

If the commitment to maximum environmental conservation had been great even before its construction started, since the power plant was

completed all activities connected to its operations have been carefully planned and organized so as to prevent any impacts on biodiversity. The local biome had been seriously compromised by lumber companies and farmland encroachments by the time the power plant was implemented. Its concern about environmental issues led Itaipu to purchase and rehabilitate its Permanent Conservation Area (APP), a.k.a. the Protection Strip, even before having one became mandated by law.

NUMBERS

1,007 km²
is the size of Itaipu's Protection Strip.

INTEGRATION AMONG AREAS

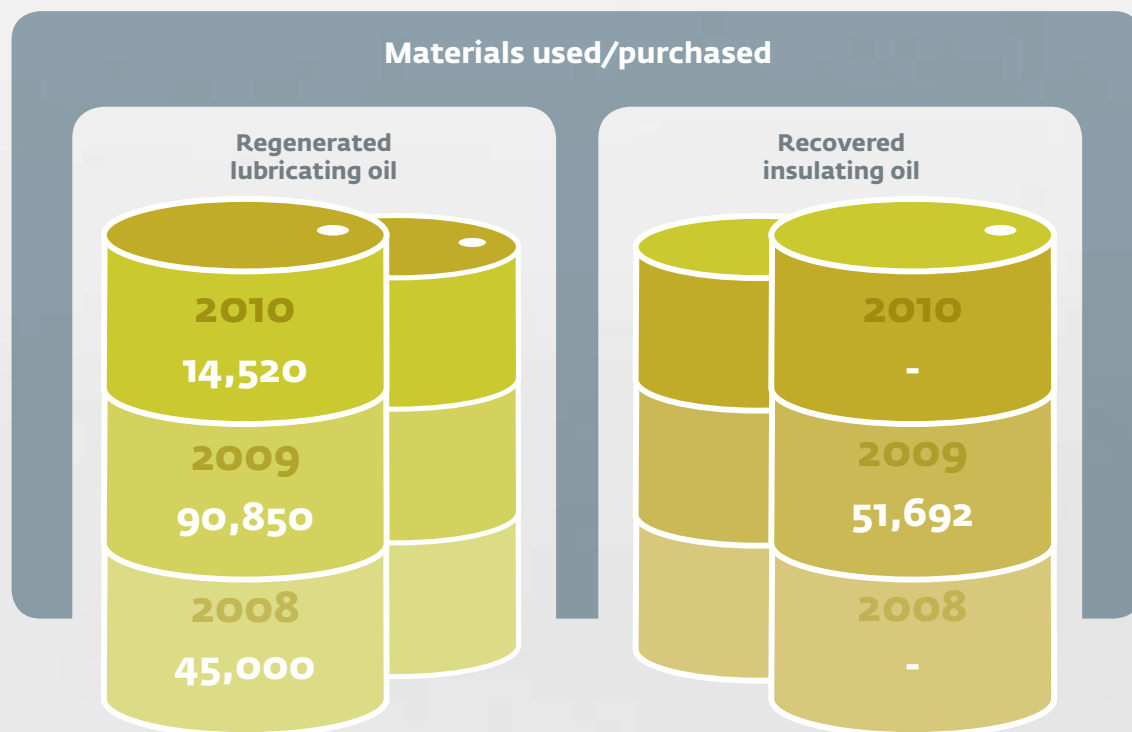
Because its project predated the current environmental legislation, Itaipu has no areas called "offsetting habitats" regarding the area that was flooded. However, the company works to protect the existence of local animal and plant species.

The Protection Strip, much like the creation of the sanctuaries, for instance, will make it possible to physically connect the Iguaçu and Ilha Grande National Parks, enabling the creation of the Santa Maria Biodiversity Corridor and the preliminary negotiations toward the creation of the Paraná River Biodiversity Corridor.

NUMBERS

0.72 km²
along the Santa Maria Biodiversity Corridor, an Atlantic Forest biome, has been rehabilitated with support from partners.

Percentage of materials used that are recycled input materials (I)



Only oil required to undergo the process is sent for regeneration. Therefore, amounts vary significantly from one year to the next.

TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

ITAIPU OPERATES A TREE NURSERY THAT GENERATED 206,000 SEEDLINGS OF 42 NATIVE SPECIES IN 2010. IT ALSO KEEPS THE MEDICINAL PLANT NURSERY CONTAINING 80 SPECIES OF MEDICINAL, AROMATIC, SEASONING AND FOREST PLANTS.

EN11; EN13; EN14;S01;PG8

SUPPLEMENTARY ACTIONS

In addition to the several actions meant to protect habitats, Itaipu further plans to reforest 0.09 km², build 5.65 km² of fences, and set up the drinking


water system for the Rio Apepu and Barro Preto communities. The plans also include the construction of 73 septic tanks on properties adjacent to the Santa Maria Corridor.

Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected area

Protected areas		
Área	Size	Location
Dry area	1,007 km ²	Paraná: Foz do Iguaçu, Santa Terezinha de Itaipu, São Miguel do Iguaçu, Medianeira, Missal, Santa Helena, Entre Rios do Oeste, Pato Bragado, Marechal Cândido Rondon, São José das Palmeiras, Mercedes, Guaíra, Itaipulândia, Diamante D'Oeste, and Terra Roxa.
Reservoir	1,350 km ²	
Areas adjacent to those protected by Itaipu		
Iguaçu National Park	1,852.6 km ²	Paraná: Foz do Iguaçu, Santa Terezinha de Itaipu, São Miguel do Iguaçu, Medianeira, Serranópolis do Iguaçu, Matelândia, Ramilândia, Céu Azul, Vera Cruz do Oeste, Santa Tereza do Oeste, Lindoeste, Capitão Leônidas Marques, Santa Lúcia, and Capanema.
Ilha Grande National Park	1,081 km ²	Paraná: Guaíra, Altônia, São Jorge do Patrocínio, Vila Alta, Icaraíma, and Querência do Norte. Mato Grosso do Sul: Mundo Novo, Eldorado, Naviraí, and Itaquiraí.
High biodiversity rate areas		
Cabeça do Cachorro State Park	0.61 km ²	Paraná: São Pedro do Iguaçu.
National Heritage Private Reserve - Santa Maria	2.42 km ²	Paraná: Santa Terezinha de Itaipu.
National Heritage Private Reserve - others	30 km ²	Paraná: Diamante D'Oeste, Guaíra, Medianeira, Santa Terezinha de Itaipu, Terra Roxa, Toledo and Vera Cruz do Oeste.

MEDICINAL PLANTS

One of Itaipu's initiatives to guarantee plant and cultural biodiversity is the Medicinal Plants project, which encompasses all BP3 cities and the city of Palotina (PR).

In the Bela Vista Biological Sanctuary, medicinal species are planted and turned into herbal medicines. In 2010, the area went from 12 to 18 healthcare units serving the population by practicing herbal medicine. A plant extract production lab was also opened in Pato Bragado (PR). 

NUMBERS

407.5 kg

of medicinal plants were dehydrated, fractioned and packaged by Itaipu in 2010.

68,830

seedlings of various species were produced in Itaipu's medicinal plant nursery.

USD 309,000

was the amount invested in the Medicinal Plants project.

GERMPLASM BANK

The forest germplasm bank (in the woods) holds over 100 species and represents a relevant contribution to the conservation of forest biodiversity, as well as a source of genetic material for the reproduction of native species.

Likewise, the animals kept in captivity (Casib and the Zoo) and belonging to over 70 species (mammals, birds, reptiles and amphibians) constitute an important biodiversity reserve. The company also cryopreserves biological material of four fish species and five mammal species.

MUSSEL MONITORING

One of the problems Itaipu faces is the obstruction in power plant equipment pipes caused by the golden mussel (*Limnoperna fortunei*), which is also to blame for instances of environmental imbalance.

The company has been monitoring this organism since it was first detected, and in 2010 a significant decrease was found in the amount of larvae and adults inside the power plant generators. Larva density was 88% below the historic annual average, and adult density dropped nearly seven times in relation to 2003 records.

TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

SEEDLINGS FROM FOREST NURSERIES KEPT BY ITAIPU ARE DONATED TO PARTNERS AND USED FOR PROTECTED AREA REFORESTATION.

EN15;PG8

Species threatened, according to the IUCN and other lists (continued)

Amphibians

Common name	Scientific name	IUCN	Brazil	Paraná	CASIB							Zoo				Germplasm bank	1977-1979 Animal Inventory	1982 Animal Rescue		
					Stock			Births in				Stock			Births in					
					2010	2009	2008	2010	2009	2008	até 2007	2010	2009	2008	2010				2009	2008
Rococo Toad	<i>Rhinella schneideri</i>	LC											1	1	1				Yes	

Fish

Common name	Scientific name	IUCN	Brazil	Paraná	Found in											1981 Inventory					
					Fishing			Turbine rescues			The Spawning Channel			Germplasm bank							
					2010	2009	2008	2010	2009	2008	2010	2009	2008								
Striped leporinus	<i>Leporinus striatus</i>															Yes	Yes	Yes		Yes	
Piapara (no common name in English)	<i>Leporinus elongatus</i>				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Driftwood Catfish	<i>Parauchenipterus galeatus</i>	LC			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
Characin	<i>Leporinus obtusidens</i>					Yes	Yes					Yes	Yes	Yes						Yes	
Cará (no common name in English)	<i>Gymnogeophagus setequedas</i>		VU	VU																	
Piracanjuba, piracanjuba (no common name in English)	<i>Brycon orbignyanus</i>		EN	EN	Yes		Yes		Yes			Yes	Yes			Yes			Yes	Yes	
Catfish	<i>Steindachneridion scriptum</i>		EN	VU																	Yes
Tiger catfish	<i>Pseudoplatystoma corruscans</i>			NT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Golden dorado	<i>Salminus brasiliensis</i>			VU	Yes	Yes	Yes	Yes				Yes	Yes	Yes							Yes
Bagre-sapo (no common name in English)	<i>Pseudopimelodus mangurus</i>			VU				Yes	Yes	Yes											
Gilded catfish	<i>Zungaro zungaro</i>			VU	Yes		Yes		Yes	Yes											Yes
Threespot leporinus	<i>Leporinus friderici</i>				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Barred Shovelnose	<i>Pseudoplatystoma fasciatum</i>					Yes	Yes					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Pacu	<i>Piaractus mesopotamicus</i>				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes

PLANTS

Common name	Scientific name	IUCN	Brazil	Paraná	Forest Nursery Production		Seeds in stock			Seed holder		1976 Forest Inventory	Medicinal plant nursery production*									
					Yes	No	Yes	No	Yes	No	Local		RBV	Yes	No	Yes						
Brazilwood	<i>Caesalpinia echinata</i>		Yes		Yes	Yes																
Peroba-rosa (no common name in English)	<i>Aspidosperma polyneuron</i>	EN		Rare	Yes	Yes		Yes	Yes	Yes	Yes	Yes										
Pau-marfim (no common name in English)	<i>Balfourodendron riedelianum</i>			Rare	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes										
Cedar	<i>Cedrela fissilis</i>				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes										
Piúna (no common name in English)	<i>Myrcianthes pungens</i>							Yes	Yes	Yes	Yes	Yes										
Amendoim-bravo (no common name in English)	<i>Pterogyne nitens</i>	LR/NT			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes										
Pink Lapacho	<i>Tabebuia impetiginosa</i>	LR/LC			Yes	Yes		Yes	Yes	Yes	Yes	Yes										
Sweetwood	<i>Ocotea puberula</i>											Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		
Rose Cactus	<i>Pereskia grandifolia</i>																			Yes	Yes	Yes
Pomegranate	<i>Punica granatum</i>	LC																		Yes	Yes	Yes
Cabriuva	<i>Myrcarpus frondosus</i>	DD		Rare								Yes			Yes					Yes		
Heart of Palm	<i>Euterpe edulis</i>		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes										
Spiny miracle-plant	<i>Maytenus ilicifolia</i>			Rare	Yes							Yes								Yes	Yes	Yes
Black cabbage	<i>Lonchocarpus muehlbergianus</i>			Rare	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	

*The medicinal plant nursery production is certified as organic.

- IUCN - International Union for Conservation of Nature
- Casib - Itaipu Binacional's Wild Animal Nursery
- VU - Vulnerable
- EN - Endangered
- NT - Near Threatened
- LC - Least Concern
- LR/LC - Low Risk
- DD - Data Deficient
- CR - Critically Endangered



FISH MONITORING

Even though the construction of the power plant did not lead to decreased stocks or lower species diversity, Itaipu built the Spawning Channel to allow genetic exchange between populations upstream and downstream from the dam.

One of the actions carried out to conserve biodiversity monitors the fish species found along the channel.

The assessment made in 2010 recorded 92 species, including migratory and sedentary ones.

So that a more detailed study could be made into the behavior of such animals, 20 specimens were fitted with radio transmitters.

The initiative makes it possible to obtain details about the route followed by the fish.

In 2010, another fish monitoring technology went into operation. It comprises small tags (PIT-TAGS) that electronically identify the animals.

The system enables tagging a higher number of fish of a wider variety of species.

In 2010, 452 fish of 13 species were monitored and provided data on how each species studied used the channel for migration purposes.

Besides monitoring work, Itaipu rescues the fish that get stuck in the turbines during maintenance shutdowns. In 2010, 2,803 animals of 36 different species were rescued.

SUPPORTING FISH FARMING

By means of the More Fish in Our Waters program, Itaipu encourages the farming of native fish species in netted tanks in the Paraná Watershed 3 (BP3).

The activity yields additional income for local fishermen, ensures families have food, and provides technical training on fish farming.

In 2010, in collaboration with Unioeste and fishermen

colonies, 27,470 pacu fry were produced and sent for fattening in the netted tanks. Itaipu sponsored the production by supplying fish food and technical assistance.

RURAL DEVELOPMENT

Through its Sustainable Rural Development program, Itaipu helps farmers in the BP3 area by means of four actions: crop branching out; organic food production and consumption; family farming development; and support for rural tourism development. These actions are supported by the Network for Sustainable Farming Technical Assistance and Extension (ATER Network), which comprises five partner institutions. Overall, 967 farmers are assisted by technicians from the ATER Network.

ENCOURAGING COUNTRY TOURISM AND ORGANIC FARMING

Itaipu also carries out actions that encourage country tourism in the BP3. Local farmers are trained to offer the service and, by so doing, generate more income for family farming in the BP3.

Another action currently underway is training farmers so they can provide organic food to restaurants, hotels and other food services to the Paraná seat during the 2014 World Cup.

NUMBERS

1,266

Family Farming Sustainable Development Plans (Sustainable Pronaf) were developed in 2010.

ONE OF THE SUSTAINABLE RURAL DEVELOPMENT PROGRAM GOALS IS TO INTRODUCE ORGANIC FOOD IN SCHOOL MEALS SERVED IN 25 BP3 CITIES, BASED ON LAW NO. 11947 OF JUNE 16, 2009.

EN14; EN16; EN17; EN18; SO1; PG7; PG8; PG9

EMISSION-REDUCING INITIATIVES

Itaipu does not cast out significant amounts of air pollutants or other ozone-depleting substances. That is a characteristic of the company, which has a small reservoir combined with abundant energy production.

Nevertheless, the hydro power plant carries out several actions to reduce emissions, including reforestation through native tree species. Since 1979, planting those trees has helped decrease emissions by getting CO₂ trapped in biomass. In 2010, about 730,614 tons of CO₂ equivalent (t CO₂e) were reduced.

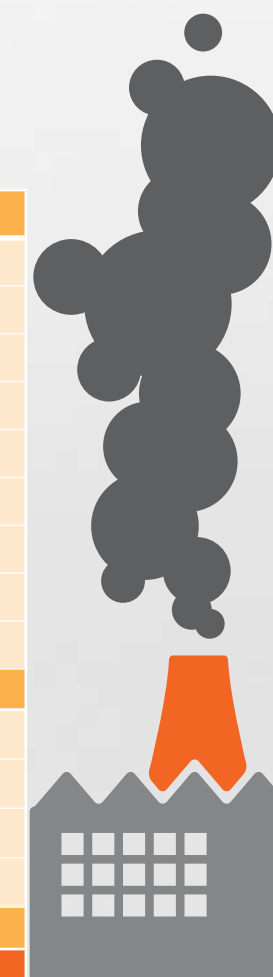
Another measure implemented is the use of biofuel-powered vehicles, which represent nearly 70% of the fleet and are preferably filled up with ethanol. In 2010, about 1,108 t CO₂ e were no longer cast out thanks to this initiative.

Besides biofuel-powered vehicles, Itaipu has 30 electric vehicles in its fleet. Replacing conventional vehicles with the electric model made it possible to decrease emissions by over 30.11 t CO₂ e in 2010. The calculation considered the amount of gasoline that was no longer used to travel the same distances.

Total direct and indirect greenhouse gas emissions, by weight (t CO₂ e) and other relevant indirect emissions of greenhouse gases, by weight

	Source of emission	2010	2009
Direct	SF ₆ from the substation	7,410	14,340
	Company fleet vehicles	612.13	1,820
	Two-stroke engine lubricating oil	0.02	0.2
	LP gas	13.1	
	Piped natural gas	10.31	32.95
	HCFC-22 cooling gas (air conditioners)	52.4	
	CO ₂ fire extinguisher refill (offices)	2.1	0.2
	Various pieces of equipment	73.71	
	Total emissions per GWh of net energy generated	0.096	0.177
	Total direct emissions		8,173.77
Indirect	Leased fleet vehicles	1,152.3	48.16
	Air travel (passengers)	1,314.89	1,173.47
	Air travel (cargo)	5.54	
	Power purchased from SIN	150.72	61.35
Total indirect emissions		2,623.45	1,282.98
Total		10,797.22	17,476.13

Itaipu follows the IPCC (2006) and GHG Protocol methods to calculate its GHG Emissions Inventory. The ongoing refinement of calculation methods and the gradual insertion of new sources not previously included make current emissions seem equal or even higher than past ones.



TAKING CARE OF THINGS HERE, KEEPING THE PLANET IN MIND

AS A RESULT OF ITS ACTIVITIES, ITAIPU DOES NOT CAST OUT SIGNIFICANT AMOUNTS OF OZONE-DEPLETING SUBSTANCES.

EN18; EN19; EN20; EN29; PG7; PG8; PG9

NEW EQUIPMENT CONTROLS SF₆

A new service car will make it easier to remove, store and replace the sulfur hexafluoride (SF₆) gas. The gas is used to insulate the electric field generated by the power that runs through the bars in the power plant substation. The gas must be stored whenever maintenance is performed at the site. The new service car will also prevent SF₆, which is harmful for the ozone layer and is a greenhouse gas, from being released into the atmosphere.

EMPLOYEE TRANSPORTATION

With respect to employee transportation, the main environmental impacts it causes are related to the use of non-renewable fuels and the discharge of air pollutants.

However, the company seeks to continuously mitigate and reduce such impacts by making use of electric vehicles and constantly servicing its fleet.

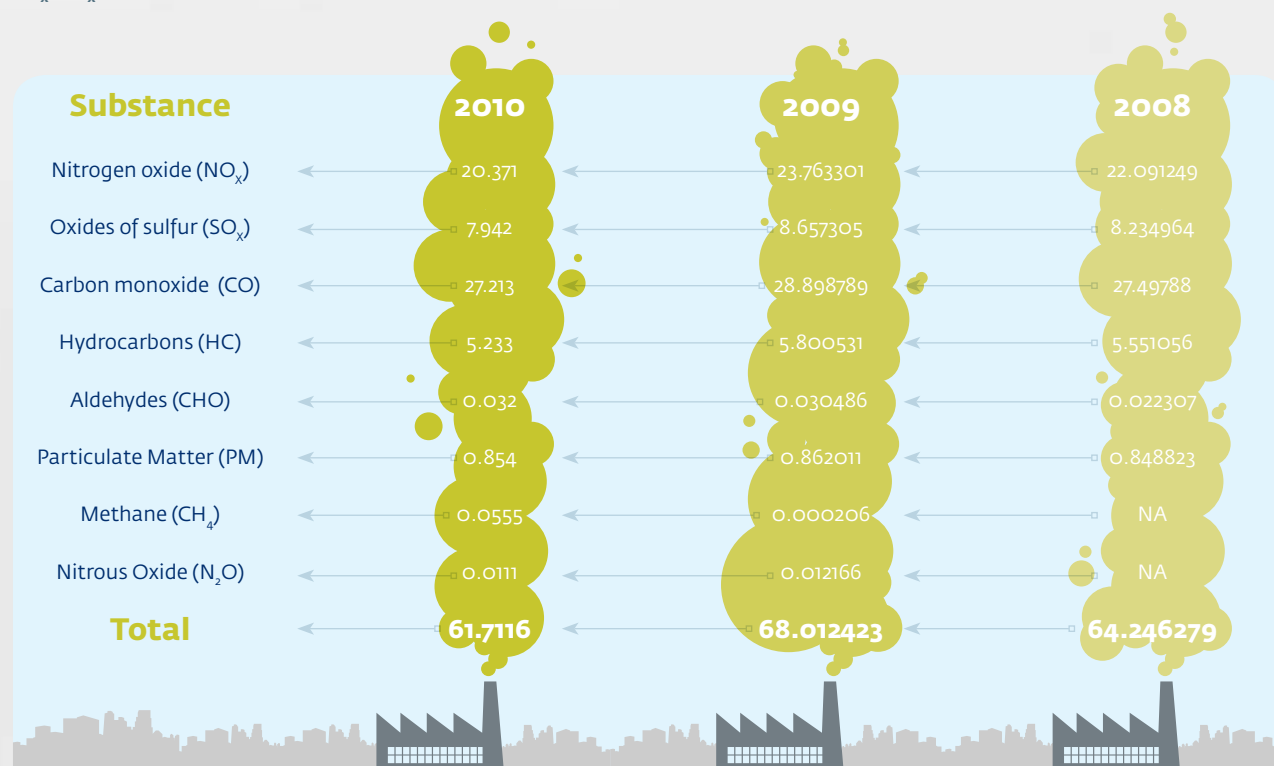
INSIGNIFICANT AIR EMISSIONS

The ongoing refinement of calculation methods and the gradual insertion of new sources not previously included make current emissions seem equal or even higher than past ones. Comparisons from recent years show insignificant differences, although in 2009 there was a slight increase over 2008.

On the other hand, in 2010 there was a reduction. That is partly due to the fact that approximately 18,440.64 liters of ethanol were no longer used due to the use of electric vehicles.

For 2011, the plan is to quantify the Fuel Evaporative Emissions (FEE).

NO_x, SO_x and other significant air emissions by type and weight (t)



SHARING RESOURCES

THE FUNDS NECESSARY TO BUILD THE POWER PLANT WERE RAISED AT NATIONAL AND INTERNATIONAL FINANCIAL AGENCIES, AND ACCOMMODATED BY THE FEDERATIVE REPUBLIC OF BRAZIL.

HR2;HR6;HR7;EC6;EC9;PG1;PG2;PG3;PG4;PG5;PG6

BINATIONAL FINANCIAL BASES

The negotiations for the creation of Itaipu Binacional required economic and financial solutions that respected the countries' sovereignty and differences.

The Itaipu Treaty, the document that regulates the company's entire operation, sets forth the financial bases and the electricity service supply bases in its Annex C.

The North American dollar is used as the reference currency for operation bookkeeping and financial statement presentation.

Daily transactions, like salary payments, purchases and supplier contracting are carried out in the local currency and converted to dollars at the exchange rate in force on the day of the operation.

Despite some singularities, which are explained in the Notes to the Financial Statements (available at www.itaipu.gov.br), Itaipu follows the practices adopted in Brazil and Paraguay.

It is important to note that Itaipu is not profit-oriented and its income should equal its costs. Annex C establishes that costs comprise royalties, remuneration on the capital invested, management and supervision fee payments to Eletrobrás and Ande, debt charges and amortizations, and operating expenses.

NUMBERS

USD 100 million

make up Itaipu's capital, which was equally invested by Brazil and Paraguay.

CLOSER RELATIONSHIP WITH SUPPLIERS

In 2010, Itaipu started developing the Supplier Relationship Portal. Out of the three modules planned, registration, electronic price collection and evaluation, the first is estimated to start operating in the second half of 2011. According to this project, the company is mapping potential and current suppliers, who are encouraged to act sustainably. Itaipu does not yet employ social or environmental criteria to select suppliers, nor does it carry out evaluations regarding human rights. The critical supplier criterion is not currently adopted either, but this is a goal to be reached, including via joint actions with Eletrobrás. ⁺

NGL REGULATES ACQUISITIONS

Given its binational nature, Itaipu has its own regulations regarding the purchase of goods and services, the General Competition Standard (NGL).

The company is not allowed to favor local/regional suppliers, or treat micro and small companies differently. However, Itaipu considers those headquartered in Paraná as local suppliers.

NO TO CHILD LABOR

Itaipu does not monitor or work directly on identifying supplier operations where there may be child labor risks. However, to take part in competitions, such Brazilian institutions must state their compliance with the Federal Constitution, article 7, XXXIII, which makes it illegal to hire people under 18 years of age, except as apprentices. In the event of violation, the contract may be terminated. In 2010, there were no instances of companies refused or contracts terminated on account of one's use of child labor.

DOWN WITH SLAVE LABOR

To minimize risks of its suppliers making use of slave labor, Itaipu requires them to prove the payment of salaries, overtime, 13th salaries, notice of termination, workplace accident insurance, and other charges. Field offices must provide restrooms, drinking water and other comfort-related conditions. Contracts may be terminated in the event any clauses are breached, which did not happen in 2010.

ROYALTIES: BUDGET BOOSTER

Itaipu has been paying royalties for the use of the Paraná River hydro power potential since 1985, when the power plant started operating. Payments are made on a monthly basis to the High Contracting Parties, represented by the Brazilian Treasury Department and the Paraguay Ministry of Finance.

In 1991, with the approval of decree 01/91 regulating the payment of royalties in Brazil, Brazilian cities and state governments became entitled to the benefit. Since then, they have received USD 2.9 billion.

In 2010, each country received BRL 211.9 million in royalties. Out of that amount, USD 80.5 million were paid to the state of Paraná and USD 81 million to the adjacent cities – those who had land flooded when the reservoir was filled. Santa Helena (PR) was the city receiving the most royalties last year, USD 20.4 million.

Other Brazilian cities and states affected by reservoirs upstream from Itaipu, which help increase the power generated by the power plant, received USD 27.3 million. The ministries of the Environment and Mines and Energy and the National Scientific and Technological Development Fund split USD 21.2 million. ⁺

Local supplier expenditure ratio (%)

	2010	2009
Materials purchased from local suppliers	9.75%	9.17%
Local suppliers hired to provide services	50.62%	37.34%
Total purchases from local suppliers	60.37%	46.41%

Distributing royalties to the adjacent cities

City	State	Flooded area (km²)	Population (°)	2009 (USD thou)	2010 (USD thou)	Accumulated 1991-2010 (USD thou)
Diamante d'Oeste	Paraná	5.62	5,027	474.4	434.1	6605.1
Entre Rios do Oeste		32.9	3,922	2776.7	2540.8	36382.4
Foz do Iguaçu		201.84	256,081	17035.3	15588.1	237204.9
Guaíra		51.01	30,669	4305.2	3939.5	59947.4
Itaipulândia		179.73	9,027	15169.1	13880.5	198755
Marechal Cândido Rondon		56.04	46,799	4729.8	4328	72745.8
Medianeira		1.16	41,830	98	89.6	1363.8
Mercedes		19.32	5,046	1630.6	1492.1	21365.4
Missal		40.07	10,474	3381.9	3094.6	47090.7
Mundo Novo		Mato Grosso do Sul	14.71	17,035	1241.5	1136
Pato Bragado	Paraná	47.07	4,823	3972.7	3635.2	52052.3
Santa Helena		263.76	23,425	22261.3	20370.1	309974
Santa Terezinha de Itaipu		41.9	20,834	3536.3	3235.9	49241
São José das Palmeiras		1.94	3,831	163.8	149.9	2280.5
São Miguel do Iguaçu		90.91	25,755	7672.8	7020.9	119303.9
Terra Roxa		1.58	16,763	133.4	122.1	1857.5
TOTAL			1,049.56	521,341.00	88,582.80	81,057.40

*Taken from ftp://ftp.ibge.gov.br/Censos/Censo_Demografico_2010/resultados/, accessed on May 9, 2011. Royalty payment data source: Aneel.

Added Value Statement

Added Value generated by	2010	2009	2008
Income			
Power supply	3,291,012,000	3,291,012,000	3,202,183,800
Energy transfer compensation	104,496,786	107,990,265	117,765,256
Cost reimbursements – unbound energy	55,038,968	83,266,537	103,853,952
Miscellaneous income (expenses)	(10,780,120)	2,101,393	757,537
	3,439,767,634	3,484,370,195	3,424,560,545
(-) Inputs purchased from third parties			
Materials	12,023,546	10,633,440	12,414,056
Third-party services	102,745,459	76,531,199	102,446,827
Other operating expenses	167,731,834	271,998,257	109,584,246
	282,500,839	359,162,896	224,445,129
Gross added value	3,157,266,795	3,125,207,299	3,200,115,416
(+) Added value received in transfers			
Financial revenues	68,146,460	19,603,092	58,682,870
Added value to share	3,225,413,255	3,144,810,391	3,258,798,286
Added Value Sharing			
Work Compensation:			
Direct compensation	248,009,177	214,113,552	218,935,388
Benefits	118,485,497	96,428,905	103,737,494
Post-employment benefits	428,607,040	353,852,808	(2,976,027)
Severance pay	168,535,361	47,517,713	57,002,958
FGTS	6,991,799	5,991,531	5,831,890
	970,628,874	717,904,509	382,531,703
Government compensation:			
INSS and IPS	38,320,111	30,765,861	31,068,124
Royalties	428,138,648	437,489,668	479,061,150
Energy transfer compensation	104,496,786	107,990,265	117,765,256
	570,955,545	576,245,794	627,894,530
Third-party capital remuneration			
Debt charges	1,154,444,716	1,221,379,726	1,275,205,982
Adjustments for inflation	(14,830,963)	(43,520,133)	8,807,103
Other financial expenses	45	-	368,391
	1,139,613,798	1,177,859,593	1,284,381,476
Company capital remuneration:			
Capital returns	44,733,476	42,812,560	45,27,776
Management and supervision fee reimbursement	32,933,742	33,653,050	36,850,858
	77,667,218	76,465,610	82,123,634
Income	466,547,820	596,334,885	881,866,943
Added value shared	3,225,413,255	3,144,810,391	3,258,798,286

For years ending on December 31, 2010, 2009 (reclassified) and 2008 (reclassified). In US dollars.

SHARING RESOURCES

SINCE 2006, ITAIPU HAS PUBLISHED ITS IBASE REPORTS BECAUSE THE POWER PLANT IS FOR TRANSPARENT COMPANY MANAGEMENT.

iBase

Annual Performance Appraisal / 2010:

1 - Calculation Basis	2010 value (USD thou)			2009 value (USD thou) ^o		
Net revenue (NR)	3,450,548			3,482,269		
Operating result (OR)	466,548			596,335		
Gross payroll (GPR)	330,936			277,628		
2 - Internal Social Indicators	Value (thou)	% over GPR	% over NR	Value (thou)	% over GPR	% over NR
Nutrition	15,708	4.75%	0.46%	11,488	4.14%	0.33%
Compulsory labor charges	45,312	13.69%	1.31%	36,757	13.24%	1.06%
Private pension plans	40,723	12.31%	1.18%	35,476	12.78%	1.02%
Health	49,180	14.86%	1.43%	39,064	14.07%	1.12%
Occupational health and safety	1,054	0.32%	0.03%	1,105	0.40%	0.03%
Education	6,175	1.87%	0.18%	5,422	1.95%	0.16%
Culture	0	0%	0%	0	0%	0%
Training and career development	2,352	0.71%	0.07%	2,475	0.89%	0.07%
Day cares or day-care vouchers	1,038	0.31%	0.03%	805	0.29%	0.02%
Profit sharing	27,982	8.46%	0.81%	21,196	7.63%	0.61%
Others	35,579	10.75%	1.03%	36,417	13.12%	1.05%
Total - Internal Social Indicators	225,103	68.02%	6.52%	190,205	68.51%	5.46%
3 - External Social Indicators	Value (thou)	% over OR	% over NR	Value (thou)	% over OR	% over NR
Education	33,815	7.25%	0.98%	36,153	6.06%	1.04%
Culture	1,976	0.42%	0.06%	356	0.06%	0.01%
Health and sanitation	17,709	3.80%	0.51%	13,014	2.18%	0.37%
Sports	0	0%	0%	0	0%	0%
Fight against hunger and for food safety	3,281	0.70%	0.10%	2,107	0.35%	0.06%
Others	27,354	5.86%	0.79%	59,287	9.94%	1.70%
Total contributions to society	84,135	18.03%	2.44%	110,917	18.60%	3.19%
Taxes (except labor charges)	0	0%	0%	0	0%	0%
Total - External Social Indicators	84,135	18.03%	2.44%	110,917	18.60%	3.19%
4 - Environmental Indicators	Value (thou)	% over OR	% over NR	Value (thou)	% over OR	% over NR
Investments related to the production/operation of the company	1,734	0.37%	0.05%	3,933	0.66%	0.11%
Investments in third-party programs and/or projects	6,866	1.47%	0.20%	5,539	0.93%	0.16%
Total environmental investments	8,600	1.84%	0.25%	9,472	1.59%	0.27%
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 51 to 75% () meets 0 to 50% (x) meets 76 to 100%		() has no goals () meets 51 to 75% () meets 0 to 50% (x) meets 76 to 100%			

5 - Staff Indicators	2010			2009 ^o		
N° of employees at the end of the period	3,186			3,268		
N° of admissions in the period	265			118		
N° of outsourced employees ^{oo}	NA			NA		
N° of interns	559			220		
N° of employees over 45 years of age	1,851			1,838		
N° of women working for the company	551			519		
% of management positions held by women	4.54%			7.32%		
N° of blacks working for the company	266			266		
% of management positions held by blacks	1.13%			1.50%		
N° of people with disabilities or special needs	47			37		
6 - Relevant information on the practice of corporate citizenship	2010			2011		
Ratio between the highest and lowest pay at the company ^{ooo}	NA			NA		
Total number of occupational accidents	20			0		
The social and environmental projects developed by the company were defined by:	() executives	(x) executives and managers	() all employees	() executives	(x) executives and managers	() all employees
Safety and health standards at the workplace were defined by:	() executives and managers	() all employees	(X) all + In-House Accident Prevention Commission	() executives and managers	() all employees	(X) all + In-House Accident Prevention Commission
As to union freedom, the right to collective bargaining and internal representation of the workers, the company:	() does not get involved	(...) follows ILO rules	(X) encourages and follows ILO	() will not get involved	(...) will follow ILO rules	(X) will encourage and follow ILO
Private pension plans include:	() executives	() executives and managers	(X) all employees	() executives	() executives and managers	(X) all employees
Profits are shared with:	() executives	() executives and managers	(X) all employees	() executives	() executives and managers	(X) all employees
When selecting suppliers, the same ethical and social-environmental responsibility standards adopted by the company:	() are not considered	(x) are suggested	() are required	() will not be considered	(x) will be suggested	(...) will be enforced
As to company employees' participation in volunteer work programs, the company:	() does not get involved	() supports it	(x) organizes and encourages it	() will not get involved	() will support it	(x) will organize and encourage it
Total number of customer complaints and criticism: ^{oooo}	at the company _NA_	at the Better Business Bureau _NA_	in court _NA_	at the company _NA_	at the Better Business Bureau _NA_	in court _NA_
% of complaints and criticism fulfilled or solved:	at the company _ %	at the Better Business Bureau _ %	in court _ %	at the company _ %	at the Better Business Bureau _ %	in court _ %
Total added value to share (in BRL thou):	In 2010: USD 3,225,413			In 2009: USD 3,144,810^o		
Added Value Sharing (AVS):	17.70% government 30.10% employees 2.41% stockholders 35.33% third parties 14.46% withheld			18.32% government 22.83% employees 2.43% stockholders 37.46% third parties 18.96% withheld		
7 - Other Information	^o Reclassified ^{oo} NA - Not Applicable because Itaipu does not outsource employees, considering it contracts services and not people. ^{ooo} NA - Not Available because Itaipu does not have this relationship in a binational manner. However, the company plans to report such data in the 2011SR. ^{oooo} NA - Not Applicable because Itaipu has no direct end-customers.					

TECHNICAL INFORMATION

GLOBAL COMPACT

Itaipu has been a signatory of the United Nations Global Compact since 2009. The initiative was created to educate and engage organizations across the world to advocate principles in the fields of human rights, labor, fighting corruption, and the environment.

By joining the Global Compact, Itaipu's purpose is to help foster such principles in the area where it operates, starting by including them in its strategy and daily operations. And, therefore, be a member

of a worldwide network that strives to build a fairer, more sustainable society. That is why in 2010 the company took a seat in the Brazilian Global Compact Committee Executive Board.

The table below provides the location, in this publication, of the company's main advancements toward making each of the Global Compact principles come true in 2010.

Principle	Page
1. Businesses should support and respect the protection of internationally proclaimed human rights	17-21, 24, 25, 32, 58 and 59
2. Make sure that they are not complicit in human rights abuses	17, 21, 32, 58 and 59
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	17, 21, 32 and 58
4. The elimination of all forms of forced and compulsory labour;	21, 32, 58 and 59
5. The effective abolition of child labour	21, 32, 58 and 59
6. The elimination of discrimination in respect of employment and occupation	16, 17, 19 - 23, 32 and 58
7. Businesses should support a precautionary approach to environmental challenges	09, 32, 34 - 37, 41 - 43, 55 and 56
8. Undertake initiatives to promote greater environmental responsibility	32, 34-41, 44 - 50, 53 - 56
9. Encourage the development and diffusion of environmentally friendly technologies	32, 34 - 39, 44 - 47, 55 and 56
10. Businesses should work against corruption in all its forms, including extortion and bribery.	08, 21, 32



Statement GRI Application Level Check

GRI hereby states that **Itaipu Binacional** has presented its report "Itaipu Sustainability Report 2010" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 24 June 2011



Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because Itaipu Binacional has submitted this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 14 June 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

TECHNICAL INFORMATION

GRI: 3.12

GRI INDEX

Profile disclosures

Strategy and Analysis		
1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy	03
1.2	Description of key impacts, risks and opportunities.	03
Organizational Profile		
2.1	Name of the organization.	Report flap.
2.2	Primary brands, products, and/or services	Report flap.
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	Report flap.
2.4	Location of organization's headquarters	Report flap.
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Report flap.
2.6	Nature of ownership and legal form	Report flap.
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	Report flap.
2.8	Scale of the reporting organization	Report flap.
2.9	Significant changes during the reporting period regarding size, structure, or ownership	There were no changes.
2.10	Awards received in the reporting period	10

Report Parameters		
3.1	Reporting period for information provided	04
3.2	Date of most recent previous report	04
3.3	Reporting cycle	04
3.4	Contact point for questions regarding the report or its contents	Report flap.
3.5	Process for defining report content	04
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	04
3.7	State any specific limitations on the scope or boundary of the report	04
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	Itaipu does not have joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities. However, except for product, operation and financial information, only the power plant's Brazilian share of the work is reported.
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the indicators and other information in the report	04
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g. mergers/acquisitions, change of base years/periods, nature of business, measurement methods)	04
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	04
3.12	Table identifying the location of the Standard Disclosures in the report	66
3.13	Policy and current practice with regard to seeking external assurance for the report	04, 78

TECHNICAL INFORMATION

GRI: 3.12

Governance, Commitments, and Engagement

4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	06, 07
4.2	Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement)	06
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	06
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	The company is not publicly traded and there are no formal mechanisms to ensure employee participation in the decisions made by the highest governance body.
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance)	There is no varying compensation linked to the organization's performance.
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	06
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics	07
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Report flap and 08.
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	06, 09

Commitments to external initiatives

4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	There are no formal self-evaluation mechanisms.
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4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	12
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	09
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	13

Stakeholder engagement

4.14	List of stakeholder groups engaged by the organization	13
4.15	Basis for identification and selection of stakeholders with whom to engage	13
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	13
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	04

Economic Performance

Economic Performance

EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	61
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	09, 41 - 43
EC3	Coverage of the organization's defined benefit plan obligations	26
EC4	Significant financial assistance received from government	Itaipu resources comprise its capital, loans, third-party funding, and revenues.

Market presence

EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	21
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	58
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	16

Indirect economic impacts

EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	28 - 30
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	25, 46, 59, 60

TECHNICAL INFORMATION

GRI: 3.12

Environmental Performance

Materials		
EN1	Supplies used by weight or volume	The company does not have equipment containing PCB (polychlorinated biphenyl). 45
EN2	Percentage of materials used that are recycled input materials	44, 46
Energy		
EN3	Direct energy consumption by primary energy source	39
EN4	Indirect energy consumption by primary energy source	39, 40
EN5	Energy saved due to conservation and efficiency improvements	39
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	Not applicable – Itaipu is a company that generates renewable energy.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	39
Water		
EN8	Total water withdrawal by source	37
EN9	Water sources significantly affected by withdrawal of water	There are no water sources significantly affected by withdrawal of water associated to the company's activities; and no water is withdrawn from areas listed in the Ramsar Convention.
EN10	Percentage and total volume of water recycled and reused	38
Biodiversity		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	48
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	47
EN13	Habitats protected or restored	47, 48
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	36, 47, 49, 54
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	50 - 53

Emissions, effluents and waste

EN16	Total direct and indirect greenhouse gas emissions by weight	55
EN17	Other relevant indirect greenhouse gas emissions by weight	55
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	55 - 57
EN19	Emissions of ozone-depleting substances by weight	57
EN20	NO _x , SO _x and other significant air emissions by type and weight	56
EN21	Total water discharge by quality and destination	38
EN22	Total weight of waste by type and disposal method	44
EN23	Total number and volume of significant spills	In 2010, there were no significant spills in the industrial area.
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	No hazardous waste was shipped internationally.
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	Itaipu did not discharge significant or even minor amounts of water capable of causing environmental damage. No water body Itaipu uses for harnessing or discharge is located in wet areas listed in the Ramsar Convention.
Products and services		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	34, 36
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Not applicable – Itaipu's product is energy, which is not packed.
Compliance		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	34
Transport		
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	56
Overall		
EN30	Total environmental protection expenditures and investments by type	35

Social Performance – Labor Practices

Employment		
LA1	Total workforce by employment type, employment contract, and region	16
LA2	Total number and rate of employee turnover by age group, gender, and region	23
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	16
Labor/management relations		
LA4	Percentage of employees covered by collective bargaining agreements	17
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	17
Occupational health and safety		
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	24
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	24
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	25
LA9	Health and safety topics covered in formal agreements with trade unions	24
Training and education		
LA10	Average hours of training per year per employee by employee category	23
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	27
LA12	Percentage of employees receiving regular performance and career development reviews	20
Diversity and equal opportunity		
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	18, 20
LA14	Ratio of basic salary of men to women by employee category	19

Social Performance – Human Rights

Investment and procurement practices		
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	Itaipu does not invest in other companies or projects with other companies, like joint ventures, corporations etc.
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	58
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	21
Non-discrimination		
HR4	Total number of incidents of discrimination and actions taken	17
Freedom of association and collective bargaining		
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	17
Child labor		
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	59
Forced and compulsory labor		
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of forced or compulsory labor	59
Security practices		
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	21
Indigenous rights		
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	32

TECHNICAL INFORMATION

Social Performance - Society

Community		
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	31, 32, 36, 49, 54
Corruption		
SO2	Percentage and total number of business units analyzed for risks related to corruption	08
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	21
SO4	Actions taken in response to incidents of corruption	In 2010, no instances of corruption were detected.
Public policy		
SO5	Public policy positions and participation in public policy development and lobbying	32
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	The company does not make financial contributions to political parties or the like.
Compliance		
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	Not applicable – Under the Itaipu Treaty, the company's entire energy generating capability is purchased by Eletrobrás and Ande. Therefore, Itaipu has no competitors.
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	There are no accounting records of significant fines or non-monetary sanctions for non-compliance with laws and regulations.

Social Performance – Product Responsibility

Customer health and safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	24
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	There were no incidents in terms of community impacts as a result of Itaipu's activities or the supply of its product to the community.

Product and service labeling		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	Not applicable – Itaipu's product is electricity, which does not entail labeling.
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	Not applicable – Itaipu's product is electricity, which does not entail labeling.
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Not applicable – Itaipu does not conduct customer satisfaction surveys because it is a power generation company. Its relationship with Eletrobrás, its direct client in Brazil, is strategic regarding actions to improve the Brazilian Electricity System.
Marketing communications		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	14
PR7	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	There were no incidents of non-compliance.
Customer privacy		
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Not applicable – Itaipu does not have direct end-customers; therefore, the company does not handle such type of information.
Compliance		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	There are no accounting records of significant fines or non-monetary sanctions for non-compliance with laws and regulations.

Sector Disclosures*

Disaster/emergency planning and response		
EU1	Installed capacity (MW), broken down by primary energy source and by regulatory regime	Report flap.
EU2	Net energy output broken down by primary energy source and by regulatory regime	11
EU3	Number of residential, industrial, institutional and commercial customer accounts	Not applicable – Itaipu does not have direct end-customers like households, factories and commercial facilities.
EU4	Length of above and underground transmission and distribution lines by regulatory regime	Not applicable – Itaipu is not a transmission and distribution company. However, it has 75.2 km long 500 kV transmission lines used to connect itself to the substations taking energy to the Brazilian and Paraguayan electricity systems. Additionally, the power plant has 13.8 kV internal distribution systems that supply its offices and attached facilities inside its Priority Area, such as the PTI.

TECHNICAL INFORMATION

GRI: 3.12

EU5	Allocation of CO2e emissions allowances or equivalent, broken down by carbon trading	Itaipu does not participate in the carbon credit market (CDM - Clean Development Mechanism projects) and does not have projects allowing it to obtain credits, given that it is not possible to get them by keeping the forest standing. Reforestation of the reservoir protection strip and the biological sanctuaries has been a part of the company's plans since it started operating, regardless of getting carbon credits.
EU6	Management approach to ensure short and long-term electricity availability and reliability	11
EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	Not applicable - Demand-side management programs are developed by distribution companies and Eletrobrás; because it is a generation company, Itaipu does not develop such programs.
EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	08
Availability and reliability		
EU9	Provisions for decommissioning of nuclear power sites	Not applicable – Itaipu does not have nuclear sites.
Demand-side management		
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	Not applicable – Itaipu already has its maximum capacity installed.
EU11	Average generation efficiency of thermal plants by energy source and regulatory regime	Not applicable – Itaipu does not have thermal plants.
System efficiency		
EU12	Transmission and distribution losses as a percentage of total energy	Not applicable – Although it has transmission equipment connecting it to the system that conveys its energy up to charging centers, Itaipu does not operate in the transmission and distribution business.
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	47
EU14	Programs and processes to ensure the availability of a skilled workforce	20
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	27
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	17, 24
EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities	17

Electric utilities management approach		
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	17
EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development	08
EU20	Approach to managing the impacts of displacement	Not applicable – Because it is a fully installed project, Itaipu no longer causes displacements.
EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	11
Access		
EU22	Number of people physically or economically displaced and compensation, broken down by type of project	Because it is a fully installed project, Itaipu no longer causes displacements.
Provision of information		
EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	Not applicable – Itaipu does not have direct end-customers because it is a power generation company.
EU24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services	Not applicable – Itaipu is not a distribution company; therefore, it does not deal with end-customers directly.
Access		
EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	Not applicable - Itaipu is a power generation company, and therefore does not have a direct relationship with electricity end-users.
EU26	Percentage of population unserved in licensed distribution or service areas	Not applicable – Itaipu does not work in energy distribution.
EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	Not applicable – Itaipu does not work in energy distribution.
EU28	Power outage frequency	Not applicable – Itaipu does not work in energy distribution.
EU29	Average power outage duration	Not applicable – Itaipu does not work in energy distribution.
EU30	Average plant availability factor by energy source and by regulatory regime	11

INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

To the
Board of Directors
Itaipu Binacional
Curitiba - PR

Introduction

We have been engaged for the purpose of applying Limited Assurance Procedures on the sustainability information reported at Itaipu Binacional's ("Company") 2010 Sustainability Report, a binational Brazilian-Paraguayan organization, related to the year ended December 31, 2010 and prepared under its management responsibility. The report information refers solely to the actions carried out in Brazil, except for the information related to the power plant's production and facilities, the Added Value Statement (AVS) and the performance appraisal according to the template issued by iBase (Brazilian Institute of Social and Economic Analyses), which include the binational information. Our responsibility is to issue a Limited Assurance report on this sustainability information.

Applied Procedures

The limited assurance procedures were performed in accordance with Rule NBC TO 3000, issued by the Brazilian Federal Accounting Council - CFC and with ISAE 3000 – International Standard on Assurance Engagements, issued by International Auditing and Assurance Standards Board – IAASB, both related to Assurance Engagements other than Audits or Reviews of Historical Financial Information.

The procedures comprised: (a) the planning of the work, considering the relevance, coherence, volume of quantitative and qualitative information and operational and internal control systems that served as a basis for the preparation of the sustainability information contained in the Company's Sustainability Report; (b) the understanding of the calculation methodology and the consolidation of the performance indicators through interviews with the responsible personnel; (c) the comparison, on a sample basis, of the quantitative and qualitative information with the sustainability information disclosed at the Sustainability Report; and (d) the comparison of the financial indicators with the financial statements and/or accounting records.

Reporting criteria

The sustainability information contained in the Company's Sustainability Report was prepared according to the Global Reporting Initiative guidelines (GRI-G3) and to the Electric Utility Sector Supplement – RG Version 3.0/EUSS Final Version.

Scope and limitations

The objective of our work was to apply limited assurance procedures on the sustainability information disclosed in the Company's Sustainability Report, concerning profile information (disclosures that set the overall context for understanding organizational performance such as its strategy, profile, and governance), management approach and sustainability performance indicators, not including the assessment of the appropriateness of its policies, practices and sustainability performance.

The applied procedures do not represent an examination in accordance with the Brazilian and international audit rules for financial statements. In addition, our report does not provide limited assurance on the achievability of future information (such as targets, expectations and ambitions) nor on qualitative information that is under subjective evaluation.

Conclusion

Based on the applied procedures we have not identified any relevant modification that should be performed on the sustainability information reported at Itaipu Binacional's 2010 Sustainability Report, related to the year ended December 31, 2010, to agree with the GRI-G3 guidelines, the Electric Utility Sector Supplement - RG Version 3.0/EUSS Final Version and with the records and files that subsidized its elaboration.

Curitiba, June 22, 2011.



KPMG Assurance Services Ltda.
CRC SP-023228/O-4 F-PR

Sidney Tetsugi Toyonaga Ito
Accountant CRC SP-169866/O-5 S-PR

TECHNICAL INFORMATION

GRI: 3.13

FOCAL POINTS

Since 2007, when the Social Responsibility Advisory Office (RS.GB) adopted the Global Reporting Initiative (GRI) Guidelines to prepare Itaipu's sustainability reports, the disclosures have been answered by a group of employees spread throughout the company. They are the "focal points of sustainability" and help define the materiality, provide the data, and revise the latter before the final text is written.

They are also thus called because in the course of the year they actively help, under guidance from the RS.GB, answer sustainability index questionnaires in compliance with Eletrobras: Corporate Sustainability Index by Bovespa (ISE-Bovespa) and the Dow Jones Sustainability Index (DJSI), by the New York Stock Exchange (on a trial basis). The ones listed below and several other employees helped prepare this report.

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