



#### Communication on Progress 2009-2010

taipu invests in renewable energy by the concept of smart grid (distributed generation), including the residual biomass. Biogas is produced by decomposition of organic waste biodigesters installed on the farms in the basin of Itaipu Hydroelectric Plant Reservoir. With biogas, farmers can produce energy for their own activities, besides selling the surplus to the local energy's distributor, increasing the efficiency of rural and urban areas. Based on the demonstration units of Itaipu, the National Electric Energy Agency approved the use of biogas for electricity generation all over Brazil. Renewables account for changes in their production that generate effective reductions of greenhouse gases, and consequently climate change.

#### **INTRODUCTION** GRI: 3.1, 3.5, 3.6, 3.7, 3.8, 3.9





This has been the first Communication on Progress (COP) published by Itaipu Binacional, the world's largest hydroelectric energy generating plant, since it joined the UN Global Compact in February 2009. It has been based on the contents of the Sustainability Report that the company elaborates every year following the guidelines of the Global Reporting Initiative (GRI) and subjected to external assurance, and shows the correlation between the GRI indicators and Itaipu's initiatives aimed at achieving the Principles of the Global Compact.

In a format that invites a quick read, this document includes the key information regarding the company's management contemplating the sustainability of its operations, the relationship with its stakeholders and its concerns and initiatives related to social, environmental and energy challenges worldwide.

To read the online versions of COP and the Sustainability Report 2009 in Portuguese or English, please see www.itaipu.gov.br/responsabilidadesocial

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# Foreword: Facing the Challenges of our Planet with the Global Compact GRI: 1.1, 1.2

Being the world leader in generating energy is not enough for Itaipu. Our aim is to help shape the future. For this reason, we are engaged in the GC's goal, in its 10 years contributing to mobilize the global business community, towards building a more balanced trade for people and nature.

Itaipu's commitment to issues regarding sustainability started when the company was set up. For 36 years, our management has been guided so as to favour the social and economic development of the communities we are inserted in, always taking special care for nature. In 2009, we reinforced that commitment by joining the UN Global Compact followed by our immediate inclusion in the Brazilian Global Compact Committee.

Our efforts have recently been acknowledged by international public opinion. The 2008 Sustainability Report was ranked among the best in the 2010 edition of GRI Reader's Choice Awards, which indicates readers'opinions: it got second place in Most Efficient Report category and third place in Civil Society category. Not only do these prizes make us feel proud but they also carry more responsibility: provide an even more transparent and effective portrayal of the main achievements and challenges of the company.

We have been GRI's partners since we started following its guidelines in our reports, in 2007. Among other activities, we took part in two workshops on gender equality in the world and the revision of gender framework in the G3 Guidelines, in 2009 and 2010.

There is much to be told about the management of our business based on ethics, transparency and concern for people and environment. In the following pages, the reader will be able to know some of our programmes, projects and actions. In order to comply with each of them, the principles of awareness, continuous learning and the engagement with the different people we relate with are present in our work.

We do hope that the next pages compel the reader to know Itaipu better.

Enjoy it!

Jorge Miguel Samek

Brazilian General Director

### Who we are ITAIPU BINACIONAL GRI: 2.1, 2.2, 2.5, 2.6, 2.7, 4.8



Itaipu is the largest hydroelectric power plant generating energy in the world. The company was set up after a diplomatic agreement between Brazil and Paraguay in the 1970s, starting its operations in 1984. Both The company's motto is "generate power with quality, social and environmental responsibility, enhancing sustainable economic, touristic and technological development in Brazil and Paraguay". Five pillars guide

In 2009, the plant was responsible for supplying 77% of the electricity market in Paraguay and 18.9% in Brazil, contributing to the maintenance of an energy essentially based on clean and renewable sources.

countries equally share its ownership, administration and the rights for their own energy consumption from its generated energy. its operations: production of clean energy, technological development, touristic development, regional integration and sustainability.

#### **Management based on sustainability**

All Itaipu's initiatives related to social and environmental responsibility have as its backbone the Business Plan, and the activities are in accordance with its budget. The guidelines for action are discussed and proposed by the Committee of Social and Environmental Responsibility, set up in 2005 and comprising representatives of the six boards of directors.

The management of the information related to the company's sustainable practices, as well as the attempts to include the concept of responsible management in the company's guidelines are being developed by a team that works together with the coordinator of Itaipu's Social Responsibility Programmes.

This area in the company has prepared reports since 2003 and meets the selective index of sustainability, ensuring that Eletrobras , which holds Itaipu's capital,

is listed in the portfolio of the Corporate Sustainability Index of the Sao Paulo Stock Exchange (ISE Bovespa), and gets the necessary rates so as to enlist the Dow Jones Sustainability Index in the New York Stock Exchange (DJSI).

One of the Eletrobras System's goals is to raise its punctuation score in the ISE Bovespa. To meet this end, the companies included in this system have listed joint actions to strenghthen their commitment to sustainability. In this context, Itaipu's challenge is to refine the follow-up of the performance of their social/ environmental programmes, to meet the identified gaps, to find opportunities for improvement and to insert itself among the companies with the best sustainability practices in the world.

### Performance 2009-2010: the Global Compact in Itaipu's practices **Goals and Conduct**

Itaipu's presence in the Global Compact has settled its adherence to the 10 principles that rule the document and has revealed the willing to contribute to its effectiveness. Itaipu's commitment with the values expressed in the Global Compact, however, precedes its formal adherence to it. Human Rights, Labour Rights, Environment Protection and Work Against Corruption govern the company's procedures, closely related to good corporate practices, the setting-up of partnership chains, the financial balance and the commitment to sustainability.

The company's noticeable actions in 2009-2010, regarding each of the Global Compact's Principles, as well as the achievements will be shown in the next pages.



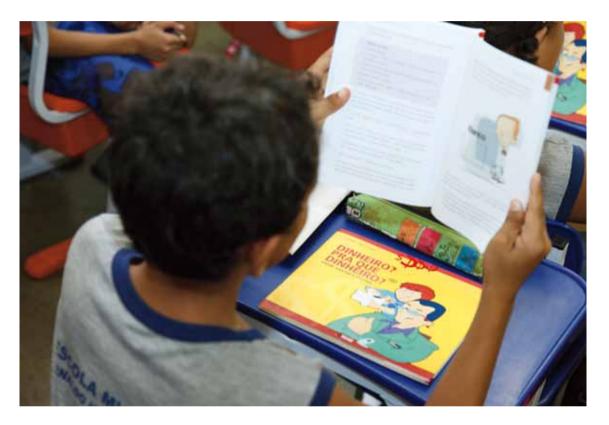




#### Human Rights GRI: DMA-HR

Itaipu has kept a clear practice in favour of Human Rights. Inside and outside the company, with the general public it relates to, it attempts to search and guarantee the freedom of expression, peace, equal opportunities, social and economic development, respect to people's dignity and the access to healthy environment as a way of promoting equality and social justice to the peoples of the Triple Border (Brazil, Paraguay and Argentina). Business should support and respect the protection of internationally proclaimed human rights

Peace culture GRI: EC8



The Protection to Children and Teenagers Programme aims at promoting the rights of the young population of Foz do Iguaçu by granting them access to the citizenship culture, qualifying them for jobs, raising their attendance to formal education and also promoting access to cultural and artistic programmes.

Bearing this in mind, Itaipu joined Federação Paranaense de Canoagem and developed a project called The Lake Boys. Through this partnership, children and teenagers living in areas with high rates of violence are encouraged to practise canoeing, which has resulted in the unveiling of talented athletes, and therefore giving these young people the opportunity of a personal and professional development. In 2009 Itaipu started a partnership with the NGO Casa do Teatro a project called Plugged – Channels connected to Culture. The purpose of the project is to spread the peace culture through artistic, cultural and political activities. It is addressed to less privileged young people studying in state schools, to teachers and people involved with children and teenagers rights. The priority in this project is to give the juvenile public protagonist roles, so that the teenager takes part in all the discussions and the planning of the topics to be focused in their communities.

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#### Protect Network GRI: 4.12, HR6

Another focus of attention of the programme is the social organization of nets which protects children and teenagers rights in the Triple Border. This Protect Network includes civil institutions, government sectors and companies in a strategic cooperation to raise their susceptibility to social issues amidst our teenagers, contributing to the reduction in the use of drugs and chemical dependency and to strenghten the activities which aim at the ban of child labour and child sexual exploitation in this tri-national area. The Protect Network works in an effective way by promoting means of diplomatic acts and integrated programmes between Brazil, Paraguay and Argentina.

Fighting children sexual exploitation is one of the main subject of Itaipu's social responsibility. Therefore, the company searches partners in order to protect children and teenagers's rights so as they can grow free of every and any form of negligence, discrimination, exploitation, violence, cruelty and oppression. For this reason, Itaipu has signed two important pacts:

Pact against Sexual Exploitation of Children and Teenagers along the Brazilian Roads, by NGO Childhood for Children's Protection, with the purpose of arousing corporations' awareness to this issue so as to promote and guarantee children/teenagers' rights.

Declaration of Corporative Commitment in the Fight against Sexual Violence against Children and Teenagers, by the Human Rights Council of the Republic, in order to develop and implement effective and concrete actions to draw the public's as well as civil servants's susceptiblity to the matter, encouraging their denunciation of such actions.



# Feeding: everyone's right GRI: SO5

In 2009 Itaipu sponsored the campaign called Feeding: Everyone's Right, launched by the National Council of Feeding and Nutritional Security (Consea) aiming at including suitable feeding in the social rights of the Federal Constitution. As part of this campaign, the company promoted and showed in Curitiba and Foz do Iguaçu the documentary "Garapa" (sugar cane juice) by the film director José Padilha, which portrays hunger in Brazil, showing three families from the state of Ceara and this drink "garapa" as a source of feeding.

The campaign reached several Brazilian states and could be seen in the Parliament. In February 2010, the Constitutional Amendment 64 was approved, including feeding in the social rights. It is in Article 6 of the Brazilian Federal Constitution.

#### Health and prevention GRI: LA8, EU16

The company promotes health and wellness for its employees and their families. Reviver (Re-live) – a programme that values health and life quality, deals with the prevention and treatment of chemical and smoking dependency, offers fitness and gym programmes, besides keeping supporting groups such as the Solidarity Group in Cancer and Affinity Group on Diabetes. All the employees are represented by formal committees in health and safety as a way of promoting life quality and wellness.

#### Voluntary Force GRI: SO1



Since 2005, all of Itaipu collaborators are encouraged to act as volunteers in social and environmental projects in the premises where the company has its facilities. That year, the Voluntary Force Programme was created and its proposal was to develop the participants' desire to transform themselves and the reality around them, giving less emphasis to voluntary philanthropy.

In four years, the Voluntary Force reached more than three thousand people with activities connected with global guidelines such as the Millennium Development Goals, the UN Global Compact and other national documents of sustainability. Among the various activities undertaken by the programme, the Integration Activity Our Force is Voluntary promotes in public schools in Foz do Iguaçu, the dissemination of themes from the social and environmental programmes developed by Itaipu together with its various stakeholders.

Another flagship of the programme is the Bank of Projects, which transfers funds to charities in which

#### Initiative aims at transforming the community

Itaipu's employees work as volunteers. In 2009, eight institutions were selected and received R\$ 5,000 each. Based on the results achieved by these organizations, Itaipu decided to increase the value: in 2010, the eight selected projects will be awarded with R\$ 10,000 each.

The Voluntary Force Project organizes three annual campaigns, such as "Warm Clothes Campaign", in which blankets, clothes and footwear are donated to Charities; the "Adopt a Little Star this Christmas Campaign", in which low income family's children are given toys as Christmas presents in Foz do Iguaçu and Curitiba; and the "Campaign for the Suitable Destination of Income Tax", in which part of the taxes are meant to favour social institutions.

# 2 Business should make sure they are not complicit in human rights abuses Boost in the development of Villa C GRI: EC8

The company invests in the dignity of the people of Villa C's, region neighbouring the power plant in Foz do Iguaçu, which housed the workers who built the dam. The work group called Working for the Sustainability of Villa C, which started in 2009 and the Federal University of Latin-American Integration (UNILA) aim at improving the district's sanitation conditions, working on diseases eradication, contributing to the improvement of environmental quality and promoting energy efficiency. Activities have been determined according to the current problems in the areas and help prepare the district to the housing, transport, energy supply, among other demands when the university is set-up.

The start of the activities is due to 2010. The Wastewater Treatment Plant called Jupira will be enlarged, with a new net of energy collection and generation from Unila's human waste and solid waste collection. Also, over 50km of a sewage system is expected to be constructed, benefiting 3.850 families in the area. This is a complementary Project to others already in existence in the neighbourhood, inserted in a programme called Solidary Energy, which, since 2003 has drawn the residents' attention to social/ economical aspects of the area. In 2010, together with the City Council, the Educational Complex Arnaldo Isidoro was opened to assist 800 pupils in Primary Education. Besides supporting the construction of the Complex, Itaipu funded its furniture and equipment. The facilities include indoor courts, Music and Arts room, library, media centre, where schoolchildren can learn the basic concepts of sustainability such as rainwater collection and solar energy use.

Another initiative of the Solidary Energy programme has been the set-up of an office for legal practice, together with University of the West of Parana (Unioeste). Teachers, tutors and students of the Law Major assist the community in legal matters, free of charge, in all aspects.

#### Respect to the indigenous culture GRI: HR9



The Sustainability Project in Indigenous Communities works permanently in Tekoha Ocoy, Tekoha Añetete and Tekoha Itamarã tribes. In order to value guarani's lifestyle, Itaipu puts into practice some activities in local infrastructure, food security, agriculture and culture encouragement. The aim is to preserve such communities from poverty, individual and other ethnical groups interests, through improvements in infrastructure, combat children's malnutrition and support to sustainable agriculture. In 2009, besides crop diversification, fishing and animal breeding also contributed to enrich the communities' eating habits. These three assisted communities were able to cultivate 350 hectares, producing 418 metric tons of food/year with Itaipu's technical assistance and partners' help. Part of this production was sold, generating income to the community. Also, with Itaipu's support, the handcraft group of the Ocoy Community could show their traditional art in regional, state and national events, selling their products to institutions and companies.

The Managing Committee "Ava Guarani" was set up, and it is formed by several institutions.

A deep analysis of the activities being undertaken as well as the understanding of the need to get all the social forces involved in the Guarani's issues have been made possible with the creation of the Committee. It is now the Committee's role to become a democratic supporting forum in favour of the indigenous causes, so as to deal with the timing and demands of this population with the white society. It is important to highlight that the Managing Committee, settled in 2003, has gone through a transforming and re-setting process along the years. However, in 2009 it was consolidated as an essential channel to the activities it entails: infrastructure, health, food security, agriculture, livestock, enhancement of culture. It can be claimed that the Committee, in which the Indigenous Associations play a crucial role, is the central chain of partners and supporters of the indigenous issues in Brazil.



#### **DVD Guarani Tradition**

One of the pillars in the Sustainability Project of the Indigenous Communities is to rescue the guarani's identity by recovering their traditional rituals and valuing their music. The 53-minute DVD Guarani Tradition was recorded in 2009, showing images of the culture and traditions of the Indians – organic agriculture, songs, spiritual rituals, prays – as well as testimonies by the leaders of each tribe.

#### Medicinal Plants GRI: EC8

The Medicinal Plants Project intends to disseminate the use of herbal medicines and knowledge about its use, offering an alternative source of income to the organic agriculture and rescue this indigenous culture, strongly connected to the use of plants in treating diseases. In 2009, 323 kg of medicinal plants were produced.

Itaipu has herbs plantation, with a complete dry system structure in the production of dehydrated medicinal plants, collection, cleanliness, processing and quality control, as well as the packing of a kit containing 18 different types of medicinal plants, used in the treatment of the most common diseases in the region. These kits are delivered in public health centers. Besides providing the herbs, Itaipu also promotes qualifying courses to professionals in the health area, so that they can prescribe herbal medicine, donated by the company. They can also insert in the prescription chemical drugs and group therapy. Over 300 patients have been benefited by this system.

Basic courses have also been offered in settlements and dwellers associations. 956 people have been qualified in the correct use of plants, food security, re-use of plants, basic sanitation and hygiene awareness.



In 2010, the Project Medicinal Plants went forward with the first laboratory producing extracts of herbal substances, in a town called Pato Bragado, where the processed raw material is stored and grown by family agriculture in the region, with the help of a co-operative organization. This unit is the result of a successful partnership between Itaipu, the local city council and the company Sustentec. It is considered a pioneering initiative in the country.

#### Concern for Health Matters GRI: EC1

The Ministro Costa Cavalcanti Hospital, first built to assist Itaipu's employees and their families, has widened its activities so as to assist the community of that region. Presently, nine towns, with an estimated population of 430 thousand people have been benefited. Itaipu holds agreements with HMCC regarding the transfer of social funds that ensure quality care and that enable it to become a reference hospital in the region.



The HMCC offers services for women victims of physical and sexual violence, which includes issuing medical records, validated by the Institute of Forensic Medicine required for the settlement of a lawsuit. With the Programme Health on the Border, Itaipu contributes to the guarantee of life quality in the region surrounding the dam.

In 2009 only, over R\$ 7 million was invested in facilities, technological improvements and health care. Besides that, the construction of the new ER in Ministro Costa Cavalcanti Hospital (HMCC) means more time efficiency and quality boost in assisting the population.

These, as well as other activities included in the Programme, such as dozens of qualifying courses, are proposed by the Work Group Itaipu Health.

The WG Itaipu Health is formed by municipal, state and federal members of Brazil, Paraguay and Argentina, with the fundamental role of considering health a matter that should lie beyond their borders. From its set-up in 2003, it has contributed to reduce mother/ children death rates in the three countries; has helped eradicate canine rabies in Paraguay and has co-operated with the Indians' awareness on issues related to healthy sexuality and reproduction, which resulted in the drop of sexual diseases and precocious pregnancy.

In 2009, the WG qualified, in several different areas, over 1.3 thousand professionals who work on basic health in the Triple Border.

Following the same procedures, the WG promoted practical courses in obstetrics emergencies, elderly assistance, the spread of the international rules in sanitation and the qualification of agents for health matters in Indian Communities.

In the endemic area alone, four courses were offered. After the activities, technicians from the three countries implemented the DOTS Strategy (Directly Observed Treatment Shortly), used worldwide in Tuberculosis control.

Qualifying professionals to work with patients with mental diseases has been another Project by WG Itaipu Health, in the Programme Health on the Border.

# Labour Standards GRI: DMA-LA

Itaipu respects labour standards, ensures freedom of association and follows good market practices to maintain an including atmosphere and to encourage its employees personal development. The company condemns the use of forced and child labour. In the trade relations with its suppliers, Itaipu requires compliance with legal requirements, under penalty of contract termination. 3 Business should uphold the freedom of association and the effective recognition of the right to collective bargaining

Freedom of association GRI: HR5, LA4



Freedom of association in trade unions is guaranteed in the collective bargaining agreement (CBA), signed between Itaipu and the trade unions. The document covers 100% of the company's employees and complies with the standards of the International Labour Organisation (ILO). In 2009, there was no event that featured the obstruction to freedom of association and collective bargaining.

The trade unions that represent the employees are an active part of CBA and other committees formed within the agreement and that aim at improvements and work conditions.

# 4 Business should uphold the elimination of all forms of forced and compulsory labour Requirements in the supply chain GRI: HR2, HR7



Itaipu's suppliers have to meet legal labour requirements and are stimulated to act in a sustainable way. They attend lectures on various topics such as corporate safety and internal standards, environmental education, procedures in case of accident and emergency care. Itaipu has included social clauses in contracts for services made by companies with fixed jobs or outsourced labour. To eliminate the risk of forced or slave labour, the contracted companies must certify the payments of wages, overtime, thirteenth salary, notice of dismissal, insurance against accidents related to work and other obligations. The field offices must provide toilets, drinking water and comfort conditions for the task to be performed. Any contract can be terminated if the hired company cease to observe any of its obligations.

Itaipu signed the National Pact for the Eradication of Slave Labour in Brazil, an initiative by the Ethos Institute, the International Labour Organisation (ILO) and the NGO Repórter Brasil, whose objective is to dignify and commit to the labour relations in the productive chains.

# 5 Business should uphold the effective abolition of child labour

First job GRI: HR6



Through the Initiation and Stimulation to Work Programme, young people aged 16 and 17 have the opportunity to work for the company, following the Apprentice Law.

The participants are selected from those with lower incomes and better school performance. The schedule is done when the apprentice is not at school and lasts no more than 4 hours per day. The pupil receives a scholarship in the amount of a minimum wage, life insurance, transportation and food vouchers, medical and dental care. This action has the following social organization partners: Association of Family and Social Education of Parana, in Curitiba, and Guarda Mirim (a kind of institution that prepares Juvenile Officers to perform civil tasks in their communities). Around 4.290 young people have already benefited from the programme since its start in 1988.

Itaipu also develops the Young Gardener Programme that follows the same selection criteria from the Initiation and Simulation to Work Programme. Regarding the topics gardening and landscaping, the youths participate in environmental education activities, theatrical plays, informatics and dances.

Between 2003 and 2009, 196 youths completed the Young Gardener Programme, and 10% are already enrolled in technical courses or graduation majors in the environmental area of knowledge.

In order to participate in bidding, companies must conform to the Federal Constitution (Article 7, XXXIII) about the absence of employees under 18, except in case of apprentices.

# 6 Business should uphold the elimination of discrimination in respect of employment and occupation Gender Equality



The programme Encouraging Gender Equality contributes to the recognition of women's human and citizenship rights within and outside the company, as it is structured in three main areas: corporate, social networking and institutional relations.

It is an innovative programme concerning business management in a predominantly male company. Therefore, the discussions are conducted through a Gender Equality Committee, which comprises participants from all the boards, men and women, facilitating matrix communication and actions and initiatives that can be easily implemented.

Itaipu signed the Pro-Gender Equality Term of Adherence in partnership with the Secretariat of Policies for Women, an institution from the Presidency of the Republic. This term focuses on the company's internal actions and helps in strengthening the Federal Government's Second National Plan of Policies for Women, especially regarding empowerment and violence against women. Itaipu is a member of the Permanent Gender Issues Standing Committee from the Ministry of Mines and Energy and Related Companies.

Due to their diverse and innovative initiatives concerning gender, in 2009, Itaipu was invited by the GRI and by the International Finance Corporation (IFC), an agency of the World Bank, to participate in an advisory workshop with experts from several countries that produced the document "Embedding Gender in Sustainability Reporting - A Practitioner's Guide". Itapu has sponsored the translation of this publication into Portuguese and Spanish and plans to disseminate the material in Brazil, Paraguay and other Latin American countries. In 2010, the company participated in another GRI WorkGroup that aimed at revising and expanding the gender indicators of the GRI Guidelines. Itaipu also participated, on March 9th, in New York, in the launch of Women's Empowerment Principles - Equality means Business, an initiative of the United Nations Fund for Women (Unifem) and the Global Compact to which the company is to join.

### Development opportunities GRI: EU14

To attract, retain and develop talents, Itaipu continuously invests in human resources and aims at creating and promoting professional achievement opportunities.

Corresponding to the employees demand, Itaipu implemented the Performance Management System, which records systematic analysis of performance and that leads to improvement at work and provides autonomy to the professionals. In order to promote social and professional inclusion for people with disabilities, complying with the Brazilian law, Itaipu mapped all the accesses in its offices to enable the transiting of people with disabilities and promoted a series of lectures on the topic with employees. The company currently provides specific vacancies for these people in its selection processes, offering opportunities for new staff, trainees and underage apprentices.

# Environmental protection GRI: DMA-EN



The daily actions of the company, since its installation in the 70s, are guided by environmental caretaking, which involves actions of corporate social responsibility, such as the conscious use of energy and the correct management of waste, respect for the environment, focusing on water and biodiversity and engagement of individuals and organizations in the protective actions.

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# 7 Business should support a precautionary approach to environmental challenges Fostering Good Water Fostering Good Water GRE 505

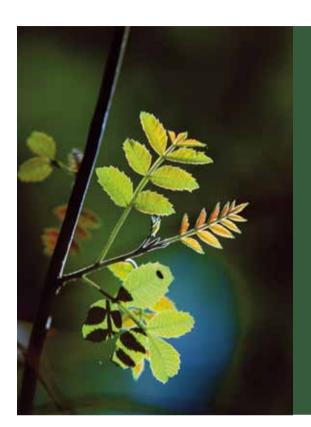


Water is the main asset of the company. The plant's reservoir, located on the border between Brazil and Paraguay, stores a total volume of 29 billion cubic meters of water, responsible for moving 20 turbines. In addition to generating power, the reservoir also attends the local population, such as the public water supply, fisheries, tourism and leisure, and in Brazil, it is connected to a set of river basins covering 29 cities and comprises the Parana Basin 3 (PB3).

In this group of cities - with a total area of 7,800 km<sup>2</sup> and a population of 900,000 inhabitants - Itaipu has a broad water management programme: Fostering Good Water. More than two thousand partners participate in this initiative. They are institutions, universities, government agencies, non-governmental organizations and associations. Not only does Itaipu look after the rivers that supply the plant, but it also plays a significant role in articulating and strengthening the preservation concepts regarding the region's water sources and the community's quality of life.

The objective is to promote a cultural change, replacing the bad habits acquired, due to the false idea that natural resources are inexhaustible, by sustainable practices. Among them are the material recycling, wastewater treatment, the recovery of riparian area, protection of biodiversity, but above all, the communities' awareness regarding environmental preservation, because it results in benefits for the local population, for future generations and for the planet.

Currently, Fostering Good Water involves 20 programmes and 63 actions developed in 70 watersheds. As a local strategy to address global climate change, the programme provides a protecting net of the resources for the PB3, located at the confluence of the rivers Parana and Iguaçu.



#### Municipal Management Committee of the Fostering Good Water Programme

The methodology for the actions of Fostering Good Water follows a series of steps. One of them, considered extremely important, is the foundation of the Management Committee of the Basin in the selected cities that take part in the project. The group includes representatives of Itaipu's social and environmental programmes, federal, state and municipal government, co-operatives, unions, social organizations, universities, schools and farmers, and is responsible for managing the planning.

In 2009, one of the most important advances of the programme was the formalization of the 29 Municipal Management Committees, by means of municipal laws in cities that comprise the PB3. Each committee approved by the legislative chambers gained the status of the representative body of the city, enabling it to collaborate with the creation of public policies.

#### Environmental Monitoring and Assessment

The Environmental Monitoring and Assessment is one of the programmes of Fostering Good Water. Periodic evaluations enable the detection of any change in the involved watershed aquatic ecosystems and also appoint actions to reduce impacts and permit the multiple use of water. Monitoring also allows the evaluation of the effectiveness of traditional water and soil conservation developed in partnership with the community and that benefits the entire region.

The monitoring is undertaken in partnership with the Environmental Institute of Parana (IAP) at stations that were set up at the time of the reservoir's construction and that are situated in 45 strategic basin locations.

The Environmental Laboratory of Itaipu has a fundamental role in this process. It is in this laboratory where analysis, research, prevention, diagnosis and control of diseases caused by contaminants and biological agents are undertaken. Approximately 13,000 tests are performed each year.



#### **Volunteers' Participation**

The action of monitoring has been enhanced by the local community engagement. Through a partnership with the Oswaldo Cruz Foundation (Fiocruz), a volunteers' training programme took place to monitor local rivers. Agreements between Itaipu and city councils from the selected cities in the project provide the transport of agents to the rivers.

#### Rivers' Health GRI: EN15

The Basins' Management project is a key project of the Fostering Good Water programme. Its proposal consists in accomplishing environmental management. For each watershed involved, a partnership with local government is established in order to transfer resources to provide a number of collective actions. The environmental adaptation is not restricted to the surrounding cities. These practices are developed from the headwaters to the lower parts of the basin, avoiding sediment and fertilizers disposal into the affluent rivers from Itaipu's reservoir.

A detailed diagnosis helps to define actions that envisage the rivers' health. The work includes raising awareness and training people to perform actions regarding erosion prevention, maintenance of the watershed's biodiversity and a thorough land use planning.

Another important point is the watershed's contribution to the rural sanitation, readjusting rural roads to reduce sediment deposit from roads to rivers. Furthermore, farmers are advised to store the organic waste and use it as fertilizer.

#### Conservation of Biodiversity GRI: EN11, EN14, EN15

Through the programme Biodiversity, Our Heritage, Itaipu promotes the protection and conservation of wild fauna and flora in the region of the Parana Basin 3 (PB3).

The company monitors the reservoir's fish stocks and migration and maintains the Spawning Channel, a 10-km link between the reservoir and the Parana River, which allows the flow of fish, preventing genetic isolation of populations above and below the dam.

In order to allow genetic exchange between animals and plants that live in the Ilha Grande and Iguaçu National Parks, the company is creating a biological corridor linking the two areas through its Protected Areas (Refuge Protection Belt) and the riparian forests of PB3. Besides



the conservation units located in the Brazilian territory, the corridor will also link areas in Paraguay, such as the Bertoni Museum, and in Argentina, such as Parque Nacional del Iguazú and other protected areas of the Missiones Province.

Since the start of the plant, Itaipu has invested in biodiversity. It has implanted the permanent preservation areas (the reservoir protection belt) and biological sanctuaries, and it invests in genetic improvement of local flora and fauna.

#### Sustainable Initiatives GRI: EN7

The company develops initiatives that aim at reducing water and energy consumption and waste disposal.

Regarding energy, Itaipu maintains an Internal Committee for Energy Conservation that encourages a conscious use of this resource and that promotes energy efficiency actions, such as replacing light bulbs for lower consumption alternatives. Initiatives to improve energy use include the covering of the roof of the buildings with a polyurethane coating that reduces the heat input, allowing limited use of air conditioners and the usage of solar heated water in showers and in the kitchen sinks of the Central Recycling Unit.

#### Water Monitoring GRI: EN8, EN9, EN21

Most of the water used by Itaipu has a non-consumptive end: it comes from the reservoir, moves the turbines to generate electrical power, passes through the spillway or is used for equipment cooling and finally returns to where it came from, the Parana River. In 2009, 381.5 billion litres of water were used. The water that was actually consumed by the company totalized 564,100 m<sup>3</sup>, 12.7% less consumption if compared to 2008. Regarding the consumed water discharge, which is directly performed by Itaipu, more than 77% are treated before disposal. The untreated portion is discarded in the soil and in the Parana River without compromising water quality, as evidenced by the monitoring in areas located upstream and downstream the dam.



### 8 Undertake initiatives to promote greater environmental responsibility Social and Environmental Knowledge and Care Centre



The Social and Environmental Knowledge and Care Centre in the La Plata Basin is an initiative of United Nations Environment Programme (UNEP) supported by Itaipu. Since 2006 the Centre has brought together governments, educational institutions and environmental NGOs from Argentina, Bolivia, Brazil, Paraguay and Uruguay, with the objective of promoting sustainability through a training process known as Circle of Lifelong Learning. In 2010, the Centre launched the third circle of training in Cochabamba in Bolivia, during the World People's Conference on Climate Change and the Rights of Mother Earth, where 30 environmental educators will be trained, and will be responsible for learning communities in the Bolivian La Plata Basin, comprising around 900 involved characters until 2011.

The processes of environmental education, which the Centre is responsible for, are already occurring in fundamentally all countries of the Basin. The idea is to train 4,500 environmental educators to work in various communities.

Several meetings of the Centre's participants have taken place in the signatory countries of Latin America for evaluation and assessment of the developed activities. In the strategic planning for 2010-2011, the challenge is to seek institutional autonomy by adopting its own legal identity.

# **Oil Regeneration**

Oils for equipment lubrication and insulation are one of the main materials used in the production process of Itaipu. The company monitors its physical and chemical characteristics and promotes periodically regeneration to preserve the functionality of these materials throughout its lifetime.

Itaipu uses an innovative process, which resembles hemodialysis. The oil circulates in a closed circuit formed by the regeneration machine and the transformer. The main advantage of this system is to allow the processor to remain connected and operating normally throughout the procedure ensuring good operational performance.

In the case of insulating oil, the technique used is different: a specialized company collects the material, which is filtered and re-additivated.As the mineral-based product does not change with use, the regeneration process can be repeated many times.

The management of material at Itaipu has a positive impact on the environment, as it not only prevents the extraction of exhaustible natural resources, but also eliminates the disposal or burning of oils used, generating a further reduction in the costs of the company.

According to the National Council of Environment, each litre of lubricant oil can contaminate one million litres of water and can take up to 300 years to degrade.





#### **Waste Management**

To manage waste, Itaipu keeps the programme Come and Go, which promotes the selective collection and aims at increasing the recycling of waste material used in the company. The correct disposal of toxic products, contaminants such as oils, fluorescent tubes and other non-recyclable waste, used in the industrial area of Itaipu is observed. This material is passed through to specialized companies, which decide about the final destination of the waste. The garbage that is not recycled goes to a landfill in Foz do Iguaçu.

#### **Environmental Education**



The environmental education activities are an essential part of the Fostering Good Water programme. In 2009, the work was strengthened by the mayors' nomination of 60 managers of environmental education, who discuss strategies to be included in municipal public policies.

Another important fact that year was the formation of the Collective Municipal Educators, which brought together people from different sectors - government, private and civil society - in order to promote reflection, to draw a socio-environmental diagnosis on each city's reality and to plan interventions that could lead to improvements.

In 2009, two activities took place in order to stimulate a change of habits and strengthen public policies for food safety. One of them was the 2nd School Lunch Management Course, featuring nutritionists and cooks, and the other was the PB3 2nd Healthy Recipes Contest - Organic edition.

#### **Internal Public**

The Corporate Environmental Education Network, integrated by volunteer employees, promotes articulation, awareness and sharing of information for the selective collection (Come and Go Programme), encourages the participation of employees in socio-environmental events and promotes lectures and on-site technical visits in some programmes of the Fostering Good Water Programme.

In 2009, the network conducted awareness activities to reduce

the use of plastic drinking cups in the company, which was about 7 million units per year. In order to put into practice such educational activities, all employees received stainless steel mugs. A reduction in plastic cups usage of 30% is expected in 2010.

### The Bela Vista Biological Refuge (RBV) GRI: EN13

The Bela Vista Biological Refuge (RBV), maintained by Itaipu in Brazilian territory, has celebrated its 25th anniversary. Over more than two decades, it has become an important centre of research on the fauna and flora, a tool for environmental education and a place where technical visits and tours are possible.

The RBV also includes a zoo for animals that can not be returned to nature, a nursery for the breeding of endangered species and a veterinary hospital. In 2009 this hospital aided 950 animals from captivity and natural habitat, delivered by environmental agencies. The RBV incorporates the 41,000 hectares of the company's protected area in Brazil and Paraguay. In addition to programmes for wildlife conservation, the Refuge researches fish in net cages and monitors the Spawning Channel. The RBV houses 81 different species of animals, including



mammals, birds, reptiles and one amphibian. Forty-three of them have already been reproduced in captivity. One case that drew most attention in 2009 was the harpy eagle, rare bird that is endangered. This was the first case of successful captive breeding in the South of Brazil. Regarding the flora, the Refuge maintains a programme of forest plants, a nursery with a capacity to produce 400,000 seedlings per year and a germplasm bank with an array of 15 forest species – some of them are endangered species like the Pau-Marfim (Ivory Wood).

#### Rural Sustainable Development GRI: 505

With the support of Itaipu, the Parana Basin 3 (PB3) is serving as a pilot plant for the implementation of a new form of agricultural credit provided by the federal government: the National Programme for Strenghtening Sustainable Family Agriculture (Sustainable Pronaf) Through the Rural Sustainable Development programme, Itaipu encourages the practice of sustainable agriculture and livestock in PB3, using its own methodology, which is serving as the foundation for actions of the federal government.

This experience has led to the signing of a technical co-operation agreement between the Ministry of Agrarian Development (MDA), Itaipu and the Development Agency of Western Parana (Adeop) for the environmental management and assessment of the land properties. The agreement provides the transfer of federal funds in the first phase of the project. The goal is to diagnose 2,500 properties in 29 cities from PB3 until December 2010.

# 9 Encourage the development and diffusion of environmentally friendly technologies Social Technology GRIEUB

Itaipu has developed an electric vehicle for collectors of recycling materials. The trolley provides these people with better working and income conditions, because they are able to load larger volumes with less effort. The equipment is simple to operate and has a low maintenance cost.

Over 80 electric vehicles have already been distributed across Brazil in partnership with the National Movement of Recycling Collectors. Besides being operated by co-operatives of collectors in the West region of Parana, the vehicle is also being tested in several locations around the country.

Itaipu currently supports projects to promote the production of 20,000 vehicles in the next four years, in partnership with the federal government. The company is negotiating funding from the National Development Bank (BNDES) of R\$ 150 million for the production of these electric cars.

#### Agro-energy and Family Farm Condominiun GR: 1.2



The first Agro-energy and Family Farm Condominium was developed with the support of Itaipu's Renewable Energy Coordination in partnership with the State's Secretariat of Agriculture and Supplies, the EMATER/ PR and the Marechal Cândido Rondon city council.

The project provides technical and organizational conditions for family farmers from a co-operative to produce electricity from animal wastes. The animals are pigs, cows and poultry raised in their properties.

The animal's manure will be treated in biodigesters in order to produce biofertilizers and biogas, which can serve as a fuel for motogenerators that generate electricity. The biogas obtained in the properties will be transported through a gas-pipeline installed across the properties, which will convey it to a micro thermoelectric unit, to be run by the co-operative.

The generated electricity will be sold to the Electric Power Company of Parana (Copel).

#### Electric Vehicle GRI: EU8

The development of an Electric Vehicle project aims at absorbing technology, training qualified teams, developing lines of applied research and creating opportunities for technological innovation for Itaipu and for Itaipu Technological Complex. The studies include the development of two prototypes: an electric mini-bus and an electric truck for small loads. Regarding the promotion of sustainable development, the company uses 41 electric vehicles, which represent 5% of the fleet.

#### Renewable Energies GRI: 1.2

The Observatory for Renewable Energy in Latin America and the Caribbean was installed in August 2009 at the Itaipu Technological Complex. It is a cooperation plan between Itaipu, the United Nations Industrial Development Organization (UNIDO) and Eletrobras.

The main objective is to stimulate the cooperation between the regions of Brazil and the Latin American and Caribbean countries regarding research and development of renewable energy through a knowledge platform. By working together it is possible to share experience and examples, to promote sustainable industrial development and to boost the local economy. The creation of the Observatory resulted in the implementation of an international demonstration area of renewable energy in Western Parana, comprised of five operating units in different scales of energy production that use conversion of biomass into biogas as energy source.

# Fight against corruption GRI: DMA-SO

Itaipu follows the international good corporate practices and, using structured internal processes and control mechanisms, aims at restraining all kinds of corruption.

#### 10 Business should work against corruption in all its forms, including extortion and bribery

Internal Processes GRI: 502



In 2009, Itaipu did not conduct specific assessments regarding risks related to corruption. However, adapting the financial processes to procedures established in the Sarbanes-Oxley Act (SOX) and carrying out internal and external audits directly contribute to prevent such practice. No cases of corruption were identified that year.

#### SOX

The company made progress in improving internal control structures and financial risk management, based on the recommendations of U.S. Sarbanes-Oxley Act (SOX). The implemented changes demanded greater involvement of managers and collaborators considering the corporate goals, and also served as a tool for improving the processes involved in management. The strengthening of the corporate management practices, which increased the transparency and credibility of the company to society and stakeholders, is among the benefits achieved with the implementation of SOX.

#### Audits

Itaipu conducts internal audits to ensure controlled work performances. The process allows the suggestions of changes regarding management and procedures, the identification of areas that deserve more attention and the correction of divergences that may affect the progress of the activities.

#### Ethical conduct GRI: 4.8



Itaipu's Code of Ethics assemble the company's values such as respect for the public's interests, harmonious coexistence among Brazilians and Paraguayans, preservation of ecological balance, contribution to the development of the surrounding communities, commitment to generate electricity with quality and reliability. It also highlights the importance of ethical conduct of each person involved with the company, from councillors and directors to employees. In 2009, Itaipu created the Ombudsman Unit, which aims at establishing a communication channel between Itaipu and its external audiences, contributing to a participative and transparent management and improving the practices and business processes. Compliments, suggestions, complaints or denouncements are sent to those responsible for each area. It is the Ombudsman's task to answer the requester. All contacts are confidential.

# Partnerships for Development Latin-American Integration GRI: EC8

In 2010 the Brazilian president Luiz Inácio Lula da Silva formally established the Federal University of Latin American Integration (UNILA), consolidating an ambitious plan to promote integration among all countries of the region through education, research and technology. For Itaipu, this is a commitment regarding the region's development as well as improvements throughout Latin America.

Since its official announcement, the company, being one of the main partners of the Ministry of Education (MEC),



has been involved in bringing to life the project of the new university. Itaipu donated the 38,9-hectare terrain where the UNILA headquarters will be built, defrayed the costs of the basic and executive projects and will endow the complementary projects of structure, installations, road and drainage systems, illumination and landscaping of the future headquarters of the institution. Until the completion of the building process, UNILA will be housed in the area conceded by the PTI.

The UNILA is an innovative project of Latin American integration through knowledge and culture. The goal is to prepare researchers and professionals to evaluate the present and to plan the future of an integrated Latin America, taking into account the areas of Science, Engineering, Humanities, Literature, Arts, Social and Applied Sciences. When consolidated, the university will achieve a framework of 10,000 students and a teaching staff of 250 Brazilians and 250 professors from other Latin American countries. The classes will be taught in Portuguese and Spanish. The beginning of the first undergraduate course is planned for August 2010.

#### **International Partnerships**

The Itaipu's Renewable Energy Coordination aims at guiding and articulating experiences related to renewable energies, interacting with the various social workers. Thus, through its influence, it brings together universities, industries and study groups involved in the matter.

The articulating role of the coordination is achieved in partnership with international agencies:

• United Nations Educational, Scientific and Cultural Organization (UNESCO) to establish an International Centre of Hydro-informatics, in order to use information technology to integrate data that enable an integrated management of water.

#### Employees and partners to set up a technological complex in Haiti GRI: EC8

Many employees in Itaipu were mobilized after the earthquake that was responsible for 220 thousand deaths in Haiti, at the beginning of 2010. A Haiti Solidarity Committee, whose purpose is to contribute to the country's recovery, has been created. The initiative is the result of a spontaneous action from the employees of Itaipu, along with 15 other institutions that, touched by the devastating earthquake disaster, decided to join forces to raise funds to enable humanitarian and economic ventures as well as projects of reconstruction of Haiti.

The funds raised will be entirely used for projects and actions for the Haitians, through the Brazilian Cooperation Agency – ABC, a member of the • United Nations Industrial Development Organization (UNIDO), with the establishment of the Observatory for Renewable Energy in Latin America and the Caribbean whose purpose is to implement various projects regarding generation of energy using renewable sources, professional training and the development of an international data base.

• Food and Agriculture Organization of the United Nations (FAO) to develop the project entitled Agroenergy and Family Agriculture Townhouse, which deals with the potential of agriculture/livestock in generating energy from the waste biomass converted into biogas.

executive body of the Ministry of Foreign Affairs and the United Nations Development Programme – UNDP Brazil.

With the participation of a member from the ABC committee that was sent on mission to the country, the group decided to develop a project to install a small technological complex focused on training the Haitians in recycling the earthquake debris and in using renewable energy from recycled wood in order to replace charcoal, largely used by the local society and that is destroying most of the forests. The Ministry of Education will also take part in the project and will be responsible for the pedagogical area while Itaipu and partners will handle the installation and operation of equipment for recycling and the entrepreneurship in the field of construction with recycled aggregates.



# Publishing Details GRI: 3.4

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Information, suggestions, criticism or comments responsabilidadesocial@itaipu.gov.br

Itaipu Binacional Coordenadoria de Responsabilidade Social

Curitiba/PR | R. Comendador Araújo, 551 | CEP 80.420-000 | Phone: 55 41 3321-4284 | Fax: 55 41 3321-4421 Foz do Iguaçu/PR | Av. Tancredo Neves, 6.731 | CEP 85.866-900 | Phone: 55 45 3520-5925 | Fax: 55 45 3520-5922





www.itaipu.gov.br