



Eletrobras



Annual and  
Sustainability Report  
**2012**





**Annual and  
Sustainability Report  
2012**

*Orquidea*  
*Catasetun macrocarpum*





## Message from the Chairman of the Board

Eletrobras's future and past met in 2012; the year the company celebrated its 50th anniversary of services provided toward Brazil's sustainable development. On one hand, during the celebration of the 50th anniversary, Brazilians had the opportunity to remember the achievements of the company and its strategic importance toward the country's development through the implementation of an electric system that is unique in the world, characterized by its clean energy matrix based on hydroelectric power and a huge interconnected transmission system. On the other hand, Eletrobras gave clear signs of the path to be taken for the coming years, focusing on environmental, social and economic sustainability.

Two facts that occurred in 2012 demonstrated this union of past and future in the present. The first such fact was Eletrobras's active participation in negotiations and debates that occurred in the Rio+20 summit, especially in relation to the United Nations in areas where the company has great expertise: energy efficiency, the use of renewable sources of energy and the universal access to electricity. In terms of efficiency, Eletrobras has been coordinating, since its creation in 1985, the National Electricity Conservation Program (Procel), a program of the federal government dedicated to raise awareness among the population about the importance of a conscious use of energy. Highlights of the Procel program are actions involving schools and public authorities, improving public lighting in cities, in addition to the Procel Seal (Selo Procel), the program's most readily recognized image by the population, since it is present in home appliances that have good energy-saving performance.

Concerning the use of renewable energy, Eletrobras's energy matrix is an example to the

world. In addition to having 85% of its matrix from hydroelectric power, which is a clean and renewable source of energy, the Eletrobras companies have expanded their participation in the wind power sector, which is an essential source of energy to complement hydroelectric power. In terms of universal access to electricity, Eletrobras coordinates a program of the federal government that is a global benchmark: the program Luz para Todos (Light for All) has taken electricity to approximately 15,000,000 people throughout Brazil. Based on this result, the United Nations decided to replicate this initiative worldwide and take electricity to 1.4 billion people who still do not have access to this basic utility that contributes to the well being of people.

The second fact in the past year that deserves highlight was the decision made by Eletrobras and its subsidiaries to extend the concession of electricity assets that were maturing in 2015 and that were anticipated by Law No. 12,783/2013. The effort made by the Eletrobras companies allowed for the federal government to reduce energy rates, bringing benefits to 190 million Brazilians who were able to reduce their domestic energy bills and still enjoy improvements in the labor market enabled by the reduction of company expenses with this basic input.

In the history of Eletrobras, every challenge was overcome. For this reason, I'm convinced that adapting the Eletrobras companies to this new reality in the Brazilian electric sector will be one more challenge to be overcome with the usual excellence. The company will become stronger, more profitable, competitive and subsequently, sustainable, ready to maintain its commitment to Brazilians for another 50 years.

MÁRCIO PEREIRA ZIMMERMANN  
Chairman of the Board

## Message from the President (GRI 1.1)

The year that Eletrobras celebrated its 50th anniversary was extremely significant and symbolic for the company. It was in the year 2012 that we proudly registered 50 years of history, and also when the challenges that we faced multiplied. As a consequence, the future of the largest power company in South America was redesigned.

With operations all over Brazil, we participate strongly in the implementation and operation of the interconnected power system and isolated systems. These systems are essential to supporting the operation and growth of the Brazilian economy and providing access to electricity for over 190 million Brazilians in an integrated manner.

This great responsibility – which has grown over the past five decades – has generated equally great results that can be attested to throughout this Sustainability Report. One highlight has been our breaking of the world record by Itaipu Binacional, which reached 98.3 million MWh, and Angra 1 and 2 plants, which reached 16 million MWh. Government programs managed by Eletrobras, such as Luz para Todos, Proinfa and Procel, also reached significant figures.

In 2012, R\$ 9.9 billion investments were made. Working alone or in partnership, the Eletrobras companies added approximately 711 MW of clean and renewable energy and 880 km of transmission lines to the Brazilian power matrix. In terms of distribution, due to our 199,935 km of network, we provide energy to approximately 3.7 million customers.

We have made further investments, as well. In the generation segment, approximately 22,662 MW are under construction and an additional 19,040 MW are under study. In transmission, we will implement over 13,730 km in the coming years, which is a gain of 13,885 MVA in transformation capacity.

As signatories of the Global Compact since July 2006, we have consistently reiterated our commitment to sustainability and to corporate citizenship. In 2012, due to our participation as

official partners in the United Nation's Conference on Sustainable Development (Rio+20), we presented to the public our initiatives that promote improvements in quality of life, our contribution to the use of more sustainable energy sources that pollute less, and also the promotion of their use in an efficient manner.

Abiding by these premises, we continue to reflect the principles of the Global Compact in our mission, vision, and values, and we practice them through actions and programs developed by our companies. In doing so, we prove that our activities effectively contribute to universal access to electricity, which is one of the greatest challenges the global power sector faces today.

In September 2012, Provisional Measure 579/12, converted into Law 12.783, established the form of extending the concession agreement for the generation, transmission, and distribution of energy. The motivation for more affordable tariffs and reduced energy bills in all classes of power consumption in the country led the federal government to propose the early maturity of concession agreements, with an automatic extension within established conditions or, as an alternative, the option to rebid the concession once the original term of the contract expired. Holding and its subsidiaries Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletrosul, and Eletrobras Furnas analyzed the various possibilities concerning technical, economic, and strategic aspects and opted for the extension of concessions for 30-year contracts, thus ensuring the preservation of its size and standing.

This year's financial results showed great loss; however, this loss should be seen as an isolated event arising from the effects of Law 12.783. The figures were severely affected by the releases resulting from the effects of this law on our assets.

These new challenges have brought new perspectives and a focus on the need for continuous



*Cecropia*  
Cecropia

improvement, accelerating enhancements that we had already been pursuing in order to create an ever more efficient company. Therefore, we began our Master Business and Management Plan while still in 2012 in order to take an immediate stand before the new business environment of the Brazilian power sector. We need to reduce costs related to revenues even further, restructuring our corporate processes and optimizing our efforts among Eletrobras companies.

This year especially, as we value the energy of

the people who have formed our history, we present in this report how much we have built. We also register our current work on economic, environmental, and social aspects in order to meet the expectations of our significant role in the Brazilian power sector.

Eletrobras is growing and at the same time modernizing itself in order to keep meeting the power supply needs of the country with quality and reliability, with the goal of creating an increasingly more sustainable Brazil.

JOSÉ DA COSTA CARVALHO NETO  
President of Eletrobras





# Mission, Vision, and Values (GRI 4.8)

## Mission

To operate in the energy market in an integrated, profitable, and sustainable manner.

## Vision

To become the largest global clean energy corporate system by 2020, with profitability in line with the major companies in the electric power industry.

## Values

- Results-driven
- Entrepreneurship and innovation
- High valuation of and commitment to people
- Ethics and transparency



*Árvore do Eletrobras*  
Carapa guaianensis

# Sustainability Policy Guidelines

The Sustainability Policy for the Eletrobras companies was prepared with the objective of establishing guidelines that guide actions related to sustainable development.

This Policy represents the commitment of the Eletrobras companies to sustainability, a concept that underlies all actions of the companies, seeking balance between business opportunities, society's current needs, and the well being of future generations.

## Promotion of sustainable development

Act as an agent of sustainable development in the territories in which the Eletrobras companies operate.

## Clean and renewable energy

Prioritize the production of clean and renewable energy.

## Rational use of resources

Promote the rational use of natural resources and materials needed for Eletrobras companies' processes, systems, and operations.

## Energy efficiency

Act as an induction agent for energy efficiency, seeking greater rationality in the employment of natural resources and promoting the development and use of technologies, processes, and systems to this end.

## Sustainable R&D+I

Promote scientific research, development, and technological innovation aimed at improving performance, boosting positive impacts, and minimizing negative impacts of the activities of the Eletrobras companies.

## Commitment to ethics and transparency

Establish ethical and transparent relationships with all stakeholders.

## Respect human rights

Respect the human rights set forth in national and international laws, treaties, and conventions, refusing to accept any violation within Eletrobras companies.

## Value for stakeholders

Add value and perform operations with profitability and competitiveness in an efficient and effective manner, generating return for employees, shareholders, customers, suppliers, and other stakeholders.

## Dialogue and engagement

Establish broad, transparent, permanent, and structured dialogue channels with stakeholders, while respecting the principles of equity, diversity, and culture in the regions where we operate and utilizing the benefits of these interactions in corporate decisions.

### **Employee citizenship**

Promote among employees a commitment to sustainability in such a way that they can develop an attitude of citizenship within the corporate environment and in their daily lives.

### **Workplace conditions and well being of employees**

Ensure health and appropriate workplace conditions to employees, in accordance with national and international standards on health and safety, as well as demanding the same commitment from our suppliers.

### **Quality of life for employees**

Promote the personal and professional growth of all our employees, as well as a work environment that includes and fosters equity and diversity.

### **Responsible partnerships and purchases**

Incorporate social and environmental requirements into the procurement of goods and services and stimulate this practice in business partnerships.

### **Sustainability management**

Improve management systems so as to promote and ensure the continuous improvement of business processes, strengthening the principles of sustainability.

### **Risk management**

Operate with the aim of minimizing and mitigating financial, environmental, social, and operational risks, and other risks associated with the Eletrobras companies' businesses.



## Main Indicators 2012

### Economic and Financial

- Net operating revenue of **R\$ 34,064 million**
- Losses for the fiscal year – **R\$ 6,926 million**
- Equity value **R\$ 67,280 million**
- Investments of **R\$ 9,850 million broken down** into:
  - **R\$ 5,263 million** in power generation;
  - **R\$ 2,985 million** in transmission;
  - **R\$ 1,056** in distribution and;
  - **R\$ 546 million** in research, infrastructure and environmental quality
- The investments in R&D+I of the Eletrobras companies in 2012 totaled R\$ 214 million, 18.9% more than the previous year

### Social

- We ended the year with **28,437 employees**
- A **3%** turnover rate was recorded
- **R\$ 193 million** was invested in projects for society
- Procel helped save **9.1 thousand GWh** in electricity
- Luz para Todos made **120,131 new installations**

### Environmental

- We invested **R\$ 197 million** in environmental protection
- We gave support for the conservation of **24 Indigenous lands** and **139 conservation units**
- We emitted **11,772,144 tCO<sub>2</sub>e**
- We avoided **134,770,589,55 tCO<sub>2</sub>e** in emissions

### Operational

- We produced **207,451 GWh** of energy
- Our installed capacity is **42,333 MW**
- We have **55,118 km** of transmission lines in Brazil and **199,935 km** of distribution lines
- We provide energy to 3.7 million customers directly
- Of the total installed capacity of Eletrobras companies, **85%** originates from clean and renewable energy sources
- The UHE Passo São João, UHE Santo Antônio, and UHE Mauá plants began operations, adding more than **500.84 MW** of installed capacity





## Commitments (GRI 1.2)

Evolution of the 2012 commitments we made in 2010 and 2011		
Goals/Commitment 2012	Performance	Comments
<b>GOVERNANCE</b>		
To promote the first performance assessment of the Eletrobras Board of Directors (BD) and Executive Board (EB) by spreading this process to all companies of the system.	PARTIALLY ATTAINED	Eletrobras has standardized a methodology for the performance assessment of the BD and EB and communicated the approval of this methodology to all companies along with the guidelines for its application.
Start of activities for two new support committees to the Board of Directors: Audit and Risk Committee and People Management and Remuneration Committee.	ATTAINED	See Item Corporate Governance, on page 66.
To promote the first election to choose an employee representative to serve on the Board of Directors.	ATTAINED	See Item Transparency in Management, on page 72.
The Contract of Goals and Corporate Performance (CMDE) set forth, among other obligations, the achievement of annual goals for the period of 2010-2014, for the Eletrobras companies, aimed at improving the performance of the processes of the Eletrobras companies.	ATTAINED	See Item Contract of Goals and Corporate Performance, on page 86.
<b>ECONOMIC</b>		
Investments of R\$ 13.3 billion	PARTIALLY ATTAINED	Approximately R\$ 9.9 billion was invested in several projects for generation, transmission, and distribution, surpassing our own record.
<b>SOCIAL</b>		
Final assessments of career performance and development within the scope of the first Unified Cycle of the Performance Management System.	ATTAINED	See Item Performance Management, on page 108.
Development of actions to improve corporate strategic objectives, organizational performance, and well being of employees, based on the results of two unified surveys on organizational climate.	ATTAINED	See Item Climate Survey, on page 107.
Acquisition and installation of suggestion boxes, provided by the holding Ombudsman, in order to capture suggestions/complaints made by outsourced staff who work for the company and do not have access to computers, as well as the development of a specific communication plan to evaluate the content of these suggestion boxes.	ATTAINED	See Item Suggestions boxes, on page 76.
Delivery of general recommendations for the preparation of a permanent process to train the internal public that would lead to the formation of an internal culture of valuation of the company's brand.	ATTAINED	After the launch of the brand, the holding and the companies held several communication initiatives aiming to engage the internal audience.

Evolution of the 2012 commitments we made in 2010 and 2011		
Goals/Commitment 2012	Performance	Comments
<b>BUSINESS</b>		
Completion of the preparation of the Business Plans for each company of the Eletrobras System in 2012.	PARTIALLY ATTAINED	Interruption after the edition of Provisional Measure 579 of September 11, 2012. Eletrobras has already resumed the process of unfolding its Strategic Plan after a new assessment of the regulatory framework. In March 2013, the company approved the Master Business and Management Plan.
Aggregation of own developments of approximately 1,349 km of transmission lines, 11,121 MVA in transformation capacity in substations, and 869 Mvar of reactive compensation.	PARTIALLY ATTAINED	Due to the delay in obtaining environmental licenses, 209.6 km of transmission lines, 6,301 MVA in transformation capacity, and 280 Mvar in reactive compensation were aggregated.
Start of operations of the following generation developments (own): Batalha, Barra do Rio Chapéu, São Domingos, João Borges, Passo São João, São Domingos, and Simplicio (hydroelectric plant).	PARTIALLY ATTAINED	UHE Passo São João started its operations in April 2012. The PCHs Barra do Rio Chapéu, João Borges, São Domingos, Simplicio, and Batalha are scheduled to start operations in 2013.
Start of operations of the following generation developments (partnerships): Jirau, Mauá e Santo Antônio (hydroelectric plant) and Cerro Chato 1, 2, and 3, Complexo Eólico Livramento, Mangue Seco 2, Miassaba 3, Pedra Branca, Rei dos Ventos 1 and 3, São Pedro do Lago, and Sete Gameleiras (wind power).	PARTIALLY ATTAINED	The wind power plant Mangue Seco 2 and Cerro Chato 1, 2, and 3 started operations in 2011. The UHE Santo Antônio started operations in March 2012; 9 out of the 44 units started their operations in 2012 and the UHE Mauá started its operations in November 2012. The wind power plants Pedra Branca, São Pedro do Lago, Sete Gameleiras, Jirau, Miassaba 3, Rei dos Ventos 1, Rei dos Ventos 3, and Complexo Eólico Livramento will start their operations in 2013.
To reach the goal (forming SPEs in partnership with private entrepreneurs) of adding approximately 4,958 km of transmission lines and 16,554 MVA in transformation capacity to substations, which will be incorporated to SIN's basic network.	PARTIALLY ATTAINED	Due to the delay in obtaining environmental licenses, 698 km of transmission lines, 1,523 MVA in transformation capacity, and 55 Mvar in reactive compensation were aggregated.
Start of the construction of the transmission line for the Brazil – Uruguay interconnection (390km) and of the associated substation, in partnership.	NOT ATTAINED	After the Public Hearing held in August 2011, an incompatibility in the layout of the transmission lines was detected, which forced a change in the location of SE Candiota and of the layout of lines and, consequently, the rescheduling of the development, with its commercial operation being forecast to start in the first half of 2014.
Start of construction of UHE Inambari (2,000 MW) in Peru, in partnership.	NOT ATTAINED	The SPE responsible for the project is awaiting decision from the Peruvian government on the continuity of studies.

Evolution of the 2012 commitments we made in 2010 and 2011

Goals/Commitment 2012	Performance	Comments
ENVIRONMENTAL		
Monitoring, with the use of the System of Corporate Sustainability Management Indicators (IGS), of four major issues (water, energy, waste, and biodiversity), using 39 indicators.	ATTAINED	See Item System of Corporate Sustainability Management Indicators (IGS), on page 149.
Seek a unified strategy for the companies regarding the use of practices that minimize or offset the emission of greenhouse gas.	ATTAINED	See Item Climate Change, on page 169.

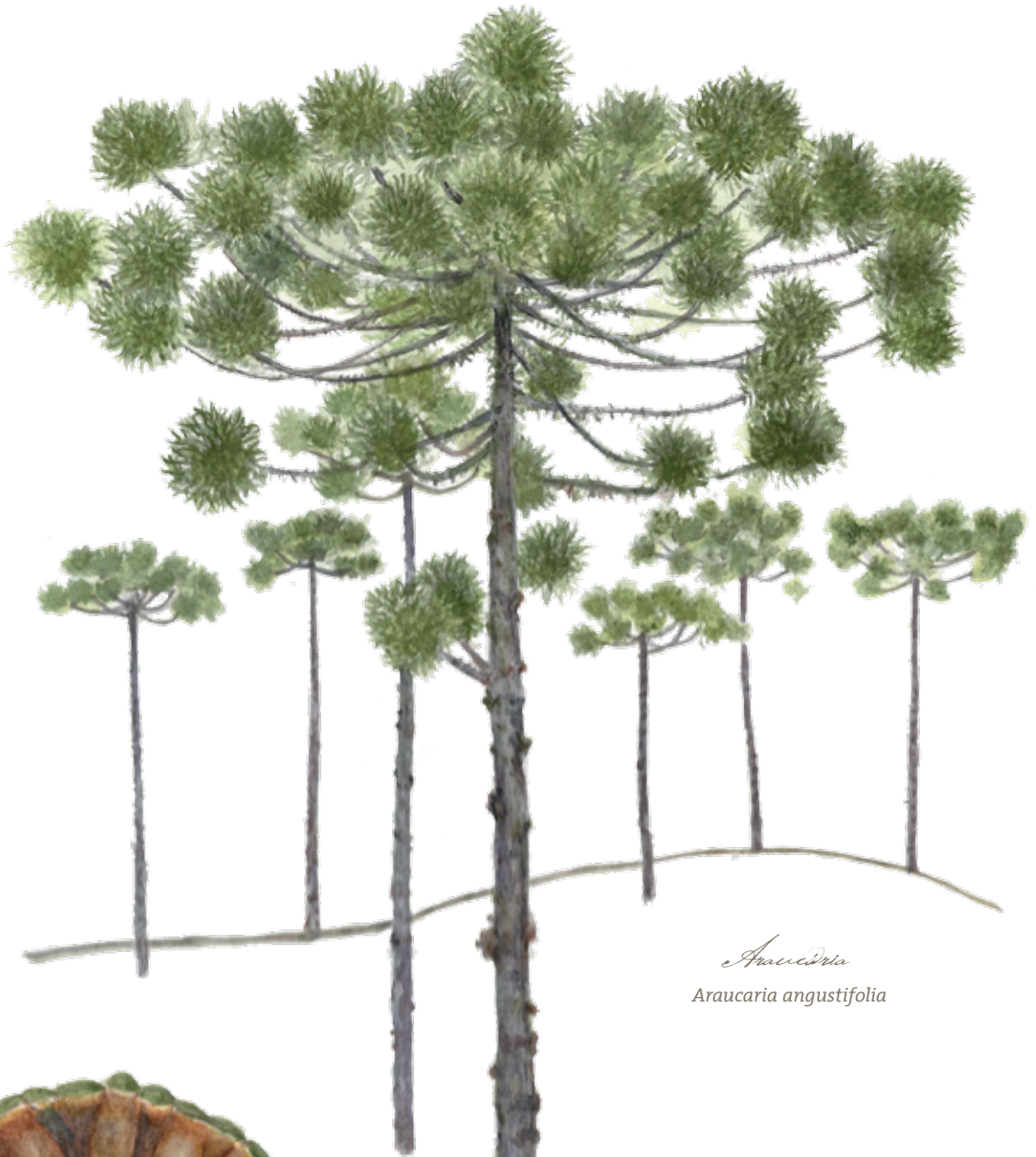


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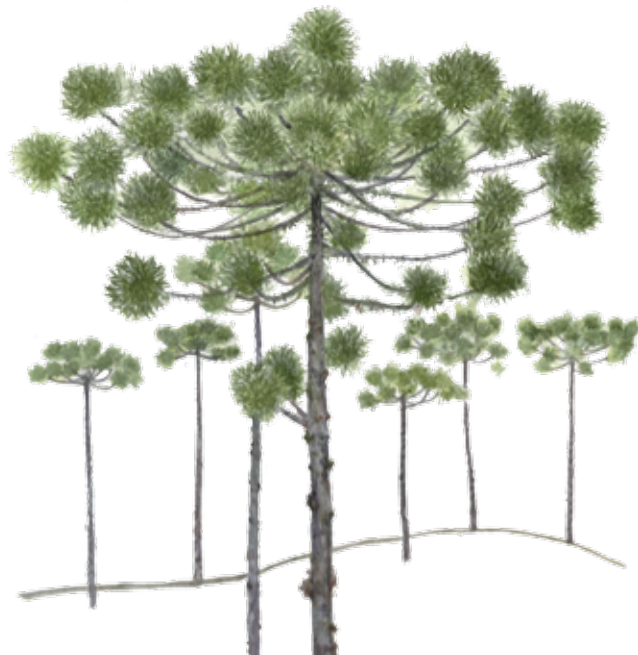




*Araucária*  
*Araucaria angustifolia*



# About this report









Eletrobras

## About this report

Since 2008, we have been publishing company information and reporting our performance on economic, environmental, and social measures. This report is published annually and follows the guidelines provided by the Global Reporting Initiative – GRI (version 3.1) and refers to the period between January 1 and December 31, 2012, with information on the 16 Eletrobras companies: holding, Eletrobras Amazonas Energia, Eletrobras Distribuição Acre, Eletrobras Distribuição Alagoas, Eletrobras Distribuição Piauí, Eletrobras Distribuição Rondônia e Eletrobras Distribuição Roraima, Eletrobras Cepel, Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletronuclear, Eletrobras Eletropar, Eletrobras Eletrosul, Eletrobras Furnas, and Itaipu Binacional. With application level B+, this document contains 83 performance indicators, where 21 refer to the Electric Power Sector Utilities Supplement, in

addition to those with profile. **(GRI 3.1; 3.2; 3.3; 3.6; 3.7; 3.8; 3.9; 3.10; 3.11)**

Since 2011, we have converted the Annual Report and the Sustainability Report into one single document, evidence that Eletrobras believes that this content is inseparable. In addition, we underline our main challenges and commitments, the actions that have been performed, and the proposals for the following years.

The complete version of this report is available online ([www.eletrobras.com/ELB/data/Pages/LUMIS76D5F4D1PTBRIE.htm](http://www.eletrobras.com/ELB/data/Pages/LUMIS76D5F4D1PTBRIE.htm)) and allows the reader easy access to subjects of specific interest in Portuguese, English, and Spanish. We also make available printed, shortened, and segmented versions for the audiences: investors and shareholders, the internal public, and the third sector.

## Materiality Process

The Eletrobras companies treat sustainability materiality as an integral part of the management of the company. A Survey with Stakeholders is performed to identify priority issues and in order to improve the materiality process of issues to be addressed in the report, we conduct a panel with specialists from the sustainability area and from the Brazilian power segment. As a result of the survey and the panel, we reiterate to our

stakeholders the importance of issues that we have been working on in our past reports.

The issues identified as priority by the panel refer to the relationship with employees; the relationship with the government; fostering of public policies, especially participation in River Basin Committees; impact on local communities; renewable energy; and occupational health and safety.

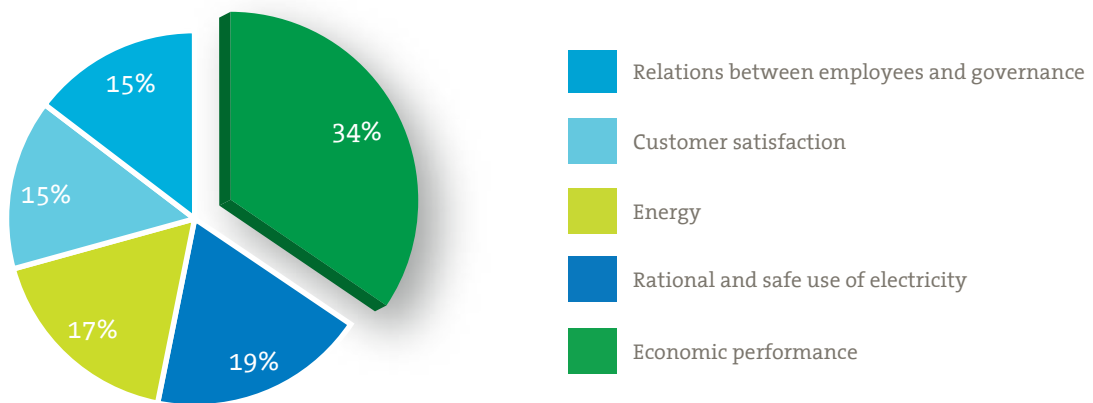
### About this report

And the Survey with Stakeholders identified as the most relevant issues:

Economic performance (see section *Our responsibility before the market*, page 103); rational and safe use of electricity (see item *Energy Efficiency*, page 178); energy (see item *Energy*, page

158); customer satisfaction (see item *Customer satisfaction index*, page 147); and the relationship between employees and governance (see item *Corporate Governance*, page 70 and section *Our responsibility to people*, page 113).

### Research with Stakeholders

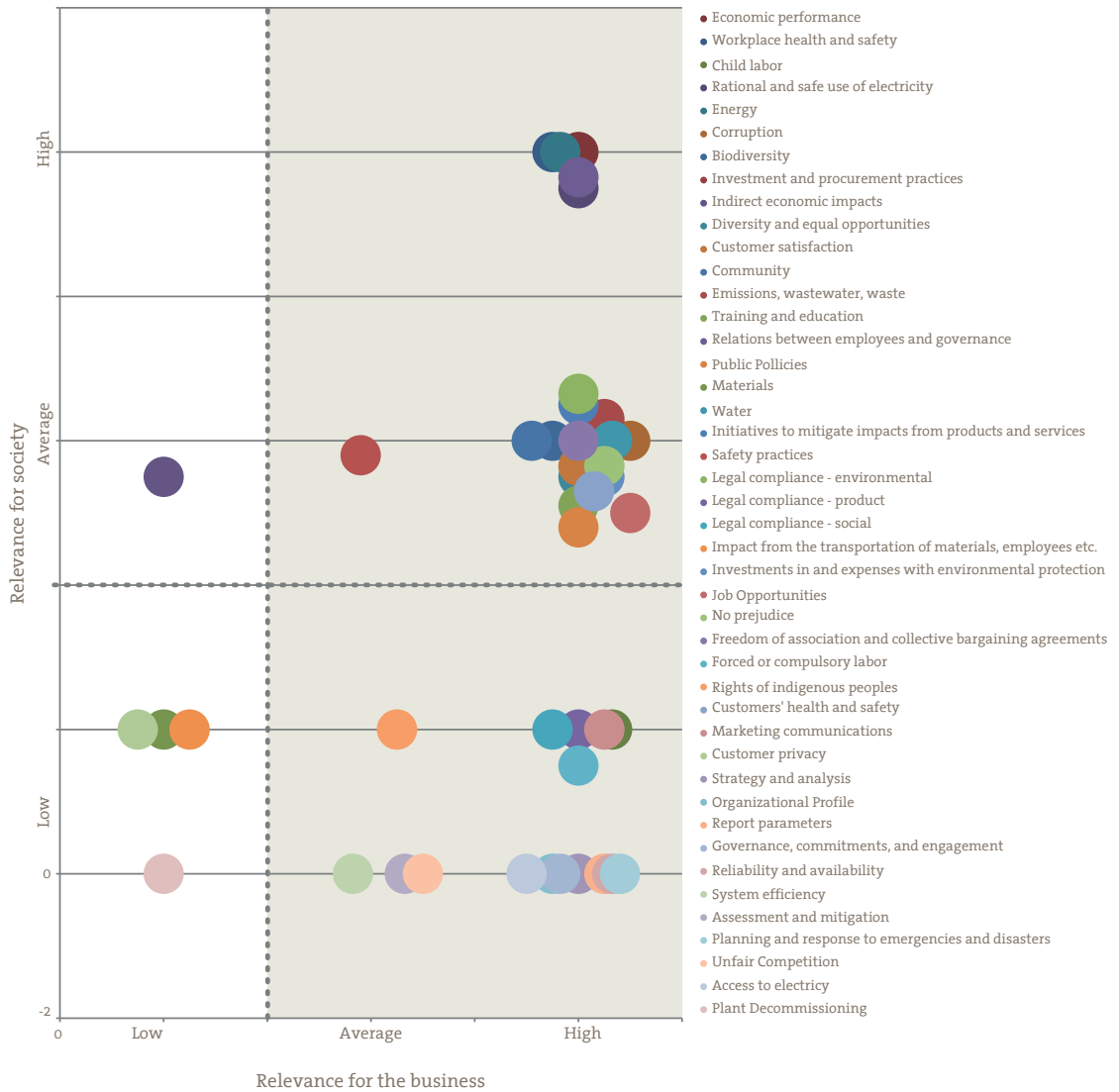


The report also addresses other issues considered relevant to our business, such as: climate change (see page 169), economic and financial balance (see page 194), risk of child labor and/or bonded labor (see pages 135 and 139), and product liability (see page 140). **(GRI 3.5)**

The materiality matrix has been revised to incorporate more stakeholders and assess, in addition to the relevance for society, the relevance of each aspect to the business. All aspects indicated by the GRI guidelines version 3.1 were used in the revision. The results of the survey with stakeholders and of the panel with experts were plotted with

weights 1 and 2, respectively, in the axis Relevance for Society. In the axis Relevance for the Business, the results of an internal assessment were plotted based on a benchmarking of the publication of the aspects in sustainability reports of companies in the electricity sector and of Eletrobras itself. In both axes, the aspects were classified in the low, medium and high relevance levels. This year, Eletrobras opted to publish the aspects classified as high and medium relevance for the business, predicting a greater emphasis on those of medium and high relevance for society as well. The matrix is presented below:

## Materiality Matrix

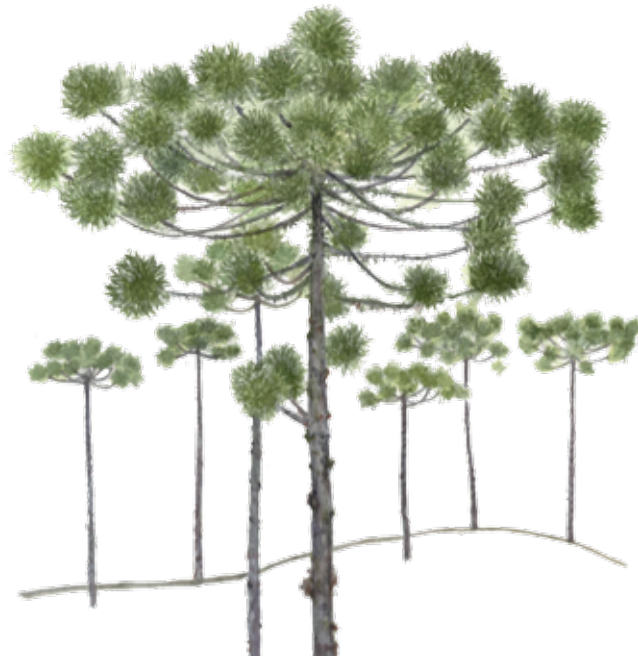


Gathering quantitative and qualitative information was done with the support of external consulting, via online data collection and through direct contact with the companies and departments of the holding. Additionally, since 2010 workshops have been conducted with companies, and interviews

have been held with managers and directors.

In the GRI Table of Contents (see page 184) the indicators reported and the pages where they are located can be found. To understand the GRI guidelines and indicators used in this report, visit: [www.globalreporting.org](http://www.globalreporting.org) (GRI 3.8)





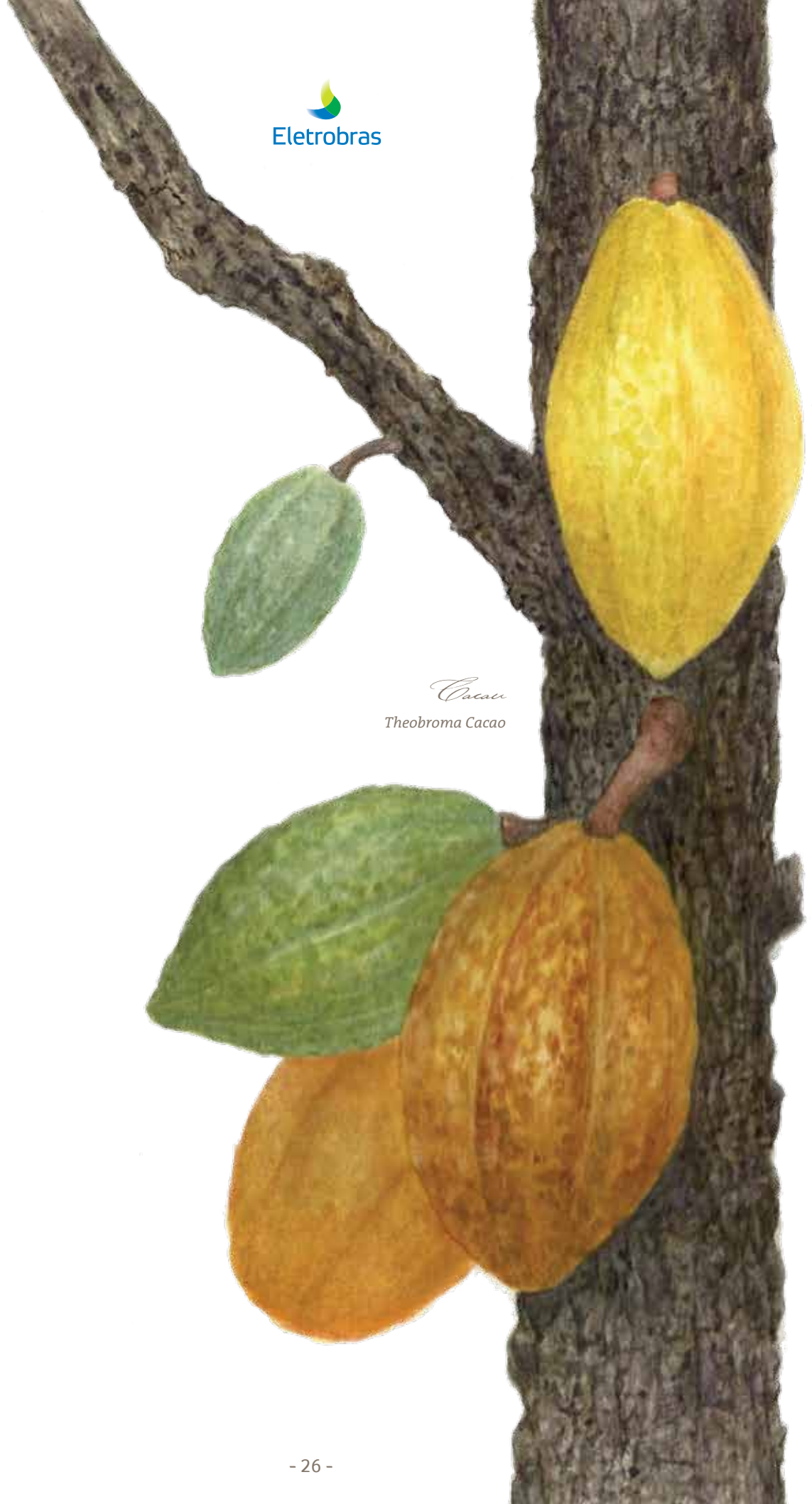
### About the Illustrations

Included in the 2012 Annual and Sustainability Report are 18 illustrations carefully developed by artist and landscape designer Dulce Nascimento, who does the important work of disseminating the botanical watercolor technique in Brazil. Our purpose is to offer an opportunity to revive this type of illustration and contribute to the appreciation of the diversity and rare beauty of Brazilian plants and fruits. We also hope to promote the interest of readers in the flora of the country, notably one of the most important examples of biodiversity on the planet.

Throughout our report, in addition to learning about who we are, what we do, how we do it, and what we did in 2012, readers will learn about plant species representative of the five Brazilian macro-regions and celebrate the natural resources of our country, artfully registered in thoroughly captured details.

Eletrobras is present throughout Brazil and gathers its multiplicity of accents and experiences under the ideal of harmoniously combining development and sustainability. Therefore, we could not help but choose the Pau-Brasil (Brazilwood tree) to open this document, a symbol of our country for its long life and beauty. There are also other noble examples such as cocoa, heliconia, yellow trumpet tree, and some little-known species of fungi or the basidiomycota mushroom.

The explanatory video on the development process of the images that illustrate this report is available on our home page ([www.eletrobras.com](http://www.eletrobras.com)). This gift from Eletrobras is to remind society that our energy and the Brazilian way are present in all our actions, with sustainable development always as an inspiration and focus.



*Cacao*  
Theobroma Cacao

# Highlights of the Year







Eletrobras

## Highlights of the Year

### Eletrobras 50 years

The company promoted actions involving employees, suppliers, and society, including events related to the cultural and artistic heritage of the city of Rio de Janeiro.

### Organizational Strategy

Increase in installed capacity of more than **711 MW** in Generation, adding of **880 km** of transmission lines and connection of **163,000** customers in Distribution.

### Participation in RIO+20

The Eletrobras companies presented to the public their initiatives on energy efficiency, social and environmental actions, and the goal to promote universal access to electricity.

### Concessions

The Provisional Measure 579 significantly altered the regulations of the Brazilian energy sector, redesigning a new regulatory scenario.

### Investments

Record investments: our investments reached 80% of the total estimated **R\$ 12.3 billion**.

### Government Programs

Through Procel, we managed to save approximately **9.1 thousand GWh** of electricity in the communities where we operate and performed 120, 131 installations with the program Luz para Todos.

### Operational Efficiency

The overall default rate went from 18.9% (2011) to 17.6% (2012) and global losses went from 34.28% (2011) to 31.01% (2012).

In transmission, the number of outages per 100 km of Eletrobras network decreased 11% when compared with 2011.

### Record of Energy Production

Itaipu Binacional surpassed for the third time its own world record of energy production, reaching 98.3 million MWh. Angra 1 and 2 plants also surpassed production records, reaching 16 million MWh.

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### **Belo Monte and sustainable development**

Brazil possesses the cleanest and most renewable energy matrix in the world. Our hydroelectric power plants are the main reason for that. Beyond producing energy, they produce wealth, economic development, job opportunities, and income, in addition to providing the conditions for the main infrastructure projects in the country to become reality. It is within this scope that the Belo Monte hydroelectric plant must be seen. It was designed using modern and preservationist run-of-river technology, and with minimum reservoir, Belo Monte meets the strictest sustainability principles, respecting the environment and surrounding communities. Therefore, the development will not flood Indigenous lands or change the lives and routines of the riverbank population. It will not compromise fishing, navigation, trade of regional products, or the culture of the people who live in the region. On the contrary, the plant will not only keep the local economy prosperous, but will also bring an increasing number of opportunities and improve the lives of thousands of Brazilian who reside there.



## Highlights of the Year

In the past, the influence area of the Belo Monte power plant, which covers 11 municipalities in the state of Pará, was abandoned and suffered from a lack of structural investment. The region was unable to have economic autonomy because of limitations in agricultural production due to restrictions imposed on predatory exploitation of natural resources and timber depletion. Now, because of Belo Monte, the reality is much more promising. Official data from the Ministry of Labor reveal that, for example, the municipality of Altamira (the main region of Xingu, where the hydroelectric plant is being built) posted the highest numbers for the hiring of workforce in construction. The municipality created 10,554 jobs, accounting for 28.25% of jobs created in Brazil in 2012. Belém, the capital of the state of Pará, was in second place with 9,846 new job opportunities created (26.38%).

A detailed technical study of the environmental impacts was carried out for the project, as well as approximately 200 technical meetings held in 11 municipalities further involving 12 indigenous lands within a 200-mile radius of the future power plant.

The project for the plant was redesigned several times, in order to avoid environmental damage. The size of the reservoir is a case in point. It was reduced to less than half its original size in order to avoid flooding the region. In addition, to reduce the impact on aquatic ecosystems, the dam was designed to keep the natural hydrological pulse downstream. The measures will reduce the energy generation capacity of the dam (firm energy) when compared with previous projects. However, this was a commitment made to society, seeking to reduce social and environmental impacts in the low Xingu River region.

Other relevant aspects can be highlighted, such as the direct line of communication that the development established with the local population. During the work on Belo Monte, Norte Energia S.A. (the company responsible for the construction, maintenance, and operation of the plant) aired a radio program to keep the local population informed on issues involving the 15 plans, 62 programs, 108 projects, and approximately 4,000 social and environmental activities, all of them aiming at alleviating the impacts created by the construction of the plant. In addition, the company responsible for the development created different public forums and work groups to discuss and find democratic solutions with representatives of civil society for the issues that affect their lives and livelihoods. A detailed description can be found in Belo Monte's Basic Environmental Project (PBA). As a complementary measure, the company responsible for the construction of the plant made available a toll-free telephone number that serves as an open channel for the communication of the company with the general public.

Through an open and transparent dialogue with the people who have properties affected by the construction, the negotiation for the removal of almost 95% of the families was conducted without the need for legal arbitration. It is important to note that in Altamira, more than four thousand families who today live in deteriorating palafitas (suspended wood houses) on the edge of streams will now have decent houses in urban areas less than 2 km away from their previous homes.

For these reasons, and due to our permanent commitment to its stakeholders, supporters, investors, and general public, we are sure that Belo Monte will be a source of pride for Brazil and an example of sustainability for the world.

To find out more about the project: <http://norteenergiasa.com.br/site/?lang=en>

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*Cogumelo*  
Basidiomycota

# Voluntary commitments







## Global Compact

Since 2006, the Eletrobras companies have undertaken to support and disseminate the Ten Universal Principles of the UN Global Compact related to Human Rights, Labor Rights, Environmental Protection and the Fight Against Corruption in all their forms within their area of influence, as well as make them part of the strategy, culture and day-to-day operations of the Organization.

To find out more about the principles of the Global Compact go to: [www.pactoglobal.org.br/](http://www.pactoglobal.org.br/)

## The Millennium Development Goals (MDGs)

Since 2005, Eletrobras has had its corporate guidelines aligned with the Millennium Goals. Within the scope of social responsibility, the Eight Millennium Goals act as guides to the development of social and environmental policies and are used as criteria for the selection of social projects that receive support from the company.

## Declaration of Corporate Commitment to Fight Sexual Abuse of Children and Adolescents

The company also adheres to the Declaration of Corporate Commitment to Fight Sexual Abuse of Children and Adolescents, which commits to expanding the focus of social responsibility, systematically developing and increasing the number of concrete and effective actions to promote awareness of employees and all its production chain on this issue.

## Women's Empowerment Principles

The Eletrobras companies<sup>1</sup> adhered to the Principles of Empowerment of Women - a UN Women initiative together with the Global Compact - publicly assuming a commitment to promoting equal rights between men and women - which reaffirms the respect for human rights and diversity in the workplace.

[www.unifem.org.br/005/00502001.asp?ttCD\\_CHAVE=29254](http://www.unifem.org.br/005/00502001.asp?ttCD_CHAVE=29254)

## Pro-Gender-and-Race-Equality Program

The Pro-Gender-and-Race-Equity Program is an initiative of the Federal Government through the Department for Women's Policies of the Presidency - SPM/PR and the 2nd National Plan of Policies for Women. It reiterates the commitment to the promotion of equality among men and women established in the Federal Constitution of 1988.

[www.spm.gov.br](http://www.spm.gov.br)

## ILO's Pact for the Eradication of Bonded Labor

The Eletrobras companies are committed to cutting commercial relations with economic agents involved in the exploitation of bonded labor.

In addition to this commitment, Eletrobras companies' representatives participate, according to their field of expertise, in several trade associations and civil society organizations.

[www.oit.org.br/](http://www.oit.org.br/)

<sup>1</sup> Holding; Eletrobras Amazonas Energia; Eletrobras Distribuição Acre; Eletrobras Distribuição Alagoas; Eletrobras Distribuição Piauí; Eletrobras Distribuição Rondônia; Eletrobras Distribuição Roraima; Chesf; Eletronuclear; Cepel; Eletronorte; Eletrosul; Furnas and Itaipu.







# Awards and Recognitions





## Awards and Recognitions [GRI 2.10]

Among Eletrobras's achievements in 2012, we can highlight the recognition by its stakeholders, which resulted in national and international awards throughout the year.

### **Dow Jones Sustainability Emerging Markets Index:**

Our sustainability actions were internationally recognized when we were entered into the Dow Jones Sustainability Emerging Markets Index, a new sustainability index for emerging markets, launched in February 2013 but based on data reported in 2012.

**Época Negócios 100:** For the fourth year, Eletrobras was considered the most prestigious company in the energy sector in Brazil according to the annual publication *Época Negócios 100*.

**ISE:** For the sixth consecutive time, Eletrobras is a part of the São Paulo Stock Exchange's Corporate Sustainability Index (ISE).

### **Negócios da Comunicação (Business Communication):**

For the second consecutive year, Eletrobras was also elected one of the best companies to communicate with by journalists in the energy sector, according to the magazine *Negócios da Comunicação*, which interviewed about 25,000 media professionals in the country.

**Stars of Energy Efficiency Award:** The North American organization Alliance to Save Energy granted Eletrobras the I Stars of Energy Efficiency Award in the international category.

### **Congreso Latinoamericano de Distribución Eléctrica (Latin American Congress on Electricity Distribution):**

The study "Energy Efficiency on Photovoltaic Systems for Rural and Isolated Electrification," presented by the holding technicians, was awarded in the II Congreso Latinoamericano de Distribución Eléctrica (The Second Latin American Congress on Electricity Distribution), in Argentina.

**Ser Humano Award:** People management was the highlight for the Ser Humano Award 2012, promoted by the Brazilian Association for Human Resources. Holding was among the five finalists in the "Public Sector" category, for the case study "Implementation of Unified Policies and Practices for Career and Remuneration."

**Green Project Awards Brazil:** The use of good practices for sustainable development also placed Eletrobras among the finalists for the Green Project Awards Brazil for the work performed in the Production Community Centers (CCP).

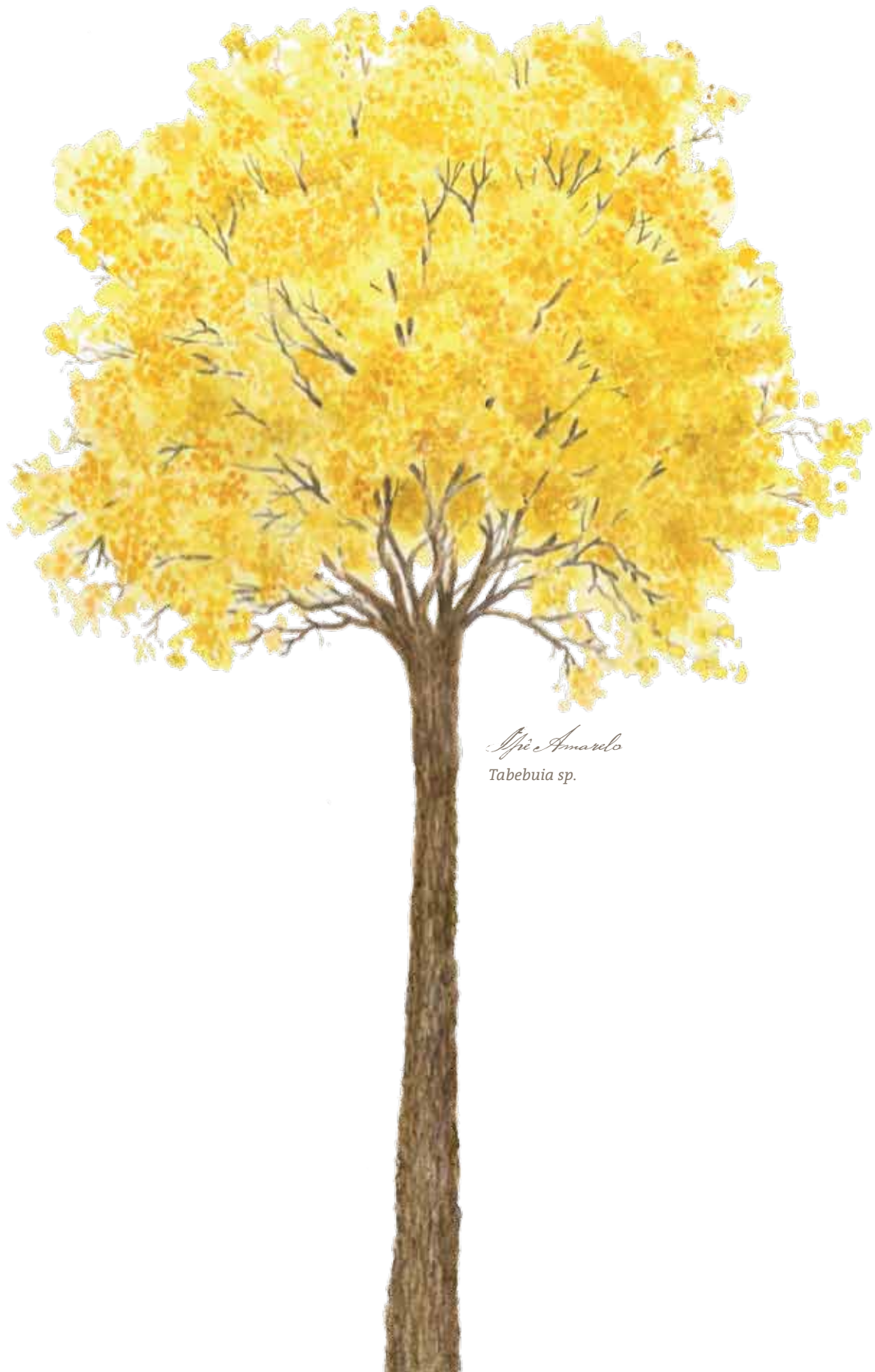
**Pro-equality Seal:** The companies holding, ED Acre, ED Rondônia, Eletrobras Cepel, Eletrobras Chesf, Eletrobras Amazonas Energia, Eletrobras Eletronorte, Eletrobras Eletronuclear, Eletrobras Eletrosul, Eletrobras Furnas, and Itaipu Binacional received the Pro-Gender Equality Seal, fourth edition, from the Special Department of Women's Policies. Eletrobras has received this Seal since the first edition of this program.

The Eletrobras companies also received the following recognition for their actions:

With management focused on relationships and the appreciation of people, ED Acre was the highlight of the *Sesi Quality at Work Award*. ED Roraima won first place in the "Education and Development" category and second place in "Social and environmental Development," for which ED Acre was also honored. ED Alagoas won in the "Large Company" category of the award, which highlighted the Career and Remuneration Plan as a good way of valuing employees.

Eletrobras Eletronorte met, for the first time, the eight criteria of the National Quality Award, granted by the National Quality Foundation (FNQ). The company's Superintendence for Hydraulic Generation was recognized by FNQ in the categories of Leadership, Plans and Strategies, Clients, Society, Information and Knowledge, People, Processes, and Results.

Eletrobras Eletrosul won the Brazil Award for Environmental Action, in the "Energy Efficiency" category for the Projeto Alto Uruguai (High Uruguay Project). The initiative, performed in the southern region, focuses on the appropriate allocation of pig manure, reducing the environmental impact and making use of the biomass for alternative energy generation. Eletrobras Chesf won first place among 337 federal public institutions in the survey on Information Technology Governance, conducted by the Department of IT Audit of the Federal Court of Auditors. This result represents an improvement of approximately 40% when compared with the previous survey conducted in 2010.



*Árvore Amarelo*  
Tabebuia sp.



# Our history







Centrais Elétricas Brasileiras S.A. - Eletrobras was created in 1962 and, according to its Bylaws, updated in 2012, can join, either directly or through its affiliates or subsidiaries, form business consortia or hold interest in companies, controlling or otherwise, in Brazil or abroad, directly or indirectly associated with the exploration of the generation, transmission or distribution of electricity.

In 2012, the Company celebrated its 50th

anniversary, with a history marked by challenges and achievements that decisively contributed to the expansion in the supply of electricity and the development of the country.

Since 2008, the company, in addition to maintaining a leadership position in Brazil, has also started to prospect for business in neighboring countries in which Eletrobras operations may represent a sustainable business opportunity.



## Main events

- | 1962  | 1968  | 1973  | 1982   | 1996   | 1997   | 1998  |
|---|---|---|--|--|--|---|
| <ul style="list-style-type: none"> <li>• Creation of Eletrobras</li> <li>• Aded Chesf, Furnas, Chevap and Charqueadas Thermoelectric</li> </ul> | <ul style="list-style-type: none"> <li>• Creation of Centrais Elétricas do Sul do Brasil (Eletrosul)</li> </ul> | <ul style="list-style-type: none"> <li>• Creation of Centrais Elétricas do Norte do Brasil (Eletronorte)</li> <li>• Creation of Centro de Pesquisa de Energia Elétrica (Cepel)</li> </ul> | <ul style="list-style-type: none"> <li>• Inauguration of Itaipu, the largest dam in the world</li> </ul> | <ul style="list-style-type: none"> <li>• Creation of Eletrobras Participações (Eletropar)</li> </ul> | <ul style="list-style-type: none"> <li>• Acquisition of Eletrobras Distribuição Alagoas</li> <li>• Acquisition of Eletrobras Distribuição Piauí</li> <li>• Acquisition of Eletrobras Distribuição Acre</li> <li>• Creation of Eletronuclear, Merged of nuclear area from Furnas to Nuclen</li> </ul> | <ul style="list-style-type: none"> <li>• Creation of Eletrobras Distribuição Roraima</li> <li>• Acquisition of Eletrobras Distribuição Rondônia</li> <li>• Acquisition of Companhia de Geração Térmica de Energia Elétrica (CGTEE)</li> </ul> |

## Main achievements

- | 1971  | 2000  | 2005   | 2006  |
|---|---|--|---|
|  |  |  |  |



**2004**

- New Regulatory of Brazilian Electric Sector

**2008**

- Beginning of the Eletrobras System Transformation Process
- PAE (Strategic Actions Program)
- Creation of Eletrobras Amazonas Energia (CEAM) 1997 Manaus 1998

**2009**

- Law 12.111 Energy Production Subsidy Isolated System
- Plan of Capitalisation of Companies of the Eletrobras System

**2010**

- Strategic Plan of Eletrobras System 2010-2020
- Launch of the Eletrobras New Brand

**2011**

- Higher Uptake of Resources Abroad from Eletrobras
- Greater Investment of Eletrobras

**2012**

- Approval of Provisional Measure 579/12

**2006**



Pacto Global  
Rede Brasileira

**2007**



**2008**



**2010**



*Bromélia*  
*Vriesea saundersii*



# Profile







Eletrobras is a quasi-public and publicly traded corporation; the Federal Government holds 54.46% of its ordinary shares, being the controlling shareholder of the company. **(GRI 2.1; 2.6; 2.8)**

We operate in the Brazilian market with seven generation and transmission companies<sup>1</sup>, including 50% of Itaipu Binacional, six distribution companies, one research center and one participation company. In addition, the company has partnerships in the development of 63 new ventures through the Specific Purpose Companies (SPEs), along with 28,437 employees. In November 2012, Eletrobras announced the intention of taking controlling interest of Companhia de Eletricidade do Amapá S.A. - CEA, in the state of Amapá, and Companhia Energética de Roraima S.A. - CERR, in the state of

Roraima. The Companhia CELG Distribuição S.A. in the state of Goiás is currently under executive management of Eletrobras, which will take controlling interest through the purchase of 51% of its ordinary shares with voting rights, after the fulfillment of conditions. **(GRI 2.2; 2.5; 2.7; HR10)**

Our total installed capacity of generation is of 42,333 MW (35% of country's total) of which 89.2% is from low greenhouse gas emissions sources. Unique in the world, the transmission line grid for national coverage spans 55,118 km (52% of country's total), in high and extra-high voltage, i.e. 230 kV to 750 kV, and the distribution grid spans 199,935 km.

We ended 2012 with approximately 3.7 million customers.

<sup>1</sup> Eletrobras Amazonas Energia is a generation and distribution company, being considered in both businesses.

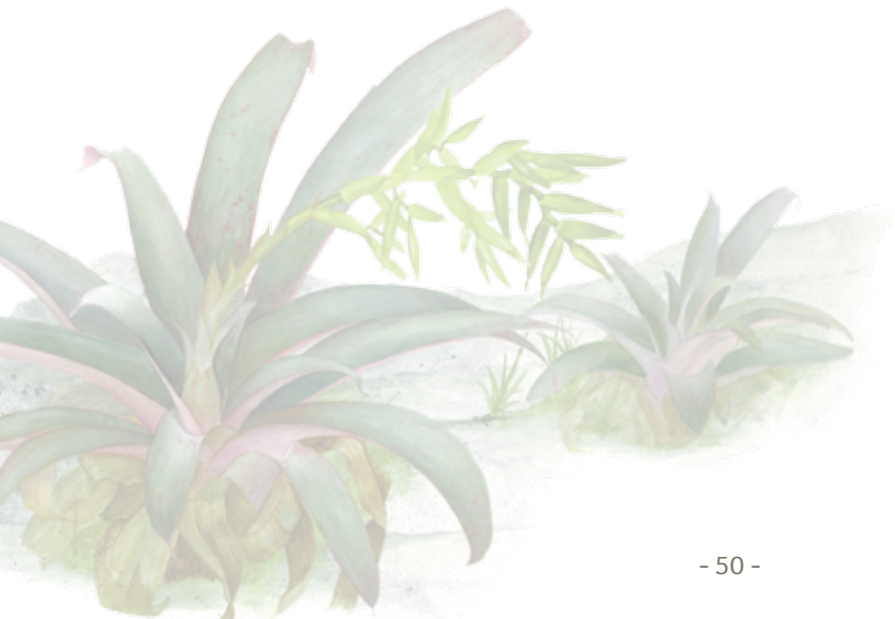
Installed Capacity by Source						
Eletrobras x Brazil	Hydraulic	Wind Power + Solar	Total Clean	Nuclear	Thermoelectric	TOTAL
Eletrobras*	35,674	103	1,990	37,767	4,566	42,333
% per source in Eletrobras's matrix	84.26%	0.24%	4.70%	89.20%	10.80%	100%
Brazil**	84,296	1,827	1,990	88,113	32,731	120,644
% per source in Brazil's matrix	69.71%	1.51%	1.65%	72.87%	27.13%	100%
% Eletrobras x Brazil	42.42%	5.64%	100.00%	42.96%	13.97%	35.09%

\* Data referring to 2011 and 2012 consider the ratio of Eletrobras's participation in ventures operated through SPEs and those of shared property.

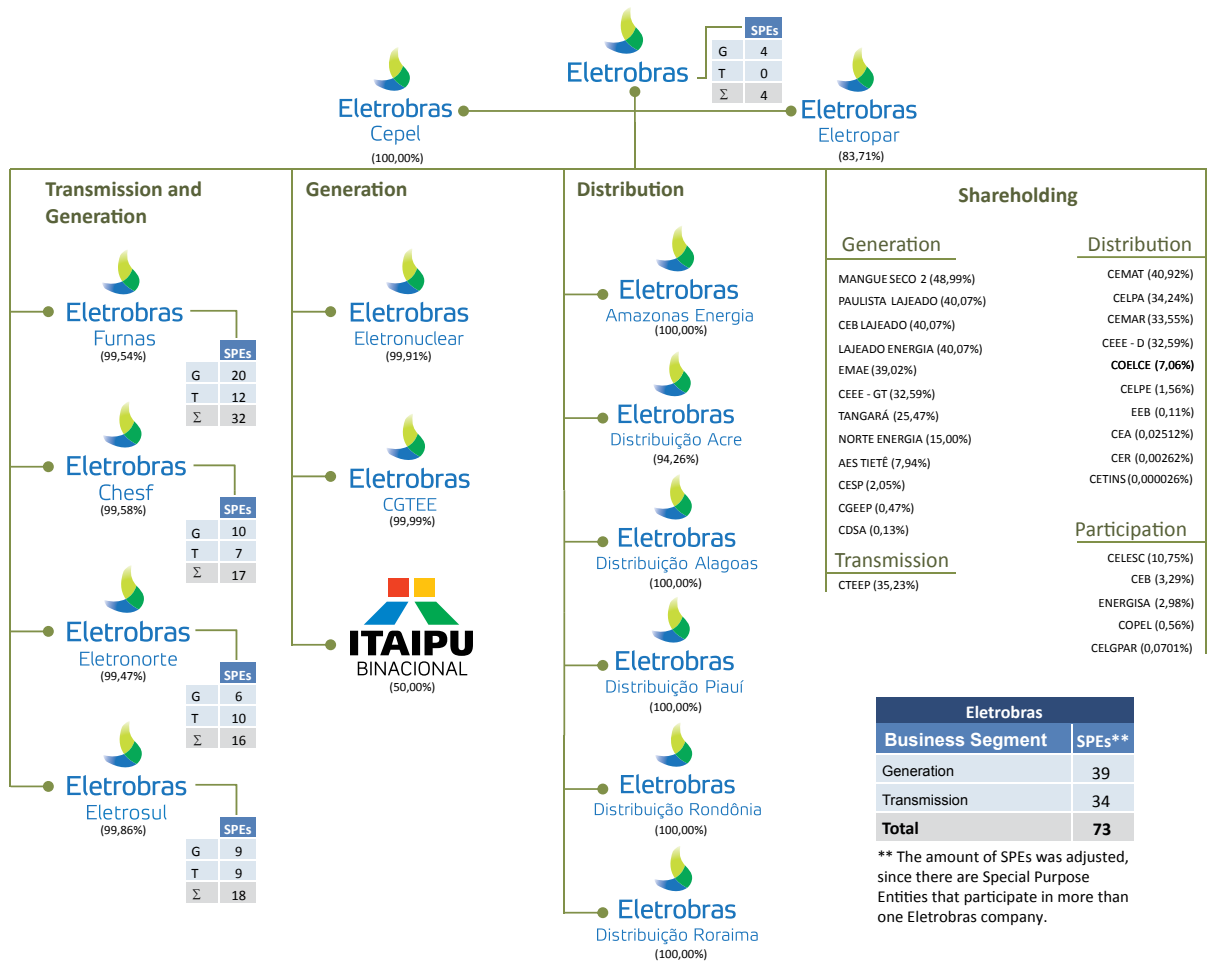
\*\*The value of the installed capacity of Eletrobras's nuclear source (1,990 MW) is different than the value found in the BIG by Aneel (2,007 MW). However, since all nuclear power installed capacity is owned by Eletrobras, a 100% interest was presented.

The Eletrobras companies are located throughout the country, with its headquarters in Brasília, its head office in Rio de Janeiro, and representative

offices in Lima (Peru), Montevideo (Uruguay), and Panama City (Panama). (GRI 2.4; 2.8; 2.9; HR10)



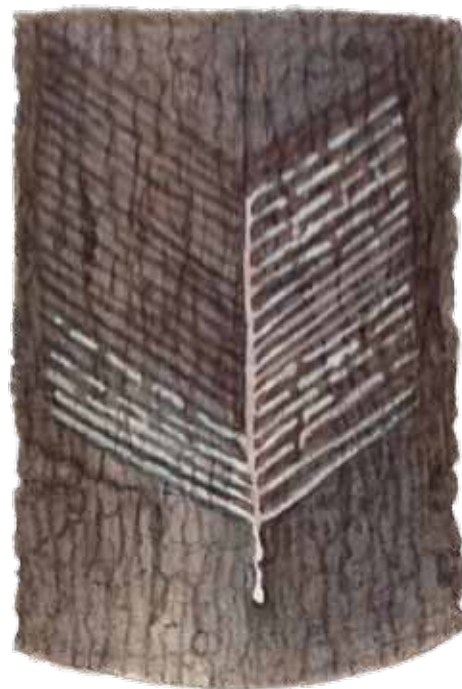
### Organizational structure (GRI 2.3)







*Seringueira*  
*Hevea brasiliensis*



# Our Businesses





Eletrobras operates in the power generation, transmission, distribution, and trading segments. Its 16 companies work in an integrated manner, with policies and guidelines proposed by the Superior Council of the Eletrobras System (Consize), developed by the presidents of the companies, and approved by the appropriate governance bodies.

The main highlights and characteristics of the operational performance, broken down by business type for the year 2012, are presented below. Other information can be found in the Administration Report at: <http://www.eletrobras.com/ELB/main.asp?Team={BC80BD9D-8497-49C8-BD52-61B9626EA294}>

## Generation

Eletrobras's Generation business closed 2012 with a total installed generation capacity of 42,333 MW, which represents 35% of the 120,644 MW installed in Brazil (**GRI EU1**). Approximately 78.5% of this total corresponds to developments, which are wholly owned by Eletrobras. Another

5% corresponds to projects executed through Special Purpose Companies (SPEs) or joint ownership. This also still includes, representing 19% of the total, half of the capacity of Itaipu Binacional (7,000 MW), which represents 16.5% of the total.

Energy Matrix - Eletrobras System	Growth of the Installed Capacity (MW)			
	Installed in:		Increase of:	
	2012	2011	MW	(%)
Clean Sources	37,767	37,086	681	1.8%
Hydroelectric	35,674	35,001	673	1.9%
Wind	1,990	1,990	0	0.0%
Nuclear	103	94	9	8.7%
Thermoelectric	4,566	4,535	31	0.7%
<b>Total Installed Capacity</b>	<b>42,333</b>	<b>41,621</b>	<b>712</b>	<b>1.7%</b>

Note: Data referring to 2011 and 2012 consider Eletrobras's ownership interest in the developments executed through SPEs and in joint ownership.



The beginning of operations in 2012 of UHE<sup>2</sup> Passo São João, with a 77 MW, wholly owned by Eletrobras Eletrosul, of UHE Santo Antônio, with 3,150 MW capacity, still in the equipment installation phase, currently producing 644 MW, of which 251 MW

correspond to Eletrobras Furnas's interest; and of UHE Mauá, with 363 MW, also in the equipment installation phase, currently producing 352 MW, of which 173 MW correspond to the interest of Eletrobras Eletrosul.

2 Hydroelectric Power Plant (UHE)

## Tapajós Complex

The Tapajós Complex consists of five projects, which will be built at the Tapajós and Jamanxim rivers; namely, São Luiz do Tapajós, Jatobá, Cachoeira do Caí, Cachoeira dos Patos, and Jamanxim. In 2012, Eletrobras began conducting the environmental studies for AHE<sup>3</sup> São Luiz and AHE Jatobá, and their engineering studies began in 2009. The company coordinates the work and is responsible for the environmental licensing. It is also responsible for the social and environmental aspects of the projects planned for the Tapajós river basin.

Of the total installed capacity of the Company, 89.2% come from clean energy sources, of which 95% is renewable, significantly contributing to make the Brazilian electric matrix the cleanest and most renewable matrix in the world.

In 2012, of the total clean and renewable energy

sources installed in the country, 43% belong to Eletrobras, notably hydroelectric energy and wind farms and solar energy (both represents currently 0.2%).

The data provided below demonstrate the evolution of the National Interconnected System's (SIN) installed capacity in Brazil. **(GRI EU10)**

### EVOLUTION OF THE INSTALLED CAPACITY IN SIN

Eletrobras System's Capacity x Total Planned Capacity (PDE 2020)

Source	2012			2017			2020		
	Capacity (MW)		Share (%)	Capacity (MW)		Share (%)	Capacity (MW)		Share (%)
	SIN	Eletrobras		SIN	Eletrobras		SIN	Eletrobras	
Coal	3,205	816	25	3,205	670	21	3,205	670	21
Oil	6,643	870	13	9,911	1123	11	9,911	1123	11
Nuclear	2,007	1,990	100	3,412	3,395	100	3,412	3,395	100
Natural Gas	10,184	679	7	11,659	1,640	14	11,659	1,640	14
Hydraulic	90,971	35,312	39	109,872	43,024	39	121,570	45,162	37
Wind	3,224	103	3	8,682	862	10	11,532	862	7
Others	6,958	0	0	8,689	1	0	9,849	1	0
<b>Total</b>	<b>123,192</b>	<b>39,770</b>	<b>32</b>	<b>155,430</b>	<b>50,715</b>	<b>33</b>	<b>171,138</b>	<b>52,854</b>	<b>31</b>

Source: 2020 Decennial Energy Expansion Plan (PDE 2020) of the Energy Research Company - EPE

**Note:** The 2020 PDE considers the power of Angra 1 Nuclear Power Plant as 657 MW, unlike Eletrobras, which considers it as 640 MW. However, Eletrobras owns 100% of the installed nuclear capacity. For joint-owned plants, the installed capacity considered was proportional to the ownership interest held by the parties. The installed capacity was not considered for stand-alone systems in 2012, only the portion that will continue to operate after the interconnection. Part of this amount will be fueled by natural gas. The decommissioning of Eletrobras CGTEE's thermoelectric plants, whose concession will not be renewed (Pres. Médico Phase A, Nutepe, and São Jerônimo) was considered.

3 Hydroelectric Development (AHE)



## Our Businesses

The Belo Monte power plant will be the only project to be expanded by Eletrobras companies as of 2016; its main powerhouse will be operational between 2016 and 2019. Of Eletrobras's installed capacity expected to be operational in 2013, power plants under construction provide 11,975 MW (proportional to the ownership interest). In

2013, the interconnection between the stand-alone systems of Manaus (AM) and Macapá (AP) and SIN is scheduled to take place, effecting their incorporation into the generating plants of the Eletrobras companies according to the Monthly Operation Program (PMO), which is established by the National Electric Power System Operator (ONS).

## Operational performance

In 2012, the power plants owned by the Eletrobras companies generated over 200 million MWh, which represents an increase of 5% in relation to the previous year. To make all this energy available, Eletrobras, through its generating companies, operates and maintains 169 power plants, of which 40 are hydroelectric, 123 are thermoelectric, 2 are nuclear, and 4

are wind/solar. Of this total, the company wholly owns 153. The remaining plants are either joint ownership plants or SPE partnerships (EU2).

This generation is presented in the two tables provided below. The first table presents the generation by wholly owned and joint ownership plants, and the second table presents the generation by SPEs.

Net Energy Production (Wholly owned and joint ownership, including Itaipu Binacional)		
Primary Energy Source	Net Generation (MWh)	Net Generation (%)
Water	179,071,363	87.22
Uranium	16,006,531	7.80
Oil*	7,085,122	3.45
Coal	2,677,186	1.30
Natural Gas	472,719	0.23
<b>Total</b>	<b>205,312,921</b>	<b>100,00</b>

Note: Net Energy Production considers the generation of power plants wholly and jointly owned by Eletrobras, proportional to the ownership interest the Eletrobras companies have in them; it includes 50% of the generation of UHE Itaipu Binacional. It also includes the thermoelectric generation of 5,827,314.00 MWh supplied by Eletrobras Amazonas Energia, not broken down into oil and gas. According to Eletrobras's website (GTON – North Region Technical Operational Group), the generation of Eletrobras Amazonas Energia in 2012 was 4,097,950.08 fueled by oil and 1,428,155.87 fueled by natural gas.

Net Energy Production (Special Purpose Company - SPE)		
Primary Energy Source	Net Generation (MWh)	Net Generation (%)
Hydroelectric*	1,686,059	80.59
Wind	332,543	15.89
Oil	73,604	3.52
<b>Total</b>	<b>2,092,206</b>	<b>100.00</b>

Note: These data consider the generation of power plants in which the Eletrobras companies participate as SPEs, proportionally to the ownership interest they have in them.

\* Not considering the 4th quarter for UHE Santo Antônio (Furnas).



From the total generated by the Eletrobras companies, Eletrobras Eletronuclear's generation performance stands out for its high availability factor<sup>4</sup>. The goal for this factor in 2012, proposed by the World Association of Nuclear Operators<sup>5</sup> (WANO), was 88.97%; Eletrobras Eletronuclear

reached 94.4%. This result was achieved because of the proper management of power plant maintenance in avoiding unplanned shutdowns, particularly at the Angra 2 Power Plant, where no unplanned shutdowns occurred. **(GRI EU11)**

#### Average Efficiency in the Generation of Thermolectric Power Plants by Energy Source and Regulatory Regime (%)

Primary Energy Source	2012	2011
Uranium	35.0	35.0
Oil	38.0	37.5
Coal	26.0	20.9
Natural Gas	31.0	30.9

Note: Numbers from 2012, includes the following companies: Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, and Eletrobras Furnas.

The low rainfall rates at the end of 2012 caused a decrease in hydroelectric generation and, consequently, a significant increase in generation by thermal energy sources (oil, gas, and coal), required for the maintenance of energy safety

levels. The two tables provided below present changes in the Availability Factor compared with 2011, broken down by primary source, for wholly and jointly owned and SPE plants, respectively. **(GRI EU30)**

#### Availability Factor (%) Wholly-owned plants, joint-ownership and Itaipu Binacional (%)

Primary Energy Source	2012	2011
Uranium	94.4	96.3
Hydroelectric	92.3	91.9
Oil	99.8	82.4
Gas	66.1	73.1
Coal	43.7	38.0

Note: Numbers from 2012 includes the plants of the following companies: Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletronuclear, Eletrobras Eletrosul, Eletrobras Furnas, and Itaipu Binacional.

<sup>4</sup> The availability factor is the average time a power plant is available to generate energy.

<sup>5</sup> WANO is a non-profit organization that aims to integrate companies that operate nuclear power plants with commercial purposes in order to reach the highest nuclear safety standards. [www.wano.info](http://www.wano.info)

Availability Factor:  
Special Purpose Companies - SPEs (%)

Primary Energy Source	2012	2011
Wind	97.7	98.0
Hydroelectric	92.7	93.0

Note: These numbers include the following wind farms: Cerro Chato and Mangue Seco 2 and the Dardanelos Hydroelectric Power Plant.

### Financial compensation and royalties

The Federal Constitution guarantees the provision of a share in the profits arising from the exploration of water resources used for generating electricity or financial compensation for such exploration to states, the Federal District, municipalities, and agencies managed directly by the Federal Government.

In this context, royalties were established as financial compensation for the exploration of water resources in the Paraná River by Itaipu Binacional for power generation. In 2012, the company paid approximately US\$ 247 million in royalties. In Brazil, the National Treasury is the agency that receives these royalties in full, and according to the Royalties Act, they are distributed as follows: 45% to states, 45% to municipalities, and 10% to federal agencies (Ministry of the Environment, Ministry of Mines and Energy, and National Fund for Scientific and Technological Development).

### Transmission

Eletrobras has 55,118 km of transmission lines (TL), which represents approximately 52% of the total existing in Brazil (GRI EU4), from which 52,526 km are owned by the Eletrobras companies and 2,602 km were won in auctions through SPEs. In 2012, the

Eletrobras companies, operating in partnership, incorporated 698 km of transmission lines (TL) into SIN's basic network, and 182 km of lines operating independently, totaling 880 km of transmission lines.

The map for the transmission network owned by the Eletrobras companies is as follows:



**LEGEND**

LT's ELETROBRAS SYSTEM	—	---	① PARANÁ RIVER COMPLEX
LT's ELETROBRAS SYSTEM (SPE)	—	---	② PARANAPANEMA RIVER COMPLEX
LT's OTHER COMPANIES	—	---	③ GRANDE RIVER COMPLEX
			④ PARANAÍBA RIVER COMPLEX
			⑤ PAULO AFONSO RIVER COMPLEX
			□ Number of circuits

## Operational performance

The transmission losses of an electricity company are calculated according to the difference between the sum of generation and imports and the company's exports and consumption at the points of delivery to distributors and local consumers.

According to the Brazilian regulatory model, the characteristics of a project for a transmission system are defined during the planning phase for the expansion when, through feasibility studies, the alternative that best fits the technical scope, the smallest level of losses and the smallest overall cost

is selected (investment and loss costs) for the electric system.

The Brazilian regulatory model does not define a specific methodology for the calculation of losses in transmission. However, a unified methodology for losses has been used in the Eletrobras companies since 2010 as a monitoring system, coordinated by Eletrobras. The methodology is based on electric calculations, which use power flow simulations. **(GRI EU12)**

*Technical Losses in Transmission (%)		
Companies	2012	2011
Eletrobras Chesf	2.65	2.87
Eletrobras Eletronorte	1.65	1.57
Eletrobras Eletrosul	2.08	1.83
Eletrobras Furnas	2.28	2.39
**Average for the Companies	2.19	2.23

\*Losses occurred during the transfer of electricity to substations.

\*\* The weighted average is calculated using the power supplied to the system.

The chart below presents the availability rate for the transmission lines owned by our companies. This indicator represents the percentage of hours per

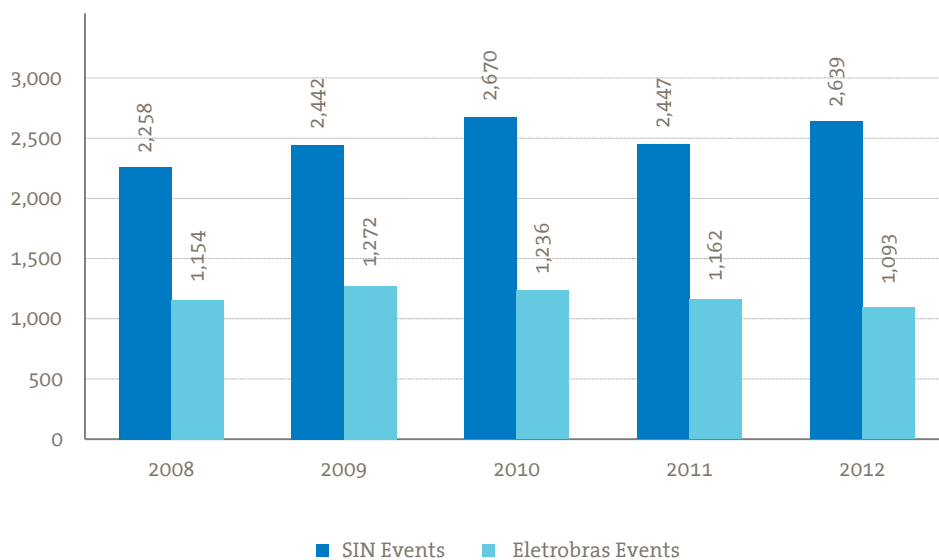
year in which the lines remained available to the transmission system.

Availability Rate for Transmission Lines (%)			
Companies	2012	2011	2010
Eletrobras Chesf	99.91	99.89	99.90
Eletrobras Eletronorte	99.92	99.93	99.95
Eletrobras Eletrosul	99.88	99.90	99.91
Eletrobras Furnas	98.71	99.83	99.87
Eletrobras companies	99.55	99.88	99.90

The charts below present, respectively, the total number of disturbances in the transmission network of the Eletrobras companies, and in the basic

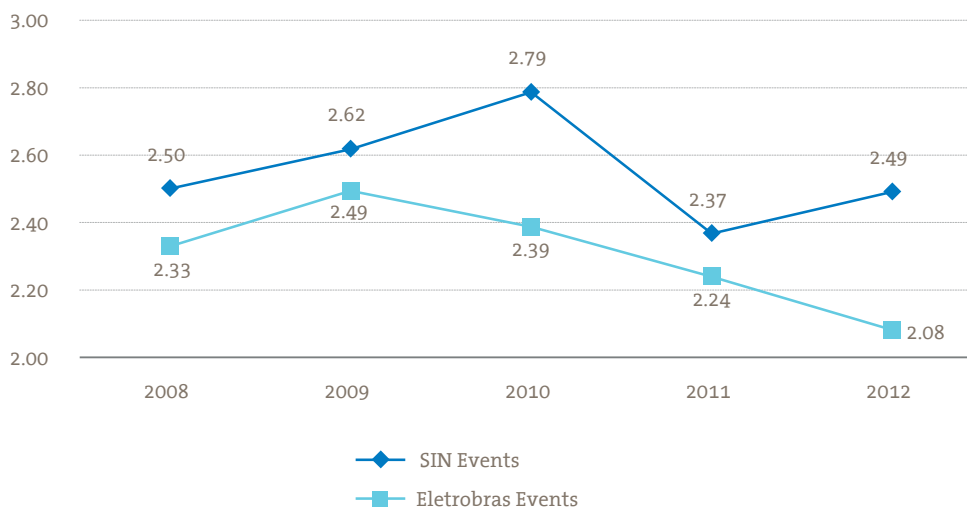
network of the SIN, as well as those causing load cuts in excess of 100 MW.

### Total Events\*



\* Source of Data: National System Operator (ONS)

### Number of Events per 100 km of network\*



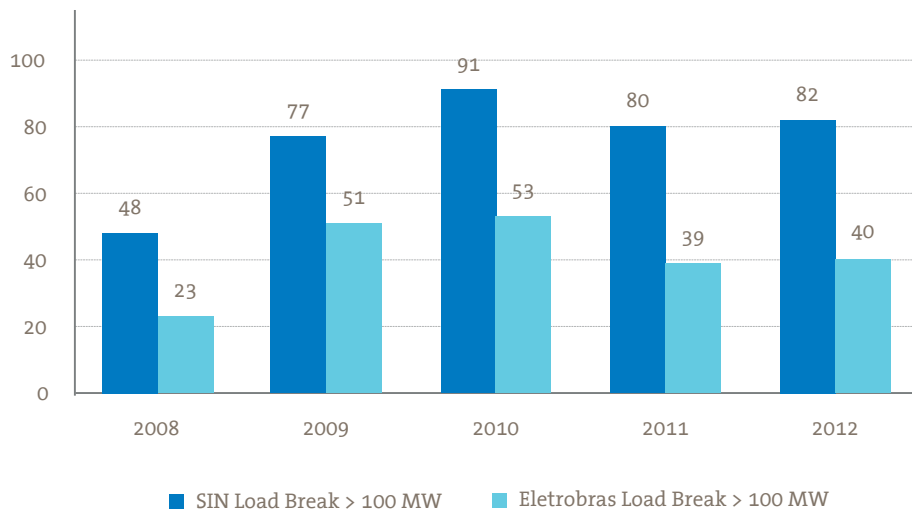
\* Source of Data: National System Operator (ONS)

Our Businesses

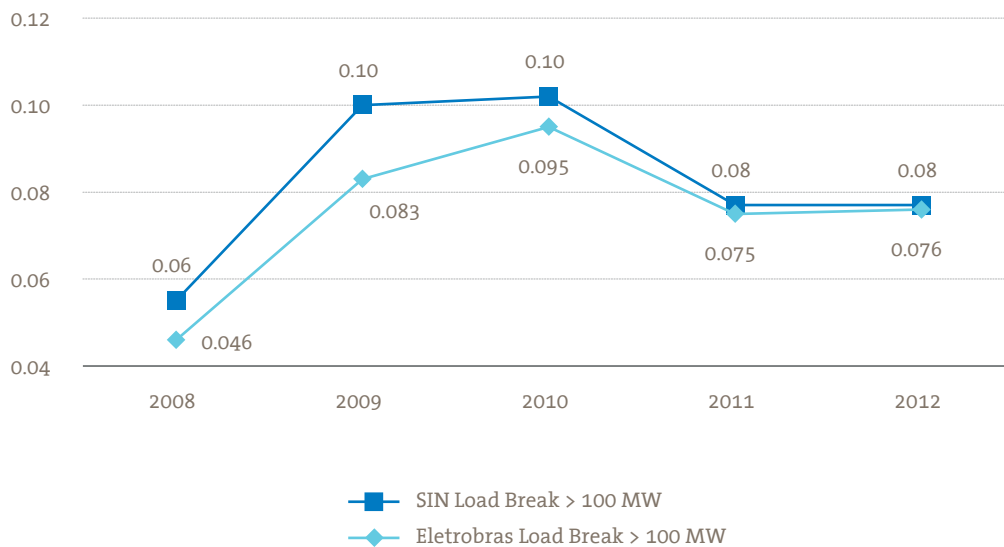
As shown, the number of disruptions in Eletrobras's network dropped from 2.33 to 2.08 disruptions per 100 km of network in the period, representing a performance improvement of approximately 11%.

This result originates from the policy adopted by the company for the prioritization of investments in enhancements and reinforcements in the transmission network.

Total shutdowns



Total shutdowns per 100 km of network

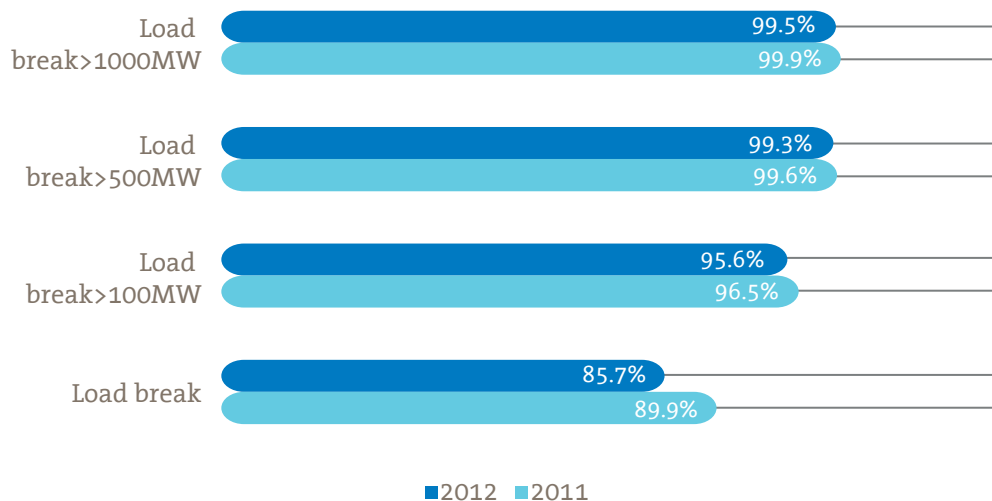


Concerning the shutdowns, which caused power cuts exceeding 100 MW in 2012, the Eletrobras companies' performance was similar to the average performance of SIN's basic network, with a drop

of 24% during the period, which represents 11 shutdowns.

In terms of the robustness indicator<sup>6</sup>, the Eletrobras companies obtained the following performance in 2012:

### Robustness Indicator



<sup>6</sup> The robustness indicator aims to assess the capacity of the basic network in supporting contingencies without interrupting energy provision to consumers. This indicator is calculated based on the ration between the number of disturbances with a given level of load cut and the total number of disturbances that resulted in outages in the SIN.



## Power outages in 2012

In 2012, four major power outages occurred in Brazil. In the three occurrences that happened in Eletrobras companies' facilities, the required actions were taken promptly. Also in 2012, the company assessed and addressed the relevant issues and identified opportunities for improvement, which then became action plans.

The substations of Imperatriz (MA) and Foz do Iguaçu (PR) experienced problems in their protection systems in September and October, respectively. In Imperatriz, the so called "blind spot" – the interconnection between two systems not covered by protection systems – was corrected the moment it was identified through the replacement of three current transformers. For Foz de Iguaçu – where a short circuit took place in a grounding transformer that caught on fire and caused another power transformer to malfunction – some of the protection systems did not work properly, causing the momentary withdrawal of Itaipu Binacional from the National Interconnected System (SIN). The required protection enhancements have already been implemented.

The third event took place in December at the Itumbiara power plant (GO and MG). Electrical discharges in the region caused the circuit breakers of the substations to open and, consequently,

the transmission lines to shutdown. An analysis conducted in 2012 pointed out that the present arrangement in the substation had to be adapted, considering its current function in SIN.

After these events, the Ministry of Mines and Energy (MME) determined that all strategic substations in the country submit to strict inspections of their measuring, protection, and control systems, based on protocols similar to those used for nuclear power plants. Of the substations listed above, all those belonging to the Eletrobras companies (28 in total) have already been assessed.

Eletrobras has directed that all its facilities, even those not listed as priority, will undergo a strict inspection, following the same method used for those which were initially considered more relevant.

The company has also determined that any issue identified be included in an action plan in order to eliminate the problem promptly. These action plans may require that authorizations be issued by Aneel (Brazilian Electricity Regulatory Agency). Aneel then listed 124 strategic substations in SIN that must undergo the protocol analysis in approximately 18 months. Of this total, 82 belonged to the Eletrobras companies. For the remaining SIN substations, Aneel set a two-year deadline.

## Distribution

The Eletrobras distribution companies operate in two states of the Northeast Region and in four states of the North Region, benefitting approximately 3.7 million customers<sup>7</sup> (5% of the total in Brazil) through low-, medium-, and high-voltage networks, which are 199,935 km long and include 239 substations. The distribution

concessions serve a total of 463 municipalities. (GRI EU3; EU4)

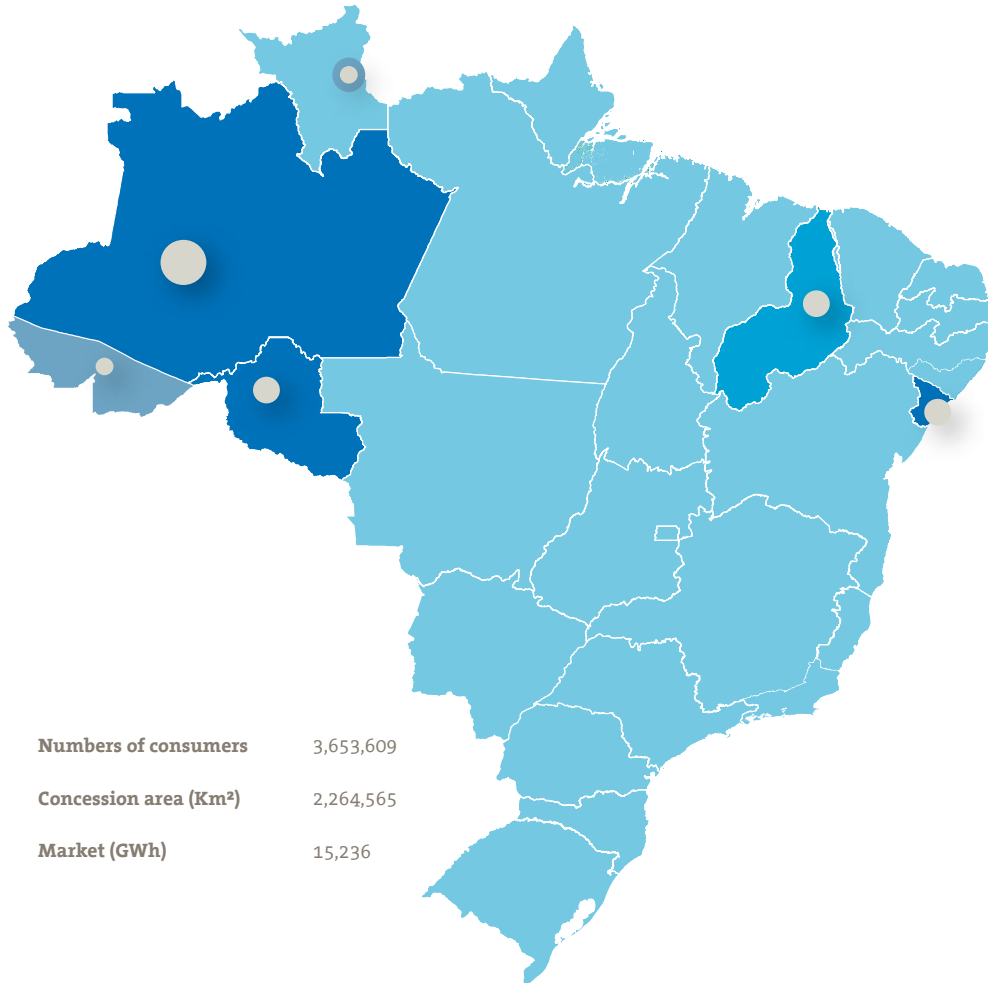
In 2012, important projects were kicked off in the distribution companies, amounting to an investment of R\$ 1.5 billion. Such investments will ensure that the growing demand for electricity in the area of the concession is met.

<sup>7</sup> According to commercial standards, the company uses the same definition for the terms: Consumer/Customer: a natural or legal person, publicly or privately held, legally represented, requiring the provision or hiring of energy, or the use of the electric system of the Eletrobras Distribution Companies, assuming the duties stemming from the provision of such service to their consumer unit(s), according to the standards and agreements, thus becoming the holder. However, whenever this issue came up, we defined "customers" as those individuals responsible for a consumer unit registered as a company and "consumer" as those individuals responsible for the consumption of energy in this consumer unit. In a household, for example, there is only one customer; however, there are many consumers.



Eletrobras

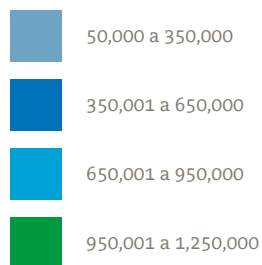
Our Businesses



**Numbers of consumers** 3,653,609  
**Concession area (Km<sup>2</sup>)** 2,264,565  
**Market (GWh)** 15,236

LEGEND

**Numbers of consumers**



**Market (GWh)**



## Our Businesses

Extension of Lines/Distribution Networks (km)	
Eletrobras companies	2012
ED Acre	16,591
ED Alagoas	39,816
ED Piauí	66,142
ED Rondônia	52,130
ED Roraima	3,143
Eletrobras Amazonas Energia	22,113
<b>Eletrobras Total</b>	<b>199,935</b>

In 2012, the registry included 163,000 new customers, representing a growth of 4.5% compared with 2011.

Number of Customers in Distribution (unit)		
Number of Customers	2012	2011
Residential	3,103,062	2,965,428
Industrial	12,903	12,816
Commercial	266,020	254,915
Rural	222,516	210,358
Government	38,670	37,366
Public Lighting	2,212	1,902
Utilities	7,302	6,094
Own Companies*	924	857
<b>Total</b>	<b>3,653,609</b>	<b>3,489,736</b>

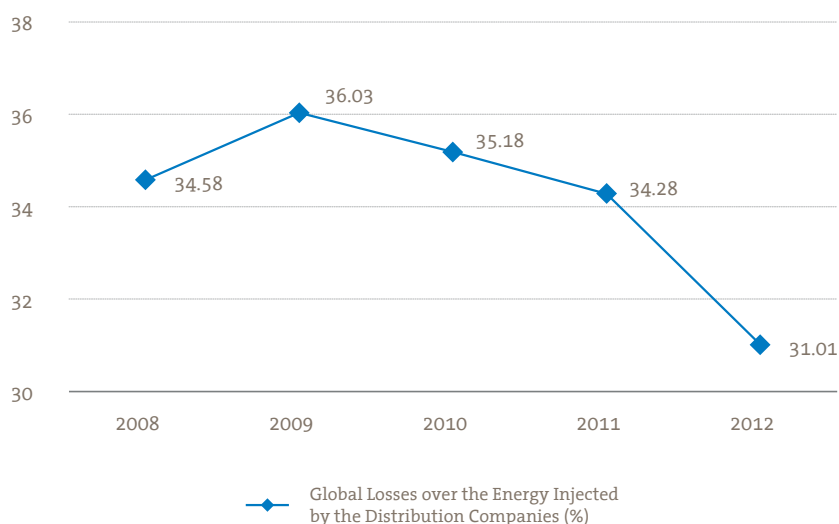
\* The number of customers includes own consumption of all the Companies

## Operational performance

From 2008 to 2012, a more detailed monitoring plan was developed and implemented, aiming to decrease distribution-related losses. This monitoring allowed for a yearly increase in operations in the area of inspections, the regularization of illegal consumers, and planned enhancements, decreasing the percentage of

distribution-related losses. It is estimated that the evolution of Energia+, the main loss reduction project (in terms of investments), will boost this result and enable further reductions in the coming years. In 2012, actions to fight loss of energy allowed for a reduction of 3.27 percentage points in the general loss rate. **(GRI EU12)**

## Global Losses over the Energy Injected (%)



The main actions that produced this result were: the inspection and regularization of consumer units (UC), enhancements in the billing process, and the re-registration of the public lighting load. Additionally, changes to the structure, aiming at

the correct calculation and charging of unbilled energy, enabled the completion of 72,000 processes for irregular measuring, with the recovery of approximately 340 GWh.

DISTRIBUTION LOSSES						
Companies	Non-technical losses (%)		Technical losses (%)		TOTAL	
	2012	2011	2012	2011	2012	2011
ED Acre	9.1	11.6	11.9	11.9	21.0	23.4
ED Alagoas	18.6	21.5	8.4	8.4	27.0	29.9
ED Piauí	17.2	20.6	13.2	12.5	30.4	33.0
ED Rondônia	10.1	15.0	12.7	12.7	22.8	27.8
ED Roraima	5.6	9.2	6.6	6.6	12.2	15.8
Eletrobras Amazonas Energia	31.3	34.1	7.7	7.7	39.0	41.8

In 2012, the distribution department more closely monitored quality rates. The investments made to improve service quality involve programmed interventions in the network. Thus, between 2009 and 2012, a drop in the accidental interruption rate was recorded; however, there was a rise in programmed shutdowns, which prevented any improvement in this rate to be registered. This rate is expected to improve in the coming years as the investment matures and Manaus (AM) is included in the interconnected system.

DEC and FEC refer, respectively, to the number of hours and the frequency in which a consumer unit

had no electricity for a given period of time. In 2012, in the Eletrobras distribution companies combined, these indicators remained at the same level as the previous year. However, there were a few advances, such as in the case of Eletrobras Amazonas Energia, which registered a rate of 60 hours for DEC and 50 interruptions for FEC, whereas Aneel accepts a rate of 65 hours and 62 interruptions.

These rates are made up of weighted averages, calculated according to the number of customers for each company. The progression of the DEC and FEC levels for the Eletrobras companies is provided below:

Power outages per Consumer (DEC) - Hour/Year							
Year	ED Acre	ED Alagoas	ED Piauí	ED Rondônia	ED Roraima	Eletrobras Amazonas Energia	Consolidated*
2012	65.9	26.3	34.2	31.4	11.9	60.1	38.7
2011	42.6	25.5	41.9	38.6	12.7	54.7	39.3
2010	44.6	20.6	40.9	31.8	17.7	72.0	40.6
Variation 2012x2011 (%)	42.6%	3.1%	-18.4%	-18.7%	-6.3%	9.9%	-1.5%

\* Weighted average of the Eletrobras companies (hours of power outages per number of consumers).

## Our Businesses

To improve these rates, pruning is being done more often, more powerful distribution transformers are being replaced, and new substations are being built. The installation and

maintenance of reclosers, feeders, and regulators in the network, along with other equipment, is planned, in addition to the review of protective equipment adjustments. (GRI EU28; EU29)

### Awareness Campaign

In recent years Eletrobras Chesf and ED Alagoas have registered a significant number of shutdowns caused by slash-and-burn activities in the sugarcane fields near transmission and distribution lines. In an attempt to reduce these occurrences, the Companies conducted campaigns associated with this topic through technical visits to the sugarcane processing plants; held workshops to raise awareness among the surrounding communities, and developed education activities and media initiatives in local TV and radios stations. In the 2011/2012 harvest campaign, 12 sugarcane plants were included representing those with highest potential of shutdown occurrences in the previous harvesting periods. As a result, Eletrobras Chesf recorded five shutdowns in the 2011/2012 harvest, 82% less than the total recorded for the 2008/2009 harvest, with 28 occurrences. In the case of ED Alagoas, for the same period, the number of events dropped from 41 to 8.

The campaigns are conducted in partnership with IBAMA, the Environmental Institute for the state of Alagoas (IMA), the Sugarcane Industry Union in the state of Alagoas (Sindaçúcar - AL) and Braskem. When the number of power outages is reduced, the social and economic repercussions of this problem are reduced as well, since it often affects entire cities, including small and large consumers, with influence in the cost reduction of companies and the reduction of possible administrative sanctions and expenses with maintenance. (EU28)

Frequency of Power Outages per Consumer (FEC) - Number of Power Outages/Year							
Year	ED Acre	ED Alagoas	ED Piauí	ED Rondônia	ED Roraima	Eletrobras Amazonas Energia	Consolidated*
2012	55.3	20.1	26.1	26.0	26.0	50.2	31.4
2011	45.2	16.7	30.0	28.9	28.9	51.1	31.5
2010	43.9	14.3	32.1	29.7	29.7	59.8	33.5
Variation 2012x2011 (%)	22.3%	20.4%	-13.0%	-10.0%	13.9%	-1.8%	0.3%

\* Weighted average of the Eletrobras companies (number of power outages per number of consumers).

### Delinquency

The total active delinquency of customers, in terms of the historical amount due, with no fees, interest, or monetary indexation added, was R\$ 1.173

billion, of which R\$ 770.3 million (equivalent to 65.7%) corresponds to private-class customers<sup>8</sup>.

<sup>8</sup> They include the residential, commercial, industrial, and rural categories.

The measures that caused the drop in delinquency levels relate to the implementation of systematic operational actions for the disconnection of service due to non-payment, the blacklisting of consumers

in credit restriction agencies (Serasa and Cadin), and lawsuits. Moreover, significant debits were solved and campaigns to promote non-delinquency were executed.

## Consolidated Delinquency of the Distributors (R\$ thousand)

Consolidated Non-payment of the distribution companies (R\$ thousands)				INAD (%)	
Class	2012	2011	Variation 2012x2011 (%)	2012	2011
Residential	359,118	232,059	55%	12.7%	10.1%
Commercial	153,288	134,395	14%	9.5%	10.3%
Industrial	185,212	230,392	-20%	17.2%	24.4%
Rural	72,683	69,317	5%	36.3%	44.0%
Municipal Government				29.8%	41.3%
State Government	127,106	111,757	14%	17.5%	18.6%
Federal Government				9.6%	9.1%
Utilities	237,998	226,225	5%	107.6%	128.8%
Public Lighting	37,566	37,732	0%	22.5%	27.6%
Total	1,172,971	1,041,877	13%	17.3%	18.9%

Note: INAD is the percentage obtained by the balance of delinquency inventory<sup>9</sup> divided by the 12-month sales.

## Energy demand management

Due to fact that Brazil has a vast land area, the generating plants are distant from the major consumption centers, and the distribution of all the energy they generate is achieved through transmission lines which ensure service for the growing demand. In this context, the Eletrobras companies play a central role in SIN's planning, operation, and maintenance.

The Eletrobras companies work in compliance with the determinations of the National Electric Power System Operator (ONS), the agency responsible for handling the energy inventory to ensure the safety of the continuous energy supply across the country. The Companies are responsible for managing

their demands and for ensuring compliance with the regulatory agency, in addition to serving the economic, social, and environmental interests of the Eletrobras companies.

The Eletrobras companies have been investing in the purchase and installation of equipment monitoring systems in order to anticipate failures, thus minimizing the risk of personal accidents and events in SIN. In addition, this will increase the availability of equipment through the prevention of unnecessary shutdowns, since maintenance is provided whenever necessary and not at fixed time periods. **(GRI EU6)**

<sup>9</sup> Delinquency inventory corresponds to the total installements overdue, outstanding, prior to the period selected.



*Cajupí*

*Anacardium giganteum* Frutos





# Sectoral Programs





## Sectoral Programs

The Eletrobras companies support important initiatives of the Federal Government, its major shareholder, and manage sectoral programs and funds that serve various areas of the electric utilities sector. These programs aim for the universal access to energy, energy efficiency, and the sustainable development of the country. Examples of such programs include

the following: Luz para Todos (National Program for Universal Access to and Use of Electricity), the National Program for the Conservation of Electricity (Procel), and the Alternative Energy Source Incentive Program. (Proinfa) (GRI EU23)

The performance of each program in 2012 is as follows:

### **National Program for Universal Access to and Use of Electricity** *(Luz para Todos)*

In addition to taking energy to the rural population, Luz para Todos offers solutions by using electricity to trigger social and economic development in low-income communities, thus contributing to a reduction in poverty and an increase in household income. Access to electricity enables the integration of health, education, water supply, and basic sanitation services and the social programs promoted by the Federal Government. The program also anticipates the free installation of up to three electricity points (one per room), two power outlets, conduits, light bulbs, and other materials necessary.

By enabling access to electricity, the program helps retain families in rural areas, improving their quality of life. Access to electricity encourages families to purchase home appliances and electric farming equipment, increasing their income and improving basic sanitation, health, and education, thus strengthening the economy in these communities.

Priority is given to serving communities in the Citizenship Territory Program or through the Brazil Poverty Eradication Plan, as well as rural settlements, Indigenous communities, quilombolas, communities located within extractive reserves or within areas intended for power generation or transmission developments whose responsibility does not fall upon the respective utility company, in addition to schools, health centers, and community water wells.

Luz para Todos is coordinated by the Ministry of Mines and Energy, operated by Eletrobras, and executed by power utility companies, licensed distribution companies, and rural electrification companies (executive agents), with the participation of state governments.

The resources required to develop the program are provided by the Federal Government's Energy Development Account (CDE<sup>1</sup>) through an economic subsidy and by the Global Reversion Reserve (RGR<sup>2</sup>) through financing; by the state governments involved; and by the executive agents. By the end of 2012, these resources amounted to R\$ 19.8 billion, of which R\$ 14.3 billion (72%) corresponds with industry-specific resources managed by Eletrobras.

It is estimated that more than 450,000 direct and indirect job opportunities have been generated as a result of the implementation of this program, considering the prioritization of the use of local labor and the purchase of local materials and equipment manufactured in the areas surrounding the locations served.

In 2012, the program completed 120,131 new installations, totaling 3,022,529 connections since 2004 and corresponding to 97% of the overall target of 3,121,477 connections and over 14.7 million people who benefitted in Brazilian rural areas.

<sup>1</sup> Sectoral fund appropriated for promoting energy development in states, projects involving universal access to energy services and the provision of subsidies to low-income consumers, and the expansion of natural gas pipelines to serve the states where such network is not present.

<sup>2</sup> Reserva Global de Reversão (RGR) is used to finance the National Program for Universal Access To and Use Of Electricity (Luz para Todos), in addition to energy efficiency projects, in the scope of the National Program for the Conservation of Electricity (Procel).

## Sectoral Programs

Eletrobras's commitments alone have resulted in 2,499,199 connections, which correspond to 92% of the total connections agreed upon between the Executive Agents and Eletrobras, as well as:

- the connection of consumer units in rural areas, in 5,410 municipalities in Brazil;
- the construction of 632,291 km of high- and low-voltage power lines;
- the installation of 6.6 million utility poles;
- the installation of 952,145 transformers;
- the installation of 2,078 photovoltaic systems.

Under this program, several situations were identified in which services were subject to the execution of projects with special characteristics, since the locations served were far from existing power distribution lines, in difficult to reach areas, and usually with a low population density. In these cases, complementing the Construction Work Programs that predominantly make use of traditional distribution networks, the Special

Projects were created, as established by MME Ordinance No. 60, of February 12th, 2009, focusing on extremely isolated populations in remote areas and in a sustainable manner, prioritizing the use of Renewable Energy Sources (FRE).

Since 2010, Eletrobras has signed, with the Executive Agents, 18 agreements related to Special Projects, using resources from the CDE in the amount of R\$ 7.6 million, and aiming at serving 377 consumer units via decentralized power generation, using FRE and the building of small sections of distribution lines (mini-grids). In 2012, the connection of 255 of these consumer units was verified by physical inspections.

In 2012, R\$ 850 million was disbursed, of which R\$ 650 million was provided by CDE and R\$ 200 million by RGR. Since 2004, R\$ 12 billion (provided by CDE and RGR) was disbursed, from a total contracted amount of R\$ 14.3 billion; that is, 84% of the total resources contracted. The table below shows the total resources contracted and disbursed from 2004 to 2012, broken down by region.

Industry-specific Resources through 12/31/2012 (R\$ million)						
Region	Contracted			Disbursed		
	CDE	RGR	CDE+RGR	CDE	RGR	CDE+RGR
North	3,133.82	318.29	3,452.11	2,512.85	275.18	2,788.03
Northeast	5,676.91	942.20	6,619.11	4,908.84	818.25	5,727.09
Midwest	765.84	590.82	1,356.66	678.78	526.85	1,205.63
Southeast	847.95	1,191.42	2,039.37	724.44	941.74	1,666.18
South	339.87	511.90	851.77	266.09	374.81	640.90
Brazil	10,764.39	3,554.63	14,319.02	9,091.00	2,936.83	12,027.83

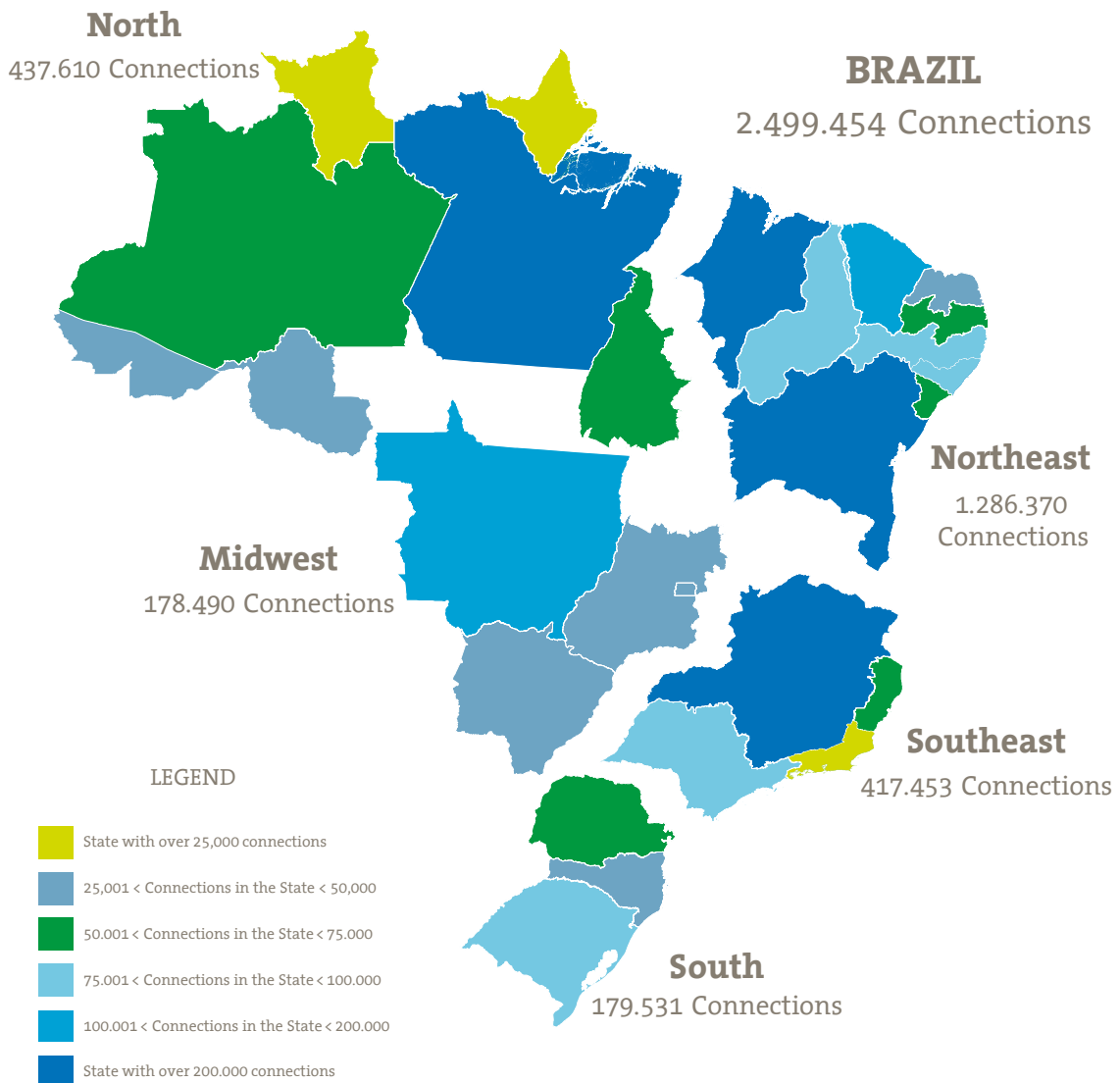
The table below shows the number of connections contracted and registered in the Project Management System of Luz Para Todos and the

number of Special Projects physically verified by Eletrobras, broken down by region:

**Number of Connections through 12/31/2012**

Region	Contracted between the Executive Agents and Eletrobras	Registered in the LPT System + Physically verified in Special Projects
North	533,244	437,610
Northeast	1,388,860	1,286,370
Midwest	198,056	178,490
Southeast	422,643	417,453
South	180,613	179,531
<b>Brazil</b>	<b>2,723,416</b>	<b>2,499,454</b>

\*Executive Agents are the utility companies, licensed distribution companies, and rural electrification companies.



## Technical cooperation to serve remote regions

Aiming to support distribution companies in serving remote regions through systems based on Renewable Energy Sources, Eletrobras maintains a technical cooperation project with the Inter-American Institute for Cooperation on Agriculture (IICA).

Within the scope of this cooperation project, computer tools were developed to manage and financially analyze rural electrification projects. This involved providing training to the utility companies, thus combining efforts and seeking to prepare and integrate actions to plan, develop, and assess projects involving decentralized power generation systems, with a goal of universal access to energy.

Also within the cooperation project, the company provided support to Eletrobras Amazonas Energia in the execution of 12 Special Projects, which aim to provide 222 families with decentralized purely photovoltaic power generation systems. This support is provided from the beginning of executive projects through the monitoring, assessment of

operational data, and improvement of project management.

Since 2007, activities have also been developed to support ED Acre in order to enhance the management and monitoring of 103 individual photovoltaic systems (24 kWp), installed by the Luz Para Todos Program in the Chico Mendes Extractive Reserve, located in the municipality of Xapuri.

Aiming to foster the use of energy in remote systems, Eletrobras and the Department of Family Production and Agroforestry Extension (Seaprof), of the Government of the State of Acre, have signed a Protocol of Intentions for the implementation of Community Production Centers (CCPs), using generation systems fueled by Renewable Energy Sources, aiming at the socio-economic empowerment and development of local communities and the associations formed by small agricultural and forest and extractivist producers of the state of Acre.

## Alternative Energy Source Incentive Program (Proinfa) (GRI EU7)

Proinfa, established by Law No. 10,438/2002, is the largest global program conceived to foster the use of alternative energy sources. Eletrobras is responsible for the trading of the energy generated by the projects contracted within the Program for a period of 20 years. As of December 31, 2012, a total of 2,656.57 MW had been added to the Brazilian energy matrix by Proinfa through 120 new developments, of which 60 were Small Hydroelectric Power Plants (PCHs) (1,159.24 MW), 41 were wind farms (963.99 MW), and 19 were biomass-fueled thermal power plants (533.34 MW).

Its implementation has contributed to diversifying the national energy matrix, in addition to fostering the creation of approximately 150,000 direct and indirect job opportunities across the country, generating significant industrial advances and the nationalization of cutting-edge technology. Moreover, it is estimated that the program facilitates a reduction of greenhouse gas emissions of approximately 2.5 million tons of CO<sub>2</sub>eq/year.

Source	Result from the Hiring		Total operational developments until 12/31/2012	
	Developments	Power (MW)	Developments	Power (MW)
PCH	63	1.191,24	60	1159,24
Wind	54	1.422,92	41	963,99
Biomass	27	685,24	19	533,34
Total	144	3.299,40	120	2656,57

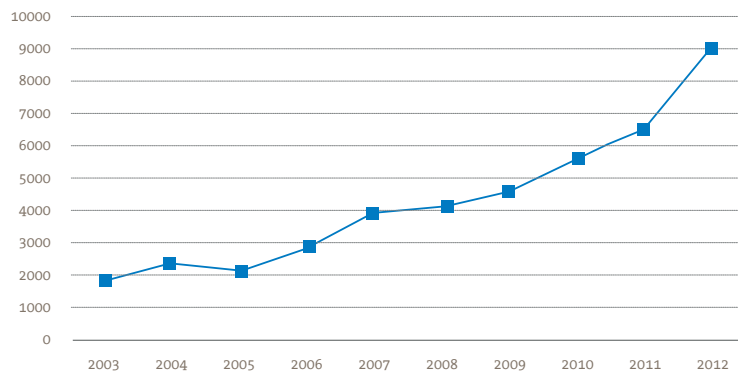
## National Program for the Conservation of Electricity (Procel)

Procel is a program by the Federal Government, coordinated by the Ministry of Mines and Energy, and designed to foster the efficient use of electricity in the country and to fight its waste. Eletrobras, which runs the Executive Department of Procel, is responsible for planning and executing the actions of the program and providing technical and financial support.

In 2012, with investments of approximately R\$ 28.4

million in projects and the funding of infrastructure and labor, not including the resources from the Global Reversion Reserve (RGR), Procel contributed to saving approximately 9.100 GWh. This result corresponds to the annual consumption of nearly 4.8 million households and represents a postponed investment in the electric utilities sector of over R\$ 928 million, based on the marginal cost of expansion (CME<sup>3</sup>). **(GRI EU7)**

### PROCEL - Energy Saved (GWh/ year)



To achieve these results, the program includes several areas, in both the public and private sectors,

through initiatives that affect society in general, for example:

### Procel GEM - Municipal Energy Management

In partnership with Procel, through the subprogram Procel GEM, Eletrobras Eletronorte began, in 2012, to prepare the Municipal Energy Management Plans (Plamges<sup>4</sup>) in the following cities: Belém (PA), Bragança (PA), Capanema (PA), Porto Velho (RO), and Cacoal (RO). Also in the scope of this partnership, 16 Municipal Energy Efficiency Agents in 15 municipalities of Mato Grosso and 17 Agents in 15 municipalities of Maranhão were trained using the Community Learning in Municipal Energy Management Project<sup>5</sup>. Including all participating municipalities, this action originated an annual savings of R\$ 938,199.00 and 1,245.55 MWh. **(GRI EU7)**

<sup>3</sup> CME is the additional cost to supply the increased demand, considering adjustments to the construction work program; that is, it represents the expected cost of the expansion of the energy generation plants

<sup>4</sup> Plamge, a PROCEL methodology, is an instrument to support municipal public administration that enables the knowledge, management, planning and control of use of electricity by optimizing consumption, identifying opportunities for savings. The software used as a tool of this methodology can calculate, allocate and present the results of energy and resources savings achieved through the implementation of energy efficiency measures.

<sup>5</sup> The Learning Communities Project in Energy Management aims at training Municipal Agents in Energy Savings. The agents are technicians of various municipalities with population of up to 30,000, in a given region, who are trained in energy efficiency concepts, in developing Action Plans for their cities, in implementing these actions and in exchanging experiences and solutions to their problems, such as waste of electricity. At the end of each project, the trained Agents report the actions taken and demonstrate the savings obtained through their energy bills and their historical comparison of consumption.



Sectoral Programs

MAIN ACTIVITIES OF THE NATIONAL PROGRAM FOR THE CONSERVATION OF ELECTRICITY		
Programs	Activities	Results
Eletrobras PROCEL	It fosters efficient energy use and fights its waste in the main consumption industries in Brazil: PROCEL GEM – Municipal Energy Management, Sanear – Program for the Efficient Use of Energy in Environmental Sanitation, and EPP – Program for Energy Efficiency in State-owned Buildings address the consumption of the Government and of the services it provides; PROCEL Indústria – Industrial Energy Efficiency Program, for the industrial sector; PROCEL Reluz – Program Concerning Public Lighting and Efficient Traffic Light mainly concentrated on public lighting; PROCEL Edifica – Program for Energy Efficiency in Buildings handles the consumption of commercial and residential buildings; and PROCEL Selo – PROCEL Eletrobras Energy Saving Seal covers the residential sector and a few industrial and commercial products. PROCEL Educação and PROCEL Info - Brazilian Center for Energy Efficiency Information operate cross-sectionally in the consumption sectors.	9,000 GWh in energy savings, 36% above 2011, which is equivalent to the annual consumption of 4.77 million households. It also avoided the emission of 624,000 tons of greenhouse gases, which is equivalent to the emissions of 214,000 vehicles in a year (EU7 and EN7).
PROCEL GEM	It aims to help city governments and remaining government areas to save energy. It helps public administrators in the energy management and efficient use in the consumer units for which they are responsible; it identifies opportunities to minimize waste; and it aids in the monitoring of energy-related expenses, therefore obtaining more financial resources to be invested in other priority areas.	In 2012, it served 37 municipalities of four Brazilian states directly, and another 50 indirectly. It generated energy savings of 61,950 MWh in 2012, of which 1,245.44 MWh/year through the Community Learning in Municipal Energy Management Project and 60,705.03 MWh/year through PLAMGES - Municipal Energy Management Plans in 50 city governments in Minas Gerais.
PROCEL Reluz	It fosters the development of efficient public lighting and traffic light systems, as well as the lighting of public urban spaces, generating energy savings and improving safety in public roads and quality of life in Brazilian cities.	In 2012, over 122,000 public lighting points were replaced in 96 municipalities, distributed across seven Brazilian states, and total energy savings and reduced demand, in 2012, of 154.38 GWh and 35.18 MW, respectively. In 2012, 44 157W LED lamps were installed in UFJF's campus and lighting tests were conducted in the field; prototypes for LED lamp drivers were also developed in the lab.
PROCEL Sanear	It fosters actions that aim at the efficient energy and water use in environmental sanitation systems, including consumers; it encourages the efficient use of water resources, as a strategy to prevent water shortage for hydroelectric power generation; and it contributes to the universalization of environmental sanitation services, with lower costs to society and additional benefits to the health and environmental areas	Integration of additional three labs to the LENHS Network - Laboratories for Energy and Water Efficiency in Basic Sanitation. Federal University of Tocantins – UFT, Universidade do Planalto Catarinense – UNIPLAC, and Federal University of Rio de Janeiro – UFRJ, totaling, in 2012, nine laboratories in the network, in addition to the launch of the Pumping System Manual: Energy Efficiency, and of the SWMM Program Manual - Storm Water Management Model, of EPA - U.S. Environmental Protection Agency, as well as the translation and adaptation of its respective software to Portuguese.
PROCEL Info	Developed with resources donated by the Global Environment Facility (GEF) to the Brazilian government, through the International Bank for Reconstruction and Development (IBRD), with the support of the United Nations Development Programme (UNDP), the Brazilian Center for Energy Efficient Information gathers, generates, organizes, and discloses the qualified information produced in the country on energy efficiency, whose main product is the PROCEL Info Portal ( <a href="http://www.PROCELinfo.com.br">www.PROCELinfo.com.br</a> ).	Over 520,000 visits on PROCEL Info Portal in 2012, 7.4% above 2011 (489,000 visits). The registration of 5,603 new users in the Portal in 2012, totaling 21,874 since its creation. The release, in 2012, of over 1,300 stories on energy efficiency through newsletters

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PROCEL Edifica	It develops activities that aim at the promotion and incentive of energy efficiency concepts in buildings and at the support and enablement of the “Energy Efficiency Law” (Law 10,295/2001), in relation to efficient buildings, and it contributes to the expansion, in an environmentally friendly manner, of the housing sector in the country, reducing operating costs in the construction and use of buildings.	<p>The offering, in 2012, through R3E - Network for Energy Efficiency in Buildings, of 34 training courses concerning the use of the Technical Regulations for the Assessment of Energy Efficiency Levels in Buildings (RTQ-C and RTQ-R), totaling 621 qualified professionals.</p> <p>The launching of a multi-zone version of Domus PROCEL Edifica - Program for the Thermal-energetic Simulation of Buildings.</p> <p>Participation and 14th general place achieved by the Brazilian prototype Ekó House, in Solar Decathlon Europe 2012, in Madrid.</p> <p>Development of the Portal for the Network for Energy Efficiency in Buildings (R3E), a hot site within PROCEL Info.</p> <p>884 labels granted to the residential class Autonomous Housing Unit - UH, 08 labels granted to the multi-family residential class, 02 labels granted to the residential class - common area, and 15 labels granted to the commercial class, through a partnership with Inmetro, in the scope of the Brazilian Labeling Program - PBE Edifica.</p>
PROCEL EPP	It fosters energy conservation actions in state-owned federal, state, and municipal buildings, in addition to disseminating techniques and methodologies for the replication of projects in the following areas: lighting systems; HVAC systems; any other system fostering reduced energy consumption, and technological innovation in building facilities and labs destined to energy conservation studies in building facilities	Through the participation in the Sustainable Esplanade Project, in 2012, the 1st Workshop for the Sustainable Esplanade Project was held, with 100 members, especially from the Federal Government. In this occasion, as to raise the awareness of this audience to the rational use of energy and water in their facilities, PROCEL EPP taught two mini-courses on the diagnosis of energy efficiency in state-owned buildings, in the surrounding, lighting, and air-conditioning areas.
PROCEL Indústria	It supports industrial segments in the enhancement of the energy performance in their facilities, with the participation of various agents of the sector, such as the National Confederation of Industry (CNI), state industry federations, universities, trade associations, energy companies, and material, equipment, and service suppliers, among others	Analysis, in 2012, of 11 energy diagnosis and self-diagnosis of large industrial plants, planned energy savings of 2.2 million kWh. The launch of AutoAvaliação, a software that allows the identification of potential energy conservation in micro and small companies in the state of Rio de Janeiro. The launch of the Manual How to Use Less Energy in Small Companies - Practical Energy Efficiency and of the Primer on Energy Efficiency in LAN Houses. Analysis, in 2012, of 11 energy diagnosis and self-diagnosis of large industrial plants, planned energy savings of 2.2 million kWh. The launch of AutoAvaliação, a software that allows the identification of potential energy conservation in micro and small companies in the state of Rio de Janeiro. The launch of the Manual How to Use Less Energy in Small Companies - Practical Energy Efficiency and of the Primer on Energy Efficiency in LAN Houses.
PROCEL Educação	It aims at enriching the formal educational process in the country with complementary information, as to promote energy conservation measures among teachers and students, in the three levels of education.	The implementation of Projeto Energia que Transforma, benefitting 26,000 students in four Brazilian states in 2012, which is broadcast by the Futura channel of TV aberta.
PROCEL Selo	A simple and efficient tool, which allows consumers to identify the most efficient equipment and appliances available in the market, in addition to encouraging the technological development and enhancement of such products.	8.88 thousand GWh of energy savings in 2012, approximately 34% above that of 2011. Inclusion, in 2012, of the following categories: table, wall, stand, and box fans to the equipment addressed by Selo PROCEL. Granting of Selo PROCEL Eletrobras to 36 models of equipment.



*Urucum*  
*Bixa orellana*

# Our structure





## Principle of the Global Compact: 10

### Corporate governance

*We pursue continuous improvement of our management practices, with a focus on transparent and appropriate procedures for the markets where we operate.*

Eletrobras has a corporate governance model that is responsible for the guidelines that direct its business and which is grounded on international management standards. Eletrobras's governance structure is made up of the General Shareholder Meeting, Audit Committee, Board of Directors, Executive Board, Internal Audit, and Board Advisory Committees.

Eletrobras's administration is the responsibility of the Board of Directors and the Executive Board, formed exclusively by Brazilians **(GRI 4.7)**. Requirements for the selection of members of the highest level of Eletrobras's corporate governance involve recognized knowledge of the electric power sector, of public administration, and of the financial and capital market, as well as moral rectitude.

As quasi-public Federal Corporation, Eletrobras is governed by the Corporations Act (Law Number 6,404, of 1976), by its Creation Act (Law Number 3,890-A, of 1961), by its Bylaws, and other provisions set forth in federal laws. Our shares are traded in the stock markets of São Paulo, Madrid, and New York, in compliance with the

rules established by the Brazilian Securities and Exchange Commission (CVM) and the São Paulo Stock Exchange (BM&FBOVESPA S.A), in addition to complying with the norms of the Securities and Exchange Commission (SEC) and of the New York Stock Exchange (NYSE) in the United States; and by Latibex, the Madrid Stock Exchange, in Spain. The transparency in Eletrobras's management is confirmed by its compliance with the North-American Sarbanes-Oxley Act (SOX). In New York, the company also trades in the American Depository Receipt (ADR) level 2, which requires compliance with the North-American US GAAP accounting standard.

Eletrobras has been listed for six years in BM&FBOVESPA's corporate governance level 1, which is a special segment that requires compliance with specific rules applicable to administrators and shareholders. Among other level 1 practices, there is the 80% tag-along right for common shares which, according to the legislation, ensures that all companies established under corporate law must offer common shareholders the right to sell their stake for at least 80% of the amount received by the majority shareholder in the case of the company being sold. Dividends ensured to common and preferred shareholders are established in its Bylaws. **(GRI 4.1)**

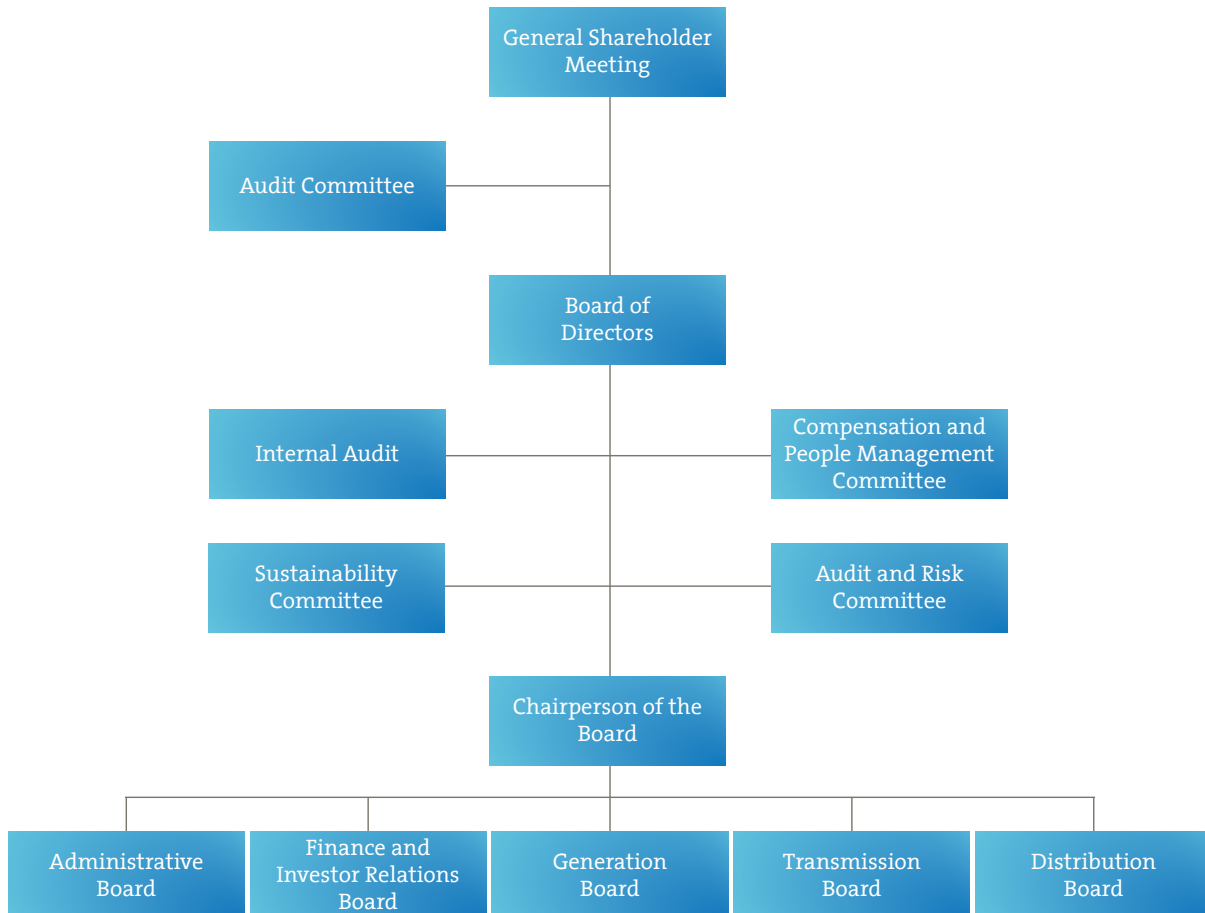
### Outstanding initiatives

Constantly focusing on reaching a high governance standard, Eletrobras has been implementing several initiatives. Some actions, ongoing since 2012, are highlighted below:

- Implementation of the process for assessing of the performance of the Board of Directors and of the Executive Board in all Eletrobras companies. **(GRI 4.10)**
- Standardization and updating of the Bylaws of the distribution, generation, and transmission companies
- Creation of two committees to support the Board of Directors of the holding.
- Development of a system to manage Eletrobras's senior-management information.
- Structuring of the "Program for the Development of Advisory Board Members Representing Employees."



Governance structure (GRI 4.1; 4.2; 4.3; 4.5; 4.6; 4.7; 4.9)



**General Shareholder Meeting:**

The Annual General Shareholder Meeting is held within the first four months following the end of the fiscal year. Extraordinarily, the Annual General Meeting is held according to the law and at the request of the Board of Directors.

In 2012, two Annual General Meetings were held. One was a regular meeting, which approved the financial statements for fiscal year 2011; the use of the net profit for the year; the election of the members of the Board of Directors and of the Audit Committee and their respective alternates, whose terms end at the first Annual General Meeting of 2013; and the monthly compensation of the

managers and members of the Audit Committee. The other was a special meeting, which determined the election of the member of the Board of Directors designated to represent minority shareholders; and the extension of the concession agreements of Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletrosul, and Eletrobras Furnas.

**Board of Directors (BD)**

The Board of Directors is a collegiate deliberation body elected by the General Shareholder Meeting and formed by up to 10 members, seven of whom are appointed by the majority shareholder; one is appointed by the minority shareholders of common shares; one is appointed by the minority



shareholders with preferred shares; and one is a representative of the employees.

In 2012, the Board of Directors had nine members with one-year mandates, eligible for reelection, among: one was an independent Board member.

The president of Eletrobras is part of the Board of Directors, nevertheless he does not cumulatively hold the position of chairman of the board; therefore, he is the only non-executive member of the board (GRI 4.3). The chair on the Board to be occupied by the member appointed by the minority shareholder with preferred shares was not occupied because this shareholder did not have the minimum number of shares required by the current legislation, which represents 10% (ten percent) of the social capital.

The Board has Internal Regulations that defines the scope of its functions and that of its members. An ordinary meeting is held on a monthly basis and extraordinary meetings are convened whenever necessary. In 2012, 16 meetings were held.

The Internal Audit Committee is associated with the Executive Board, along with the following committees: Sustainability Committee of the Eletrobras companies; Audit and Risk Committee, and the Remuneration and Personnel Management Committee. (GRI 4.1)

#### Structure of the Board of Directors

10 positions, nine of which are occupied, one is an independent member, one is an executive member, and one is a representative of the employees

One-year mandate, eligible for reelection

Ordinary monthly meeting and extraordinary meetings whenever required

#### Composition of the BD in 2012 (GRI 4.3):

- Beto Ferreira Martins Vasconcelos
- José Antonio Corrêa Coimbra
- José da Costa Carvalho Neto (executive board member)
- Lindemberg de Lima Bezerra

- Marcelo Gasparino da Silva (independent board member)<sup>1</sup>
- Márcio Pereira Zimmermann (chairman)
- Maurício Muniz Barretto de Carvalho
- Thadeu Figueiredo Rocha (employee representative)
- Wagner Bittencourt de Oliveira

#### The Audit Committee (AC):

The Audit Committee is a standing committee, with a one-year mandate eligible for reelection, and is responsible for the legal and statutory duties, and whose attributions are determined by its Internal Regulations. The committee is composed of up to five members and their corresponding alternates, three members are appointed by the majority shareholder, and the minority shareholders of ordinary and preferential shares are entitled to appoint one representative each. In 2012 the Audit Committee had five members, one of whom was a financial specialist, as per requirement of the SEC. The Audit Committee held 13 meetings throughout the year.

#### Structure of the Audit Committee

Five members and their corresponding alternates; and the minority shareholders of ordinary and preferential shares are entitled to appoint one representative each.

One-year mandate eligible for reelection

Monthly ordinary meetings and extraordinary meetings convened whenever necessary.

#### Composition of the AC in 2012:

- Danilo de Jesus Vieira Furtado (Chairman)
- Charles Carvalho Guedes (Board member – finance specialist)
- Fernando Pessoa Lopes (Board member)
- Jarbas Raimundo de Aldano Matos (Board member)
- Manuel Jeremias Leite Caldas (Board member)

#### Executive Board:

The Executive Board is responsible for managing Eletrobras's businesses according to the strategic

<sup>1</sup> He replaced the representative of the minority shareholders, who resigned in November 2012.



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guidelines established by the Board of Directors. It is made up of six members, including the CEO, which are elected by the Board of Directors. The Executive Board holds weekly meetings.

Structure of the Executive Board
6 members, including the Chief Executive Officer, elected by the Board of Directors
Mandate of up to 3 years, eligible for reelection
Weekly meeting

The Board is described below:

- CEO: José da Costa Carvalho Neto
- Administrative Director: Miguel Colasuonno
- Distribution Director: Marcos Aurélio Madureira da Silva
- Generation Director: Valter Luiz Cardeal de Souza
- Transmission Director: José Antônio Muniz Lopes
- Finance and Investor Relations Director: Armando Casado de Araújo

## Governance Effectiveness

The performance of the Board of Directors and of the Executive Board is assessed through specific methodology expressed in the Performance Assessment Manual of these bodies. The first round of assessment in all the Eletrobras companies began in 2012.

Monitoring the sustainability performance of the Eletrobras companies is the responsibility of the Sustainability Committee subordinated to the Board of Directors. The Committee acts in the implementation of internationally recognized tools and processes in order to improve the management practices of the companies. **(GRI 4.9; 4.10)**

## Transparency in management

Eletrobras discloses its transactions with related parties according to Article 247 of Law Number 6,404/76 and CVM Deliberation Number 26/86. Such disclosure aims to provide, especially for minority shareholders, information for a better understanding of the scope, characteristics, and effects of this type of transaction on the financial situation and on the profits of the company.

In addition to the information established in the legislation, we aim to include explanatory notes concerning the quarterly information, containing the disclosures specified in the accounting standards applicable to the annual financial statements.

We also have a Manual for the Disclosure and Use of Relevant Information, which establishes the practices for the disclosure and use of information, as well as a Policy for the Trading Securities issued by the Company, in compliance with Ruling Number 358, issued by the Brazilian Securities and Exchange

Commission (CVM). Our information disclosure and use practices comply with CVM, SEC, and NYSE.

We annually publish Form 20-F, which is submitted to SEC with relevant information on the management of our businesses, on the results of our operations, and on our financial situation. We also make available on our website, under Investor Relations, quarterly information, announcements and relevant facts, financial statements, and the remaining corporate reports that contribute to the decisions made by investors. The remuneration of the Board of Directors, of the Audit Committee and of the Executive Board is disclosed in an aggregate form in the Administration Report, published annually, and in item 13.2 of the Reference Form, provided to the CVM. In addition to the Administration Report, the remuneration of the Board of Directors and of the Audit Committee is informed individually in through the Corporate Management Report in the accountability to the

**Sectoral Programs**

Comptroller General of the Union (CGU), which then submits it to the Federal Court of Accounts (TCU).

The members of the Executive Board receive a fixed compensation amount and a variable portion, which is linked to profit sharing. The remuneration of

the members of the Board of Directors and of the Audit Committee is a fixed amount, which corresponds to 10% of the average monthly compensation paid to the Executive board.

**(GRI 4.5)**

**Total Remuneration of the Board of Directors, Audit Committee, and Executive Board**

<b>Compensation (R\$)</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Board of Directors	435,835.60	350,198.74	322,297.50
Audit Committee	251,458.77	196,316.77	187,500.00
Executive Board	4,678,451.19	4,497,155.96	4,246,825.33

The Ombudsman’s Office is one of the main communication channels in Eletrobras, enabling the demands of the stakeholders and employees to be met and, in partnership with other Ombudsman channels in the Eletrobras companies, aiming to reach transparency in negotiation processes. **(GRI SO1)**

The Eletrobras companies held the first election for choosing an employee representative for the Board of Directors, as established in the Bylaws, in 2012. The election took place simultaneously in all Eletrobras companies and the representative serves a one-year term. The representative elected for Eletrobras’s Board of Directors held periodic meetings with employees to discuss the situation of the electric utilities sector, maintaining a communication channel, via e-mail, on a monthly basis. **(GRI 4.4)**

The company’s Bylaws foresee situations involving conflicts of interest, in which board members must

abstain from the discussion and the vote that will decide the matter in which the conflict is characterized. These abstentions will be registered in the minutes of the meetings of the Board of Directors. In order to avoid possible conflicts of interest and the use of confidential and strategic information, the president and the directors cannot hold any directing, managing, or consulting positions in privately held companies, power utility companies, or private law entities associated in any way whatsoever with the electric utilities sector, other than subsidiaries, affiliates, special purpose companies, or utility companies controlled by the states in which Eletrobras holds ownership interest, where they may hold positions in the board of directors and audit committee, in compliance with the provisions of Law Number 9,292, of July 12th, 1996, concerning their compensation. **(GRI 4.6)**

**Ethical conduct (GRI 4.8)**

The Code of Ethics of the Eletrobras companies formalizes the principles that guide our professional conduct in the workplace and in business practices, addressing issues such as corruption, discrimination, grievances, and promotion of gender equality, among others. The document is based on the best market practices and complies

with the Constitution of the Federative Republic of Brazil (CRFB/88) of 1988, and with the Brazilian legislation.

All employees receive a copy of the Code at the time of hire. The members of the board and of the committee, in addition to approving the document, have taken part in workshops with practical



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applications of the subjects the Code describes. Contractors, service providers, interns, and young apprentices also receive a copy of the Code when they establish a relationship with the company. The document is also made available in Braille and audio, and also in a comic-book version, using accessible and educational language.

Learn more about the Code of Ethics by accessing:

[www.eletrobras.com/elb/main.asp?View={1B18E422-243D-49FA-8F34-5DF7F020115A}](http://www.eletrobras.com/elb/main.asp?View={1B18E422-243D-49FA-8F34-5DF7F020115A})

Any claims related to the failure to comply with the guidelines established in the Code can be sent by specific channels (website, letter, or phone call). All cases received are registered and internally investigated by the company. The actions to be taken are then defined, as well as the eventual penalties to be applied. (GRI SO4)

In the reporting period, Eletrobras companies registered 28 discrimination claims, an increase of 79%<sup>2</sup> compared with the previous year. Of this

total, 23 concerned Eletrobras Eletronorte; 12 are being assessed, 9 have been dismissed, and 2 were upheld. The 5 remaining claims were registered in Itaipu Binacional; however, they concern grievances involving discrimination complaints. They are in the initial phase and have not been judged. The claims were sent to the relevant areas (Permanent Ethics Committee or Gender and Diversity Committee) for investigation and for appropriate actions to be taken. (GRI HR4)

20<sup>3</sup> cases of corruption were also registered; 2 at ED Acre, 4 at Eletrobras Amazonas Energia, 1 at Eletrobras Chesf, 1 at Eletrobras CGTEE, and 12 at Eletrobras Eletronorte, of which 7 are ongoing, and 5 were dismissed. Of this total, 2 cases at Eletrobras Amazonas and 1 at Eletrobras Chesf resulted in dismissals; in addition, 1 case at Eletrobras CGTEE was dismissed. Another 2 claims at Eletrobras Amazonas Energia resulted in punishment; the remaining cases are ongoing. In 2012, no service agreements were terminated or non-renewed due to corruption claims. (GRI SO4)

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### Suggestion boxes

In 2012, holding installed complaint/suggestion boxes in its buildings. The initiative was suggested by the Ombudsman Area and the Ethics Commission to serve some segments of the company, such as service providers. Contract managers, inspectors, and supervisors and contractors have been instructed on how to proceed with the claims. In the same year, 35 members of the Ethic Commissions took part in 72 hours of training workshops.

### Exercising citizenship

Eletrobras Eletronorte invests in educational actions aimed at policies and procedures concerning human right issues. In 2012, there were 43 classes created with 514 members, representing approximately 16% of the employees. Some of the actions performed were: managerial training on gender and race, training workshops and updating of the gender and race subcommittee, lectures on volunteer work, Brazilian sign-language classes, lectures on women's etiquette, sexuality, conversational rounds on drugs, accident prevention, among others. (GRI HR3)

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<sup>2</sup> This increase is due to the fact that, in 2012, all claims were considered, instead of only the cases that were upheld.

<sup>3</sup> The methodology used for collection in 2012 was modified, aiming at greater precision and at registering all claims, regardless of their outcome

## Corporate risk management in Eletrobras companies

Governed by a single policy and coordinated by the holding, the risk management process in Eletrobras companies was developed to ensure a systemic view of results and standardization across all its subsidiaries.

In order to support risk management activities, operational (risk management and internal controls) and governance structures (risk committees) were established in each of the companies. The holding's Risk Committee is responsible for providing general guidance and its main responsibilities are as follows: the management and validation of the results of risk analyses; the prioritization of high-impact and vulnerability group risks according to financial, operational, and image criteria; and the guidance and integration of the performance of the remaining Eletrobras companies.

Based on this model, Eletrobras has identified and consolidated all possible threats to its strategic objectives in a single risk matrix. This matrix includes strategic, operational, financial, and compliance risks. In 2012, in addition to tracking prioritized risks according to a quantitative model (assessing their impacts on the company's financial

statements), it was possible to expand the coverage of the management process through the inclusion of risks associated with distribution activity. Previously, the matrix had only addressed events related to energy generation and transmission.

We aim for the continual improvement of our management practices, focusing on transparent processes suitable to the market in which we operate. Eletrobras seeks to comply with the requirements of the Sarbanes-Oxley Act and to maintain the rating of its American Depositary Receipts (ADRs) in the NYSE. In order to do so, the Program for the Remediation of Deficiencies of Internal Controls was implemented, through which the company intends to reduce its existing material weaknesses, as well as to demonstrate its engagement in the implementation of the best management practices. **(GRI 4.11)**

The certification of our internal controls is done by the administrators (CEO and CFO) and by independent auditors, addressing eventual weaknesses and their remediation plans in a transparent manner.

## Stakeholder engagement (GRI 4.14; 4.15)

The relationship with stakeholders aims to define and establish a channel for receiving internal and external inputs, in order to identify potentially relevant issues to stakeholders and to Eletrobras companies. Our audiences are:

- Leaders at Eletrobras companies
- Employees/Service providers/Interns
- Families of the employees of Eletrobras companies
- Investors/Shareholders/Market analysts
- Communities
- Society
- Press and opinion makers
- Partners/Sponsors/Suppliers
- Legislators/Regulatory Agencies/Government
- Clients/Consumers/Distribution companies

Through the Eletrobras companies' Integrated Communication Plan, whose content is in line with the strategies of our business, we guide the activities of the communication area, from the establishing messages to identified audiences to implementing action plans. **(GRI S01)**

The engagement of these audiences is possible through different communication channels, which are segmented according to the audiences: internal and external.

Among the mechanisms offered to the internal audience, we highlight the Organizational Climate Survey; the program Prosa & Café (Chat and Coffee); e-mail; Fale com o Presidente (Talk to the President), the forwarding of questions to the President during a corporate radio program; and surveys with Stakeholders.

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With our external audience, we have maintained a relationship through the following channels:

**Survey with Stakeholders:** It was conducted by Eletrobras companies for the third consecutive year, with the main objective of identifying the issues that are relevant to our audiences. The Survey with Stakeholders, conducted using the GRI methodology, enables the assessment of perceptions concerning one of the most important promotion tools of the Eletrobras companies: its annual and sustainability report. The survey is conducted based on a questionnaire, which is sent to our main stakeholders. In 2012, a total of 3,557 people took part in this process. *(Learn more about the subjects addressed in the survey in section About this Report, on page 17)*

**Panel with Specialists:** For the first time, Eletrobras held a Panel with Specialists, aiming to enhance the materiality process concerning the subjects to be addressed in the Annual Sustainability Report. The specialists voluntarily analyzed the document for the previous year and suggested opportunities for change, as well as the most relevant subjects to be addressed in this material considering the current situation of the Brazilian electric utilities sector, the types of business of the company, and the expectations of society. *(Learn more about the results of this panel in section About this Report, on page 17)*

**Ombudsman Areas:** All of the Eletrobras companies have Ombudsman Areas to receive contacts, thus establishing a communication channel between senior management and its various audiences. The contacts received are analyzed by the Ombudsman Areas and forwarded to the involved areas in order to be appropriately handled.

**Fale Conosco (Contact Us):** This communication channel is designed for the stakeholders and available on our website. It addresses various subjects, including the clarification of social and environmental issues.

<http://www.eletrobras.com/elb/data/Pages/LUMISFE1BFC04ENIE.htm>

**Canal Denúncia (Report Channel) of the Eletrobras companies:** The channel is available on the Eletrobras companies' websites; it receives claims

and information on possible irregularities or inappropriateness in accounting records. Any person who identifies or suspects any irregularity in the Eletrobras companies can use this tool to inform the company's Ombudsman Office directly, through the web or phone numbers.

[www.eletrobras.com/elb/data/Pages/LUMIS93E16E79PTBRIE.htm](http://www.eletrobras.com/elb/data/Pages/LUMIS93E16E79PTBRIE.htm)

**Access to Information Law:** In compliance with the Access to Information Law (Law number 12,527), Eletrobras's General Ombudsman implemented the Serviço de Informação do Cidadão (Citizen Information Service) – SICI, in 2012. This service allows public agencies and society in general to send requests and perform queries in an efficient manner by accessing:

[www.eletrobras.com/elb/data/Pages/LUMISE874B847PTBRIE.htm](http://www.eletrobras.com/elb/data/Pages/LUMISE874B847PTBRIE.htm)

**Other relationship mechanisms:** As a complement to the aforementioned relationship mechanisms, Eletrobras maintains a constant relationship with society through the performance of its current activities, such as the management of the National Program for Universal Access to and Use of Electricity (Luz para Todos) and of the Technological and Industrial Development Program (PDTI), through which the company stimulates cooperation and partnership between the Eletrobras companies and universities, research centers, and the industry in general. Public hearings and technical meetings, which are held during the planning of new developments and environmental licensing, are opportunities for the on-site presence of stakeholders. We also participate in the regular meetings with the Consumer Council *(See details on page 144)*.

The main subjects addressed with employees, according to our Integrated Communication Plan, are the four values described in our Strategic Plan: focus on results, entrepreneurship and innovation, appreciation and engagement of people, and ethics and transparency.

For stakeholders, in addition to the subjects highlighted above, our communication proposes to contribute to creating a space to maintain



## Sectoral Programs

relationships with the community; to stimulate the sharing of experiences; to offer information about our businesses; and to promote the values, conduct, and procedures of the Eletrobras companies in projects involving sponsorship, advertising,

preservation, and the improvement of the quality of life of society, from an ethical-cultural and social and environmental standpoint. (GRI 4.17)

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### People Energy

In 2012, through “Energy of the People,” our communication actions highlighted the pathway taken by Eletrobras in its 50 years. Throughout the year of our fiftieth anniversary, we adhered to our strategy of appreciating employees by starring them in our advertising campaign called “Reinventando a Energia” (Reinventing Energy), which presented stories of real people who demonstrate how the company is a part of the life of Brazilians.

### Managerial meetings

In 2012, Eletrobras’s Executive Board brought the company’s management together in two semiannual meetings where the financial and operational results of the company were presented and relevant subjects were discussed. This initiative is part of the communication plan called “face a face” (“face to face”), which consists of on-site meetings aimed at closer integration between the audiences, and also included the “Action Plan for Improving the Organizational Climate.” With the release of the semiannual results in an event exclusively for managers, the company sought to strengthen its relationship with these employees, in addition to collecting insights and suggestions for the improvement of corporate aspects.

### Rio+20

Eletrobras was present as one of the official partners in the United Nations Conference on Sustainable Development, or Rio+20, held from June 13 - 22, 2012 in Rio de Janeiro. At our booth combining all of the Eletrobras companies, our initiatives regarding the efficient use of energy, social and environmental actions, and the universal access to energy, among others, were presented to the public. During this event, Eletrobras representatives took part in events such as “Encontro da Indústria para a sustentabilidade” (Meeting of the Sector for Sustainability) and “Seminário Energias Renováveis para o Desenvolvimento Sustentável” (Renewable Energies for Sustainable Development Seminar) - Energy Day.

### Seminar on Sustainability

In 2012, Eletrobras Amazonas Energia held the 1st Seminar on Sustainability, Environment and Energy that had the participation of consumers, governmental and private institutions, aiming to provide a useful setting to exchange knowledge and experiences about issues on sustainability, environment and energy.

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## Brand, reputation, and image management

In 2012, the corporate reputation and image study was concluded. It aimed to maintain an increasingly specific approach destined for Eletrobras's stakeholders, in Brazil and abroad. The study investigated brand awareness, assessing how much these audiences know about Eletrobras and, comparatively, the other companies in the industry. The familiarity assessment reflected both the number of people who know the company and

the depth of their knowledge. To evaluate the first, we used a spontaneous memory assessment, similar to a top-of-mind awareness survey. To determine how much people know Eletrobras, we used a closed analysis on the level of knowledge they have about the company. The brand assessment survey was conducted based on three main criteria: brand strength, perceived coherence, and identification. **(GRI 2.2)**

## Business Strategy

In 2012, the company continued preparing the 2012-2016 Business Plans for each of the Eletrobras companies, involving a comprehensive negotiation process with the holding. The work was conducted based on the following Plans of the Eletrobras System: Strategic (2010-2020); Business Directors for 2011-2015 - with their analyses, diagnoses, assumptions, and portfolio of projects and actions; and Management and Business Director (2013-2017), with its respective project portfolio.

Provisional Measure 579 (see details on page 83) had a profound impact on Eletrobras's operational strategy due to the adjustments the Federal Government made in the operation, maintenance, and expansion dynamics governing the Brazilian Electric Utility Sector. After passage of this measure, the planning and management process, which was ongoing at the time, was reviewed in order to address the new conditions in which the concessions that were about to expire were extended. The work for the development of the Eletrobras companies' Business Plans was interrupted, given that a series of assumptions related to cash flow generation, financing and raising of funds, and expansion strategies were affected by the provisions set forth in the aforementioned Provisional Measure.

In an immediate action for the strategic alignment of Eletrobras to the new reality, the company sought to prepare short- and medium-term guidelines addressing the following conditions:

- The definition of a set of strategic guidelines to be implemented in a portfolio of critical projects, focused on management and on the business areas of the Eletrobras companies;
- The incorporation of performance indicators and related targets to the aforementioned project portfolio, allowing the easy monitoring and measuring of results;
- The review of the Strategic Corporate Plan for 2013-2022;
- Stemming from the previous item, the resumption of the preparation of the Eletrobras companies' Business Plans for 2013-2017 based on new assumptions.

The strategic guidelines, which result from this adaptation, are grouped in three areas of operation:

- Sustainable expansion: to maintain leadership in the domestic market, prioritizing participation in structuring projects, in Brazil and abroad, based on criteria for the selection of developments which consider their social and environmental and economic-financial feasibility.
- Operational efficiency: to be pursued as a short-term objective (3 years) by implementing cost reduction, revenue increases, quality enhancement, and workplace safety actions, through a portfolio of projects that is common to all companies. This portfolio directly reflects the conditions adopted for the financial forecasts that have supported the recommendation to



accept the extension of the concessions that are about to expire and the targets established by the CMDE, agreed upon between the holding and the companies.

- Business, governance, and management model: considering the economic-financial, corporate,

organizational, legal, and regulatory dimensions and improved efficiency in the management of existing assets, so as to ensure the advancement of its activities, the quality of its results, and the sustainability of the organization.

## Understanding MP 579

When Eletrobras celebrated its fiftieth anniversary, the Brazilian electric utilities sector underwent deep changes in its business environment. In September 2012, the Federal Government approved Provisional Measure 579/12, which governs the power generation, transmission, and distribution concessions in the country, as well as the reduction of industry-specific charges and tariff affordability.

According to this measure, the concessions (whose terms are due to expire in 2015 and 2017) will be renewed, one single time, for up to 30 years. The measure established that, due to this extension, companies would be paid only for investments in equipment operation and maintenance and no revenue would be received, including the amortization of unamortized and undepreciated assets. These would be compensated by the grantor and would not be included during the calculation of the tariff.

The calculation for indemnification, at the time the concessions were extended, was prepared based on a methodology called New Replacement Cost, which is used in the tariff renewal processes of the power

distribution and transmission concessions to define the basis of their compensation.

Adherence to the MP was optional, and companies had approximately two months to assess the situation and choose either to maintain the terms agreed for the concession or to renew them.

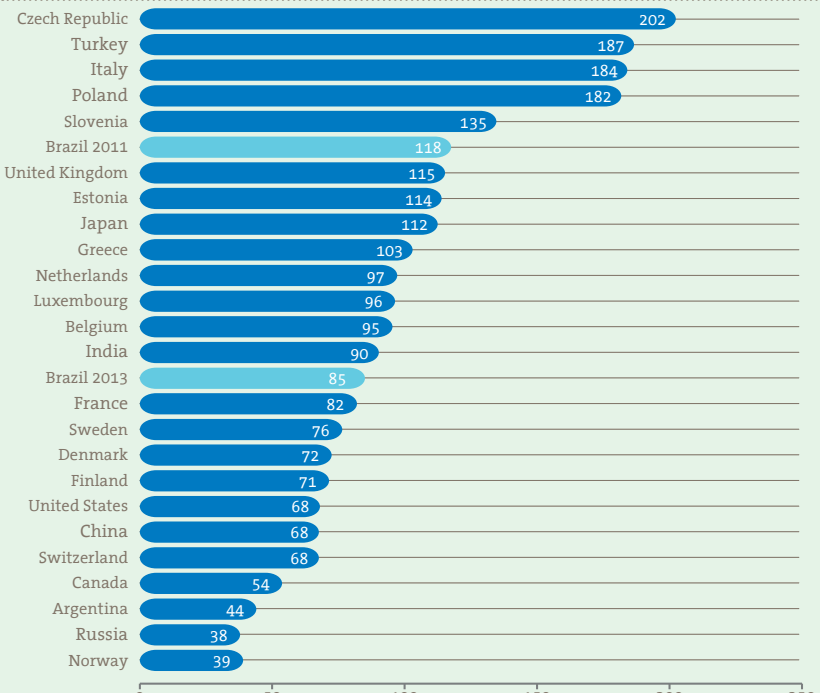
### **Eletrobras companies' understanding of Law 12,783**

Eletrobras companies accept the 30-year extension of concessions whose agreements expire between 2015 and 2017.

The decision was made during the Annual General Meeting, where the Board of Directors presented technical studies prepared by Eletrobras companies and approved by the holding. During the meeting, it was clear that our option to extend the concessions was the decision that would add greater value to shareholders.

The chart below demonstrates the impacts of Law 12,783, according to the understanding of the management area.

Sectoral Programs

Impacts stemming from the measure:																																																						
To Society	- The electric bill of Brazilian families is now 18% lower on average.																																																					
	- The industry felt an average drop of approximately 32%, which increased competitiveness in various segments and fostered the economic expansion cycle. On average, considering all consumer classes, there was a fall of approximately 20% compared with 2012.																																																					
To Brazil	- Brazil is included in the small group of countries that is simultaneously cutting back on energy costs and boosting their energy production.																																																					
	<p>- Until 2012, the average residential and industrial tariffs were R\$ 346/MWh and R\$ 235/MWh, respectively. After Law 12.783, the average residential and industrial tariffs decreased to R\$ 291/MWh and R\$ 170/MWh, respectively. Considering the countries that belong to OECD, BRICS, and including Argentina, the average industrial tariff charged in Brazil holds the 12th position, according to the graph shown below.</p> <p>Comparação de tarifas industriais sem tributos</p>  <table border="1"> <caption>Comparação de tarifas industriais sem tributos</caption> <thead> <tr> <th>Country</th> <th>Tariff Value</th> </tr> </thead> <tbody> <tr><td>Czech Republic</td><td>202</td></tr> <tr><td>Turkey</td><td>187</td></tr> <tr><td>Italy</td><td>184</td></tr> <tr><td>Poland</td><td>182</td></tr> <tr><td>Slovenia</td><td>135</td></tr> <tr><td>Brazil 2011</td><td>118</td></tr> <tr><td>United Kingdom</td><td>115</td></tr> <tr><td>Estonia</td><td>114</td></tr> <tr><td>Japan</td><td>112</td></tr> <tr><td>Greece</td><td>103</td></tr> <tr><td>Netherlands</td><td>97</td></tr> <tr><td>Luxembourg</td><td>96</td></tr> <tr><td>Belgium</td><td>95</td></tr> <tr><td>India</td><td>90</td></tr> <tr><td>Brazil 2013</td><td>85</td></tr> <tr><td>France</td><td>82</td></tr> <tr><td>Sweden</td><td>76</td></tr> <tr><td>Denmark</td><td>72</td></tr> <tr><td>Finland</td><td>71</td></tr> <tr><td>United States</td><td>68</td></tr> <tr><td>China</td><td>68</td></tr> <tr><td>Switzerland</td><td>68</td></tr> <tr><td>Canada</td><td>54</td></tr> <tr><td>Argentina</td><td>44</td></tr> <tr><td>Russia</td><td>38</td></tr> <tr><td>Norway</td><td>39</td></tr> </tbody> </table> <p>Source of data: IEA Prices and Taxes, ANEEL and FIRJAN - Exchange Rate 1\$ = 2R\$</p>	Country	Tariff Value	Czech Republic	202	Turkey	187	Italy	184	Poland	182	Slovenia	135	Brazil 2011	118	United Kingdom	115	Estonia	114	Japan	112	Greece	103	Netherlands	97	Luxembourg	96	Belgium	95	India	90	Brazil 2013	85	France	82	Sweden	76	Denmark	72	Finland	71	United States	68	China	68	Switzerland	68	Canada	54	Argentina	44	Russia	38	Norway
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The Eletrobras companies	- The industry-specific legislation, since the Water Code, already provided for the return of the assets held by a concession to the Union after the expiration of its term.																																																					
	- Law 12,783 offered the option of extending the concessions in case the utility company accepted the conditions defined by the Grantor. Based on the assumptions presented in the studies produced by the companies, the option of extending the concessions proved to be the best one, from a financial standpoint.																																																					

## Sectoral Programs

	- Given that the indemnification value calculated, based on the new legislation, differed from and, in most cases, was inferior to the accounting amounts, it was necessary to register this balance in the Financial Statements. It is noteworthy that this fact would be recorded regardless of the decision made by shareholders. The financial result of the application of Law 12,783 in the Consolidated Balance Sheet for 2013 produced financial losses totaling R\$ 10.085 million.
	- The Eletrobras System, due to the extension of the concession for another 30 years, reduced its annual revenue for 2013 and 2014 by R\$ 8.7 billion, and half that amount in 2015. At the same time, it has secured an annual revenue of R\$ 3.3 billion for 30 years.  - The implementation of an extensive operational efficiency enhancement program across the Eletrobras System is critical for the maintenance of the financial sustainability of the companies.
	- The extension of the concessions poses a great challenge. In order to meet it, the companies will have to take advantage of instruments that they already have: i) economy of scale in operations and logistics; ii) opportunities for future investments in the facilities that had their concession term extended; iii) operational synergy, both internally and with other players in the industry; iv) nationwide presence; v) preservation of the operational safety and unity of the electric system managed by Eletrobras; vi) continued sustainable expansion to maintain its leadership in the national electricity market.

## Goal and corporate performance agreement

Eletrobras has been working to enhance its management mechanisms and to achieve improved performance levels. The Contract of Goals and Corporate Performance (CMDE) is one of the pillars of this process, considering that it manages the performance of processes at various levels of the Eletrobras companies.

Since 2010, agreements for corporate performance goals have been entered into by holding and its companies regarding economic-financial, social and environmental, and operational dimensions through the use of specific indicators.

The established goals and indicators to reach corporate objectives resulted in an action portfolio

that is managed in through each subsidiary. In 2012, the process achieved some progress:

The setting of goals associated with the indicator panel of holding for 2012;

The signature of the Addenda to the CMDEs of subsidiaries, with readjustments for 2012 due to new criteria for the determination of indicators, motivated by the adoption of accounting model IFRS and changes in the business scenario of the Eletrobras companies;

At the end of 2012, studies were carried out in order to establish new goals for the 2013-2017 cycle, due to new regulations set forth by law 12,783 (related to Provisional Measure 579).

## International operations

### Border interconnections

Eletrobras operates international interconnections with Paraguay (comprising four transmission lines that transmit part of the power from the hydroelectric power plant of Itaipu to the Ibiúna substation, in Sao Paulo); with Argentina (characterized by the 132 kV transmission line,

which interconnects Uruguiana substation with Paso de los Libres substation, in Argentina); with Venezuela (230 kV transmission line, with 200 MW capacity, which interconnects Boa Vista (RR) to the city of Santa Elena, in Venezuela); and with Uruguay (230 kV transmission line which interconnects the Riviera frequency converter station – 70 MW – to the Livramento substation in Brazil. A second

## Sectoral Programs

interconnection is being built to strengthen this power integration between the two countries).

### Foreign operations

Eletrobras maintained its strategy of developing an international operation in the energy sector, directly or in consortium, seeking the implementation of developments for renewable energy generation and transmission, provided they meet thorough risk and return assessments.

In 2012, Eletrobras continued with studies on opportunities presented in the Americas and Africa. It is possible to highlight studies on the UHE Tumarín, in Nicaragua; the transmission line Brazil

– Uruguay, with both works scheduled to start in 2013; and the implementation of high-voltage transmission lines in Mozambique.

Also in 2012, the Agreement for Assessment and Development of the Complex for Wind Power Generation installed in the Oriental Republic of Uruguay was entered into by Eletrobras and the Uruguayan state company *Administración Nacional de Usinas y Trasmisiones Eléctricas* (UTE). Through this agreement, Eletrobras and UTE are evaluating a series of wind power developments that will add more than 210 MW of clean energy to the power matrix of Uruguay.

## Programs for investment and expansion

In 2012, Eletrobras made 78.6% of planned investments for the year, injecting R\$ 9.8 billion (R\$ 5.9 billion in the corporate area and R\$ 3.9 billion in partnerships), distributed in the following segments: generation R\$ 5.3 billion, transmission

R\$ 3.0 billion, distribution R\$ 1.0 billion, other (research, infrastructure, and environmental quality) R\$ 0.5 billion. For 2013, we forecast investments of R\$ 13.7 billion.

Nature of Investments (R\$ thousands)	Budgeted	%**	Actual				
	2013		2012	2011	2010	2009	2008
<b>Own Investments</b>							
Generation	4,218.3	-46.1%	1,770.9	2,587.7	2,447.6	2,152.3	1,593.1
Transmission	2,247.7	-41.6%	1,638.7	2,319.8	1,075.9	1,527.3	1,022.3
Distribution	1,465.4	28.7%	837.2	597.1	672.5	379.0	242.1
Maintenance - Generation	675.1	15.7%	511.6	431.3	367.7	468.3	425.7
Maintenance - Transmission	652.1	51.7%	401.2	193.9	176.6	227.6	210.1
Maintenance - Distribution	254.1	15.9%	218.8	183.9	148.9	139.4	99.5
Others (Research, Infrastructure, and Environmental quality)	611.9	15.4%	545.7	461.5	390.0	296.5	285.2
<b>Subtotal</b>	<b>10,124.6</b>	<b>-14.4%</b>	<b>5,924.1</b>	<b>6,775.2</b>	<b>5,279.4</b>	<b>5,190.3</b>	<b>3,878.1</b>
<b>Financial Investments in Partnerships</b>							
Generation	2,467.7	29.2%	2,980.3	2,109.1	822.2	437.7	543.9
Transmission	1,104.6	-5.2%	945.1	994.6	852.8	590.1	101.6
<b>Subtotal</b>	<b>3,572.3</b>	<b>20.9%</b>	<b>3,925.4</b>	<b>3,103.7</b>	<b>1,675.0</b>	<b>1,027.8</b>	<b>645.5</b>
<b>Total</b>	<b>13,696.8</b>	<b>-0.3%</b>	<b>9,849.5</b>	<b>9,878.9</b>	<b>6,954.4</b>	<b>6,218.1</b>	<b>4,523.6</b>

\* Own Investments PM 598 (December 27, 2012), Financial Reversals in partnerships Decree 7867 (December 19, 2012).

\*\* Percentage increase of investments made in 2012 based on data from 2011.



## Sectoral Programs

The decrease in generation investment in 2012 was mainly due to the delay in the construction of Angra 3 Nuclear Plant. In transmission, the great delay was in the projects for implementation of Porto

Velho Collector Substation and Collector Station and in the implementation of Araraquara II Inverter Station.

### Research, development and innovation

In accordance with Law 9,991/2000, Eletrobras companies must apply resources in research and development and annually publish calls for proposals and projects aimed at the implementation of the company's scientific research and technological development programs.

Since 2009, the companies have followed the guidelines of the corporate Research, Development, and Innovation Policy (R&D+I) and approached this topic through short-, medium-, and long-term

corporate strategies, aligned with and integrated into the Strategic Plan and business plans, seeking results as a base for growth and competitiveness and as a critical element in combining sustainable business growth with social and environmental responsibility.

The investments in R&D+I of the Eletrobras companies in 2012 totaled R\$ 215 million, up 18.9% compared with the previous year. **(GRI EU8)**

Expenses for Research and Development (in R\$ millions)		
Types of Projects	2012	2011
Energy efficiency	19.27	14.98
Renewable energy technologies	11.12	11.38
Distributed energy	2.00	2.10
Transmission and distribution technologies	125.98	105.70
Generation and advanced technologies	35.07	26.90
Innovative services related to sustainability	20.72	18.96
R&D Management and Innovation	0.93	-
<b>Total invested</b>	<b>215.07</b>	<b>180.02</b>

Note: Data for 2012 do not include information on the flowing companies: ED Acre, ED Piauí, e Eletrobras Eletronuclear.

### R&D Projects of the Eletrobras companies

In line with the Research, Development, and Innovation Policy, the Eletrobras companies developed technological solutions that aim at strengthening the concept of sustainable development in line with growth in the supply and demand of clean and renewable energy. To do so, the companies have a diversified structure of R&D+I with the support of a wide network of laboratories, including Cepel, as well as partnerships with educational and research institutions in various regions of the country.

Eletrobras Distribuição Alagoas, for instance, invested approximately R\$ 3.3 million in 2012 in research and development projects focused on transmission and distribution technologies, such as the Development of a Reference Model project for the EDEs, based on experimenting with applications of a set of technologies within the smart grid concept.

Pilot initiatives will be implemented in Parintins (AM) to evaluate the effective contribution of these applications in the enhancement of the operational performance of the Eletrobras Distribution Companies.



## Sectoral Programs

In order to increase the degree of knowledge about the processes that result in global warming, Eletrobras has been promoting the development of studies and research. This occurs especially in relation to the estimated greenhouse gas emissions in hydroelectric reservoirs.

In this case, Eletrobras and its generating companies have actively invested in the development of methodologies and technologies for the emissions by reservoirs in hydroelectric plants to be reliably calculated.

An example of this is the strategic project “Monitoring of Greenhouse Gas Emissions in Reservoirs of Hydroelectric Plants” of public hearing number 009/2008 held by the National Electricity Agency (Aneel), whose objectives include the establishment of guidelines for the monitoring, analyzing of data and modeling, in addition to the definition of best practices in management concerning greenhouse gas emissions in reservoirs of hydroelectric plants.

This study is financed by the generating companies Eletrobras Furnas, Eletrobras Eletronorte and Eletrobras Chesf, with mediation by the holding and coordination by Eletrobras Cepel, representing an important Brazilian contribution to the Hydroelectricity Workgroup of the international energy agency (leahydro).

Eletrobras CGTEE invested in a technology capable of using ashes resulting from the production process in the Presidente Médici Thermolectric Plant (RS) as raw material for a new product to be used in pavements.

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## Energy Research Center (Eletrobras Cepel)

Eletrobras Cepel operations seeks excellence in results in the areas of research, development, and innovation (R&D+I); in the areas of generation, transmission, distribution, marketing, and final use of electricity, as well as in the electrical-energy planning and operation; in the conduction of technology studies and services; and in the conduction of experimental research and tests. It works as Executive Department of the Commission for Technology Policy (CPT) of the Eletrobras companies, a structure that, in 2012, started to treat R&D+I and Technology corporate issues in an integrated manner, defining policies, guidelines, strategies, and action plans. The benefits arising from the operation of Eletrobras Cepel go beyond the Eletrobras companies and include the Ministry of Mines and Energy (MME), the Ministry of Environment (MMA), and the Ministry of Science, Technology and Information (MCTI), as well as trade groups such as the Energy Research Company (EPE), Operator of the National Electric System (ONS), Power Trading Chamber (CCEE), and the Brazilian Electricity Regulatory Agency (Aneel), along with utility companies and equipment manufacturers.

The company is currently expanding its laboratory infrastructure and experimental research for the development of advanced solutions in the transmission of large amounts of energy, which are essential for the sustainable use of hydroelectric resources from the North of Brazil, such as the External Ultra-High-Tension Laboratory (Labuat), under construction in the Adrianópolis Unit with resources from Eletrobras, FINEP/MCTI, and the World Bank.

It participates in important actions for the promotion of hydropower, such as the development of methodologies for implementation of hydroelectric plants, using the Platform-Plant concept, international participation, and the coordination of a group for the International Energy Agency (IEA). It gives Eletrobras technological support in programs such as Procel and Proinfa. **(GRI EU23)**

In 2012, it developed its main action in R&D+I for Eletrobras companies through its institutional projects portfolio with 92 projects as shown below:



Type of Project	Quantity
Disturbance Analysis	1
Technical and Financial Analysis of Developments and Tariffs	1
Conservation and Efficient Use of Energy	14
Renewable Energy and Distributed Generation	6
Stochastic Hydrology, Hydro, and Wind Power Resources	4
Environment	5
Monitoring and Diagnosis of Systems and Equipment	11
Planning of Electro-energetic Expansion	5
Planning of Electro-energetic Operation	5
Planning, Operation, and Network Analysis	7
Computer Techniques for Parallel Processing	4
Technology of Materials and Useful Life Extension	8
Technologies of Real-Time Supervision and Control	5
Transmission Technologies	10
Technologies for Distribution, Metering, Preventing Losses, and Energy Quality	6
<b>Total</b>	<b>92</b>

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## Innovation System

The Eletrobras Innovation System focuses on systemic innovation and is based on four dimensions that interact with each other, obtaining a practical model for its institutionalization. The selected modules that began the implementation of this system were People and Capacities, in 2011, with the initiative Action for Awareness on Innovation. The following year, the module focused on Processes and Tools, with the initiative Collection and Treatment of Employees' Ideas. To this end, support tools were analyzed and the software NOUS was selected, which is collaborative software focused on innovation and used successfully by other companies.

One of the applications of NOUS was the challenging program "Renew Eletrobras," which aims at seeking innovative solutions, collected from employees and aligned with the corporate strategy for cost reduction, increased revenue, and new business development.

The governance of the Eletrobras Innovation System is the responsibility of the Managing Committee, composed of representatives of all Boards, and of a Committee for Evaluation of Innovative Ideas, responsible for the assessment, classification, prioritization, and implementation of ideas registered in the database by employees. In 2012, a total of 62% of employees participated in the project and presented 219 new ideas, all of which were analyzed by the Committee, which selected the ones most suitable to the company's strategic interests.

This approach to innovation is based on the appreciation of employees' skills, and their engagement is a key factor in its success.

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*Augusto César*  
*Adenocalymna*



# Our Responsibility Towards the Market





## Our Responsibility Towards the Market

### Economic Sustainability

*The growth of the Eletrobras companies is based on strategic decisions made ethically and responsibly*

Our financial management is aligned with the best practices of the market, considering the interests of shareholders, employees, customers, suppliers, and the local community, because we believe it is important to grow together.

In 2012, the Eletrobras companies suffered atypical effects due to the Provisional Measure 579, which affected the company's profitability. However, there are still growth perspectives.

Investments were made in the amount of R\$ 9.8 billion, which included R\$ 5.3 billion in generation, R\$ 3.0

billion in transmission, R\$ 1.0 billion in distribution and R\$ 0.5 billion in research, infrastructure, and environmental quality. Working independently or in partnership, the Eletrobras companies added approximately 711 MW of clean and renewable energy and 880 km of transmission lines to the Brazilian power matrix. In distribution, with our 199,935 km of network, we provide energy to approximately 3.7 million customers. In addition, in the generation segment approximately 22,662 MW are being built and the construction of 19,040 MW is being studied. In transmission in the coming years, we will implement over 13,730 km, which represents a gain of 13,885 MVA in transformation capacity.

### Highlights of consolidated results

- Net Operating Revenue: R\$ 34,064 million (up 16.6% from 2011);
- Operating Result: R\$ 1,668 million (down 59.7% from 2011), this result was mainly influenced by Operational Provisions, which presented an increase of R\$ 2.5 billion compared with 2011, and by the Transfer from Itaipu Binacional;
- Personnel, Material, and Service (PMS)/ Net Operating Revenue (ROL): 24.8%, down 1.5% from 2011;
- Adjusted and Consolidated Ebitda: R\$ 5,520 million, down 8.4% from 2011. The variables that influenced this decrease are as follows: revenue from Transfer from Itaipu Binacional, which went from R\$ 836 million in 2011 to R\$ 414 million in 2012; and the provisions for impairment<sup>1</sup>, which went from R\$ 435 million in 2011 to R\$ 1,059 million in 2012;
- Net Result of Exchange Rate Variation: R\$ 421 million (down 37.1% from 2011);
- Transfer from Itaipu Binacional R\$ 414 million (down 50.5% from 2011);
- Atypical Effects (impairment, onerous contracts, and compensations) R\$ 11,693 million.

<sup>1</sup> Impairment of assets according to CVM rule



## Our Responsibility Towards the Market

### Value Added Statement (DVA) (GRI EC1)

CENTRAIS ELÉTRICAS BRASILEIRAS S.A. - ELETROBRAS				
STATEMENT OF VALUE ADDED FOR THE YEARS ENDED DECEMBER 31, 2012 AND 2011 (in thousands of Reais)				
	CONTROLLER		CONSOLIDATED	
	2012	2011	2012	2011
<b>1 - REVENUES ( EXPENSES)</b>				
Sale of goods, products and services	2.780.499	2.763.701	39.538.861	33.061.356
Not operationals	-	-	44.766	1.187.135
	<b>2.780.499</b>	<b>2.763.701</b>	<b>39.583.627</b>	<b>34.248.491</b>
<b>2 - INPUTS PURCHASED FROM THIRD PARTIES</b>				
Materials, services, and other	(765.131)	(352.358)	(25.930.890)	(11.442.512)
Segment burdens	-	-	(1.797.922)	(1.712.669)
Power purchased for resale	(2.408.742)	(1.944.449)	(4.573.673)	(3.386.289)
Fuel for the production of electrical energy	-	-	(708.711)	(162.673)
Operational provisions	(764.387)	(936.390)	(3.441.106)	(2.848.749)
	<b>(3.938.261)</b>	<b>(3.233.197)</b>	<b>(36.452.302)</b>	<b>(19.552.892)</b>
<b>3 - GROSS ADDED VALUE</b>	<b>(1.157.761)</b>	<b>(469.496)</b>	<b>3.131.324</b>	<b>14.695.599</b>
<b>4 - WITHHOLDING</b>				
Depreciation, exhaustion and depletion	<b>(6.279)</b>	<b>(6.392)</b>	<b>(1.775.214)</b>	<b>(1.723.885)</b>
<b>5 - NET VALUE ADDED PRODUCED BY THE ENTITY</b>	<b>(1.164.040)</b>	<b>(475.888)</b>	<b>1.356.111</b>	<b>12.971.714</b>
<b>6 - ADDED VALUE RECEIVED in TRANSFER</b>				
Shareholdings	(7.531.378)	2.049.302	468.584	482.785
Financial Revenues	4.775.182	4.779.677	4.335.442	4.262.326
	<b>(2.756.195)</b>	<b>6.828.979</b>	<b>4.804.026</b>	<b>4.745.111</b>
<b>7 - TOTAL VALUE ADDED TO DISTRIBUTE</b>	<b>(3.920.236)</b>	<b>6.353.091</b>	<b>6.160.136</b>	<b>17.716.825</b>
<b>DISTRIBUTION OF VALUE ADDED</b>				
<b>PERSONNEL</b>				
. Personnel, charges and fees	326.533	366.893	5.422.099	5.346.029
. Retirement and pension Plan	28.292	27.620	294.669	204.832
	<b>354.825</b>	<b>394.513</b>	<b>5.716.768</b>	<b>5.550.861</b>
<b>TAXES</b>				
. Taxes, charges and contributions	792.862	345.262	3.285.987	4.086.108
	<b>792.862</b>	<b>345.262</b>	<b>3.285.987</b>	<b>4.086.108</b>
<b>THIRD PARTIES</b>				
. Financial charges and rentals	1.521.039	1.673.555	3.702.933	4.027.873
. Donations and contributions	289.954	207.196	380.101	289.964
	<b>1.810.993</b>	<b>1.880.751</b>	<b>4.083.034</b>	<b>4.317.837</b>
<b>SHAREHOLDERS</b>				
. Dividends or interest on net equity	433.962	360.933	433.962	360.933
. Participation of non-controlling shareholders	-	-	(46.737)	29.454
. Retained profit or loss for the financial year	(7.312.878)	3.371.632	(7.312.878)	3.371.632
	<b>(6.878.916)</b>	<b>3.732.565</b>	<b>(6.925.653)</b>	<b>3.762.019</b>
	<b>(3.920.236)</b>	<b>6.353.091</b>	<b>6.160.137</b>	<b>17.716.825</b>



### Result 2012 x 2011

The 2012 result shows a decrease of 284.3% when compared with 2011, registering net losses of R\$ 6,879 million in 2012, compared to a net income of R\$ 3,733 million in 2011. This negative result is due to the effect of atypical events (impairment,

onerous contracts, and compensations) mainly due to the regulatory changes made last year, which amounted to R\$ 11,693 million.

### Net Operating Revenue (ROL)

The Net Operating Revenue (ROL) of 2012 exceeded that of 2011 by 16.6%, going from R\$ 29,211 million to R\$ 34,064 million.

Consolidated (R\$ million)		
2012	2011	
		a) Generation
21.548	18.427	Energy Supply/Procurement/Sale
414	836	Financial Asset/Transfer Itaipu Binacional
		b) Transmission
3.682	3.603	Revenue from construction
2.562	1.979	Revenue from operation and maintenance
3.149	2.774	Updating of rate of return - Transmission
		c) Distribution
6.122	4.148	Supply
1.346	729	Revenue from construction
21	565	Operation and maintenance revenue
696	866	Other Revenues
39.539	33.927	Total
		Deductions to Operating Revenue
(1798)	(1713)	Industry-specific taxes
(1362)	(1086)	ICMS
(2290)	(1902)	PASEP and COFINS
(25)	(15)	Other Deductions
(5.474)	(4.716)	Total Deductions
34.064	29.211	Net Operating Income



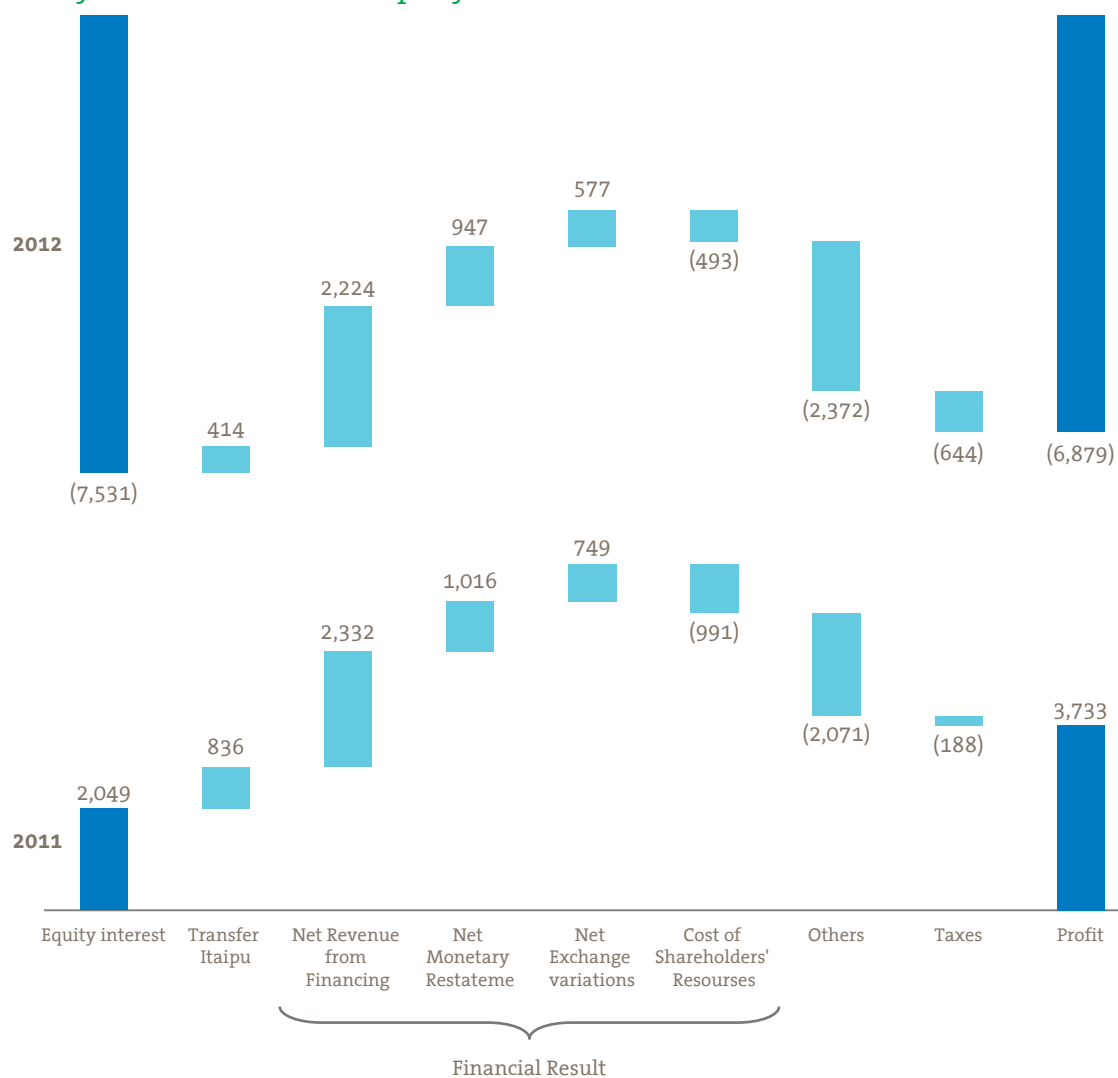


## Net Income

Consolidated (R\$ million)		
2012	2011	
34.064	29.211	Net Operating Revenue
(8.439)	(7.671)	(-) Personnel, Materials, and Services
(4.574)	(3.386)	(-) Energy Purchased for Reselling
(1.764)	(1.421)	(-) Use of the electric grid
(5.027)	(4.280)	(-) Construction
(709)	(163)	(-) Fuel for the production of electricity
(1.652)	(1.329)	(-) Remuneration and Compensation
(1.775)	(1.724)	(-) Depreciation and amortization
10.125	9.238	
469	483	Ownership interests
(5.327)	(2.849)	Operating provisions
(3.130)	(2.568)	Other results
2.137	4.304	
2.499	2.422	Interest income
858	653	Monetary restatement
421	670	Exchange variation
(2.334)	(1.709)	Debt charges
(572)	(1.179)	Charges for Shareholders' Resources
(240)	(623)	Other financial results
2.769	4.539	
(10.085)	0	Losses - Law 12,783/2013
390	(777)	Income Tax and Social Security Contribution
(6.926)	3.762	Net profit for the period
47	(29)	Ownership interest of non-controlling shareholders
(6.879)	3.733	Consolidated Net Profit



### Analysis of the Parent Company





## Our Responsibility Towards the Market

### Capital Market

Eletrobras (BM&FBOVESPA: ELET3 and ELET6 / NYSE: EBR and EBR-B / LATIBEX: XELTO e XELTB), the largest company in the energy sector in Latin

America, has a base of over 28,200 thousand shareholders, located in 34 countries.

### Analysis of Eletrobras's Shares

Asset Name	Closing Rate (December 2011)*	Closing Rate (December 2012)*	Associated Exchange	Variation
ELET 3 - BM&FBOVESPA	R\$ 16.38	R\$ 6.37		-61%
ELET 6 - BM&FBOVESPA	R\$ 24.67	R\$ 10.45		-58%
EBR - NYSE	R\$ 8.78	USD 3.12		-65%
EBR-B - NYSE	R\$ 13.19	USD 5.01		-62%
XELTO - LATIBEX	R\$ 7.39	EUR 2.39		-68%
XELTB - LATIBEX	R\$ 10.98	EUR 3.95		-64%

\* Ex-dividend closing rates.

### Relationship with shareholders and investors

In accordance with the policy of information submission to the market and the Level 1 rules of corporate governance of BM&FBOVESPA, the company holds semiannual meetings in the regional Apimecs (Association of Analysts and Investment Professionals in Capital Markets) of the country: RJ, SP, MG, DF, South, and Northeast.

In addition, the Investor Relations area holds semiannual meetings in Europe and in the United States (road shows) in order to present the company to foreign investors. The Eletrobras Day is held annually in New York, and the Latibex Forum is held in Madrid. Eletrobras's Investor Relations area frequently participates in dozens of events and seminars promoted by international banks, in Brazil and abroad, with the presence of prestigious analysts and investors from the equity and debt segments.

Eletrobras publishes the Investor Newsletter, a quarterly report that has as its audience analysts and investors of the equity and debt market worldwide. In it, we publish economic and financial data, an analysis of the results of these companies and the consolidated result of all the Eletrobras companies. It is issued in three languages, filed in CVM, in SEC, and in the Madrid Stock Exchange, made available on Eletrobras's website, and sent via direct mail to approximately 3,000 registered people.

Eletrobras also publishes "Energy in Shares," which is a quarterly newsletter with the most relevant news about the company and its possible effects on the market. The intent is for minority shareholders to have more detailed information on the company.



## Shareholdings

The portfolio is composed of 44 companies: 14 subsidiaries, 29 with minority shareholding, and Itaipu Binacional with 50% interest. In this portfolio, 18 companies have their shares traded on Bovespa, and the total value of these shares was R\$ 5.15 billion on December 31, 2012, whereas on December 31, 2011 it was R\$ 6.94 billion, reflecting the decrease in value of energy companies due to the publication of Provisional Measure 579 and its effects. The depreciation of the Bovespa shares in the period was of 25.8%.

In 2012, the control of Boa Vista Energia was transferred from Eletronorte to Eletrobras and the negation of the debt of Guascor do Brasil S.A. was concluded with the sale of all shares held by Eletrobras. On November 26, 2012, Eletrobras and the State of Roraima signed a letter of intent in order to participate in the process of technical, economic, and financial recovery of the company CERR. This process provides the transfer of management and shareholding control from CERR to Eletrobras.

In April 2012, two agreements were entered into and between Eletrobras and the State of Goiás, and Companhia Celg de Participações – Celgpar: the Shareholders – Agreement and the Management Agreement, in order to allow Eletrobras to take over the executive management of Celg Distribuição S/A (Celg D) through its majority representation in the Board of Directors of the distributor.

Eletrobras and the State of Amapá entered into a Shareholders – Agreement and a Management Agreement in order to promote the economic-financial recovery of the CEA company, which, after the implementation of all terms, will evaluate the possible purchase, by Eletrobras, of the shareholding control of that company.

Eletrobras's participation portfolio currently has shares of four specific developments (SPEs): one in operation (Wind Power Plant Mangue Seco 2), one under construction (UHE Belo Monte – Norte Energia), and two projects (UHE Inambari, in Peru, and UHE Tumarín, in Nicaragua).



*Pitanga*  
*Eugenia uniflora*

# Our Responsibility to People











## Our Responsibility to People

### Global Compact Principles: 3; 4; 5; 6

*The Eletrobras companies invest in actions that promote respectful and harmonious relationships with its employees, considering the expectations of both parties*

The Eletrobras companies maintain a good and respectful relationship with its employees through continuous actions that promote professional and personal development.

With a structured People Management Policy, we disseminate responsible corporate guidelines through the alignment of our activities in all the Eletrobras companies. Currently, the Performance

Management System (SGD), the Career and Remuneration Plan, the Individual Development Plan, the Unified Climate Survey, and the Health and Safety Policy, as well as the standardization of personnel administration and the Information System for People Management, are some of the tools that ensure the unified integration and management of the companies.

In 2012, we invested in performance management and actions related to the quality of life of employees, as well as improvements in internal procedures such as the effective implementation of the Human Resources module on SAP's management system in holding.

### Equal opportunities (GRI LA13)

One of the commitments assumed by the Eletrobras companies is to provide equal opportunities to all. Initiatives such as the voluntary adhesion to the Pro-Equity in Gender Program, to the "Principles of Empowering Women", and support to the campaigns that seek to eliminate violence against women, aimed to develop actions that value diversity and eliminate any form of discrimination in the work environment. (GRI 4.12)

The Eletrobras companies integrate the Standing Committee for Gender Issues of the Ministry of Mines and Energy and Associated Companies. During the meetings of the committee, the companies have the opportunity of sharing experiences about gender equity practices and the

valuation of diversity in the corporate environment and in the social projects they support.

Hiring at Eletrobras companies is done through a civil service examination, an impartial process, as set forth in the Federal Constitution of 1988, banning the company from any kind of guidance in the selection, including that of gender, race, age group, nationality, and place of residence of the candidate.

Eletrobras provides a minimum share of 5% of vacancies for people with disabilities, as required by the Brazilian legislation. Even though we ensure this legal percentage, Eletrobras has not been able to meet the minimum percentage. In 2012, Eletrobras companies had 433 employees with some kind of disability.

### Aligned team

By the end of 2012, we had a team of 28,437 employees<sup>1</sup>, all of them working in alignment with

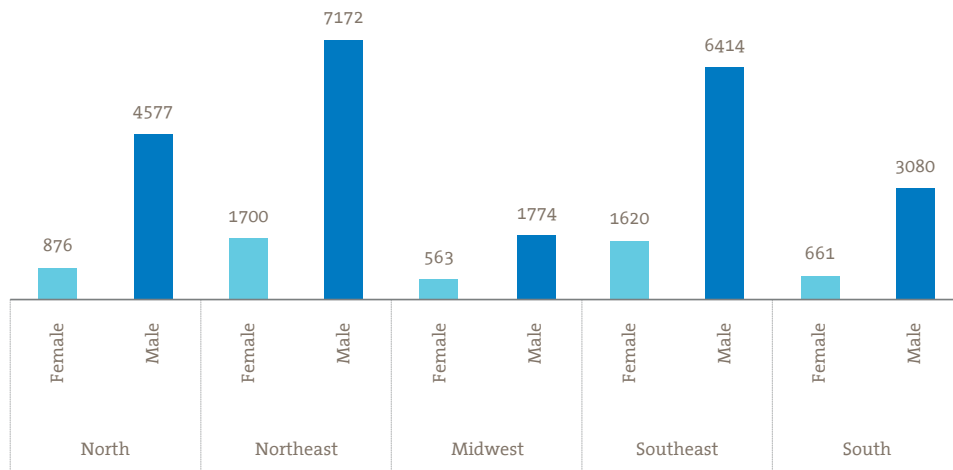
our mission and organizational values (GRI LA1).

<sup>1</sup> In 2012, the number of employees includes the number of rehired employees (amnesty). All employees working at Eletrobras Eletropar are part of the staff of other Eletrobras companies. Employees from Paraguay working at Itaipu Binacional were not considered.



Own employees by company and gender																	
	ED Acre	ED Alagoas	ED Piauí	ED Rondônia	ED Roraima	Eletrobras Amazonas Energia	Eletrobras Cepel	Eletrobras CGTEE	Eletrobras Chesf	Eletrobras Eneonorte	Eletrobras Etronuclear	Eletrobras Eletrosul	Eletrobras Furnas	Holding	Itaipu Binacional	Total	% per gender
Female	68	178	296	176	80	358	101	127	1.182	737	474	268	699	409	267	5.420	19%
Male	265	1.119	1.160	682	208	1.921	382	552	4.557	3.020	2.080	1.278	3.868	773	1.152	23.017	81%
Total	333	1.297	1.456	858	288	2.279	483	679	5.739	3.757	2.554	1.546	4.567	1.182	1.419	28.437	

### Own Employees by gender and region



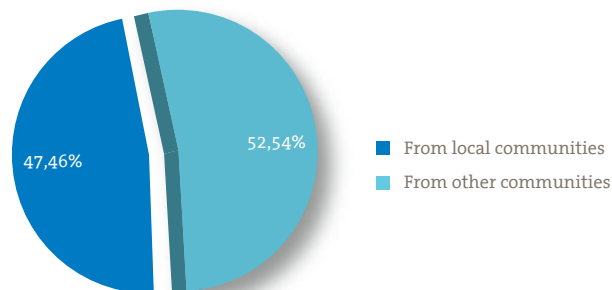
Of the total number of employees, 98% work full time and 2% work part time.

	Own employees by period							
	Full-time employees			Part-time employees - 6h		Part-time employees - 4h		Total
	Female	Male	Total	Female	Male	Female	Male	
ED Acre	68	265	333	0	0	0	0	0
ED Alagoas	161	810	971	16	307	2	1	326
ED Piauí	296	1.160	1.456	0	0	0	0	0
ED Rondônia	176	682	858	0	0	0	0	0
ED Roraima	79	207	286	1	0	0	1	2
Eletrobras Amazonas Energia	358	1.921	2.279	0	0	0	0	0
Eletrobras Cepel	101	382	483	0	0	0	0	0
Eletrobras CGTEE	85	307	392	40	245	2	0	287
Eletrobras Chesf	1.182	4.557	5.739	0	0	0	0	0
Eletrobras Eletronorte	737	3.020	3.757	0	0	0	0	0
Eletrobras Eletronuclear	474	2.080	2.554	0	0	0	0	0
Eletrobras Eletrosul	262	1.274	1.536	6	3	0	1	10
Eletrobras Furnas	699	3.868	4.567	0	0	0	0	0
Holding	406	769	1.175	3	4	0	0	7
Itaipu Binacional	267	1.152	1.419	0	0	0	0	0
Subtotal	5.351	22.454	27.805	66	559	4	3	632
Total for the Companies	28.437							

As to the origin of top management members: in 2012, out of 59 employees in these positions, 47%

were considered members of the local community. (GRI EC7)

### Senior-management employees



Note: ED Acre and ED Alagoas are not included.

## Our Responsibility to People

In 2012, the governance bodies of the Eletrobras companies were composed of 15% women and 85%

men; 31% were between the ages of 30 and 50 and 69% were over 50 years of age. (GRI LA13).

Composition of governance Boards, Audit Committee, and Board of Directors (LA 13)					
By gender	2012	2011	By age	2012	2011
Female	22	19	< 30 years of age	0	0
Male	129	118	30 - 50 years of age	47	41
			> 50 years of age	104	96
Total	151	137	Total	151	137

Permanent employees by employee category (LA13)	2012	%	2011	%
Managerial Positions - Female	364	1%	387	1%
Managerial Positions - Male	1.526	6%	1.656	6%
Positions with higher education - Female	2.008	7%	2.109	7%
Positions with higher education - Male	5.601	21%	5.861	21%
Positions without higher education - Female	2.860	11%	2.913	10%
Positions without higher education - Male	14.781	54%	15.618	55%
Total	27.140		28.544	

Note: Data for 2012 do not include information for ED Alagoas.

### The search for equality

Eletrobras Eletronorte, through actions of the Pro-Gender and Race Equality Program developed a "Study of Management Positions According to Gender" in order to establish criteria, plans, requirements, and goals for the occupation of management positions, which enable the adoption of affirmative measures to accelerate and broaden the promotion of gender equality in career advancement.

The study showed an inequality of gender in management positions. Given this result, the company will adopt measures such as the definition and approval of a Career Plan for Management Positions complementing the Plan for Positions of the Eletrobras companies; develop and implement a tool to identify interest and availability of opportunities for women to take on management positions; and establish goals to increase the number of women in management positions, among others.

For the fulfillment of these measures, an Action Plan was prepared, with activities to be promoted between 2013 and 2014. In addition, a Work Group for Management Mobility, composed of career, education, and strategic planning teams, meets weekly to consolidate steps of this study, and benchmarking is being conducted in public organizations.

To find out more about the program, go to:

[www.eletronorte.gov.br/opencms/opencms/imprensa/pro\\_equidade/equidade\\_genero.html](http://www.eletronorte.gov.br/opencms/opencms/imprensa/pro_equidade/equidade_genero.html)

## Climate Survey

The company's focus is to listen to the expectations of our employees for the continuous improvement of our management. Prepared in 2011, the second unified Organizational Climate Survey of the Eletrobras companies guided the companies in the preparation of specific Action Plans, according to their needs.

In holding, for instance, the action plan was composed of 17 macro actions, focused on subjects such as career, communication, culture of results, education, people and process management,

physical installation, and health and safety in the workplace. The work was prepared in a collaborative manner by a group composed of managers and employees. In 2012, a total of 11 actions were executed; among them we may highlight the Agreement of Housing Cooperation and Financial Contribution, which presents below market rates, and the Good Ideas Award (Prêmio Boas Ideias). Ongoing actions can be followed by employees via intranet. The surveys are conducted every two years, and the next will take place in 2013.

## Performance management

In 2012, we ended the first unified cycle of the Performance Management System (SGD), which supported the career development of 87.72% of employees of the Eletrobras companies who adhered to the program. In accordance with the rules and guidelines of the Career and Remuneration Plan (PCR), and based on results of skills assessments and SGD goals, the promotion of employees was conducted in a horizontal (merit) and vertical (change in complexity level) manner.

As a result of the feedback meeting on the performance assessed by the SGD, manager and employee prepared an Individual Development Plan (PDI), focused on performance improvement and development of their career (**GRI LA12**). The following actions may be agreed upon:

**Formal educational actions:** Structured and coordinated by the Corporate Education Units of the Eletrobras companies, these formal educational actions can be internal or external, online or on-site, and are associated with the skills needed for good performance of employees in each company, or through Unise when of strategic nature, according to the Eletrobras System.

**Non-formal educational actions:** Associated with the development of employee skills, the non-formal educational actions are the responsibility of managers and/or employees (self-development) and involve reading of books or articles, on-the-

job guidance, participation in informal groups or external institutions, and participation in projects.

**Biopsychosocial actions:** Monitored by the Company's occupation health department, the biopsychological actions are recommended for general health, psychological and social aspects (relationship) that may interfere with the performance of employees.

**Re-adaptation actions:** Re-adaptation actions aim to adjust the health conditions of employees on leave from their job attributions due to health reasons, with monitoring by the Company's occupational health department.

**Actions for technical visits:** The purpose of these visits is to increase knowledge about Eletrobras and its companies, technologies, and history; or introduce new technologies, processes, and better market management practices and/or processes in which the company operates.

**Actions for layout change:** Aiming to detect physical and environmental work conditions that may interfere with employees' good performance or their personal and/or collective safety, we conduct changes to layout. The most common changes are associated with the position of furniture, equipment, or employee repositioning.

**Ergonomic Actions:** We support the adaptation of work to the characteristics of individuals in order to



## Our Responsibility to People

promote comfort, safety, and good performance in employees' activities and consequently we foster ergonomic actions. These actions are monitored by the occupational safety department of the company.

In 2012, 100% of employees of the Eletrobras companies had their performance assessed; 88% were assessed through SGD, as shown below, and the remaining assessments were conducted through other tools. **(GRI LA12)**

Employees who had their performance assessed	Number	Percentage
Male	20,182	87.68%
Female	4,764	87.90%
Total	24,946	87.72%

## Remuneration

The salary definition of our employees takes into consideration the salary matrix of each general position, namely, basic level professional, mid-level support, mid-level operational, and higher level and professional researcher, provided in the Career and Remuneration Plan (PCR). The matrix was designed in order to observe pay equality and complexity of positions when compared with the market, as well as the economic-financial situation of the

Eletrobras companies. In case of readjustments originating from collective bargaining, the salary matrix is readjusted according to indices defined and approved by the Collective Bargaining Agreement (ACT).

We also note that the lowest male and female salaries in Eletrobras companies in 2012 were of R\$ 1,031.85; that is, equivalent to 165.9% the minimum national wage (GRI EC5).

	2012		2011	
	Women	Men	Women	Men
Lowest salary paid by the organization	1.031,85	1.031,85	982,42	982,48
Ratio between the lowest salary paid by the Company and the minimum salary	165,9%	165,9%	180,3%	180,3%

In 2012, only 2.38% of employees of the Eletrobras companies received remuneration equivalent to the national minimum wage.

	2012	2011
Percentage of employees whose remuneration is based on wages	2.38%	2.68%

Note: The minimum wage officially established by the government on December 31, 2012 was R\$ 622.00.

Below, we present the average base salary of the Eletrobras companies by gender and their ratio (GRI LA14):

Average and Proportion of base pay (by gender and employee category) - LA14	2012			2011		
	Female	Male	%	Female	Male	%
Managerial position	11.922	13.135	91	9.976	12.514	80
Positions with higher education	7.248	8.243	88	6.303	8.834	72
Positions without higher education	4.407	4.627	95	3.169	3.033	104

Note: Data for 2012 do not include ED Rondônia.

## Knowledge management and education

The Eletrobras companies invest in initiatives that benefit their employees and add mutual value, such as the Knowledge Management Plan (GC) and the Eletrobras Corporate Education Plan.

The Knowledge Management Plan, which began in 2011, has as its main goal to disseminate the knowledge of its technical team, acquired through trainings, practical experiences, and investments in innovation, in order to retain this knowledge in the companies.

The Corporate Education Plan focuses on the development of professional skills to reach organizational goals through lectures, training, workshops, seminars, and graduation incentives, among others. The Eletrobras System University

(Unise) is a great ally in this regard. In 2012, this organization started the Programa Líder, which aims to expand knowledge on leadership, leveling concepts and practices of the best business schools (Harvard, Chicago and Stanford) and to share information in the context of the Eletrobras companies. It is a pioneer initiative among Eletrobras companies, integrating 2,374 managers in the online mode with an approximate cost of R\$ 643.00 per participant.

In addition, Eletrobras companies invest in graduation and training programs according to the needs identified in the critical knowledge mapping process and the strategic needs, and in PDIs that include incentives for MBAs and post-graduate, technical, and language courses. (GRI EU14; LA10)

### Average training hours per year, per employee (by employee category and gender) - LA10

	Managerial Positions - Female	Managerial Positions - Male	Positions with higher education - Female	Positions with higher education - Male	Positions without higher education - Female	Positions without higher education - Male	TOTAL
Total training hours	97.405	216.692	83.354	212.619	109.121	509.279	1.228.470
Average training hours per employee category	296,97	140,16	41,78	38,71	41,33	37,22	47,83

Note: Does not include the companies ED Alagoas and ED Piauí.



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### Young Apprentice Program

Through the Young Apprentice Program, the Eletrobras companies support the first job and promote better technical-professional training of young students working as apprentices.

The Program involves a training course offered with support from Senai, and seeks to address the demand of the population for a more just and egalitarian society.

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## Occupational Health and safety

The working conditions and the well being of our employees are contemplated in the Sustainability Policy of the Eletrobras companies and respected by the corporate Policy for Occupational Health and Safety. Following corporate guidelines, the Eletrobras companies manage data, identify opportunities for improvement, and establish formal health and safety procedures in accordance with legal requirements, seeking continuous management improvement and, consequently, accident reduction.

In ED Roraima and Eletrobras Eletronorte, for instance, Daily Safety Dialogues (DDS) are conducted in order to promote a culture of prevention by raising awareness on safety. The safety team of Eletrobras Amazonas Energia extended the values of the policy to its supply chain, periodically monitoring their activities in order to ensure compliance with safety requirements. In 2012, holding prepared for the first time an Emergency Plan, with simulated evacuations of the offices; in addition, it conducted theoretical and practical first aid and wilderness survival courses in order to protect employees who work in inspection activities. **(GRI EU16)**

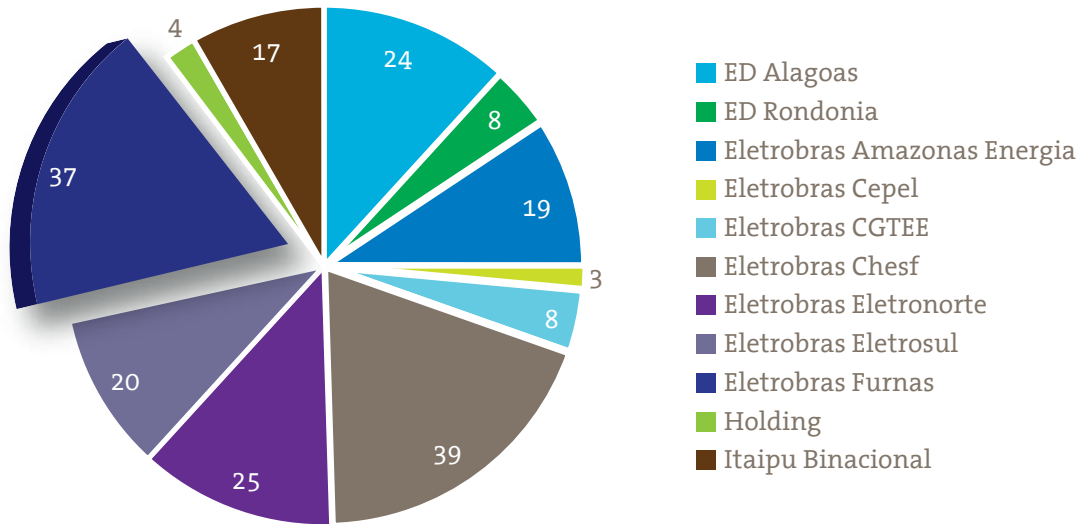
Topics related to the health and safety of employees are provided in the Collective Bargaining Agreement

(ACT) entered into by the Eletrobras companies and the Workers' Union. The items in the ACT are negotiated and, if necessary, changed annually, ensuring compliance with workers' rights regarding health, safety, and quality of life in the workplace.

Among the topics covered, it is possible to mention the compliance with NR-10 and NR-9; prohibition of isolated work; structuring of Specialized Service in Safety Engineering and Occupational Medicine (Sesmt); distribution of Individual Protection Equipment (EPI) and Collective Protection Equipment (EPC); supplement to sickness allowance; participation in the Health and Safety Committee; Health Protection and Recovery Plan (PPRS); Policy for Investigation of Occupational Diseases; Program for Occupational Health Medical Control (Pcmso); Internal Commission for Accident Prevention (CIPA); costs associated with occupational accidents; leave for accompanying dependants; and maternity protection. **(GRI LA9; SO1)**

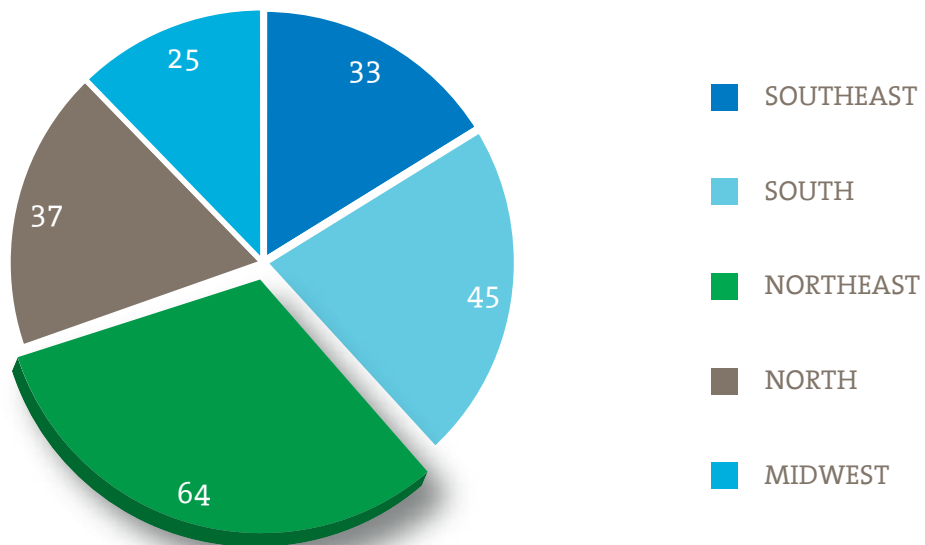
In 2012, the Eletrobras companies reported 182 injuries (with or without sick leave) and three deaths: one in Eletrobras Chesf, one in Eletrobras Eletronorte, and one in Eletrobras Eletrosul. The Eletrobras companies report lost days on the day subsequent to the accident **(LA7)**.

**(No-lost time and Lost time) injuries per Company**



Note: the companies ED Acre, ED Piauí, ED Roraima and Eletrobras Eletronuclear are not considered.

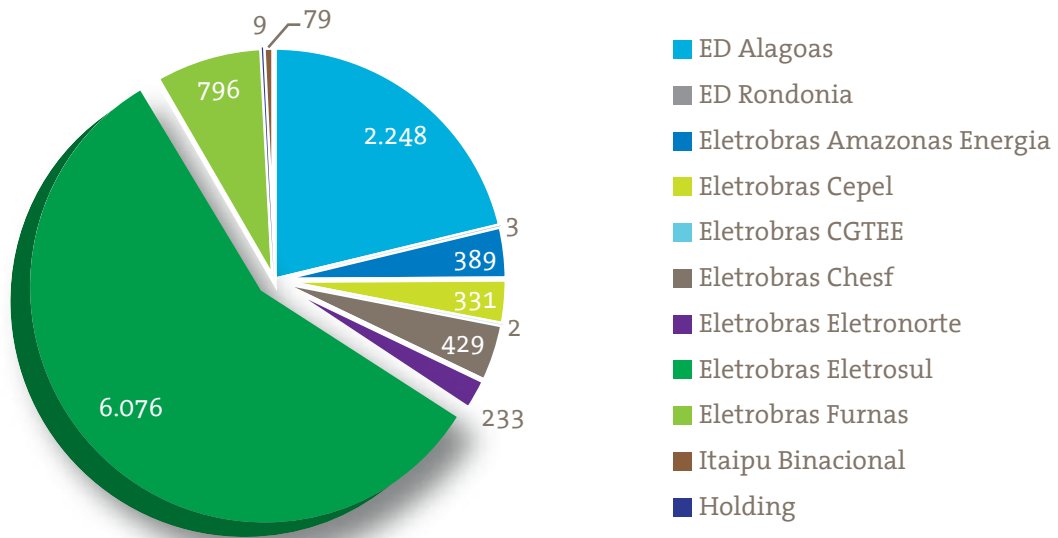
**(No-lost time and Lost time) injuries per region**



Note: the companies ED Acre, ED Piauí, ED Roraima and Eletrobras Eletronuclear are not considered.

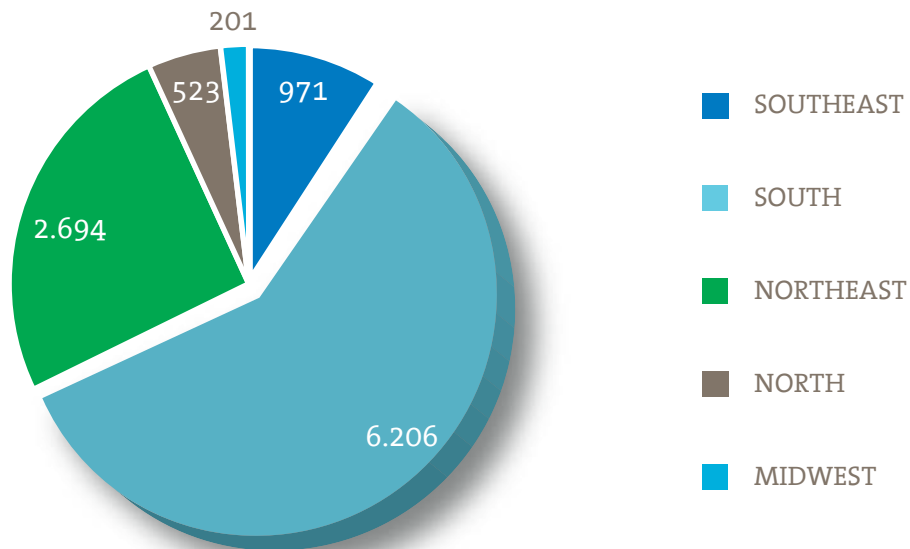
Our Responsibility to People

Lost Days per Company



Note: the companies ED Acre, ED Piauí, ED Roraima and Eletrobras Eletronuclear are not considered.

Lost Days per Region



Note: the companies ED Acre, ED Piauí, ED Roraima and Eletrobras Eletronuclear are not considered.

Total Hours Worked, Injury Rate, Lost Days (LA7)

COMPANY	Total number of Hours Worked	Injury Rate (with and without lost time)	Lost Day Rate
ED Alagoas	2,599,188	1.85	172.98
ED Rondônia	1,719,432	0.93	0.35
Eletrobras Amazonas Energia	5,004,272	0.76	15.55
Eletrobras Cepel	966,000	0.62	68.53
Eletrobras CGTEE	230,669	1.54	0.38
Eletrobras Chesf	1,126,200	0.67	7.62
Eletrobras Eletronorte	6,135,437	0.85	7.60
Eletrobras Eletrosul	2,578,732	1.55	471.24
Eletrobras Furnas	9,434,832	0.78	16.87
Holding	2,636,352	0.3	0.68
Itaipu Binacional	3,115,126	1.09	5.07
<b>Total</b>	<b>34,709,922</b>	<b>1.05</b>	<b>181</b>

Note: The data collection methodology on injuries, lost days X hours worked, does not include commuting accidents.

## Assurance of rights

Eletrobras companies complies with the Department of Work and Union Relations to assure the rights of all employees. 100% of the employees are covered by collective bargaining

agreements Eletrobras companies (GRI LA4) and 100% are represented by formal health and safety committees. Altogether, there are 132 CIPAs and 61 local committees (NR-10 and others). (GRI LA6)

## Individual Protection Equipment

In 2012, Eletrobras companies developed a catalogue for the Individual Protection Equipment (EPI) containing their specific characteristics in order to maintain safety standards. The product is already being used by the companies and has presented benefits such as cost reduction, improved quality of the equipment, and speed and accuracy in bidding processes.

## Check-ups

Holding has an agreement with clinics for employees to get annual check-ups. These check-ups are done in order to protect employees' quality of life by detecting illnesses early, as well as assessing if their position in the company has any effect on their health so that occupational diseases can be identified and their causes eliminated. These clinics also perform regular medical exams as well as exams for employees who are changing positions, returning to work, or being dismissed.

## Safe initiatives

Itaipu Binacional has a Binational Commission for Electricity Hazards and maintains activities such as the Emergency Action Plan (PAE), the Hearing Conservation Program, and a work group for the analysis of employees with labor restrictions. The company won the Fundação COGE 2012 award for the Hearing Conservation Program, which recognizes and promotes successful projects and practices implemented by companies in the energy sector.



## Our Responsibility to People

### Quality of life

Eletrobras companies have a work group for Health and Quality of Life, which is responsible for identifying the best practices regarding these subjects and standardizing and unifying them in a corporate manner, promoting their continuous monitoring. These actions are aligned among representatives of each company. **(GRI LA8)**

Among the practices promoted by the companies in 2012, we highlight the Running Program and the

Choir of the Eletrobras companies. Throughout the year, 16 races were held with the participation of 4,767 employees. In the race for the celebration of Eletrobras's 50th anniversary, we registered 2,004 applications among employees and the general public. And the choir gave two performances throughout the year; the largest, with 104 choir members, was for the celebration of Eletrobras's anniversary.

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Learn about some actions of the Eletrobras companies associated with quality of life:

#### Holding

**Caretaker Program:** It provides assistance to employees and/or their dependants who need temporary help with their daily activities and physiological needs.

**Psycho-pedagogical Program:** It provides support to employees' dependants who have physical and/or intellectual disabilities, enabling them to have access to education, required treatments, and extracurricular activities.

**Healthy Eletrobras:** Promote assistance to employees in relation to food reeducation, travel medicine among other themes linked to health and quality of life.

#### Eletrobras Chesf

**Health Promotion Centers (CPS):** It offers office employees access to gyms, dance classes, labor gymnastics, physiotherapy, nutrition, massage, and sports.

**Program Live Well Hotline:** It gives support, by telephone or in person, to employees and their family members in psychological, social, financial, and legal areas.

**Program for Prevention and Treatment of Problems Related to Alcohol and Drugs:** It monitors detected cases in all companies and offers opportunities for health and lifestyle improvements to all employees.

**Smoking Treatment Program:** It monitors detected cases in all companies and offers opportunities for health and lifestyle improvements to all employees.

#### Eletrobras Eletronorte

**Nutrition workshops:** It encourages employees to acquire healthy habits, improving their quality of life and preventing disease.

**Retirement Preparation Program (PPA)**

**Program to Prevent Drug Abuse**

**Quality of Life Seminar**



### **Eletrobras Eletronuclear**

**Vaccination Campaign:** The Company promotes seasonal flu and H1N1 vaccinations; in 2012, 1,056 shots were given.

**Counseling Program:** The Company makes a biopsychosocial team available for employees and family members.

**Lectures:** Employees participate in lectures on depression, alcoholism, smoking, nutrition, and physical activity.

**Campaigns:** Campaigns were held on topics such as smoking as a cause of cancer and the prevention of alcohol and drug abuse.

### **Eletrobras Furnas**

Social caretaker

Workshops on fitness

### **Itaipu Binacional**

**Program REVIVER:** In 2012, in addition to encouraging creativity, family life, sports, and citizenship, the company implemented actions that disseminated to employees and their dependants the idea that changes in habits, attitude, and lifestyle, along with the development of self-esteem and confidence, are crucial for a healthy and joyful life.

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### **Stay Alert**

In 2012, Eletrobras Chesf launched the 2012/2013 cycle of the campaign Fique Alerta para a Segurança Dez aimed at developing a precautionary culture, focused in health and safety in the workplace and the well being of all employees of the company. Two main topics were the focus in this cycle of the Campaign: Commitment of Managers and Safety Communication.

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### **Standing Commission for Labor Claims**

The Standing Commission for Labor Claims (CTTP) was created by holding, through negotiations with employee representatives, in order to internally analyze labor claims made to the Ombudsman within the company and to deliberate on matters requested by employees.

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## Human rights aspects

Eletrobras companies address human rights in studies for the implementation of new developments, as well as to adopt measures to prevent any violations in locations where the company operates. The companies raise awareness of employees and stakeholders through campaign and events.

In order to reinforce human rights issues, the employees of ED Acre, Eletrobras Chesf, Eletrobras Eletronorte, holding, and Itaipu Binacional, for instance, received formal training on the company's policies and procedures on this subject. Itaipu Binacional also promoted a course for safety agents on defensive techniques and progressive use of force. These companies have 12,430 employees,

of which 1,372 (11%) were trained, amounting to 27,614 training hours. **(GRI HR3)**

Eletrobras companies review and evaluate human rights through an assessment of contracts and communication channels that aim to monitor and account for any human rights complaint that involves employees or stakeholders. Complaints about human rights violations may be confidentially made through the Ombudsman. The cases are forwarded to the responsible area for analysis and possible actions. In cases where any evidence of ethical transgression is found, the complaint is forwarded to the Ethics Commission. **(GRI HR10, HR11)**

Formal claims related to Human Rights, broken down by (GRI HR11):	Registered	Solved (*)
Total	50	44
Total claims, broken down by:		
Employees	41	36
Stakeholders	9	8
Gender:		
Women	11	9
Men	24	22
Unidentified	15	13
Minorities:		
Blacks	0	0
Foreigners	0	0
Other diversity indicators	2	2
Subtotal	2	2

Note: Data does not include the companies ED Alagoas, ED Piauí and Eletrobras Eletronuclear.

(\*) The difference between registered and resolved complaints comprises complaints considered unfounded, or that were in progress at the end of the 2012 cycle.





## Maternity and paternity leave

In 2012, out of the 580 employees of the Eletrobras companies who returned from maternity or paternity leave, 100% remained in the workforce

after 12 months. The companies also offered women 60 days more than what is required by law. **(GRI LA15)**

Maternity/paternity leave (LA 15)	2012	%	2011	%
<b>Employees entitled to maternity/paternity leaves</b>				
Female	188		215	
Male	435		672	
Total	623		887	
<b>Employees who took maternity/paternity leaves</b>				
Female	186		189	
Male	430		486	
Total	616		675	
<b>Employees who returned to work after maternity/paternity leaves</b>				
Female	150	81%	151	80%
Male	430	100%	485	100%
Total	580		636	
<b>Employees who returned to work after the end of their maternity/paternity leaves still employed after 12 months from resuming their activities</b>				
Female	150	100%	149	99%
Male	429	100%	438	90%
Total	579		587	

Note: ED Piauí not included in the figures for 2012.

Our Responsibility to People

## Turnover (GRI IA2)

In 2012, the Eletrobras companies registered a turnover rate of 3%, down 1% compared with

the previous year, where a rate of 4% was registered.

Turnover rate by age (IA2)										
Age Group	Number of employees		Employees who left the company		New Hires		Turnover Rate		Hire Rate	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
18 to 25 years of age	476	738	30	37	80	247	6%	5%	17%	33%
26 to 30 years of age	2,136	2,421	94	107	170	411	4%	4%	8%	17%
31 to 40 years of age	6,121	5,720	84	92	211	404	1%	2%	3%	7%
41 to 50 years of age	6,241	6,622	37	34	58	132	1%	1%	1%	2%
51 to 60 hours	9,550	9,406	471	592	56	43	5%	6%	1%	0,5%
> 60 years of age	2,328	1,772	198	244	34	19	9%	14%	1%	1%
<b>TOTAL</b>	<b>26,852</b>	<b>26,679</b>	<b>914</b>	<b>1,106</b>	<b>609</b>	<b>1256</b>	<b>3%</b>	<b>4%</b>	<b>2%</b>	<b>5%</b>

Note: ED Alagoas and ED Roraima are not included in the 2012 data

Turnover rate per region (IA2)						
REGION	Total Employees	Employees who left the company	New Hires	Turnover Rate	Hire Rate	
SOUTH	3.741	171	118	5%	3%	
SOUTHEAST	8.034	511	235	6%	3%	
NORTH	5.165	76	189	1,47%	4%	
NORTHEAST	7.575	80	61	1,06%	0,81%	
MIDWEST	2.337	76	6	3%	0,26%	
<b>TOTAL</b>	<b>26.852</b>	<b>914</b>	<b>609</b>	<b>3%</b>	<b>2%</b>	

Note: ED Alagoas and ED Roraima are not included.

Turnover rate by gender																	
Number of employees by Gender		Employees who left the company				New Hires				Turnover Rate				Hire Rate			
Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
5162	21690	155	759	216	890	130	479	281	975	3,00%	3,50%	4,00%	4,00%	2,52%	2,21%	5,00%	4,00%
<b>26852</b>		<b>914</b>		<b>1.106</b>		<b>609</b>		<b>1.256</b>		<b>3%</b>		<b>4%</b>		<b>2%</b>		<b>4%</b>	

Note: ED Alagoas and ED Roraima are not considered in the 2012 data.

## Program for Voluntary Termination of Employment

Eletrobras companies are studying the implementation of a Plan for Voluntary Termination of Employment in order to reduce personnel costs. The plan, which is awaiting approval, will be

presented to employees in the first half of 2013 and works simultaneously with other initiatives to ensure the transfer of knowledge.

### Permanent Incentive

Itaipu Binacional has a Permanent Program for Voluntary Termination of Employment (PPDV) for voluntary employee terminations under established conditions or on the date they reach 100% of the grace period for INSS and/or their Supplementary Pension Foundation. This program provides opportunities for planning personnel replacements and follow-up on terminations. In general, terminations occur due to retirement. In hiring, Itaipu Binacional adopts a selective process similar to that a civil service examination. The difference in terminology is due to specific characteristics of the company's legal nature; it is not a state company, but a binational company ruled by a treaty signed by the Brazilian and Paraguayan governments. (GRI EU15)

#### EMPLOYEES WHO MAY RETIRE, BY EMPLOYEE CATEGORY (%)

	In the next 10 years						In the next 5 years					
	Managerial positions		Positions with higher education		Positions without higher education		Managerial positions		Positions with higher education		Positions without higher education	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
ED Acre	3.0	4.6	1.0	6.7	20.0	14.9	6.0	40.9	6.0	20.0	31.0	29.3
ED Alagoas	4.2	0.0	3.8	0.0	34.8	6.4	2.3	0.0	1.4	0.0	10.9	0.0
ED Rondônia	35.3	0.1	28.5	0.3	22.0	0.4	8.8	0.0	12.1	0.1	4.9	0.2
ED Roraima	0.7	7.0	3.1	1.7	14.8	1.9	0.3	1.8	1.7	0.3	5.9	0.5
Eletrobras Amazonas Energia	1.5	0.3	0.9	1.9	10.5	14.8	0.4	0.1	0.9	0.7	6.9	5.2
Eletrobras Cepel	96.0	100.0	58.4	50.0	83.7	81.0	72.0	67.0	33.0	33.0	67.0	63.0
Eletrobras CGTEE	62.9	55.6	8.5	14.3	39.7	46.1	24.7	18.5	0.0	6.3	19.4	9.2
Eletrobras Chesf	10.5	3.4	8.2	7.6	14.8	34.5	62.3	2.5	46.2	5.4	61.6	23.5
Eletrobras Eletronorte	17.1	22.0	31.0	12.5	51.9	20.4	2.7	36.6	13.2	19.7	27.0	24.3
Eletrobras Eletronuclear	78.4	85.8	45.0	47.6	36.9	42.2	10.1	74.9	7.2	40.8	12.1	31.8
Eletrobras Eletrosul	7.2	1.0	6.5	1.5	27.7	8.4	6.0	1.0	3.8	2.5	17.5	6.7
Eletrobras Furnas	79.1	82.6	47.3	54.5	64.1	66.0	71.1	76.0	38.7	46.1	56.0	58.9
Holding	4.4	2.3	11.7	3.0	10.2	4.2	5.6	7.0	6.8	8.3	9.7	15.0
Itaipu Binacional	73.1	70.6	35.2	36.4	44.3	45.3	29.4	31.1	17.7	16.3	25.6	24.6

Note: Does not include the company ED Piauí. In 2011, for each functional category with a possibility of retirement, the percentage was calculated taking into account the total number of employees at the company. For 2012, the total number of employees in each functional category was considered: management positions, requiring higher education, and not requiring higher education. Para 2012, foi considerado o número total de empregados em cada categoria funcional: cargos gerenciais, com exigência de nível superior e sem exigência de nível superior.



EMPLOYEES WHO MAY RETIRE, BY REGION (%)

	In the next 10 years									
	Midwest		Northeast		North		Southeast		South	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
ED Acre	-	-	-	-	24.0	21.7	-	-	-	-
ED Alagoas	-	-	42.88	0.19	-	-	-	-	-	-
ED Rondônia	-	-	-	-	23.4	-	-	-	-	-
ED Roraima	-	-	-	-	18.1	2.2	-	-	-	0.5
Eletrobras Amazonas Energia	-	-	-	-	12.9	16.9	-	-	-	-
Eletrobras Cepel	-	-	-	-	-	-	72.7	66.0	-	-
Eletrobras CGTEE	-	-	-	-	-	-	-	-	45.2	45.2
Eletrobras Chesf	-	-	13.0	45.5	-	-	-	-	-	-
Eletrobras Eletronorte	44.9	16.7	7.6	24.9	47.4	18.0	0.1	60.0	-	-
Eletrobras Eletronuclear	-	0.3	-	-	-	-	100.0	99.8	-	-
Eletrobras Eletrosul	2.0	1.2	-	-	1.0	0.2	-	-	38.3	20.1
Eletrobras Furnas	58.8	59.3	-	-	56.1	50.0	59.2	63.8	70.2	72.9
Holding	-	-	-	-	-	-	26.1	9.3	-	-
Itaipu Binacional	33.3	25.0	-	-	-	-	-	100.0	43.3	44.0

Note: ED Piauí is not included.



In the next 5 years										
	Midwest		Northeast		North		Southeast		South	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
	-	-	-	-	43.0	28.7	-	-	-	-
	-	-	14.55	0.04	-	-	-	-	-	-
	-	-	-	-	6.06	-	-	-	-	-
	-	-	-	-	8.0	-	-	-	-	-
	-	-	-	-	8.2	6.0	-	-	-	-
	-	-	-	-	-	-	50.3	47.0	-	-
	-	-	-	-	-	-	-	-	11.6	10.2
	-	-	58.0	31.4	-	-	-	-	-	-
	42.0	22.0	13.1	33.2	44.7	23.6	0.1	-	-	-
	0.3	0.3	-	-	-	-	99.7	99.7	-	-
	1.0	0.5	-	-	0.7	0.1	-	-	25.5	9.7
	46.6	47.9	-	-	43.9	42.2	51.2	56.7	66.0	68.1
	-	1.4	-	-	-	-	21.7	28.8	-	-
	-	25.0	-	-	-	-	100.0	100.0	22.9	21.9



*Heliconia*  
*Heliconia rostrata*



# Our Responsibility to Society









## Our Responsibility to Society

*Throughout our journey, we have built a solid partnership with the communities in which we operate*

With a structured set of corporate guidelines, we have transformed the Vision, Mission, and Values of the company into attitudes, behaviors and management practices. In doing so, we have strengthened our role in society as a catalyst for

sustainable development by preparing or investing in actions focused on culture, education, health, assurance of children's rights, job and income generation, environment, professional qualification, and assurance of citizenship, as well as mitigating actions established in our licensing process as a result of the impacts caused by our activities.

### Communities

The Eletrobras companies conduct studies for the implementation of their developments and maintain a relationship with the social groups involved. In these studies, the target-audience is identified in order to proceed with these social and environmental actions for compensation,

mitigation, and reparation, as set forth in the environmental licensing process (Environmental Impact Studies, Preliminary License, Basic Environmental Project, Installation License, and Operation License). In addition, the Eletrobras companies benefit the local communities through Social Responsibility programs.

### Engaging with communities

The relationship of the Eletrobras companies with the communities in which they operate has been strengthened year after year through initiatives involving respect and partnership.

The participation of the affected people and communities occurs through meetings and other gatherings designed to inform them of the status of projects and also through formal public hearings promoted by environmental agencies. When the

Preliminary License is obtained, the next step is to take the project further, and the programs provided in the EIA are detailed. In this step, negotiations with groups subject to expropriation are crucial, as are their conditions and the way they are conducted. The Eletrobras companies seek to promote improvements in the local community by raising housing standards and improving sanitary and road infrastructure, among others.

### Impact on communities

The operations of the companies may produce a high or low social and environmental impact depending on the characteristics of the region where they are being implemented. The identification of affected social groups takes place at the start of the planning process. As the planning stages advance, specific studies are conducted in order to get to know the expectations of the population and their lifestyle, economic base, and organization. The issues, such as the increase in migrant population, changes in the use of land, impact on infrastructure, changes in landscape, changes in social structures and local culture,

among others, are part of the scope of the surveys conducted in environmental studies in order to propose measures that minimize negative impacts and maximize positive ones. These measures are carried out by each company, according to their specific situation. **(GRI SO1; SO9; SO10; 4.16)**

Among the actions taken, we can highlight:

- The continuity of the Plan for Regional Insertion of UHE Tucuruí - Pirtcuc, through which Eletrobras Eletronorte contributed significantly with the Sustainable Development Plan of the Micro Region Surrounding UHE Tucuruí - PDST.



## Our Responsibility to Society

- The Eletrobras Eletronuclear Medical Assistance Fund (FEAM) administers the Praia Brava Hospital, which assists employees and the community. Currently, 80% of medical services are provided through the Unified Health System (SUS).
- ED Alagoas trains community leaders in Maceió to work as Social Agents for Citizenship, with the important role of teaching the local people to build a more equal and fair society. The lectures address topics such as Conscious Consumption, Citizenship Concepts, How to Turn Popular Initiatives into Law, and Safe Use of Electricity.
- Annually, Eletrobras CGTEE holds the Regional CGTEE and Communities Forum to present to the community the programs that are being promoted in partnership with CGTEE, in order to improve the quality of life of the population of Candiota and neighboring areas.
- Through the Program Cultivando Água Boa, Itaipu Binacional develops actions that involve environmental education, fishing, medicinal plants, family and organic agriculture, young gardeners, sustainability for Indigenous communities, biodiversity, and environmental monitoring and evaluation. To find out more about the program, go to: [www2.itaipu.gov.br/aguaboa/](http://www2.itaipu.gov.br/aguaboa/)

## Traditional communities

In previous years, Eletrobras has developed studies on the feasibility of large hydroelectric projects that impact Indigenous communities. With the National Indian Foundation (Funai), the company has conducted a set of actions that involve meetings about projects and the development of programs for compensation, among others. **(GRI EU19)**

The Eletrobras companies did not register any possible case of violation of Indigenous rights in 2012.

Eletrobras Eletronorte has maintained a program for 25 years with actions to protect the Waimiri Atroari Indigenous community. This relationship began as a result of the loss of a portion of land and natural resources in their traditional area of occupation, removal of villages and other impacts arising out of the construction of the Balbina Hydroelectric Plant. The company signed immediate commitments, and mid- and long-term commitments with the

National Indigenous Peoples Foundation aiming to compensate and support the community. The company is also responsible for the Parakanã Program, developed as a result of the inundation of their lands for the formation of the reservoir for the Tucuruí Hydroelectric Plant.

Both programs to compensate the impacts of the hydroelectric plants of Eletrobras Eletronorte to the Waimiri-Atroari and Parakanã peoples are more than 20 years old and nationally and internationally recognized for the recovery of their population and the actions to value their culture and protect their territory.

In 2012, due to the letter of intent entered into by Eletrobras and Funai, we developed projects, which had as their main goal to strengthen the productive infrastructure and social autonomy of 26 Kayapó villages, helping over 6,000 Indigenous people, totaling an investment of R\$ 2 million. **(GRI HR9)**

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### System for Vessel Transposition

Norte Energia<sup>1</sup> is the company responsible for the construction and operation of the Belo Monte hydroelectric plant in Pará. In 2012, it started the work for the implementation of the System for Vessel Transposition in the Pimental Ranch, where the main dam of the development is located.

<sup>1</sup> Norte Energia is a private company incorporated for the construction of Belo Monte and has shareholding interest on Eletrobras Eletronorte (19.98%), Eletrobras Chesf (15%), and holding (15%).



## Our Responsibility to Society

The goal is to allow Indigenous and riparian communities, who use this part of Xingu River for transportation, to be able to continue using it safely during the period of work and also during the entire period of the plant's operation.

The mechanism, which opened in January 2013, can transport small or large vessels of up to 50 tons upstream or downstream. The system has signaling buoys, lights for night navigation, and clear instructions to help skippers. In addition, it removes the vessels from the water and takes them from one side of the dam to the other, connected by a 700-meter-long lane. While the vessel is being moved, its passengers are transported by van. If there are several boats waiting to transfer, passengers may use the support structure where there are bathrooms, a lounge, and waiting room.

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### Concern with social issues

Eletrobras seeks to implement its developments in a way that prevents displacement of people and keeps environmental impacts to a minimum. The Eletrobras companies develop their activities in accordance with legislation and regulations in effect. During the feasibility studies for projects, the EIAs are developed with their scope defined by environmental licensing agencies. Among the most commonly conducted studies during this stage, we can highlight the Socioeconomic Registry, a tool for the identification and qualification of the population affected by developments.

In 2012, the hydroelectric projects of São Luís do Tapajós (PA) and Jatobá (PA), according to Inter-ministerial Ordinance 340/2012, presented the

Registry Plans of the surrounding areas to the Inter-ministerial Committee of Socioeconomic Registry. These will be the first Brazilian hydroelectric projects to follow this new regulation. The use of the Socioeconomic Registry will provide legal security for those involved in the process, especially investors and affected populations, decreasing the occurrence of conflicts.

In 2012, 1,243 people were physically displaced due to the companies' developments. In addition, 2,666 people were economically displaced; that is, there was loss of assets or access to assets, which in some cases meant the temporary loss of livelihoods. **(GRI EU20, EU22)**

### Social and environmental projects

The Eletrobras companies maintain permanent channels for communication, dialogue, and negotiations with society and the communities where the companies operate in order to contribute solutions to social problems that affect people under social risk.

In this sense, resources are provided to support and develop social projects demanded by society in different areas of action: education, health, culture, sports and leisure, job and income generation,

assurance of children's rights, and environment. In 2012, more than R\$ 65 million was invested in social and environmental projects geared toward communities.

The project selection respects the mission, values, and corporate strategies of the Eletrobras companies, in addition to complying with the public policies of the federal government and with the assumptions of the UN's Millennium Development Goals and Global Compact.

## Support to Culture and Sports

In the area of culture and sports, Eletrobras prioritizes projects that receive fiscal incentives foreseen in the specific legislation, such as the Rouanet Act and the Sports Incentive Law. The cultural program of the Eletrobras companies earmarked in 2012, R\$ 23 million to support projects in the following areas: theater, audiovisual, immaterial heritage and traveling of theater plays. Also in 2012, the Program to Sponsor Events in

the Electric Sector of the Eletrobras companies was launched, and 32 relevant technical-scientific projects were selected for the company's business areas. In the area of sports, Eletrobras invests in projects that contribute to social inclusion through the practice of sports. In the segment of Yield Sports, we highlight the sponsorship to Clube de Regatas Vasco da Gama and the Brazilian basketball Confederation - CBB.

EXTERNAL SOCIAL INDICATORS	2012	2011
<b>Social Projects</b>		
Education	11,088,975.86	12,789,051.14
Health and Infrastructure	38,588,489.51	35,106,759.65
Income and Job Generation	8,784,217.35	7,568,854.34
Assurance of Children's and Adolescents' Rights	650,650.67	1,932,476.65
Environment	2,991,348.43	2,576,373.91
Sports and Leisure	3,248,563.82	4,084,747.56
<b>Sports Projects</b>		
With Incentives (Sports Incentive Law)	2,933,119.18	1,926,327.70
Without Incentives	28,837,964.56	31,529,618.76
<b>Cultural and Institutional Projects</b>		
Cultural Sponsorship With Incentives	38,838,980.19	26,381,062.27
Institutional Sponsorship Without Incentives	51,273,871.95	23,997,842.84
<b>Philanthropic Donations</b>		
Financial Resources	6,180,392.70	3,003,630.00
<b>Total Investments</b>	<b>193,416,574.22</b>	<b>150,896,744.82</b>

Note: the companies ED Alagoas, ED Piauí, ED Rondônia, ED Roraima; Eletrobras Amazonas Energia, and Itaipu Binacional were not considered.

## Socioeconomic Development

The Eletrobras companies focus on investing in projects that foster socioeconomic development in the communities where they operate.

Previous successful experiences motivated Eletrobras to develop complementary projects to the Luz para Todos program, focusing on the productive use of electricity, such as projects involving the Production Community Centers (CCPs).

The CCPs are small community developments supported by Eletrobras and focused on

encouraging the productive use of electricity in rural areas through its use in beneficiation processes, which adds value to products of small farmers belonging to associations/cooperatives. In the units working in partnerships led by Eletrobras, electricity becomes an input for production and a mechanism for the development of the Brazilian countryside. This community initiative results in economic growth for the groups involved, the strengthening of social relationships among participants of the project, and a contribution to the feasibility of the rural electricity market. **(GRI 4.12)**

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## Public Policies (GRI SO5; 4.12; 4.13)

The Eletrobras companies participated in the development of public policies in connection with such organizations as:

- Agência Internacional de Energia Atômica (AIEA); (Abraget);
- American Nuclear Society/Seção Latinoamericana (ANS);
- Associação Brasileira das Companhias Abertas (Abrasca);
- Associação Brasileira das Distribuidoras de Energia Elétrica (Abradee);
- Associação Brasileira das Empresas Geradoras de Energia Elétrica (Abrage);
- Associação Brasileira das Grandes Empresas de Transmissão de Energia Elétrica (Abrate);
- Associação Brasileira da Indústria Elétrica e Eletrônica (Abinee);
- Associação Brasileira das Instituições de Pesquisa Tecnológica (Abipti);
- Associação Brasileira de Comunicação Empresarial (Aberje);
- Associação Brasileira de Energia Nuclear (Aben);
- Associação Brasileira da Infraestrutura e Indústrias de Base (Abdib);
- Associação Brasileira de Ensaio Não-Destrutivo e Inspeção (Abendi);
- Associação Brasileira de Treinamento e Desenvolvimento (ABTD);
- Associação Brasileira dos Contadores do Setor de Energia Elétrica (Abraconee);
- Associação Brasileira dos Agentes Comercializadores de Energia (Abraceel);
- Associação Brasileira dos Geradores Térmicos
- Associação Brasileira para o Desenvolvimento das Atividades Nucleares (Abdan);
- Associação Comercial do Rio de Janeiro (ACRJ);
- Associação de Empresas Proprietárias de Infraestrutura e Sistemas Privados de Telecomunicações (Aptel);
- Associação Nacional dos Carroceiros e Catadores de Materiais Recicláveis (Ancat);
- Câmara de Comercialização de Energia Elétrica (CCEE);
- Câmara de Comércio Americana (Amcham);
- Câmara Setorial de Agricultura Orgânica e Agroecológica;
- Centro Brasileiro de Relações Internacionais (Cebri);
- Centro Internacional Celso Furtado de Políticas para o Desenvolvimento (Cicef);
- Centro para Inovação e Competitividade (CIC);
- Clean Coal Centre (CCC);
- Clube de Engenharia do Rio de Janeiro;
- Comitê Permanente para questões de Gênero do Ministério de Minas e Energia e Empresas Vinculadas;
- Sistema de Gestão da Ética do Poder Executivo Federal, sob a Coordenação da Comissão de Ética Pública – CEP, por força de lei, Decreto 6029/2007;
- Fórum Nacional de Ética das Empresas Estatais;

### Our Responsibility to Society

- Comitê Interministerial para Inclusão Social e Econômica dos Catadores de Materiais Reutilizáveis e Recicláveis (Ciisc);
- Comitê de Entidades no Combate à Fome e pela Vida (COEP);
- Sustainable Energy for All, rede mundial criada pela ONU para a universalização da energia no mundo;
- Fórum de Meio Ambiente do Setor Elétrico Brasileiro (Fmase);
- International Hydropower Association (IHA), organização não-governamental que promove a hidroeletricidade como uma solução sustentável na geração de energia limpa, na gestão responsável dos recursos hídricos e das mudanças climáticas;
- Comissão de proteção ao Programa Nuclear Brasileiro (Copron);
- Comissão de Integração Elétrica Regional (Bracier);
- Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Cebds);
- Comitê de Meio Ambiente da ACRJ;
- Comissão de Integração Energética Regional (Cier);
- Comissão de Produção Orgânica no Paraná (Cporg-PR);
- Comitê Brasileiro de Barragens (CBDB);
- Comitê Brasileiro de Eletricidade (ABNT/Cobe);
- Comitê Brasileiro do Conselho Mundial de Energia (CME);
- Comitê Brasileiro do Pacto Global (CBPG);
- Comitê Gestor e Conselho Diretivo do Centro de Saberes e Cuidados Socioambientais da Bacia do Prata;
- Comitê Intergovernamental Coordenador dos Países da Bacia do Prata (CIC);
- Comitê Nacional Brasileiro de Produção e Transmissão de Energia Elétrica (Cigre);
- Conselho Consultivo do Parque Nacional do Iguaçu (Comparni);
- Conselho Mundial da Água (CMA);
- Associação Brasileira da Infraestrutura e Indústria de Base (Abdib);
- Fundação Abrinq;
- Fundação Comitê de Gestão Empresarial (Funcoge);
- Fundação Nacional da Qualidade (FNQ);
- Instituto Ethos de Empresas e Responsabilidade Social;
- Instituto Nacional de Investidores (INI);
- Instituto Nacional de Pesquisa e Desenvolvimento de Empresas Inovadoras (Anpei);
- Instituto para o Desenvolvimento de Energias Alternativas da América Latina (Ideal);
- Instituto Qualidade Minas (IQM);
- International Energy Agency (IEA);
- Movimento Brasil Competitivo (MBC);
- Movimento Catarinense para a Excelência (MCE);
- Operador Nacional do Sistema (ONS);
- Organização das Nações Unidas para o Desenvolvimento Industrial (Onudi);
- Radiation Emergency Medical Preparedness and Assistance Network (Rempan);
- Rede Nacional de Mobilização Social (Coep);
- Rede de Tecnologia e Inovação do Rio de Janeiro (Redetec);
- Section of the Latin American Nuclear Society (LAS);
- Serviço Nacional de Aprendizagem Industrial (Senai);
- Sindicato dos Eletricistas do Rio Grande do Sul (Senergisul);
- Sindicato dos Engenheiros do Rio Grande do Sul (Senge);
- Serviço Social da Indústria (SESI);
- World Association of Nuclear Operators (Wano);



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- World Business Council for Sustainable Development - Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Cebds);
- World Nuclear Association (WNA).

In compliance with legislation, the Eletrobras

companies do not support or contribute to political parties or political campaigns of candidates for elected positions. This guideline is ratified by the Code of Ethics of the Eletrobras companies. **(GRI SO6)**

## Responsibility in the value chain

### Engagement with suppliers

The Eletrobras companies are committed to effectively contributing to sustainable development in the areas where they operate; therefore, they request that their suppliers and service providers prioritize the use of sustainable manufacturing in their processes. All investments made are associated with actions that focus on maintaining a harmonious relationship with their supply chain, seeking competitive advantages and local socioeconomic development.

Eletrobras, in accordance with its Sustainability Policy, guides its businesses through internationally recognized management practices in order to maximize positive social and environmental impacts and minimize negative impacts arising from their activities. By recommending that a supplier follows sustainability standards in the manufacturing of its products or in service provision, we encourage these companies to contribute in the same way. Also, through our Declaration of Commitment on Climate Change, we seek the reduction of greenhouse gas emissions of suppliers and customers.

One way to ensure the effectiveness of these actions is through resolutions that are listed in the Code of Ethics of the Eletrobras companies. The established commitments of conduct in the relationship with suppliers are as follows:

- Select and hire suppliers and service providers based on legal, technical, quality, cost, and punctuality criteria, demanding an ethical profile in the management of social and environmental responsibility.
- Reject practices of unfair competition, child

labor, abuse and sexual exploitation of children and adolescents, bonded labor or demeaning work practices, as well as any form of physical, sexual, moral, or psychological violence and other practices contrary to the principles of the Code of Ethics; this includes practices in the production chain of suppliers. In case of violation, offenders will be reported.

- Do not provide any favors or paid service to suppliers and service providers with whom they maintain a relationship by virtue of their activities in the company.
- Treat suppliers' and service providers' employees with respect and kindness according to the principles of the Code of Ethics.
- Protect and properly deal with confidential registry data and information related to customers, suppliers, service providers and other partners obtained through corporate relationships.
- Do not accept or offer gifts, gratuities, or advantages, even in the form of preferential treatment to customers, suppliers, service providers, or other partners connected with the business or interests of the Eletrobras companies.

Establish and maintain relationships and communication with customers, suppliers, service providers, and other partners according to the ethical principles set forth in the Code of Ethics of the Eletrobras companies, offering equal treatment to each, avoiding any type of privilege and discrimination (ethnic, religious, gender), providing equal opportunities and respecting differences.

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To see the full version of the Code of Ethics of the Eletrobras companies, go to [www.eletrobras.com](http://www.eletrobras.com)

This Code is shared with all supplying companies in order for all of them to be aligned with the same practices.

In 2012, a total of 8,171 (100%) of agreements for significant investments had human rights clauses; of this total, 7,222 (88%) were revised regarding human rights aspects. The companies ED Acre, ED Rondônia, ED Roraima, Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronuclear, Eletrobras Eletrosul, and Eletrobras Furnas registered 3,015 significant suppliers; of these, 12 contracts (0.4%) were refused or were subject to other actions as a result of human rights evaluations. **(GRI HR1; HR2; HR8, HR10)**

The companies Eletrobras Chesf, Eletrobras Furnas, and Itaipu Binacional offered trainings to 111 (46%) of their 239 safety team employees

on organizational policies or specific procedures related to human rights issues and their application. All employees of the company must follow and practice what is set forth in the Code of Ethics related to human rights and immediately report people who do not comply with it. The safety teams of the remaining Eletrobras companies are outsourced, and the employer, according to contract clauses, is responsible for the training on this subject. **(GRI HR8)**

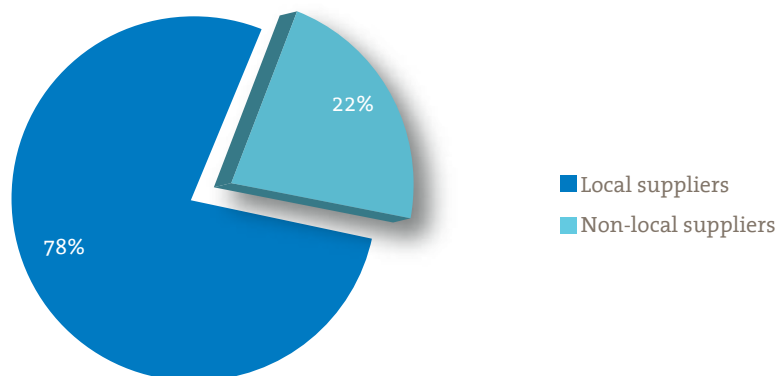
In cases of non-compliance with human rights clauses, a deadline will be set for their defense and, if necessary, for the supplier to make the necessary adjustments. If the supplier does not adjust, the Eletrobras companies will determine the measures that will apply, such as fines and termination of contract. In cases of recurrence, the contract will be unilaterally cancelled.

### Expenditures with local suppliers

According to the legislation in effect for public hiring and acquisitions, Law 8,666/93 which instituted rules for contracts and bidding, Eletrobras is not authorized to establish a policy that favors local suppliers; that is, it is not permissible to hire services of suppliers based on their location.

However, it is possible to measure the percentage by region. In 2012, the Eletrobras companies spent approximately R\$ 4 billion in purchases. Of this total, 78% was purchased from suppliers considered local; that is, suppliers from the same region as the companies. **(GRI EC6)**

### Expenses with Suppliers



Note: ED Alagoas, ED Piauí, Eletrobras Amazonas Energia, Eletrobras Chesf, Eletrobras Eletrosul, and Itaipu Binacional were not considered.

## Meeting with suppliers

In 2012, Eletrobras promoted a Meeting of Suppliers, which focused on adding value to the holding's relationship with its suppliers, intensifying integration and providing alignment of information referring to hires, following the main guidelines and requirements to maintain and develop the supply chain. This meeting aimed to maximize supplier performance and minimize non-compliance in hiring and execution of agreements. The meeting promoted the engagement of suppliers with sustainability practices that permeate the hiring process of the company. In this meeting, other subjects were presented such as issues with bidding and administrative contracts; the Code of Ethics of the Eletrobras companies; information on social responsibility; environmental issues; new paths for the company; electronic invoicing; corporate sustainability and its application in hiring; and the procurement logistics of the Eletrobras companies.

To ensure that suppliers meet the guidelines of the Code of Ethics, the Eletrobras companies conduct a risk analysis for collective association, child labor,

and bonded labor or bonded-like labor. The table below shows potential risks related to the chain of suppliers. **(GRI HR5, HR6, HR7)**

Risks related to the chain of suppliers	2012	2011
Number of operations and significant suppliers in which the employees' right to exercise freedom of association and collective bargaining may be at risk (*)	0	0
Operations and significant suppliers identified as having significant risk for incidents of child labor (**)	24	0
Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor (***)	24	23

(\*) Does not include ED Piauí and Eletrobras Eletronuclear.

(\*\*) Does not include ED Alagoas, ED Piauí, Eletrobras CGTEE, and holding.

(\*\*\*) Does not include ED Alagoas, ED Piauí, and holding.

## Accident prevention

The Eletrobras companies promote specific actions for contingencies. The procedures in response to risks and emergency situations vary according to the characteristics of each business, the hazards related to the operations, and the technologies used.

In 2012, for example, Eletrobras CGTEE developed, with the participation of employees, specific contingency plans for natural disasters,

environmental impacts, fires, strikes, and image crises. The communities potentially influenced, civil defense agencies, fire departments, etc. did not participate in the preparation of this material; however, the prepared guidelines foresee their intervention when needed, depending on the level of severity and extension of impacts resulting from claims of this nature.

Eletrobras Eletronuclear conducts a general

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emergency simulation that shows the capability of activating emergency centers and evaluates the ability to command, coordinate, and control them, as well as to verify the efficiency of the logistics in case of an emergency. The Emergency Plans for Angra 1 and Angra 2 foresee the immediate mobilization of a national network of contacts involving hundreds of professionals on three levels of government (municipal, state, and federal).

In the event of an electricity outage, Eletrobras Furnas makes available different ways to manage its contingencies, depending on the site at which it occurred and the cause of the outage. For events at the company's substations and plants, there are operation teams working in shifts 24 hours a day, which can provide first assistance. For events outside the installations, as is the case for transmission lines, the company has an action plan for emergencies that is put into effect after analysis

of the site where the fault occurred. The analysis includes topography, access conditions, number of damaged towers, and other factors that serve as input data in order to assess the human resources and materials needed for the team to get to the emergency site as quickly as possible and restore transmission service.

In 2012, Eletrobras Chesf's work group defined models for contingency plans for social, environmental, and natural disaster issues which will be implemented as pilot plans at a hydroelectric plant and a substation. These models will then be reapplied to other operational units, according to the schedule established in agreement with operational areas, between 2013 and 2017. In 2013, the report on these actions will be submitted to the Executive Board and Board of Directors for approval. **(GRI EU21)**

## Product liability

The Eletrobras companies seek to inform their consumers on everything the energy sector legislation recommends in order to ensure transparency and access to information. These efforts serve customers of the electricity distribution companies who seek to understand the characteristics of their services and products in order to promote good use and safety and be warned about possible risks and impacts that electricity may cause.

The electricity bill is one of the most important channels of communication with the customer. In it, they can find technical details and general information on safety and correct use, including consumption, tariffs, date of reading, taxes, indicators of quality in supply, the contact number of the distributor, and other technical information on voltage and type of connection and meter. The companies also promote educational projects on

the safe and efficient use of electricity, highlighting commercial aspects (consumption, tariffs, etc.), as well as consumers' rights and duties.

The users can also obtain information on electricity through the following channels **(GRI PR3)**:

All information can be found at the service centers of distribution companies;

On the companies' website, information is available on network safety, procedures in case of accidental electric shock, guidelines for complaints regarding tariffs, guidelines for equipment breakdown, and guidelines for all our consumers on issues related to electricity supply.

In spite of the efforts made by the Eletrobras companies in disclosing information on safety related to the product, in 2012, the following accidents were registered involving the public and the company's assets **(GRI EU25)**:



### Number of accidents and deaths

NUMBER	2012	2011
Number of individuals involved in accidents	48	124
Number of deaths	19	1
Pending lawsuits related to health and safety in 2012	21	29
Settled lawsuits related to health and safety in 2012	2	2

Note: Data considers the companies: ED Acre, ED Rondônia, ED Roraima, Eletrobras Amazonas Energia, Eletrobras Eletronorte, Eletrobras Eletrosul, and holding.

## Customer satisfaction index (GRI PR5)

The Eletrobras companies are constantly seeking to improve their services using different mechanisms to identify the needs and expectation of customers<sup>1</sup>. In 2012, the six distribution companies of Eletrobras and the generation and transmission companies Eletrobras Chesf and Eletrobras Eletronorte conducted a customer satisfaction survey.

In the surveys conducted in 2012, the Customer satisfaction index for the organization as a whole was 80.27% for generation and transmission (G&T) and 63.83% for distribution (D). For customer service, the satisfaction rate was 98.60% for generation and transmission (G&T), which is consistent with 2011, and 67.55% for distribution (D), which is slightly up from 2011.

## Generation and Transmission (G&T)

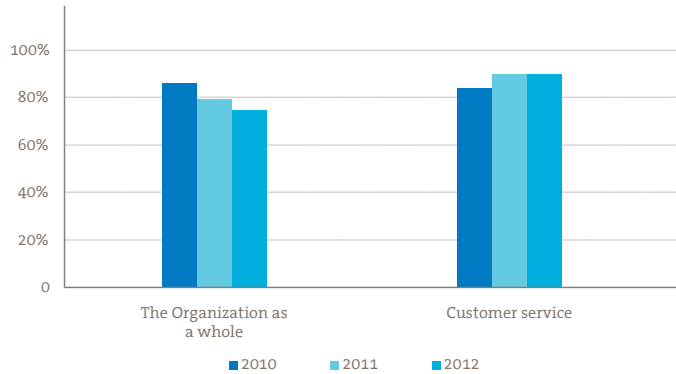
The satisfaction surveys for G&T are conducted taking into consideration the commercialization of electricity (purchase and sale), products, and services. The surveys are conducted in many forms: in person, online, in periodical meetings, and through questionnaires. The monitoring of customer satisfaction is conducted individually

by Eletrobras Chesf, Eletrobras Eletronorte, and Eletrobras Eletrosul. The companies conduct periodical meetings, technical visits, and technical exchanges with their customers; make communication channels such as mail, e-mail, telephone, and websites available; and ensure that all issues receive formal consideration.

<sup>1</sup> The definition of customer includes the person who is responsible for a registered consumer unit and consumers are the ones responsible for energy consumption in this consumer unit. In a house, for instance, there is only one customer, but several consumers.

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Satisfaction index G&T



Note: Eletrobras Chesf is not included in 2010 data.

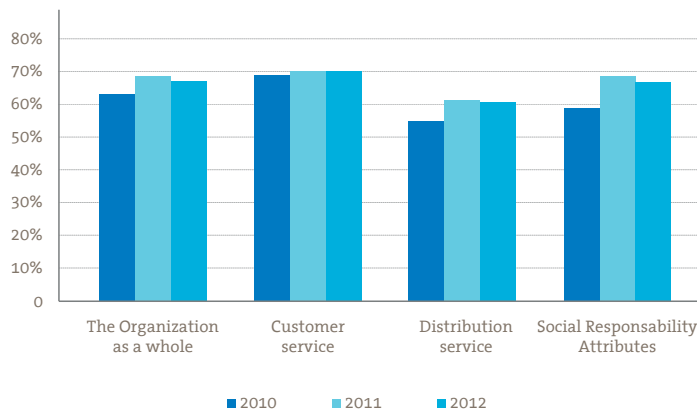
Distribution

The distribution companies have used the Abradee (Brazilian Association of Electricity Distribution Companies) satisfaction survey since 1999.

The Social Responsibility Attributes were also assessed. They consist of ten items: a) a company that fights fraud; b) a company that cares for the environment; c) a company that offers support for or promotes social programs; d) a company that offers support for or holds cultural events; e) a

company concerned with accident prevention in the electricity network and safety of the population; f) a company that invests in taking electricity to areas not served; g) a company that contributes to the economic development of its city; h) a company that helps citizens with special needs gain access to all forms of customer communication; i) an honest company that fulfills its obligations to all audiences with which it operates, and; j) a company that offers good working conditions to its employees.

Satisfaction index - distribution



Note: The data of 2010 does not consider ED Alagoas, ED Rondonia and Eletrobras Amazonas Energia.



## Our Responsibility to Society

The Eletrobras Distribution Companies also participated in the survey conducted by Aneel, called Aneel's Consumer Satisfaction Rate (IASC). The results that measured the satisfaction rate of residential consumers in relation to services provided by electricity distributors can be accessed here: [www.aneel.gov.br/area.cfm?idArea=755&idPerfil=2](http://www.aneel.gov.br/area.cfm?idArea=755&idPerfil=2)

In the distributing companies, survey results are published through the company's communication channels. For employees, results are disclosed to managers and people responsible for the areas involved in the survey. For customers, results

are revealed in meetings with the Council of Consumers<sup>2</sup>, whose main goal is to represent the interests of consumers with the company and the consumer segments, guided by the equality and balance principle. Among the topics discussed are improvements in customer service and tariffs applied to electricity supply services; the ongoing and concluded projects for investment in improvement; and the methodology for tariff revision. In these meetings, the main issues raised in the survey and the suggestions made by consumers are heard.

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### **Eletrobras Cepel Satisfaction Survey**

Eletrobras Cepel, as a research center and service provider, also conducts internal and external customer satisfaction surveys. In 2012, the Customer satisfaction index was at 92% for services provided by the laboratories and 84% for services provided by the certification activity.

### **Integrated Satisfaction Survey**

Eletrobras Eletronorte, through the Coordination for Commercialization of Electricity, conducted its first Integrated Customer Satisfaction Survey for the Generation and Transmission Businesses with a commercial focus, the result of a priority project based on the "Customer Window" method. The tool LimeSurvey was used for online data collection.

The survey included customers of the generation business (free/potentially free consumers, traders, CCEE, distributors, and ONS/BSB) and of the transmission business (ONS/RJ and users of the basic network: distributors, free/potentially free consumers, generators, and importers).

The following dimensions were evaluated by grades: service, commercial, product/service, management of electricity commercialization contracts, management of transmission contracts, metering for billing, and image.

\*For more information on survey results, see the item Customer satisfaction index.

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<sup>2</sup> The Consumer Council was instituted due to a resolution made by the Brazilian Electricity Regulatory Agency – Aneel, which is an advisory institution, with no legal profile and unremunerated, composed of six members and their alternates, appointed by institutions that represent types of consumers (Residential, Commercial, Rural, Industrial, and Public Power) and Consumer Defense (Public Ministry).





## Information with responsibility

Since 2011, Eletrobras has been voluntarily affiliated with the Brazilian Advertisers Association (ABA). As an affiliated company, it facilitates the technical development of its professionals in marketing and communication, resulting in competitive assets in business. It also receives information related to the best practices adopted by other companies through access to forums, courses, and eventual participation in technical committees.

In the advertising area, our activities are assessed and approved by the Department for Social Communication of the Presidency (Secom-PR). The department analyzes each media plan and the content of all aired campaigns.

We make available several communication channels with the public, provided for in the following: in the guidelines of the Sustainability Policy, in the Policy for Integrated Communication, in the Environmental Policy, and in the Code of Ethics of the Eletrobras companies, as well as in other regulations that show our commitment to transparency and constant improvement of good practices in our relationship with stakeholders. Therefore, we focus on the dialogue with several social agents who have been involved since the beginning of the planning process for developments. We also establish communication processes and disclose information to the audiences on topics related to electricity, energy



Eletrobras

Our Responsibility to Society



efficiency, and environmental actions that involve our activities.

Eletrobras markets electricity, which is topic constantly discussed by the public and of interest of stakeholders. In order to meet the expectations of stakeholders, the company makes several institutional communication tools available to address a variety of subjects. The main tools are the Ombudsman, the channels Fale Conosco, telephone, and Internet. **(GRI PR6)**

In 2012, the Eletrobras companies received no significant fines for non-compliance with laws and regulations. **(GRI PR9)**

There were no cases of non-compliance with

regulations and voluntary codes related to marketing and advertising in 2012. **(GRI PR7)**

Eletrobras, based on the commitments to society that guide our actions in transparency, ethics, and corporate responsibility, prepares the content of its institutional plays by focusing on the appreciation of diversity and local culture, by showing the support we give to social and environmental actions, and by meeting the standards and rules established by regulatory agencies such as the State Department for Social Communication of the Presidency (Secom-PR), the Standard-Norms Executive Council (CENP), the Advertising Self-Regulation Council (CONAR), and the Communication Policy of the Eletrobras System.



*Guaraná*  
*Paullinia Cupana*



# Our Responsibility to the Environment







## Our Responsibility to the Environment

*Global Compact Principles: 7; 8 and 9*

### Sustainable Development

Eletrobras invests in responsible management to ensure the permanence of the company, without affecting its commitment to the environment

Eletrobras has made a commitment to meet the growing energy demand in Brazil that is based on sustainable development principles which align efficient production with environmental preservation.

This commitment was strengthened in 2012, when

we published our Declaration of Commitment on Climate Change and became signatories of the document for sustainability, which was launched in Rio+20 by the National Confederation of Industry. These commitments motivate the company to improve its management year after year by adopting new technologies and actions aimed at preventing and mitigating social and environmental impacts in the communities where we operate.

### Corporate environmental management

The environmental management activities developed by Eletrobras include technical and institutional support for the end-activities developed by the company and are aligned with strategic and corporate goals.

Our environmental management actions are led by the guidelines of the corporate Environmental Policy, by development activities within the scope of the Environment Committee (SCMA), and by the System of Indicators for Corporate Sustainability Management (IGS).

#### Environmental Policy

The Environmental Policy presently in effect meets its main goals by establishing general principles and guidelines applicable to environmental management in the Eletrobras companies, considering the diversity in their business segment (generation, transmission, and distribution) and in their sources (water, nuclear, conventional thermoelectric, wind power, and coal).

In 2012, we started the revision of our Environmental Policy by formulating specific guidelines related to subjects considered priority in environmental management in our developments. Thus, we selected seven topics to improve the Policy; they are as follows: climate strategy, environmental education, environmental communication, biodiversity, management of use and occupation of banks of reservoirs, relocation of affected populations, and Indigenous issues. With

the exception of guidelines on the relocation of affected populations and Indigenous issues, they were concluded and approved within the scope of SCMA in 2012. Its formal approval should occur in 2013. Finally, the guidelines regarding climate strategy received a different treatment, due to the decision to present them individually in the format of a "Declaration of Commitment."

To find out more about the guidelines of this policy and the Declaration of Commitment, go to: [www.eletrobras.com/elb/data/Pages/LUMIS376C5AF5PTBRIE.htm](http://www.eletrobras.com/elb/data/Pages/LUMIS376C5AF5PTBRIE.htm).

[www.eletrobras.com/ELB/main.asp?View={564CE0B4-00B6-45E1-BBA3-9F34FF0A5F71}&BrowserType=IE&LangID=pt-br&params=itemID%3D%3B&UIPartUID=%7BD90F22DB-05D4-4644-A8F2-FAD4803C8898%7D](http://www.eletrobras.com/ELB/main.asp?View={564CE0B4-00B6-45E1-BBA3-9F34FF0A5F71}&BrowserType=IE&LangID=pt-br&params=itemID%3D%3B&UIPartUID=%7BD90F22DB-05D4-4644-A8F2-FAD4803C8898%7D)

#### Environment Committee (SCMA)

The SCMA is a technical and institutional space for interaction among companies, discussion of practices, and definition of common guidelines for the treatment of social and environmental issues. The board is composed of managers of the environmental areas of the companies who gather three times a year, and it has the support of permanent work groups and temporary commissions formed by representatives of the technical teams of the companies in treating subjects of common interest, previously defined and approved by the committee.

## Our Responsibility to the Environment

In 2012, nine work groups were present and their topics were as follows: 1) Environmental Policy; 2) Legislation and Regulatory Framework; 3) Climate Strategy; 4) Environmental Costs; 5) Environmental Management of Federal Companies; 6) Water Resources and Biodiversity; 7) Tools for Environmental Management; 8) Environmental Communication; and 9) Use of Reservoir Banks. Additionally, four other commissions were present: Environmental Education; Involuntary Relocation of Populations; Indigenous Communities; and Application of Resources for Environmental Compensation.

### System of Indicators for Corporate Sustainability Management (IGS)

The IGS System has been under development since 2007. The increase in corporate sustainability demands led to the broadening of the system, initially designed to treat the environmental dimension, to also fulfill the financial and social responsibility dimensions, considering variables in several areas of the company, such as Governance, Energy Efficiency, and People Management, among others.

### Eco-efficiency

Below, we present the performance of our main indicators in 2012.

#### Water and wastewater

The use of water in operations and administrative activities of the Eletrobras companies is monitored through the IGS tool.

Regarding the hydroelectric power plants, even though a large volume of water is captured, almost all of it is non-consumptive; that is, this water is not effectively used, so it is returned in the same condition to the bodies of water. The water collected in the reservoirs formed by the dams of hydroelectric power plants is conducted to the powerhouse through channels, tunnels, and/or metallic conduits and moves the turbines for the generation of electricity.

At Eletrobras Eletronuclear and the coal-fired

In its environmental dimension, the goal of IGS is to support the environmental management of the Eletrobras companies, measuring variables of environmental performance such as energy, water, biodiversity, waste, legal compliance, and voluntary actions. This allows for the standardization of processes and the establishment of improvement goals. The IGS data also provides input to certain items of the Inventory for Greenhouse Gas Emissions of the Eletrobras companies.

Since 2010, the system has been implemented in all Eletrobras companies and is an important strategic tool. Its configurations seek to ensure the traceability of information through a certification system in different management levels, being already consolidated by the time they reach holding.

In 2012, approximately 230 employees of the Eletrobras companies participated by adding data to the IGS System and based on that data, we were able to monitor 170 indicators and 249 variables. In order to effectively use this tool in all companies, we invested in training and promoted numerous meetings for questions and suggestions.

thermoelectric Eletrobras CGTEE, the water is for industrial use (cooling of equipment), and after appropriate treatment, it is returned to water bodies with appropriate monitoring.

In 2012, Eletrobras companies' water consumption in administrative offices was 5.8 million m<sup>3</sup>. Much of this volume is due to the use of this resource, in a non-consumptive manner, in the Hydrobiology and Pisciculture station of the Furnas Hydroelectric Plant.

Due to the low water level in reservoirs of hydroelectric plants in 2012, there was more need for the use the thermoelectric generation, which explains the increase in water volume used through surface collection of approximately 9 million m<sup>3</sup>. The 3,465,993,312 m<sup>3</sup> volume refers to sea water used by Eletrobras Eletronuclear for the cooling of equipment. **(GRI EN8).**



Water used for administrative consumption, by source (m3)		
SOURCE	CONSUMPTION	
	2012	2011
Surface water*	4,166,391.68	-
Groundwater**	743,939.12	-
Supply companies***	932,814.32	1,000,738.16

\* Includes the companies: ED Rondônia, Eletrobras Eletronorte, Eletrobras Furnas, and Itaipu Binacional.

\*\* Includes the companies: ED Piauí, Eletrobras Eletronorte, Eletrobras Furnas, and Itaipu Binacional.

\*\*\* Includes the companies: ED Acre, ED Alagoas, ED Piauí, ED Rondônia, Eletrobras Cepel, Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletronuclear, Eletrobras Eletrosul, Eletrobras Furnas, holding, and Itaipu Binacional.

Water used for thermoelectric power generation, by source (m3)		
SOURCE	CONSUMPTION	
	2012	2011
Surface water*	9,048,822.00	978,372.00
Supply companies**	2,293.00	57,901.09
Others***	3,395,149,452.00	3,465,993,312.00

\* Includes the companies: Eletrobras CGTEE, Eletrobras Eletronorte, Eletrobras Eletronuclear, and Eletrobras Furnas.

\*\* Includes the company Eletrobras Eletronorte.

\*\*\* Includes the company Eletrobras Eletronuclear.

## Reduced use

In accordance with corporate guidelines, Eletrobras Eletrosul invests in good practices in order to reduce water use in its activities. In 2012, it acquired a reservoir with the capacity to store 45,000 liters of rain water, used mainly for irrigation of a community garden near the unit Regional Division for Maintenance in the West (DROE). In the administrative building of the Sector for Maintenance of Campos Novos (Smcno), the company has an elevated reservoir, known as sustainable tower, which combines a water reservoir for supply, a system for solar heating of water, and a system for the use of rain water.

Eletrobras Chesf started a pilot project for Effective Management of Natural Resources in the Thermoelectric Plant of Camaçari (UTC), responsible for mapping the consumption of the unit, as well as identifying opportunities for improvement. The result of this study was a 55% reduction in water use compared with the previous year.

The planned disposal of wastewater from the Eletrobras companies, including nuclear plants,

totalled 9,768,825.46 m3, disposed of within the quality standards required by law. **(GRI EN21)**



WASTEWATER DISCHARGE, BY QUALITY AND DESTINATION (m3)	
<b>Total volume of wastewater discharged</b>	
Total	9,770,360.46
<b>Planned discharge of wastewater, by destination type</b>	
Rivers	9,189,155.00
Ocean	187,658.46
Others	262,689.00
Undefined location	129,323.00
<b>Planned discharge of wastewater, by treatment methods</b>	
Wastewater with no need for treatment	64,338.00
Unclassified wastewater	216,131.00
Treated wastewater	9,488,356.46

Note: data include the companies Eletrobras CEPEL, Eletrobras CGTEE, Eletrobras Eletronorte, Eletrobras Eletronuclear, Eletrobras Eletrosul, Eletrobras Furnas, and Itaipu Binacional.

Eletrobras Eletronorte disposed of 1,535 m3 of unplanned wastewater in 2012. Aware of the impact, the company invested in treatment stations focused on the appropriate disposal of its wastewater in order to eliminate unplanned disposals.

Eletrobras Eletronuclear, for instance, ensures that the standards set forth by legislation are met through Procon Água; it provides monthly communication on the results of the wastewater procedures performed in order to meet these standards.

Eletrobras CGTEE disposes of its wastewater through the production units and meets all quality standards set forth in the environmental legislation in effect. More information on CGTEE's wastewater management can be found at:

[www.cgtee.gov.br/sitenovo/index.php?secao=103&periodico=62](http://www.cgtee.gov.br/sitenovo/index.php?secao=103&periodico=62)

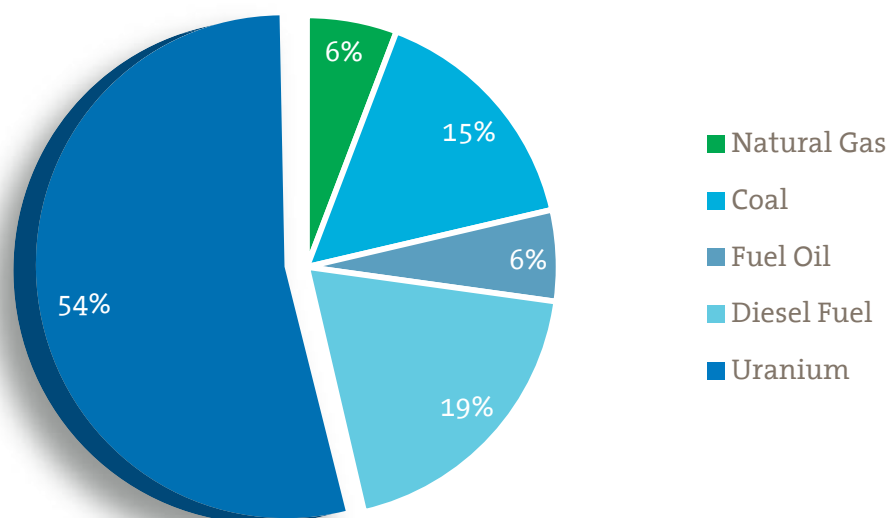
### Energy

With respect to the direct use of electricity by the Eletrobras companies, the focus for 2012 was on energy consumption for the operations of the companies, excluding use for electricity generation, which is available in the SIN network.

This direct energy comes from primary renewable sources (ethanol) and non-renewable sources (natural gas, liquefied petroleum gas, diesel, etc.) and is used, for example, in machinery, in the operation of thermoelectric plants, and in the vehicle fleets, among other operations.

Below, we present a chart with the main sources of direct energy used by the Eletrobras companies in thermoelectric generation:

### Main Sources used for Thermolectric power generation



In 2012, we registered a total consumption of 515,000 GJ of energy (renewable and non-renewable) for administrative activities and 217 million GJ for thermolectric generation. Compared

with the previous year, the energy consumption reflected a considerable increase, mainly due to the inclusion of Eletrobras Furnas in the IGS system. (GRI EN3)

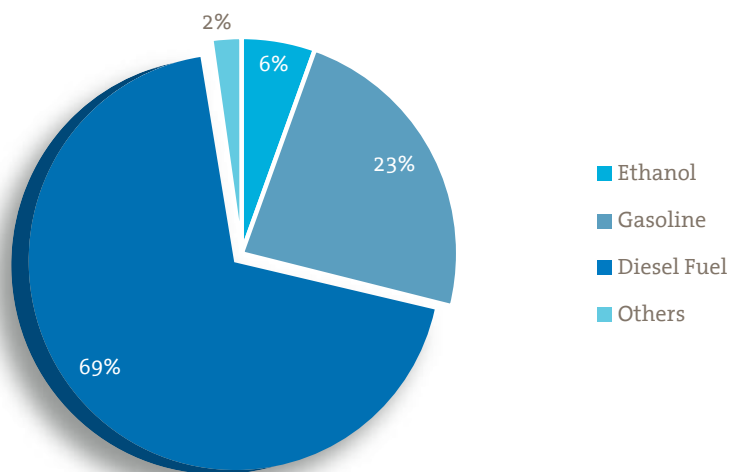
Fuel Consumption - GJ					
Type of Fuel		Administrative Activities		Thermolectric Power Generation	
		2012	2011	2012	2011
RENEWABLE	Ethanol	28,369.44	26,568.70	-	-
	Natural Gas	481.92	126.00	12,536,482.18	1,796,037.76*
	Compressed Natural Gas	300.21	242.87	-	-
	Liquefied Petroleum Gas	5,526.42	878.78	-	-
	Coal	-	-	33,824,311.88	26,083,998.31
	Gasoline	120,648.82	28,743.35	-	-
NON-RENEWABLE	Fuel Oil	-	-	12,696,182.74	1,242,762.03
	Diesel Fuel	354,754.29	128,717.99	41,575,866.60	8,250,547.69
	Two-stroke oil	355.90	17.98	-	-
	Aviation kerosene	4,927.01	7,099.98	-	-
	Uranium	-	-	116,468,740.88	111,922,556.94
TOTAL		515,364.00	192,395.65	217,101,584.28	147,499,864.97

Note: The gaps represent the absence of consumption in the referring sources.

\* The information referring to the natural gas used in the thermolectric plants for 2011 was revised and went from 1,861,901,349.51 GJ to 1,796,037.76 GJ.

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Main Fuels used in the Administrative Activities performed by the Eletrobras Companies



Another energy source used by the Eletrobras companies is indirect energy involving energy consumed through intermediate sources; that is, the energy used in the form of electricity.

The table below presents the distribution of the consumption of electricity in the Eletrobras companies:

Total electricity consumption	Administrative Activities		Hydroelectric Power Generation		Thermoelectric Power Generation		Grand Total*	
	2012	2011	2012	2011	2012	2011	2012	2011
MWh	51.110,67	105.423,04	279.444,58	62.373,01	1.351.748,29	924.139,23	1.782.303,54	1.191.935,28
GJ	43.998,41	379.522,93	1.017.144,18	584.542,84	4.488.621,43	3.326.901,24	6.049.764,02	4.290.967,01

In 2012, approximately 6 million GJ or 1.8 million MWh were purchased to supply the demand for electricity in the production and management processes of the organizations. **(GRI EN4)**

The increased consumption of electricity in hydroelectric generation is due to the expansion of the coverage of data from the companies Itaipu Binacional, Eletrobras Amazonas Energia and Eletrobras Furnas.

The increased volume of energy from thermoelectric power generation is due to the more dispatches from these plants in 2012 as

a result of the low rainfall rates. In addition, monitoring of energy consumption was expanded in administrative activities and in hydroelectric generation.

**Efficient energy use (GRI EN5; EN7; EU7)**

In Eletrobras Chesf, among the actions implemented to produce indirect energy savings, we highlight the retrofitting<sup>1</sup> of the HVAC systems of the substations, which contributed to the reduction of energy consumed by the company, generating savings.

<sup>1</sup> Modernization of equipment, machinery, or systems. It is a modern and effective procedure, which is more cost-effective than new purchases.



## Our Responsibility to the Environment

In 2012, aiming to reduce greenhouse gas emissions, Eletrobras Chesf maintained the measures concerning the use of cleaner fuels, which enabled the consumption of gasoline to drop by 54.89%. The company is also a member of the National Program for the Rationalization of the Use of the Byproducts of Oil and Natural Gas (Conpet), whose actions in 2012 provided the foundations for the Program of Incentive to Technological Innovation and to the Consolidation of the Production Chain of Motor Vehicles (Inovar-AUTO), which will foster higher consumption levels in the coming years.

We can also highlight the actions aimed at the use of clean energy, such as the actions conducted by Eletrobras Amazonas Energia, which chose to use natural gas in its energy matrix. Currently, the Mauá 3 Power Plant is being implemented, and will replace part of its diesel-powered machinery in the capital city. In addition, the Company has

been implementing mini-photovoltaic power plants fueled by solar energy will be implemented.

### Solid Waste

Through IGS, we have been improving the monitoring, and control of waste, especially in power generation processes and in activities that support power plant operation and maintenance.

Waste disposal is prepared according to the rules established by the Brazilian Association of Technical Standards (ABNT) and by the National Environment Council (Conama) and according to the legal requirements governing the disposal of solid industrial waste. This issue is constantly discussed by the Eletrobras companies, and its variables are permanently investigated and reassessed by the representatives of the companies.

The table below presents the waste generated by the Eletrobras companies and their disposal methods: **(GRI EN22)**

Disposal (in tons)	Administrative Activities	Hydroelectric Power Generation	Thermoelectric Power Generation	Transmission	Distribution	Grand total
MUNICIPAL WASTE COLLECTION	1,119.17	25.54	965.94	15.36	-	2,126.01
INDUSTRIAL LANDFILL	2,221.29	54.00	504.93	1,287.09	-	4,067.31
COMPOSTING	1,823.52	48.08	16.00	2.01	121,797.00	123,686.61
INCINERATION	6.57	0.01	0.02	111.85	-	118.45
LOCAL STORAGE	2,431.00	111.35	778,506.83	3,728.48	-	784,777.66
CO-PROCESSING	3.67	91.46	260.13	136.44	-	491.70
RECYCLING	599.96	269.09	929.76	171.40	-	1,970.21
REUSE	25.80	500.36	476,468.19	42.10	-	477,036.45
<b>TOTAL</b>	<b>8,230.98</b>	<b>1,099.88</b>	<b>1,257,651.80</b>	<b>5,494.73</b>	<b>121,797.00</b>	<b>1,394,274.39</b>



## Our Responsibility to the Environment

Of the 1.258 million tons of waste from thermoelectric generation, 1.254 million tons are ashes of national coal burned in the Eletrobras

CGTEE power plants, of which 38% (476,468 t) are used as raw material in the production of Portland Pozzolana cement.

Waste Types (in tons)	Administrative Activities	Hydroelectric Power Generation	Thermoelectric Power Generation	Transmission	Grand total
Class I Hazardous Waste*	129.33	1,831.85	8,699.65	108.00	10,768.83
Class IIA Non-hazardous Waste	4,863.38	142.78	1,310,945.01	1,283.15	1,317,234.32
Class IIB Non-hazardous Waste	968.20	555.49	53.64	1,063.14	2,640.46
Medical Waste	112.58	-	-	-	112.58
<b>TOTAL</b>	<b>6,073.49</b>	<b>2,530.11</b>	<b>1,319,698.30</b>	<b>2,454.29</b>	<b>1,330,756.19</b>

\*This waste was classified according to NBR 10004/04.

Most of the medical waste (112.2 tons) is generated by Hospital Nair Alves de Souza, located in the city

of Paulo Afonso (PE), where Eletrobras Chesf's Paulo Afonso Hydroelectric Complex is located.

### Developing the 5 Rs (Rethink, Refuse, Reduce, Reuse, and Recycle)

In 2012, Itaipu Binacional completed the environmentally friendly disposal of approximately 60 tons of electronic waste (computers, two-way radios, fax machines, scanners, televisions, printers, telephones, etc.). It was the first time that the company disposed of this type of waste; therefore, it analyzed the best market practices and ensured that the contractor guaranteed that the disposal would not impact the environment in any way and that the processes complied with the laws, technical rules, and resolutions in effect.

Since 2008, Eletrobras Furnas has been implementing the Collaborative Selective Waste Collection Program in all its units, including power plants, substations, and offices. This work is executed by the Selective Collection Commission, which was restructured in 2012. Currently, 26 cooperatives benefit from this project, with a total of 2,800 waste pickers. In 2012, these cooperatives received over 216 tons of recyclable materials, such as paper, plastic, metal, and glass, which were sorted at the company, generating over R\$ 272,000 to the families of approximately 500 waste pickers in seven states and in the Federal District. Since the implementation of the program for the selective collection of recyclable materials in Eletrobras FURNAS (which is in its fifth year), over 850 tons of material have been recycled, attesting to the notable success of this social responsibility program in the company.

In addition to generating income to the families of the waste pickers registered in Eletrobras FURNAS's program, it also originated sustainability gains for the mitigation of the environmental impact due to the significant reduction in the amount of material discarded as traditional waste



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by the various locations that produced it and by the companies in charge of its disposal.

Eletrobras Cepel maintained the activities of the EcoCepel Project. Established in 2010, it encourages employees and contractors to take part in the selective collection process, which receives hazardous materials from their homes, namely: batteries, lamps, and used cooking oil. After this stage, the waste is disposed of in an environmentally friendly manner. In Cepel's restaurants, plastic cups were replaced with clear polycarbonate cups, creating an annual reduction estimated at 312,000 units, which represents 456 kg of non-generated plastic waste.

In the holding, the Selective Collection Commission is responsible for developing actions involving this issue, in order to raise the awareness of employees on waste segregation and in an educational manner, demonstrate the environmental and social benefits of this attitude. The company sorts the waste generated (white paper, cardboard, PET bottles, among others), which is then collected by a cooperative. Hazardous waste is produced in the health area (first-aid center), and it is stored and collected in compliance with the rules established by Anvisa.

The Selective Collection initiatives of the Eletrobras companies were initiated in response to Decree No. 5940/06, which provides for the segregation of recyclable waste discarded by agencies and entities of the direct and indirect public federal administration.

### Waste Transportation

Hazardous waste is transported by specialized companies, which must provide proof of compliance with all legal requirements involving this type of activity. In 2012, the Eletrobras companies did not ship any hazardous waste internationally. **(GRI EN24)**

#### Total weight of hazardous waste (in tons)

Exported by the organization	-
Imported by the organization	-
Shipped to the organization	462.25
Shipped from the organization	1333.7
Treated waste	162.3

**Note:** Includes the companies Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, and Eletrobras Furnas.

Eletrobras CGTEE, for example, has a Temporary Solid Industrial Waste Storage Center and waste

### Spills

The risk management process enables the identification of threats by defining which are directly related to the strategies of the company. This facilitates the reduction of likelihood and/or environmental impacts, given that we execute

is controlled in compliance with the guidelines established by the Solid Industrial Waste Control and Management System (Sigecors) of the environmental agency of the state of Rio Grande do Sul, called Fepam.

### Nuclear waste

In 2012, the Almirante Álvaro Alberto Nuclear Center produced, at the Angra 1 and Angra 2 power plants, a total of 42.78 m<sup>3</sup> of nuclear waste, a drop of 41% compared with 2011 (73.24 m<sup>3</sup>), below the annual target of 75.1 m<sup>3</sup>. After its use, the nuclear fuel (spent fuel) is transferred to the pools located in the reactor buildings; they are not sent for any type of processing or reprocessing.

All radioactive waste generated in the nuclear power plants is safely stored and isolated from the public and the environment, and its safety, radiologic protection, traceability, and volume reduction are the basis of this work.

procedures with the utmost care to avoid leakages and spills. No effort was spared to reduce the frequency and the severity of incidents, and our processes are enhanced continuously.



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In 2012, we registered spills in only three companies, and reduced the number of spills by nearly 50% from 2011 to 2012.

The table below presents the level of spills and the actions taken. **(GRI EN23)**

COMPANY	Amount	Volume (m3)	Location	Material	Impacts	Actions taken	Segment
Eletrobras AMAZONAS ENERGIA	1	0,04	Transformer - Rua São João - Compensa II (pole 2D39/26)	Transformer oil	A relatively small volume of transformer oil leaked from the transformer, thus, no major damage was caused to the soil, water resources, or groundwater, considering that the area in question is impervious and paved; the oil was transported and disposed in the sanitary sewage system of the surrounding area	The oil residue that remained in the transformer was taken to the yard of the analysis laboratory of the utility company, for regeneration purposes, so that it can be used in other transformers; thus, it was not discharged to the environment;	Distribution
	2	0,35	UTE São José, UTE Electron	Fuel Oil	The overflowing oil polluted the surface of the water in the surroundings of the UTE.	The fuel oil was contained in the area where the oil-spill containment boom was located; a specialized company cleaned the area, and the oil was collected and properly disposed of. Absorbent materials and peat were used for the removal of the supernatant oil from the surface of the water.	Thermoelectric Power Generation
Eletrobras CGTEE	2	30	Candiota	Fuel Oil Type 1A	There were no direct impacts on the environment, because the spill did not reach the external area of the industrial plant. Indirect impacts due to changes to the quality of the wastewater discharged and by the disposal of the waste generated.	1-Elimination of spill; 2-Containment of oil in separation tanks and wastewater treatment system; 3-Collection through proper equipment, for disposal in 200-liter barrels; 4-Disposal of waste through co-processing process.	Thermoelectric Power Generation
Eletrobras FURNAS	1	0,25	SE Foz do Iguaçu (DRPO)	Transformer oil	Soil Contamination	The contaminated crushed stone was removed and placed in a containment basin; the contaminated soil was removed and stored in barrels, which were sent to an industrial landfill; the soil was also corrected with OIL GATOR.	Transmission



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### Emergency Response Plan

In 2012, Eletrobras Eletronuclear started preparing an Emergency Response Plan for emergencies related to chemical spills or leakages. A 40-hour training course was also offered to train teams to respond to emergencies involving chemicals, in addition to another training course conducted by the chemical emergency response group of the Fire Department of the state of Rio de Janeiro. The quality of the analyses is controlled through comparison programs maintained by the International Atomic Energy Agency, by the US Environmental Protection Agency, and by the Institute for Radiation Protection and Dosimetry Institute of the National Nuclear Energy Commission (CNEN).

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### Water Resources

Since water is a public good and a natural resource that is critical for power generation, Eletrobras prepared, in 2010, a Water Resource Policy which aims to contribute to the sustainable use of water resources in the development of its activities (learn more about the guidelines

of the policy at [www.eletrobras.com/elb/main.asp?Team=%7B9BC13D8E-9408-4391-BED4-C20FCDACB376%7D](http://www.eletrobras.com/elb/main.asp?Team=%7B9BC13D8E-9408-4391-BED4-C20FCDACB376%7D)). The companies are responsible for implementing actions that seek to reduce water consumption and wastewater generation.

### River Basin Committee

The Eletrobras companies, as established in the corporate Water Resource Policy and through the Drainage Basin Committees, are members of groups that form the foundation of the participatory and decentralized water resource management in Brazil. In these groups, the government (federal, state, and municipal), water users (industries, mining companies, and others), and civil society discuss, negotiate, and make decisions concerning local water management, using technical tools for the management, conflict negotiation, and the promotion of multiple uses for water.

Eletrobras Furnas, for example, qualified as a full member of the River Basin Committee of Rio Grande at the federal level during the election of the members of the Plenary Assembly, with mandates from 2012 to 2016. At the state level, for Minas Gerais, Furnas is a member of the Plenary

Assembly of the River Basin Committee for the area surrounding the Furnas Reservoir and of the River Basin Committee for the Tributaries of the Mid-Region of Rio Grande, whose mandate ends in 2013.

Eletrobras Eletronuclear is part of the Drainage Basin Committee for the Ilha Grande Bay as user and of the Collegiate Board, and was involved in the formation of the pro-committee, in which it is a member of the electoral commission. The company is also an alternate at the State Water Resource Council of Rio de Janeiro (Cerhi-RJ). Eletrobras Chesf is part of the São Francisco River Basin Committee and contributes to the hydro-environmental revitalization of the Basin through several programs developed by its environmental area. As a user of the São Francisco River Eletrobras Chesf contributes to meeting the various needs of the population and fosters regional development.

### Biodiversity

Aware of the environmental impacts arising from its activities, Eletrobras sees biodiversity as one of the

critical issues in its operational strategy.

Aiming at increased integration between



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biodiversity issues and its processes, the company prepared, in 2012, its Biodiversity Guidelines to enhance Eletrobras's Environmental Policy.

Also in 2012, the IGS System expanded its set of indicators and variables to improve the management of its companies in relation to biodiversity.

### Impact Management (EN12, EN14, EN15, EN26)

Environmental issues are directly related to the nature of our businesses; thus, the minimization of the impacts stemming from our operations is a strategic corporate guideline. Such issues are contemplated from the planning of developments to their operation, and they may cause projects to be reviewed for changes, such as dimension or structure.

The Environmental Impact Assessments are conducted to characterize the areas planned for the projects, to identify possible impacts arising from the installation and operation of the developments, and to propose mitigation and compensation actions. The bodies of water and the vegetation present where the developments are located are monitored to check their environmental quality, as is the recovery of the affected areas.

During the studies, lists containing the endangered species in the state and in the country are also

used, such as the Red Book of Brazilian Endangered Species and the National List of Brazilian Endangered Fauna, published by the Ministry of the Environment; the international list provided by the International Union for Conservation of Nature (IUCN); and the Convention on International Trade in Endangered Species of Wild Fauna (CITES). The endangered species identified are handled by specific programs.

The most relevant impacts that may affect biodiversity during the implementation and operation of the developments are listed in the chart below. Mitigation, control, or compensation measures are proposed for each impact and are developed to ensure the use of the best environmental control and monitoring techniques.

Potential impacts on biodiversity, per activity and type of venture, and examples of actions/programs developed by the Eletrobras companies.

Potential Impacts	Activity	Type of Development	Examples of Actions/Programs
Changes in water quality	Generation	Hydroelectric power plants	Water quality monitoring programs
Loss of groundcover	Generation Transmission	Hydroelectric power plants Wind farms Transmission and distribution lines	Reforestation programs
Changes in ecosystems/habitats	Generation Transmission	Hydroelectric power plants Thermoelectric power plants Transmission Lines	Support for the creation or maintenance of Conservation Units
Interference in fauna and flora	Generation Transmission	Hydroelectric power plants Thermoelectric power plants Wind farms Transmission lines	Reforestation and Wildlife rescue and monitoring programs
Interference in the migration routes of aquatic wildlife	Generation	Hydroelectric power plants	Fish ladders
Interference in migration routes and collisions with birds	Generation Transmission Distribution	Wind farms Transmission and distribution lines	Installation of signals to avoid collisions



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### Biodiversity protection strategies

The Eletrobras companies maintain environmental control, monitoring, and recovery programs aiming

to mitigate the impacts arising from its operation and to protect ecosystems. (GRI EN13, EN14)

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#### Preservation of species and ecosystem

Itaipu Binacional manages the program Biodiversidade - Nosso Patrimônio (Biodiversity - Our Heritage) which involves seven projects for the preservation, conservation, and recovery of regional flora and wildlife, all valuing biodiversity. Wildlife shelters, Canal da Piracema (fish ladder), and biodiversity corridors are some of the successful projects implemented under the program, which was also responsible for planting 23 million trees in their natural habitats and for maintaining over 5,000 ha of riparian forests in micro-bays. Itaipu Binacional has also implemented a biodiversity corridor (called Santa Maria Corridor) that, through a reforested strip of land, connects the Iguaçu National Park to the Buffer Zone of the Reservoir.

In Itaipu's Wildlife Breeding Site, located in the Bela Vista Biological Shelter, wild animals are bred in captivity and then released in the buffer zone of the lake and in the wildlife shelters on the Brazilian side of the reservoir. The breeding site has already bred approximately 800 animals of 42 different species, with a survival rate in excess of 70%. One noteworthy example is the captive breeding of small wildcats. Currently, breeding activities concentrate on species that are endangered in Brazil and on those that are rare in the region.

Eletrobras Chesf maintains an aquaculture station to restore rivers and reservoirs with fish species that are native to the areas where its developments are installed. The company has implemented actions in the São Francisco River, aiming to restore the natural fish populations in this river. A total of 553,111 fry of native species have been released.

In 2012, Eletrobras Amazonas Energia was responsible for the rehabilitation and release of 60 birds and 61 mammals of different species. Through the Uatumã Chelonian Program, 20,218 hatchlings were born in the Uatumã Sustainable Development Reserve, the largest conservation unit in this category in Brazil.

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### Seedlings and seeds

The programs for the production, planting, and donation of seeds and seedlings aim to contribute to the maintenance of biodiversity and forest genetic resources, and to the recovery of degraded areas found where the developments are implemented.

In 2012, the regional transmission company located in Tocantins voluntarily planted 1,000 seeds, produced by Eletronorte's Forest Germplasm Program, to generate seedlings that were then

planted at the Miracema and Colinas Substations.

For the recovery of riparian forests and other degraded areas, Eletrobras Chesf maintains a forest nursery to produce and distribute seedlings that are native to the regions where its developments are implemented. A total of 408.72 ha were recovered in the areas of the Boa Esperança, Sobradinho, Itaparica, Paulo Afonso Complex, and Xingó power plants.

Eletrobras Amazona Energia s Program for the



## Our Responsibility to the Environment

Recovery of Degraded Areas, in Balbina, involves the following activities: seed collection, seedling preparation and planting, and reforestation area maintenance. In 2012, a total of 7,000 seedlings of native species were planted, and the areas where they were planted were maintained. In addition, the company is responsible for the recovery of 18 ha of degraded areas in the Uatumã Biological Reserve.

Itaipu Binacional's forest nursery currently produces 500,000 seedlings annually, including forest and fruit trees, 80% of which are native species. From

the seedlings produced, 70% are used in programs developed by the company, such as settlements, gardens, reforestation, afforestation, and environmental education. The remaining seedlings are donated to municipalities and educational projects, with priority given to the area of influence of the power plant. Approximately 250,000 seedlings are donated annually.

In 2012, the Eletrobras companies were responsible for the production of 979,487 seedlings. In the same year, an additional 138,600 were planted voluntarily and 107,639 seedlings were donated.

### Permanent Preservation Areas (APP<sup>2</sup>) and Legal Reserve

The management of the use and occupation of the margins of reservoirs of hydroelectric power plants is extremely relevant to the Eletrobras companies, given that the total perimeter of the margins of the reservoir corresponds to over 37,000 km (which exceeds the extension of the coast line of South America) with a total reservoir area of 19,500 Km<sup>2</sup>.

Aiming to reduce the impact on biodiversity, Eletrobras Chesf avoids the implementation of towers in its transmission systems located in APPs and raises these towers to prevent impacts. In addition, erosive processes in a total of 26 ha were recovered in the APPs, in the Paulo Afonso Complex, and the Boa Esperança power plants. Moreover, Eletrobras Chesf maintains 26,012 ha of Legal Reserve in its irrigated perimeters, connected to the Itaparica Power Plant.

Eletrobras Eletrosul executes actions for the restoration of APPs and degraded areas located within its developments. Generally, for the restoration of APPs, artificial perches are implemented in the areas where the replenishment,

transposition, and dissemination of organic soil (seedling bank) is made. Branches are placed in the area, and natural regeneration areas are isolated.

The Green River Project aims to recover and preserve 100% of the riparian forests located in the main rivers of the state of Mato Grosso by 2020. The project is executed by Instituto Ação Verde, and was supported by Eletrobras from 2010 to 2012 for the recovery of a stretch of 200 km of APP along the Teles Pires River. The project also intends to execute environmental education actions involving the local population for the preservation of the APPs located along the river. These actions involve the replanting of seedlings native to the area in the APPs. In 2012, two representatives of Eletrobras took part in the launching of two actions of this project: the Renascer program, in the Zumbi dos Palmares Settlement, which aims to foster the use of nut trees, and the program Adote uma Nascente (Adopt a River Source), which aims to recover 30 river sources located in the urban area of Sinop, in partnership with municipal schools.

<sup>2</sup> The permanent protection areas are preserved to maintain the environmental functions of preserving water resources, landscape, geologic stability, biodiversity, wildlife and fauna genetic flow, soil protection, and of ensuring the well being of human populations

### Protected areas (GRI EN13)

Support to conservation units has proven to be an efficient measure toward biodiversity protection. Parks, biological reserves, and ecological stations, among others, house various species, creating a protection network in the several biomes present in the country.

Until 2012, there were 163 protected areas, such as conservation units and indigenous territories, supported by Eletrobras companies, totaling 19,010,998 ha. They are located within the main Brazilian biomes: Cerrado, Atlantic Forest, the Amazon, Pampas, and Coastal Biome. They include the following: 31 national parks, 24 state parks, 19 biological reserves, 16 ecological stations, 15 environmental protection areas, 6 ecological parks, 4 national parks, 4 sustainable development

reserves, 3 wildlife shelters, 3 extractive reserves, 2 municipal parks, 1 private reserve of natural heritage, 2 ecologically relevant areas, 1 woodland, 1 ecological corridor, 1 national forest, 1 forest park, 1 ecological reserve, 1 special protection area, and 2 wildlife preservation zones. In addition, 24 Indigenous territories and 1 archeological site received support. Of the 163 protected areas supported, 61.30% are managed by federal agencies, 23.22% by state, municipal, and private agencies, and 15.48% by Eletrobras companies.

In 2012, Eletrobras companies invested a total of R\$ 21.6 million to support these protected areas. A total of R\$ 5.4 million was invested in voluntary actions, of which 86% was destined for areas that are managed by Eletrobras companies.



### Our Responsibility to the Environment

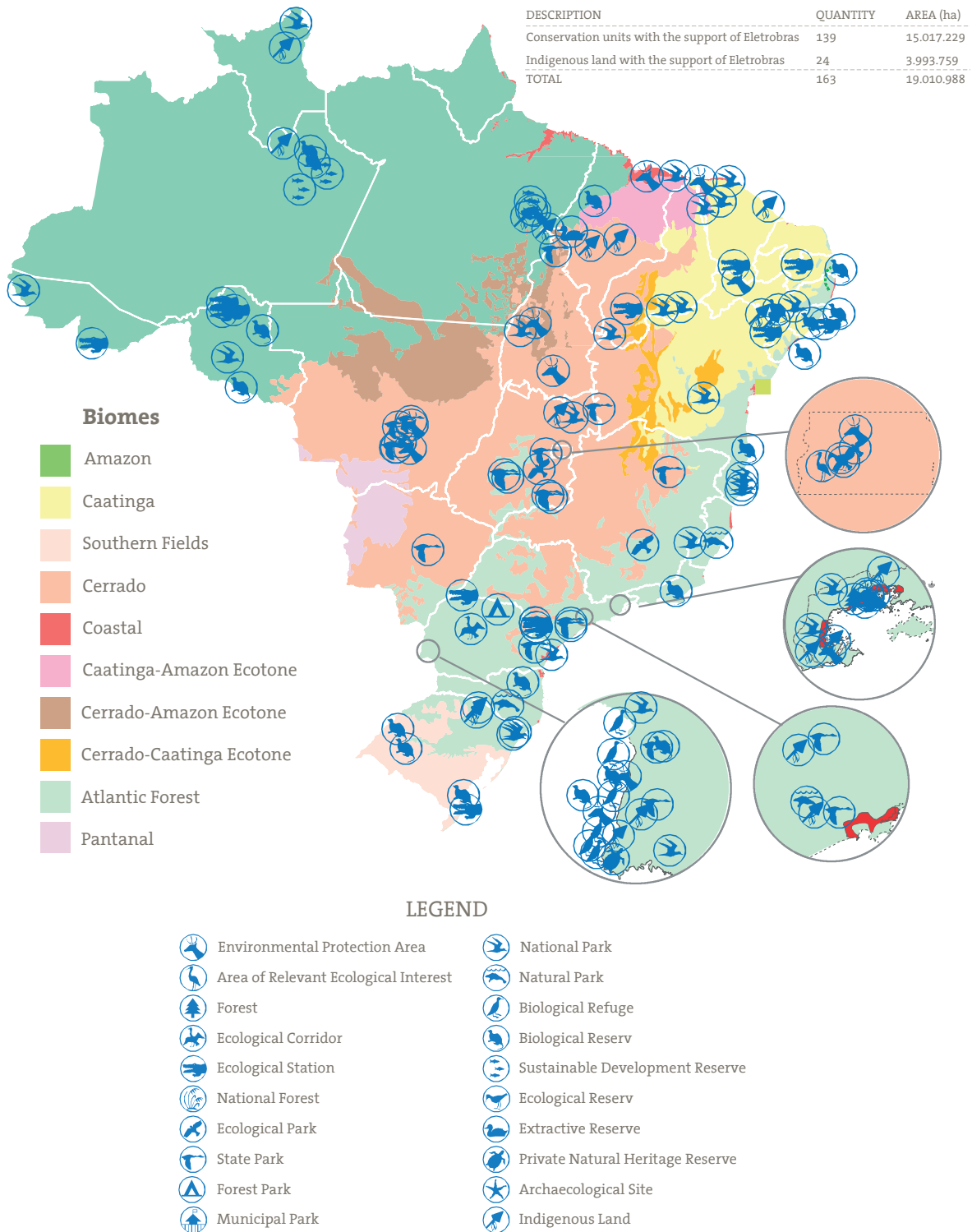


Figure 1. Location of the protected areas supported by Eletrobras.





## Our Responsibility to the Environment

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### Samuel Ecological Station

Samuel Ecological Station of Eletrobras Eletronorte is located in the Amazon Biome and has 72,000 ha. In General, the forest of the Ecological Station is considered quite diverse, with around 200 tree species per hectare. The station was created to protect a representative area of the natural ecosystems of the Jamari River basin and preserve biodiversity in the area.

### Bela Vista Biological Sanctuary

The wildlife nursery of Itaipu Binacional and the Zoo Roberto Ribas Lange, maintained by the company in the Bela Vista Wildlife Sanctuary (RBV), provides an environment suitable for the reproduction of most species to more than 200 animals. Itaipu Binacional carries out important research and activities aimed at procreation and to guarantee survival of species.

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## Climate Change

Eletrobras is aware of the challenges posed by climate change in the 21st century. To face these challenges, the company has continuously sought to improve its planning and management instruments as a means of considering both the contribution of its activities to this phenomenon, and the impacts of climate change on the company's operations.

In this context, the climate strategy of the Eletrobras companies is guided by a series of actions that find their main guideline in Strategic Planning. Eletrobras's Vision for 2020 is to become the largest global clean energy business system. To this end, one of its strategic objectives is to maximize the participation of renewable sources in its energy matrix, thus keeping the low carbon intensity of the Eletrobras companies (in 2012: 0,057 tCO<sub>2</sub>e/MWh).

An environmental management system that adds new information and improves existing processes is added to this medium-term business strategy aiming to diagnose and efficiently manage the various aspects related to the environment, among them climate-change related issues.

Eletrobras's Declaration of Commitment on Climate Change, published in May 2012, strengthens the integration of the climate change issue into the company's procedures and guidelines. Among the various commitments made are: the search

for a unified strategy for its companies to adopt practices that minimize or offset its GHG emissions; the prioritization of the share of renewable energy sources in its project portfolio; and the promotion of studies to identify and understand the risks and opportunities related to climate change for Eletrobras companies.

With respect to the latter commitment, Eletrobras is promoting two studies focusing on: 1) analyzing the risks, vulnerabilities and possibilities to adapt the electric power generation system of the Eletrobras companies to climate change impacts; and 2) performing sensitivity analysis of the financial impact of a possible taxation of CO<sub>2</sub> emissions for thermoelectric generation of the Eletrobras companies (pilot case study).

With regard to greenhouse gas (GHG) emissions, since 2009 the inventory of greenhouse gas emissions of the Eletrobras companies has been prepared annually, in accordance with the methodology of the IPCC (Intergovernmental Panel on Climate Change) and of the GHG Protocol, and whose result is the recording of its emissions by source, having become a strategic tool for the companies to manage their emissions.

The inventory of Greenhouse Gas Emissions of the Eletrobras companies in 2012, assured by third party certification companies, presented the following results (**GRI EN16; EN17**):

## Our Responsibility to the Environment

COMPANY	Scope 1															
	Fixed						Mobile						Fugitive			
	Thermoelectric Plants		Generator Groups		Others		Road		Waterway		Airway		SF6		Refrigeration and Air-Conditioning	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
ED Acre	n.s.	323	n.s.	n.s.	247	n.s.	148	148	n.s.	n.s.	n.s.	n.s.	827	201	0	n.a.
ED Alagoas	n.s.	n.s.	2	2	n.s.	0	1,745	1,930	n.s.	n.s.	n.s.	n.s.	0	n.a.	68	n.a.
ED Rondônia	n.s.	n.s.	2	1	143	n.s.	9,383	789	n.s.	n.s.	n.s.	n.s.	0	120	0	n.a.
ED Roraima	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	244	195	n.s.	n.s.	n.s.	n.s.	n.a.	0	n.a.	n.a.
ED Piauí	n.s.	n.s.	4	1,638	n.s.	16	1,805	2,048	n.s.	n.s.	n.s.	n.s.	574	72	n.a.	n.a.
Eletrobras Amazonas Energia	3,569,586	2,210,331	n.a.	n.s.	n.s.	n.a.	1,230	970	n.a.	5	n.a.	n.s.	0	0	13	n.a.
Eletrobras Cepel	n.s.	n.s.	n.s.	n.s.	44	2	70	23	n.s.	n.s.	n.s.	n.s.	0	24	0	n.a.
Eletrobras CGTEE	3,317,889	2,594,110	n.s.	n.s.	0	1	330	343	n.s.	n.s.	n.s.	n.s.	0	n.s.	0	n.a.
Eletrobras Chesf	5,066	8,811	63	5	11	n.a.	4,437	4,513	n.s.	5	347	537	47,561	38,240	n.a.	n.a.
Eletrobras Eletronorte	643,697	651,068	129	62	27	n.a.	3,259	7,007	9	20	2	n.s.	14,842	3,585	0	n.a.
Eletrobras Eletronuclear	n.s.	n.s.	1,707	1,376	42	6	1,082	1,082	15	n.s.	n.s.	n.s.	n.s.	n.s.	305	n.a.
Eletrobras Eletrosul	n.s.	n.s.	54	51	12	10	1,687	1,716	n.s.	n.s.	101	n.s.	2,498	3,677	130	n.a.
Eletrobras Furnas	318,681	123,863	4	12	76	26	4,629	1,287	n.s.	6	8	153	204,347	104,046	812	n.a.
Holding	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	19	45	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0	n.a.
Itaipu Binacional	n.s.	n.s.	19	n.s.	51	48	514	546	9	n.s.	n.s.	n.s.	7,170	7,170	536	n.a.
<b>Subtotal Sources</b>	<b>7,854,919</b>	<b>5,588,506</b>	<b>1,983</b>	<b>3,146</b>	<b>653</b>	<b>110</b>	<b>30,582</b>	<b>22,642</b>	<b>32</b>	<b>36</b>	<b>458</b>	<b>691</b>	<b>157,135</b>	<b>573,718</b>	<b>1,864</b>	<b>0</b>
Annual Comparison	2012															
Total Scopes	8,169,464															



## Our Responsibility to the Environment

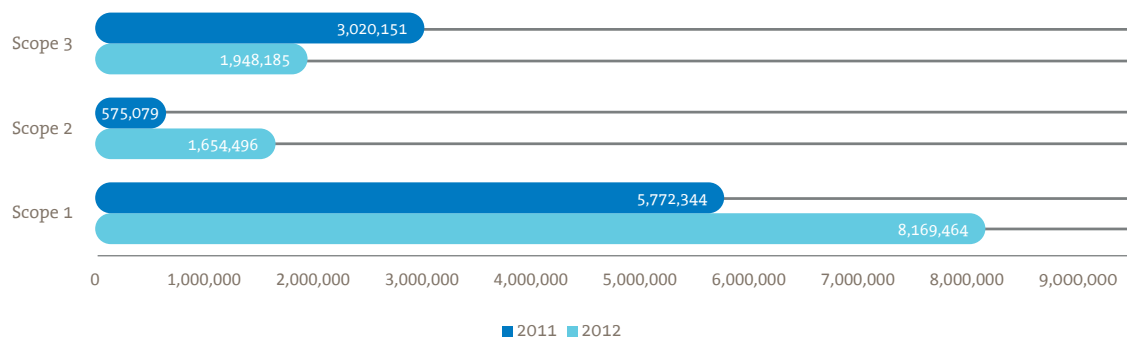
					Scope 2						Scope 3								SUBTOTAL BY EMPRESA	
Fugitive				Electricity Consumption		Losses in Transmission		Losses in Distribution		Independent Power Producers (IPPs)		Air Business Travel		Transportation of Employees		Transportation and Distribution				
Sewage Treatment		Fire Extinguishers																		
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
	n.s.	0	0.2	0.2	72	27	n.s.	n.s.	14,393	n.s.	118,186	115,685	285	388	19	n.s.	234	n.a.	134,411	116,772
	n.s.	0	0.5	0.5	274	n.a.	n.s.	n.s.	81,756	36,387	n.s.	n.s.	219	n.a.	525	n.s.	1,354	4	85,942	38,323
	n.s.	0	1.6	1.9	257	65	n.s.	n.s.	52,763	26,706	199,328	203,794	599	673	n.s.	n.s.	n.a.	n.a.	262,477	232,149
	n.s.	0	0.1	0.1	173	n.a.	n.s.	n.s.	6,511	34,782	10,415	n.s.	n.a.	n.a.	n.s.	n.s.	n.a.	n.a.	17,343	34,977
	n.s.	0	2.6	2.6	266	99	n.s.	n.s.	81,973	34,782	n.s.	n.s.	195	309	n.s.	n.s.	n.a.	n.a.	84,820	38,967
	n.a.	0	6.0	12.9	n.s.	3,247	n.s.	n.s.	243,494	107,759	1,395,270	1,416,757	1,224	634	n.a.	n.s.	n.a.	n.a.	5,210,824	3,739,712
	n.s.	0	1.8	0.7	452	129	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	260	246	468	407	n.s.	n.a.	1,295	832
	295	0	1.7	1.0	128	40	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	110	386	525	353	3,634	3,653	3,322,914	2,598,888
	n.s.	0	15.6	16.2	995	230	239,230	71,196	n.s.	n.s.	n.s.	n.s.	2,354	7,510	n.s.	n.s.	n.a.	n.a.	300,080	131,059
	61	0	37.9	1.8	885	120	124,385	34,820	n.s.	n.s.	200,281	1,257,058	2,256	3,234	309	n.s.	11	n.a.	990,191	1,956,962
	7	0	6.8	2.3	1,837	39	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	704	338	1,861	1,853	19	3	7,587	4,720
	n.a.	0	3.0	2.3	658	435	185,442	55,421	n.s.	n.s.	n.s.	n.s.	140	223	163	312	2	n.a.	190,890	61,847
	677	0	30.6	34.6	2,331	463	615,689	168,105	n.s.	n.s.	n.s.	n.s.	2,751	1,513	n.s.	n.s.	n.a.	n.a.	1,150,036	399,507
	n.s.	0	0.9	1.1	389	160	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	2,433	2,615	n.s.	n.s.	n.s.	n.a.	2,862	2,821
	n.s.	0	4.0	0.9	142	68	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	979	1,044	1,029	1,131	42	28	10,494	10,040
	1,042	-	113	79	8,860	5,120	1,164,746	329,541	480,890	240,417	1,923,479	2,993,294	14,511	19,114	4,898	4,055	5,296	3,688	TOTAL (tCO2e)	
	2011				2012				2011				2012				2011		2012	2011
	5,772,344				1,654,496				575,079				1,948,185				3,020,151		11,772,144	9,367,574

### Our Responsibility to the Environment

The largest dispatch of the thermoelectric power plants in the country at the end of 2012 led the Eletrobras companies (company-owned thermoelectric plants - scope 1) to increase their direct emissions by 29%, compared to 2011. The largest dispatch of the thermoelectric plants also greatly influenced the emission factor of the SIN,

which, in turn, affected the calculation of GHG emissions relating to the portions “electricity consumption”, “loss in distribution” and “loss in transmission” (scope 2). This increase in GHG emissions in 2012 contributed to an increase in Emission Intensity of the Eletrobras companies by 21% compared to 2011.

### Comparison of the Emission, by scope, in the production chain of the Eletrobras Companies

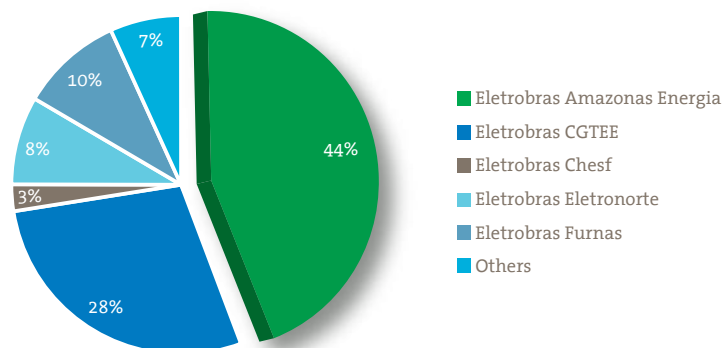


**Scope 1:** Direct emissions of the company or that have control, for example, burning of fossil fuels and of production processes.  
**Scope 2:** Consumption of purchased energy (electrical), losses in distribution and transmission.  
**Scope 3:** Emissions that occur as a function of the activities of the organization, but that has its origin in sources not owned or controlled by the same. Some examples are: transport of goods in vehicles that do not belong to the company, use of vehicles from third parties, in addition to the transport of employees or business trips.

The largest portion of greenhouse gas emissions, in scope 1, comes from stationary sources of large, medium and small thermoelectric generation (7,854,919 tCO<sub>2</sub>e), representing 67% of the total emissions. Still in Scope 1, direct emissions related to SF<sub>6</sub> released by electric equipment reached

3.5% of the total for this scope and are subject to programs for their reduction. In relation to Scope 2, emissions related to loss in transmission and distribution represent 10% and 4% respectively of the total inventory of emissions in this scope.

### Eletrobras Companies' Emissions



## Our Responsibility to the Environment

Below, we present some reductions in Greenhouse Gas emissions:

### Reductions in GHG emissions by source (tCO<sub>2</sub>e)

Other stationary sources	74.16
Mobile	4,313.62
Fugitive	8,460.75
Electric energy consumption	148.58

Note: Data include companies: Eletrobras Distribuição Alagoas, holding and Itaipu Binacional.

### SO<sub>x</sub> and NO<sub>x</sub> Emissions (GRI EN20)

SO<sub>x</sub> (sulfur oxides) and NO<sub>x</sub> (nitrogen oxides) emissions arising out of the activities of the Eletrobras companies are mainly related to electric

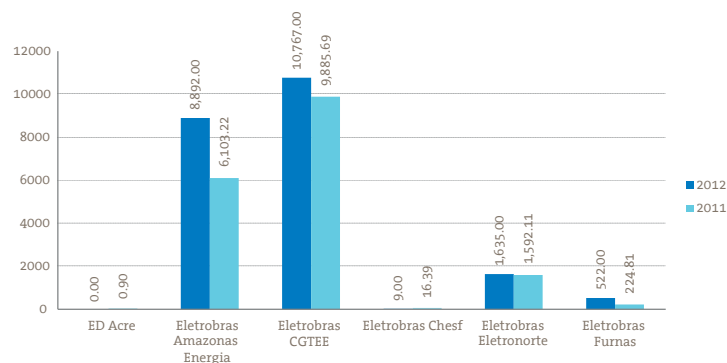
energy generation processes by thermoelectric power plants and fuel consumption by mobile sources, as shown in the following tables:

COMPANY	NO <sub>x</sub> Emissions		Variation 2012x2011 (%)	SO <sub>x</sub> Emissions		Variation 2012x2011 (%)
	2012	2011		2012	2011	
ED Acre	n.a.	0.90	-	n.a.	0.42	-
Eletrobras Amazonas Energia	8,892.00	6,103.22	31%	20,396.00	13,526.50	34%
Eletrobras CGTEE	10,767.00	9,885.69	8%	28,371.00	62,247.82	-119%
Eletrobras Chesf	9.00	16.39	-82%	3.00	0.82	73%
Eletrobras Eletronorte	1,635.00	1,592.11	3%	4,178.00	666.13	84%
Eletrobras Furnas	522.00	224.81	57%	88.00	39.25	55%
<b>TOTAL</b>	<b>21,824.00</b>	<b>17,823.13</b>	<b>18%</b>	<b>53,036.00</b>	<b>76,480.93</b>	<b>-44%</b>

SO<sub>x</sub> emissions are mostly generated by stationary sources such as coal-fired power plants. NO<sub>x</sub> emissions, in addition to the coal-fired plants, also originate from mobile sources such as vehicles.

Below, we present NO<sub>x</sub> emissions by the Eletrobras companies:

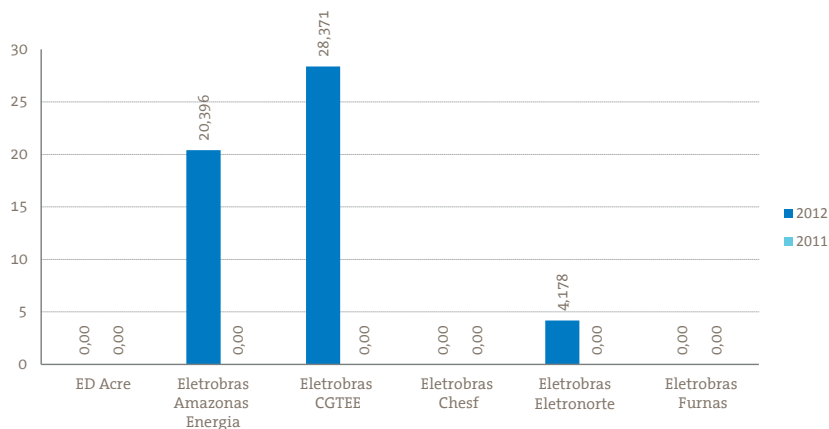
### Eletrobras Companies' NO<sub>x</sub> Emissions



## Our Responsibility to the Environment

Below, we present SOx emissions by the Eletrobras companies:

### Eletrobras Companies' SOx Emissions



### Alternative solutions

Eletrobras CGTEE signed, in March 2012, an agreement with the Federal University of Rio Grande (FURG), in order to install and operate a unit for the biofixation of carbon dioxide gas by microalgae. Also, Eletrobras Chesf seeks to integrate the operation actions with the transport tasks, allowing for gains in efficiency in the cost of transportation. Another mechanism used to reduce emissions arising out of travel is related to technological alternatives for communication. Videoconferences have proven to be an effective tool, especially when the number of employees traveling and the time spent in transportation are impractical, both from an operational and environmental standpoint (**GRI EN18**).

### Environmental investments (GRI EN30)

In 2012, our main investments and spending on environmental protection totaled R\$ 197 million. The amounts invested increased 41% compared to 2011.

Of this total, close to R\$55 million were invested in environmental programs of projects, as in the case of Eletrobras Furnas and Eletrobras Eletronorte. Other companies such as Itaipu Binacional and Eletrobras Eletrosul invested approximately R\$ 12 million in the recovery of degraded areas and protection of areas.

Eletrobras CGTEE contributed with close to R\$ 27 million in the treatment of atmospheric emissions.

Eletrobras Eletronorte earmarked approximately R\$ 15 million in various actions such as environmental programs, environmental audits, environmental surveillance and implementation of ISO 14001 and in the recovery of degraded areas in some parts of the transmission lines. Itaipu Binacional earmarked approximately R\$ 17 million in actions to encourage the development and diversification of production in rural properties, in sustainability projects for Indigenous communities, in programs to support the regional aquaculture, in the monitoring of the ichthyofauna, among others.

## Legal Compliance

### Environmental licensing (GRI EU19)

For the viability of electric generation projects, in addition to the studies of the planning phase, an Environmental Impact Study is carried out in the environmental licensing process (with its respective Environmental Impact Assessment - EIS/EIA) or Simplified Environmental Report. According to the assumptions contained in CONAMA Resolution No. 00186 and in the Terms of Reference issued by environmental licensing agencies, environmental studies detail the aspects of the physical, biotic, socio-economic and cultural environment by obtaining primary data from field surveys. In this step there is a greater detailing of environmental impacts and the further evaluation of its magnitude, duration and scope, with the proposal of measures to eliminate or mitigate them. Should there be the need for relocation of population, the most conducive locations for resettlement are identified. In this phase, one or more public hearings are held in the region of the development to formally present the project to society, discuss potential social and environmental impacts foreseen and the respective mitigating and compensatory measures. The EIS/EIA is reviewed by the appropriate environmental agency that decides on the granting of Preliminary Environmental License (LP). It is at this point that the environmental agency approves and recommends the environmental programs that should be detailed in a later phase.

In the Basic Project phase, with the definition of the entrepreneurs after the public tender, additional field surveys can be carried out, either by project requirements, or by formal request from the environmental agency. In the Basic Environmental Project (Projeto Básico Ambiental – PBA) the scope of environmental programs and projects approved in the EIS is detailed, and some may even be implemented, depending on the need and term. The institutional coordination and social negotiations are detailed. If the population is affected, the negotiation criteria and the procedures for acquisition/compensation of land and leasehold improvements are established. Locations for the urban and rural resettlement are defined. After analysis of the PBA, the environmental agency decides on the granting of the Installation License (LI).

In the construction phase, Environmental Management consolidates with the implementation and monitoring of programs and projects related to the physical, biotic and socio-economic environment proposed in social and environmental studies. It is at this point that the compensation for land and improvements, acquisition of areas for resettlement of populations and the resettlement process occur. At the end of this phase, the environmental agency issues the Operating License (LO).

During the operation, programs that were not completed in the previous phase and those planned to be completed in a longer period continue to be executed. Additionally, the other monitoring programs that were planned are implemented.

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### Studies in the Planning Phase

The Hydroelectric Inventory is characterized by the design and analysis of several alternatives to divide drops in the river basin, formed by sets of projects. These alternatives are compared with each other, in order to select the one that offers the best balance between deployment costs, energy output and environmental impacts. This analysis is conducted based on secondary data, supplemented with information from the field and based on basic cartographic, meteorological, geological and geotechnical, and environmental studies, as well as on the multiple uses of water. Since the revision of the Inventory Manual in 2007, an Integrated Environmental Assessment (AAI) of the selected alternative has been included in the studies, aiming to outline the cumulative and synergistic effects. It is in this phase that the environmental and social guidelines are established for the continuity of studies for the design of projects and for future social and environmental studies in the basin.

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## Our Responsibility to the Environment

### Energy efficiency

In 2012, the Eletrobras's energy efficiency department was restructured in order to strengthen and emphasize the corporate side upon developing the energy efficiency activities common to all the Eletrobras companies and enable new businesses.

In the same year, the Integrated Energy Efficiency Committee of the Eletrobras System (Cieese) was reactivated aiming at the coordination, discussion and exchange of information within the areas managing energy efficiency in the Eletrobras companies to support process improvement and the synergy of energy efficiency actions in the Eletrobras companies. Among the main initiatives of the Committee, we can highlight the Energy Efficiency Policy Update of the Eletrobras System, which aims to promote, guide and prioritize

energy efficiency in the Eletrobras companies to optimize the investment and other corporate gains in the generation, transmission, distribution and consumption of electricity, in line with the business plan of the Eletrobras System.

The development of a standard methodology for the acquisition of efficient distribution transformers and the beginning of work for the implementation of ISO 50001 (Energy Management), are some of the actions taken by the Eletrobras companies aiming at Energy Efficiency in the process. **(GRI EU7; EN5).**

The following table shows a summary of the energy efficiency programs and projects characterized as initiatives to provide products with low power consumption **(GRI EN5; EN6; EU7):**

#### Main activities related to the promotion of energy efficiency, by company

Companies	Initiatives	Activities	Results
Eletrobras Furnas	Four energy diagnostics were carried out in schools and three diagnostics in own facilities, in states where the company has facilities or projects under development.	<p>"Animação Cultural" – activity carried out at schools, parks and communities with the theme Electric Energy Conservation .</p> <p>"FURNAS/Procel in Schools" – lecture for students held on company premises.</p> <p>"Energia da Sabedoria" – lectures for the elderly</p> <p>"Technical Lectures" – Lecture for professionals with a bachelor's degree or technical training.</p> <p>"Events" – with internal and external partnerships, at trade fairs, exhibitions, congresses, cultural events and distribution of informative booklets on energy conservation.</p>	<p>"Animação Cultural" – 6,801 participants, of whom 5,345 are from Minas Gerais and 1,456 from Rio de Janeiro.</p> <p>"FURNAS/Procel in Schools"</p> <ul style="list-style-type: none"> <li>– Total of 58,495 students and 1,363 teachers participated.</li> <li>"Energia da Sabedoria"</li> <li>– 2,136 participants.</li> <li>"Technical Lectures"</li> <li>– 427 participants.</li> <li>"Events" – 35,473 participants.</li> </ul> <p>These studies identified potential savings of 118.38 MWh/year and a potential for reduction in demand of 58.83 kW.</p>



## Our Responsibility to the Environment

Companies	Initiatives	Activities	Results
Eletrobras Amazonas Energia	Mini-photovoltaic plants of the Luz para Todos program in the state of Amazonas.	Project for 12 mini-photovoltaic plants with mini-grids and prepayment billing system, developed within the framework of the Luz para Todos program. The mini plants use solar energy acquired through photovoltaic modules made up of solar panels, load controllers with accumulation system. The entire mini-grid and mini-plant system relies on remote monitoring and prepaid billing system.	<p>The municipalities benefitted are: Autazes, Barcelos, Beruri, Eirunepé, Novo Airão and Maués. There are approximately 222 consumer units (among houses, community centers, schools and churches), with approximately 1,300 people benefitted.</p> <p>The company's intention is for other remote communities in the interior of the state to have access to this benefit.</p>
	Agent Eletrobras Parintins and Energy Efficiency at the Court of Justice of the state of Amazonas.	Energy efficiency in low-income consumer units in the city of Manaus and energy efficiency in low-income consumers in isolated electric systems in the state of Amazonas.	<p>Measurement of the gain in efficiency is in the implementation phase, expected to be completed by June/2013.</p> <p>1,722 refrigerators were replaced in the interior of the state of Amazonas.</p> <p>In the first phase, 1,375 inefficient refrigerators were replaced with others with consumption of up to 24 kWh/month, and 14,840 incandescent bulbs were replaced with 15W compact fluorescent bulbs in the municipality of Parintins/AM. In the second phase, 1,994 40W tubular fluorescent bulbs were replaced with 1,320 18 W LED bulbs, and 674 32W compact fluorescent bulbs.</p>



## Our Responsibility to the Environment

Companies	Initiatives	Activities	Results
Eletrobras Cepel	<p>Replacement of equipment of the HVAC system</p> <p>Progressive replacement of computer equipment</p> <p>Efficient Solar House</p>	<p>Replacement is part of the strategy to improve the efficiency of final energy use, which accounts for the largest portion of Cepel's total consumption of electricity.</p> <p>Replacements made so far, with specifications focusing on energy consumption, constitute an important strategy to reduce energy consumption in Cepel's research activities.</p>	<p>Estimated energy savings of 1,428 kWh or 5,141 MJ in 2012, an increase of 14.2% compared to the previous year.</p> <p>The Efficient Solar House is a fully Autonomous Installation in terms of energy.</p>
Eletrobras Eletronorte	<p>Educational actions in energy efficiency</p>	<p>The actions, developed through partnerships, took place in municipal public schools in several cities of the states of Pará, Tocantins, Maranhão and Amapá.</p>	<p>The program continued in 300 schools, and the municipality of Ferreira Gomes-AP made a special request to develop educational projects in its schools.</p> <p>Since 2005, the programs have reached 875,453 students, 8,201 teachers and 1,352 schools in the region where Eletrobras Eletronorte operates. Savings achieved in 2012 with the educational programs totaled 2,272,068 GJ, slightly lower compared to that of 2011, which was of 2,880 GJ.</p>

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### Efficient management

Proceeding with the work developed since 2000, Eletrobras Chesf continues to invest in Projects to Improve Energy Efficiency (PMEEs) and annually accumulates the energy benefits obtained with its actions. 108 projects were developed as of 2012, 99 of which have already been implemented, representing more than 605,000 GJ (168,000 MWh) of energy saved over the 12 years that the PMEEs have been developed. Total investment was of approximately R\$ 9 million, equivalent to an average cost of less than R\$55.00/MWh. With the new technological alternatives under consideration, such as the use of Solar Energy, the preparation of action plans on Energy Management and the intensification of measures to reduce consumption in pumping systems, even more significant results are expected for the coming years (GRI EN5).

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*Bromélia*  
*Vriesea saundersii*



# Social Audit

(Ibase Table)





## Social Audit (Ibase Table)

(R\$ thousand)

	Holding		Consolidated	
<b>I. Human Resources</b>				
<b>a. Compensation</b>	2012	2011	2012	2011
Gross Payroll (GP)	213,695	152,580	4,716,416	3,619,082
- Employees	183,517	113,611	4,653,216	3,560,225
- Administrators	4,161	2,857	153,925	22,746
Ratio between the largest and the lowest compensation:				
- Employees	16.65	15.35		
- Administrators	1.42	0.00		
<b>b. Benefits Granted</b>	2012	2011	2012	2011
Payroll charges	54,988	58,524	1,267,774	1,061,237
Food	16,099	16,966	327,949	284,271
Transportation	855	834	41,353	20,602
Private pension plan	28,292	22,719	275,780	247,163
Health	19,312	13,585	437,469	323,727
Occupational health and safety	5,342	5,758	43,365	37,086
Education or stipend for day care	2,396	2,317	55,357	36,586
Culture	0	0	2,332	2,076
Training and professional development	5,249	6,497	64,498	67,540
Others	0	0	0	0
Profit sharing	40,000	37,800	435,770	419,251
<b>Total</b>	<b>172,533</b>	<b>165,000</b>	<b>2,951,648</b>	<b>2,499,539</b>
<b>c. Workforce information</b>	2012	2011	2012	2011
Number of employees at the end of the fiscal period	1,182	1,212	28,078	24,884
Number of hires	4	77	681	1,104
Number of terminations	32	47	948	987
Number of interns at the end of the fiscal period	220	214	2,145	1,866
Number of employees with disabilities or special needs at the end of the fiscal period	10	10	636	507
Number of outsourced employees at the end of the fiscal period	801	768	12,915	8,248
Number of employees by gender:				
- Men	773	797	22,695	20,193
- Women	409	415	5,383	4,691
Number of employees by age group:				
- Under 18	0	0	0	0
- From 18 to 35	368	414	6,586	6,007
- From 36 to 60	718	721	19,177	17,183
- Over 60	96	77	2,315	1,693
Number of employees by level of education:				
- Illiterate	0	0	1	0
- Elementary and Middle School	55	50	3,035	2,716
- High School	189	200	5,181	4,438
- Technical Education	0	0	7,097	6,569
- Higher Education	515	543	9,296	8,126
- Postgraduate Degree	423	419	3,514	2,942

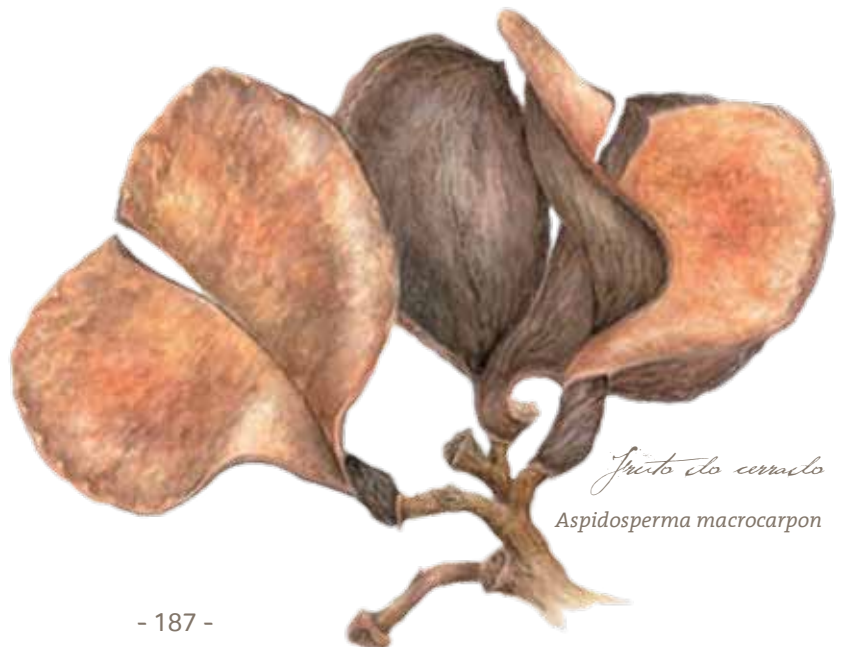


Social Audit (Ibase Table)

Percentage of employees in management position, by gender:				
- Men	75.00	74.00		
- Women	25.00	26.00		
<b>d. Labor liabilities and contingencies</b>	<b>2012</b>	<b>2011</b>	<b>2012</b>	<b>2011</b>
Number of labor suits filed against the company	456	309	6,517	5,060
Number of labor suits found to have grounds	28	31	931	714
Number of labor suits found to be without grounds	32	30	518	365
Total amount of indemnifications and fines paid by court order	1,974	7,293	258,006	84,722
<b>II. Company Interaction with the External Environment</b>				
<b>2.1. Relationship with the community</b>	<b>2012</b>	<b>2011</b>	<b>2012</b>	<b>2011</b>
Total investments in:				
Education	1,460	924	39,830	18,422
Culture	57,110	21,576	90,212	56,869
Health and infrastructure	0	0	102,138	81,404
Sports and leisure	29,829	32,952	32,781	35,243
Food	0	0	6,576	3,487
Job and income generation	2,417	1,353	15,899	8,614
Resettlement of families	0	0	0	0
Others	0	0	152,278	13,294
<b>Total investments</b>	<b>90,816</b>	<b>56,805</b>	<b>439,714</b>	<b>217,333</b>
Taxes (excluding payroll charges)	214,405	425,941	2,692,128	3,837,342
Financial compensation for the use of water resources	0	0	1,201,519	611,204
<b>Total Relationship with the Community</b>	<b>305,221</b>	<b>482,746</b>	<b>4,333,361</b>	<b>4,665,879</b>
<b>2.2. Interaction with suppliers</b>	<b>2012</b>	<b>2011</b>	<b>2012</b>	<b>2011</b>
Social responsibility criteria used for the selection of suppliers	0	0		
<b>III. Interaction with the Environment</b>				
Investments and maintenance costs in operational processes for the improvement of the environment	0	0	155,470	135,245
Investment and spending on the preservation and/or restoration of degraded environments	0	0	114,372	58,591
Investments and spending on environmental education to employees, contractors, self-employed professionals and company administrators	0	34	1,470	735
Investments and spending on environmental education for the community	0	0	4,283	2,522
Investments and spending on other environmental projects	0	0	33,733	30,645
Number of environmental, administrative and legal actions filed against the company	0	0	12	7
Value of fines and indemnities relating to environmental matters, administrative provisions and/or legally established	0	0	2,000	153
Environmental liabilities and contingencies	0	0	8,522	1,240
<b>Total interaction with the Environment</b>	<b>0</b>	<b>34</b>	<b>319,902</b>	<b>229,138</b>
<b>IV. Other information</b>				
Net Operating Income (NOI)	2,631,551	2,606,807	34,064,477	25,865,267
Operating Profit (OP)	1,296,376	1,871,631	(7,962,243)	4,493,807



# GRI Table of Contents





GRI Table of Contents[GRI 3.12]

Indicator	Indicator	Description	Page
1.1	Strategy and Analysis (Message from the president)	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.	6
1.2	Organizational Profile	Description of key impacts, risks, and opportunities. The reporting organization should provide two concise narrative sections on key impacts, risks, and opportunities.	13
2.1	Organizational Profile	Name of the organization.	49
2.2	Organizational Profile	Primary brands, products, and/or services. The reporting organization should indicate the nature of its role in providing these products and services, and the degree to which it utilizes outsourcing.	49; 94
2.3	Organizational Profile	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	51
2.4	Organizational Profile	Location of organization's headquarters.	50
2.5	Organizational Profile	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.	49
2.6	Organizational Profile	Nature of ownership and legal form.	49
2.7	Organizational Profile	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	49
2.8	Organizational Profile	Scale of the reporting organization.	49; 50
2.9	Organizational Profile	Significant changes during the reporting period regarding size, structure, or ownership.	50
2.10	Organizational Profile	Awards received in the reporting period.	37
3.1	Report Parameters	Reporting period.	21
3.2	Report Parameters	Date of most recent previous report.	21
3.3	Report Parameters	Reporting cycle.	21
3.4	Report Parameters	Contact point for questions regarding the report contents .	203
3.5	Report Parameters	Process for defining report content.	22
3.6	Report Parameters	Boundary of the report.	21
3.7	Report Parameters	Statement on any specific limitations on the scope or boundary of the report.	21
3.8	Report Parameters	Basis for the preparation of the	21
3.9	Report Parameters	Data measurement techniques and the bases of calculations.	21
3.10	Report Parameters	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement.	21
3.11	Report Parameters	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	21
3.12	Report Parameters	Table identifying the location of the Standard Disclosures in the report.	187

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Indicator	Indicator	Description	Page
3.13	Report Parameters	Policy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scope and basis of any external assurance provided. Also explain the relationship between the reporting organization and the assurance provider.	197
4.1	Governance, Commitments, and Engagement	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight. Describe the mandate and composition (including number of independent members and/or nonexecutive members) of such committees and indicate any direct responsibility for economic, social, and environmental performance.	85; 86; 87
4.2	Governance, Commitments, and Engagement	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).	86
4.3	Governance, Commitments, and Engagement	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. State how the organization defines 'independent' and 'non-executive'. This element applies only for organizations that have unitary board structures. (See the glossary for a definition of 'independent').	86; 87
4.4	Governance, Commitments, and Engagement	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	89
4.5	Governance, Commitments, and Engagement	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).	86; 89
4.6	Governance, Commitments, and Engagement	Processes in place for the highest governance body to ensure conflicts of interest are avoided	86; 89
4.7	Governance, Commitments, and Engagement	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.	85; 86
4.8	Governance, Commitments, and Engagement	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	9; 89
4.9	Governance, Commitments, and Engagement	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.	86; 88
4.10	Governance, Commitments, and Engagement	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	85; 88
4.11	Governance, Commitments, and Engagement	Explanation of whether and how the precautionary approach or principle is addressed by the organization	91

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Indicator	Indicator	Description	Page
4.12	Commitment to external initiatives	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	33; 115; 141
4.13	Commitment to external initiatives	Memberships in associations (such as industry associations) and/or national/international advocacy organizations.	141
4.14	Stakeholder Engagement	List of stakeholder groups engaged by the organization.	91
4.15	Stakeholder Engagement	Basis for identification and selection of stakeholders with whom to engage. This includes the organization's process for defining its stakeholder groups, and for determining the groups with which to engage and not to engage.	91
4.16	Stakeholder Engagement	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	137
4.17	Stakeholder Engagement	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns.	93
EC1	Economic Performance	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.	106
EC5	Economic Performance	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	120
EC6	Economic Performance	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	144
EC7	Economic Performance	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	117
EN3	Environmental Performance	Direct energy consumption by primary energy source.	159
EN4	Environmental Performance	Indirect energy consumption by primary source.	160
EN5	Environmental Performance	Energy saved due to conservation and efficiency improvements.	160; 178; 181
EN6	Environmental Performance	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	178
EN7	Environmental Performance	Initiatives to reduce indirect energy consumption and reductions achieved.	80; 160
EN8	Environmental Performance	Total water withdrawal by source.	156
EN12	Environmental Performance	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	166
EN13	Environmental Performance	Habitats protected or restored.	167; 169
EN14	Environmental Performance	Strategies, current actions, and future plans for managing impacts on biodiversity.	166; 167
EN15	Environmental Performance	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	166





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Indicator	Indicator	Description	Page
EN16	Environmental Performance	Total direct and indirect greenhouse gas emissions by weight	171
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EN18	Environmental Performance	Initiatives to reduce greenhouse gas emissions and reductions achieved.	176
EN20	Environmental Performance	NOx, SOx and other significant air emissions by type and weight.	175
EN21	Environmental Performance	Total water discharge by quality and destination.	157
EN22	Environmental Performance	Total weight of waste by type and disposal method.	161
EN23	Environmental Performance	Total number and volume of significant spills.	164
EN24	Environmental Performance	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.	163
EN26	Environmental Performance	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	166
EN28	Environmental Performance	<p>Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.</p> <p>In 2012, the Brazilian Institute of the Environment and Renewable Natural Resources – IBAMA drew up Notice of Infraction No. 685551-D, in the amount of R\$ 3,500,000.00 (three million five hundred thousand reais) for Eletrobras Eletronuclear alleged failure to meet the conditions set forth in the Preliminary License 279/2008 and of the Installation License 591/2009. The company has presented defense and awaits decision</p>	
EN30	Environmental Performance	Total environmental protection expenditures and investments by type.	176
LA1	Labor Practices and Decent Work	Total workforce by employment type, employment contract, and region.	115
LA2	Labor Practices and Decent Work	Total number and rate of employee turnover by age group, gender, and region.	130
LA4	Labor Practices and Decent Work	Percentage of employees covered by collective bargaining agreements.	125
LA6	Labor Practices and Decent Work	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.	125
LA7	Labor Practices and Decent Work	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	122; 125
LA8	Labor Practices and Decent Work	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	126
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LA10	Labor Practices and Decent Work	Average hours of training per year per employee by employee category.	121

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Indicator	Indicator	Description	Page
LA12	Labor Practices and Decent Work	Percentage of employees receiving regular performance and career development reviews.	119; 120
LA13	Labor Practices and Decent Work	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	115; 118
LA14	Labor Practices and Decent Work	Ratio of basic salary of men to women by employee category.	121
LA15	Labor Practices and Decent Work	Return to work and retention rates, by gender.	129
HR1	Human Rights	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	144
HR2	Human Rights	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	144
HR3	Human Rights	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.	90; 128
HR4	Human Rights	Total number of incidents of discrimination and actions taken.	90
HR5	Human Rights	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.	145
HR6	Human Rights	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	145
HR7	Human Rights	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	145
HR8	Human Rights	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	144
HR9	Human Rights	Total number of incidents of violations involving rights of Indigenous people and actions taken.	138
HR10	Human Rights	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	49; 50; 128; 144
HR11	Human Rights	Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms.	128
SO1	Society	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	89; 91; 122; 137
SO4	Society	Actions taken in response to incidents of corruption.	90
SO5	Society	Public policy positions and participation in public policy development and lobbying.	141
SO6	Society	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	143

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Indicator	Indicator	Description	Page
SO7	Society	Total number of legal actions for unfair competition, anti-trust, and monopoly practices and their outcomes.  Regarding legal action for unfair competition, anti-trust and monopoly practices, the company ED Acre obtained a legal action, which was suspended. The companies ED Piauí, ED Rondônia , Eletrobras Amazonas Energia, Eletrobras Cepel, Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletrosul, holding and Eletrobras Furnas did not report any legal action.	
SO8	Society	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.  Regarding fines and non-monetary sanctions in 2012, only ED Rondônia recorded seven non-monetary civil sanctions arising from non-compliance with laws and regulations, and one labor sanction. The company also recorded a total of significant fines of R\$ 7,703,528, of which R\$ 7,652,500.00 refer to civil suits, and R\$ 51,027.75 refer to labor / social security suits.	
SO9	Society	Operations with significant potential or actual negative impacts on local communities.	137
SO10	Society	Prevention and mitigation measures implemented in operations with potential or actual negative impacts on local communities.	137
PR3	Product Responsibility	Type of product and service information required by procedures and labeling, and percentage of products and services subject to such requirements.	146
PR5	Product Responsibility	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	147
PR6	Product Responsibility	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	151
PR7	Product Responsibility	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	151
PR9	Product Responsibility	Monetary value of (significant) fines for noncompliance with laws and regulations concerning the provision and use of products and services.	151
EU1	Electric Utilities	Installed capacity, broken down by primary energy source and by regulatory regime.	55
EU2	Electric Utilities	Net energy output broken down by primary energy source and by regulatory regime.	58
EU3	Electric Utilities	Number of residential, industrial, institutional and commercial customer accounts.	66
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EU7	Electric Utilities	Demand-side management programs (DSM) including residential, commercial, institutional and industrial programs.	78; 79; 80; 160; 178
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EU20	Electric Utilities	Approach to managing the impacts of displacement.	139
EU21	Electric Utilities	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/ restoration plans.	146
EU22	Electric Utilities	Number of people physically or economically displaced and compensation, by type of project.	139
EU23	Electric Utilities	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services .	75; 100
EU25	Electric Utilities	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.	146
EU28	Electric Utilities	Power outage frequency.	70
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EU30	Setorial – Elétrico	Fator de disponibilidade média por fonte de energia e regime regulatório.	44



*Orquidea*  
*Catasetum macrocarpum*



# Limited Assurance Report and Statement GRI Application Level Check



## Limited Assurance Report [GRI 3.13] and Statement GRI Application Level Check



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### LIMITED ASSURANCE REPORT ISSUED BY INDEPENDENT AUDITORS

To the Directors and Officers of  
Centrais Elétricas Brasileiras S.A. - Eletrobras  
Rio de Janeiro - RJ

#### Introduction

We have been engaged by Centrais Elétricas Brasileiras S.A. – Eletrobras (“Companhia” ou “Eletrobras”) to present our limited assurance report on the compilation of the information disclosed on the Annual and Sustainability Report 2012 of Centrais Elétricas Brasileiras S.A. – Eletrobras, related to the year ended December 31<sup>st</sup>, 2012,.

#### Responsibilities of Company Management

The management of Eletrobras is responsible for preparing and adequately presenting the information in the Annual and Sustainability Report 2012 in accordance with the *Guidelines for Sustainability Reports of the Global Reporting Initiative – GRI (GRI-G3.1)* and with the *Sector Supplement “Mining & Metals Sector Supplement RG Version 3.0/MMSS Final Version”* and by the internal controls determined as necessary to ensure this information is free from material misstatement, even though it was resulted by fraud or error.

#### Independent auditors’ responsibility

Our responsibility is to express a conclusion about the information in Annual and Sustainability Report 2012 based on the limited assurance engagement conducted in accordance with Technical Notice (CT) 07/2012 approved by the Federal Accounting Council and prepared in accordance with NBC TO 3000 (Assurance Engagements Other Than Audits and Reviews), issued by the Federal Accounting Council - CFC, which is the equivalent to international standard ISAE 3000 issued by the International Federation of Accountants applicable to Non-Historical Information. These standards require compliance with ethical requirements, including independence ones and also that the engagement is conducted in order to provide a limited assurance that the information in Annual and Sustainability Report 2012 taken as a whole is free from material misstatement.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) consists mainly of questioning to the management of Eletrobras and other professionals of the Company involved in the preparation of the information disclosed in the Annual and Sustainability Report 2012 and also applying analytical procedures to obtain evidence that allows us to make a limited assurance conclusion about the information taken as a whole. A limited assurance engagement also requires additional procedures when the independent auditor learns of issues which lead them to believe that the information in the Annual and Sustainability Report 2012 taken as a whole could present material misstatement.



## Limited Assurance Report [GRI 3.13] and Statement GRI Application Level Check



The selected procedures were based on our understanding of the issues related to the compilation and presentation of the information in the Annual and Sustainability Report 2012 and other engagement circumstances and considerations about areas where material misstatement could exist. The procedures consisted of:

- (a) the planning of the work, considering the relevance, amount of quantitative and qualitative information and the operational systems and internal controls that served as a basis for preparation of the information in the Annual and Sustainability Report 2012 of Eletrobrás.
- (b) the understanding of the calculation methodology and the consolidation procedures used to of the indicators through interviews with the personnel in charge of the preparation of the information
- (c) the application of analytical procedures to the quantitative information and enquiries about the qualitative information and its relation to the indicators disclosed in the information presented in the Annual and Sustainability Report 2012, and
- (d) the comparison of the financial indicators with the financial statements and/or accounting records.

The limited assurance engagement also consists of complying with the guidelines and criteria for structuring the preparation that applies to the preparation of the information in Annual and Sustainability Report 2012.

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

### **Scope and limitations**

The procedures applied in a limited assurance engagement are substantially less extensive than those applied in an assurance engagement aiming to express an opinion about the information in the Annual and Sustainability Report 2012. Due to this, it does not ensure us that we are aware of all the issues that would be identified during an assurance engagement which aim to express an opinion. If we had conducted an engagement in order to express an opinion, we may have identified other issues and possible misstatements which can be in the information presented in the Annual and Sustainability Report 2012. Therefore, we are not expressing an opinion about this information.

The nonfinancial data is subject to more inherent limitations than the financial data, due to the nature and diversity of the methods used to determine, calculate or estimate this data. Qualitative interpretations of the data's materiality and accuracy are subjected to individual presumptions and judgments. Additionally, we did not examine data informed for prior periods or future projections and targets either.

Limited Assurance Report [GRI 3.13] and Statement GRI Application Level Check



**Conclusion**

Based on the applied procedures, described in this report, we have not identified any relevant information that leads us to believe that the information in the Annual and Sustainability Report 2012, was not compiled, in all material respects, in accordance with the *Guidelines for Sustainability Reports of the Global Reporting Initiative – GRI (GRI-G3.1)* and with the Sector Supplement “Mining & Metals Sector Supplement– RG Version 3.0/MMSS Final Version and with the records and files that subsidized its elaboration.

São Paulo, June 3<sup>rd</sup>, 2013.



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

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



## Statement GRI Application Level Check

GRI hereby states that **Centrais Elétricas Brasileiras S.A. - Eletrobras** has presented its report “2012 Annual and Sustainability Report of the Eletrobras Companies” to GRI’s Report Services which have concluded that the report fulfills the requirement of Application Level B+.

GRI Application Levels communicate the extent to which the content of the G3.1 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 G3.1 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

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

Amsterdam, 27 June 2013



Nelmara Arbex  
Deputy Chief Executive  
Global Reporting Initiative



The “+” has been added to this Application Level because Centrais Elétricas Brasileiras S.A. - Eletrobras has submitted (part of) 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](http://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 2013. GRI explicitly excludes the statement being applied to any later changes to such material.



*Arvore de Amêijoaba*  
*Carapa guaianensis*

# Credits / Contact information

The production of this Annual and Sustainability Report is the result of the joint effort of the Eletrobras team. We wish to thank for the participation and commitment of all.

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*Victoria Regia*  
Victoria Amazonica

# Glossary



## Glossary

Abdib	Brazilian Association of Infrastructure and Heavy Industry
Abdan	Brazilian Association for the Development of Nuclear Activities
ABEN	Brazilian Association of Nuclear Energy
Abendi	Brazilian Association of Nondestructive Tests and Inspections
Aberje	Brazilian Association of Corporate Communications
Abinee	Brazilian Association of the Electric and Electronic Industries
Abipti	Brazilian Association of Technological Research Institutions
ABNT	Brazilian Association of Technical Standards
ABNT/COBE	Brazilian Electricity Committee
Abraceel	Brazilian Association of Energy Trading Agents
Abraconee	Brazilian Association of Accountants of the Electric Energy Sector
Abradee	Brazilian Association of Electricity Distribution Companies
Abrage	Brazilian Association of Electricity Generating Companies
Abraget	Brazilian Association of Thermoelectric Generating Companies
Abrasca	Brazilian Association of Corporations
Abrate	Brazilian Association of Large Energy Transmission Companies
Abrinq	Brazilian Association of Toy Manufacturers
ABTD	Brazilian Association of Training and Development
ACRJ	Rio De Janeiro Trade Association
ACT	Collective Bargaining Agreement
ADR	American Depositary Receipts
AHE	Hydroelectric Potential
AIE	International Energy Agency
AIEA	International Nuclear Energy Agency
Amcham	American Chamber of Commerce
Ancat	National Association of Pickers of Recyclable Material
Aneel	National Electric Energy Agency
Anpei	National Institute of Research and Development of Innovative Companies
ANS	American Nuclear Society/Latin American Section
Aptel	Association of Companies Owners of Infrastructure and Private Telecommunication Systems
Bracier	Regional Electrical Integration Committee
BRIC'S	Brazil, Russia, India and China
CA	Board of Directors (BD)
Cadin	Registry of information on non-settled credits in the federal public sector
CBB	Brazilian Basketball Confederation
CBDB	Brazilian Committee on Dams
CBPG	Brazilian Committee of the Global Compact
CCC	Clean Coal Center
CCEE	Electricity Trading Chamber

Glossary

CCP	Community Production Centers
CDE	Energy Development Account
Cebds	Brazilian Corporate Council for Sustainable Development
Cebri	Brazilian Center on International Relations
CENP	Executive Council for Norms-Standards
CEO	Chief Executive Officer
CEP	Public Ethics Committee
Cepel	Electric Energy Research Center
Cerhi-RJ	Rio de Janeiro State Water Resource Council
CF	Audit Committee (AC)
CFO	Chief Financial Officer
CGTEE	Thermoelectric Power Generation Company
CIC	Center for Innovation and Competitiveness
CIC	Intergovernmental Committee Coordinating the Lower Basin of the Plata River
Cicef	Celso Furtado International Center for Development Policies
Cieese	Integrated Committee on Energy Efficiency in the Eletrobras System
CIER	Regional Energy Integration Committee
Cigre	Brazilian Committee for the Production and Transmission of Energy
Ciisc	Interministerial Committee for the Inclusion of Pickers of Recyclable and Reusable Materials
CIPA	Internal Accident Prevention Committee
Cites	Convention on International Trade in Endangered Species of Wild Fauna
CMA	World Water Council
CMDE	Agreement on Corporate Performance Goals
CME	Brazilian Committee of the World Energy Council
Comparni	Advisory Council for the Iguaçú National Park
CNEN	National Nuclear Energy Committee
CONAR	National Council for Self-Regulation in Advertising
COEP	Committee of Entities against Hunger and for Life
Conpet	National Program for the Rational Use of Oil Derivatives and Natural Gas
Consise	Superior Council of the Eletrobras System
Copron	Protection Committee of the Brazilian Nuclear Program
CPORG-PR	Organic Production Committee in the State of Paraná
CPS	Health Promotion Center
CTTP	Permanent Committee of Labor Claims
CVM	Brazil's Securities and Exchange Commission
DDS	Daily Dialogue on Safety
DEC	Duration Equivalent of the Interruption by Consumer Unit
DROE	Western Regional Maintenance Division
DVA	Value Added Statement

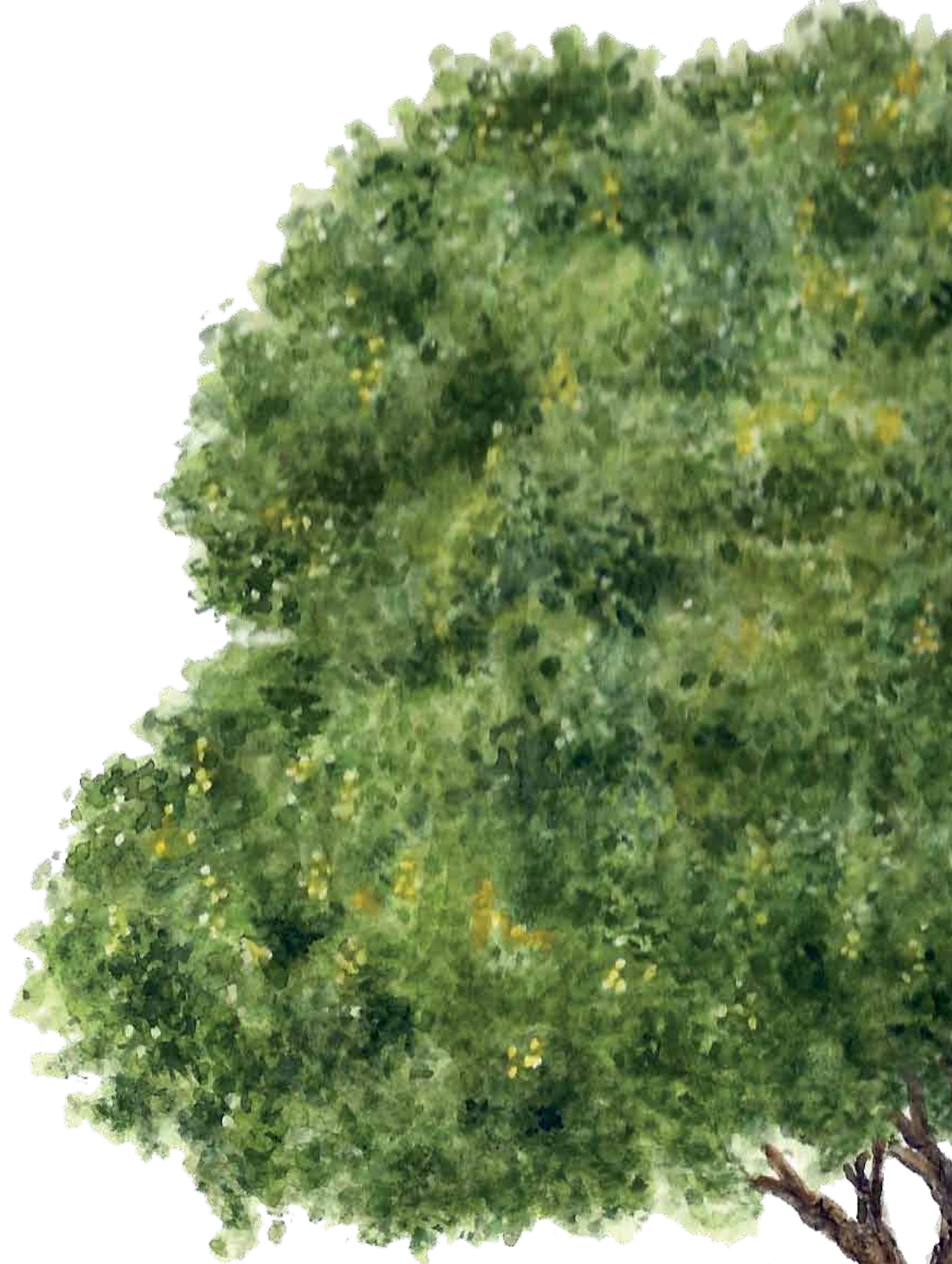
Ebitda	Earnings Before Interest, Taxes, Depreciation and Amortization
ED	Distribution Company
EIA	Environmental Impact Study
EPC	Collective Protection Equipment
EPE	Energy Research Company
EPI	Personal Protection Equipment
ETE	Wastewater Treatment Station
FEAM	Eletrobras Eletronuclear Medical Assistance Foundation
FEC	Frequency Equivalent of Interruption by Consumer Unit
Fmase	Environmental Forum for the Brazilian Electrical Sector
Fepam	State Foundation of Environmental Protection
FRE	Renewable Energy Sources
Funai	National Indigenous Foundation
Funcoge	Corporate Management Committee Foundation
FNQ	National Quality Foundation
FURG	Rio Grande Federal University
GC	Knowledge Management Plan
GEE	Greenhouse Gases
GEM	Municipal Energy Management
GHG	Greenhouse Gas Protocol
GJ	Gigajoules
GRI	Global Reporting Initiative
GTD	Generation/Transmission and Distribution
GTON	Operational Technical Group of the Northern Region
GWH	Gigawatt Hour
IASC	Aneel Consumer Satisfaction Index
Ideal	Institute for the Development of Alternative Energy in Latin America
IEA	International Energy Agency
Ieahydro	International Energy Agency Implementing Agreement for Hydropower Technologies and Programmes
IGS	System of Indicators for Corporate Sustainability Management
IHA	International Hydropower Association
IICA	Inter-American Institute for Cooperation in Agriculture
INAD	Delinquency Rate
INI	National Investors Institute
Inovar-AUTO	Program to Promote Technological Innovation and Strengthening of the Production Chain in Automotive Vehicles
INSS	National Social Security Institute
IPCC	Intergovernmental Panel on Climate Change
IQM	Quality Institute for the State of Minas Gerais

## Glossary

IUCN	International Union for Conservation of Nature
Labuat	Ultra High Tension Laboratory
LAI	Law of Accessibility to Information
LAS	Section of the Latin American Nuclear Society
LI	Installation License
LT	Transmission Line
LO	Operating License
MBC	Competitive Brazil Movement
MCE	Excellence Program for the State of Santa Catarina
MCTI	Ministry of Science, Technology and Information
MME	Ministry of Mines and Energy
MP	Provisional Measure
MVA	Megavolt ampère (apparent power)
Mvar	Megavolt Ampère(reactive power)
MW	Megawatts
MWh	Megawatts Hour
NOx	Nitrous Oxide
NYSE	New York Stock Exchange
OCDE	Organization for Cooperation and Economic Development
OIT	International Labor Organization
ONS	National Operator of the Electric System
ONU	United Nations
Onudi	United Nations Organization for Industrial Development
P&D+I	Research, Development and Innovation
PAE	Emergency Action Plan
PBA	Basic Environmental Plan
PCH	Small Hydroelectric Power Plant
Pcmso	Occupational Health and Medicine Control Program
PCR	Career and Remuneration Plan
PDE	Decennial Plan for the Expansion of Energy
PDI	Individual Development Plan
PDST	Sustainable Development Plan for the Micro Regions Surrounding the Tucuruí Hydroelectric Plant
PDTI	Technological and Industrial Development Program
PID	Termination Incentive Program
Pirtuc	Regional Insertion Plan for the Tucuruí Hydroelectric Plant
Plamgens	Municipal Plan for Management of Energy
PMO	Monthly Operating Plan
PMS	Personnel, Materials and Services
PPA	Retirement Preparation Plan

PPDV	Standing Program for Voluntary Termination
PRME	Principles of Responsible Corporate Education
Procel	National Electricity Conservation Program
Proinfa	Program to Promote Alternative Sources of Energy
RBV	Bela Vista Wildlife Sanctuary
Redetec	Rio de Janeiro Technology and Innovation Network
Rempan	Radiation Emergency Medical Preparedness and Assistance Network
RGR	Global Reversal Reserve
RIMA	Environmental Impact Assessment
ROL	Net Operating Income
SAP	Systems, Applications and Products in Data Processing
SCMA	Environmental Committee
Seaprof	State Department for Agricultural-Forestry Extension and Family Production
SEC	Securities and Exchange Commission
Secom - PR	President's Social Communication Department
Senai	National Industrial Learning Service
Sengisul	Electricians Union in Rio Grande do Sul
Senge	Engineering Union in Rio Grande do Sul
SESI	Social Services for the Industry
Sesmt	Specialized Services in Occupational Health and Safety Engineering
SGD	Performance Management System
SIC	Citizen Information Services
Sigecors	Industrial Solid Waste Control and Management System
SIN	National Interconnected System
Smcno	New Fields Maintenance Sector
SOx	Sulfurous Oxide
SPE	Specific Purpose Enterprise
SPM/PR	President's Department on Policy for Women
TI	Information Technology
UC	Consumer Units
UHE	Hydroelectric Plants
Unifem	Women's United Nations Fund
Unise	Eletrobras Companies University
US GAAP	United States - Generally Accepted Accounting Principles
UTC	Camaçari Thermoelectric Plant
UTE	Thermoelectric Plant
WANO	World Association of Nuclear Operators
WNA	World Nuclear Association





*Pau Brasil*  
*Caesalpinia echinata*