



# Vision [GRI 4.8]

To be the largest global clean energy conglomerate by 2020 with profitability comparable to the best businesses in the energy industry.

# Mission

Work in the energy markets in an integrated, profitable and sustainable way.

# **Values**

The values that guide practices and behavior in the Eletrobras System and its members, representing its fundamental and permanent doctrines are:

- Focus on results
- Entrepreneurship and innovation
- Appreciation of and commitment to people
- Ethics and transparency

# Message from the Presidents [GRI 1.1 e 1.2]

There are several reasons for saying that a business is great. Its productive capacity, the number of jobs it generates, its market share and the role it plays in society are some examples. These days, sustainability represents an increasingly important factor in this equation. Hands in the present, eyes on the future.

The Eletrobras that I took over last February is without a doubt a great Brazilian company: for its importance in the country's history, for its social significance and commitment and for being Latin America's largest energy holding.

There are several aspects of its greatness, however, that can only be seen in details. This is why I am proud to present this report. In it is the portrait of a company that each and every Brazilian can be proud of.

The programs, projects, actions and entrepreneurship that appear in the following pages show a company committed to sustainability, wich has been a signatory to the UN Global Compact since 2006, and represents, for me, a roadmap towards our future. They also represent the certainty that we have a team of very good professionals up to the challenges we face.

For us to be the largest global clean energy conglomerate system in 2020, we will have to be a great business in every possible sense. Therefore, it is encouraging to look at everything that our 27 thousand employees have built so date.

.José da Costa Carvalho Neto

President of Eletrobras since February 2011

The numbers presented in this report portray an Eletrobras in transformation. In 2010 the transformative process was deepened, consolidated and expanded, making the Eletrobras companies into a stronger, more solid and more integrated group. As the president of the holding over these years, I was able to lead a team of professionals that have reinvented themselves to together reinvent work processes, practices and, finally, the group's market positioning.

Changing is not a simple task. It is even harder when the novelty has worn off to submit ideas to the hard test of day-to-day activity. Therefore, 2010 was an extremely meaningful year. Eletrobras' new brand was welcomed with celebration, but it also overcame the challenge of being, in record time, on more than 27 thousand employees badges. It was celebrated in colors, but mostly in principles and ideals.

Today, Eletrobras companies work together throughout Brazil, with the same face, the same objectives and an ambitious goal: to be the largest global clean energy conglomerate by 2020. In the colors of the new brand are reflected not only the ideals that guide this goal, but also the new times – it is now time to think of economy, energy efficiency and responsible use of natural resources.

We have in this document impressive numbers – for the size of our businesses and the size of the country we are committed to supplying energy to. But what shows us that we are on the right track is seeing that these numbers correlate to very consistent sustainability practices. To generate, transmit and distribute electric energy sustainably is our commitment to Brazil. Our pride lies in being able to show it to the world.

#### José Antonio Muniz

President of Eletrobras from 2008 to 2011

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WITH FOCUS ON SUSTAINABILITY, ELETROBRAS COMPANIES INVEST NOT ONLY IN GENERATION, TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, BUT ALSO GROWTH AND DEVELOPMENT THROUGHOUT BRAZIL.

Integrated into every region and every corner of the country with respect for the environment, they build the future based on economic, social and environmental criteria. This chapter presents the main indicators in these three areas.



# 1. Main Indicators

### 1.1. Economic

### Distribution of added value (R\$ thousands)

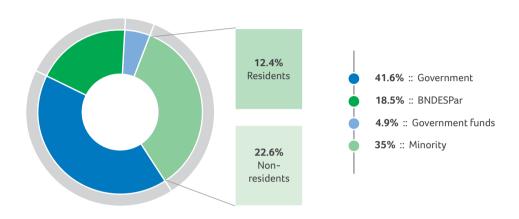
	2010	2009	
	15,939,587	15,440,138	
PERSONNEL			
Personnel, taxes, and fees	4,877,556	4,251,184	
Employees profit sharing	296,270	284,534	
Retirement and pension plan	-32,309	214,682	
TOTAL PERSONNEL	5,141,517	4,750,400	
TAXES			
Taxes, fees and contributions	4,245,666	1,742,321	
TOTAL TAXES	4,245,666	1,742,321	
THIRD PARTIES			
Financial charges and rents	3,738,414	7,459,299	
Donations and contributions	261,006	237,978	
TOTAL THIRD PARTIES	3,999,420	7,697,277	
SHAREHOLDERS			
Dividends and interest on equity	370,755	370,755	
Minority shareholders participation	305,072	338,673	
Retained earnings/ profits	1,877,158	540,712	
TOTAL SHAREHOLDERS	2,552,985	1,250,140	

### Shareholding structure \*

<u> </u>				
SHAREHOLDER	Common shares (%)	Preferred shares (%)	Total (%)	
Government	52	0.01	41.6	
Brazilian Development Bank Holdings (BNDESPAR)	21.1	8.2	18.5	
Government funds	5.2	4.3	4.9	
Resident minority	6.9	37.8	12.4	
Non-resident minority	14.8	49.7	22.6	

<sup>\*</sup> Position on 12/31/2010: R\$ 26 billion.

#### SHAREHOLDING STRUCTURE OF COMMON SHARES \*



<sup>\*</sup> Position as of 12/31/2010: R\$ 26 billion.

### Consolidated economic indicators

	2010 (R\$ million)	2009 (R\$ million)	Variation (%)	
Net Operating Income (NOI)	27,419	24,712	11.0	
Personnel, material and services	7,371	6,486	13.6	
Other costs	14,045	12,550	11.9	
Earnings before interest, taxes, depreciation and amortization (EBITDA)	6,003	5,676	5.8	
Net debt	8,985	5,556	61.7	
Shareholders' equity (SE)	70,530	69,346	1.7	
Investments made	6,965	5,190	34.2	
Investments planned	10,233	8,359	22.4	
Net profit	2,248	911	146.8	
Net profit /SE	3.2%	1.3%	1.9 pp	
Personnel, materials, third party services and other expenses (PMSO)/NOI	26.9%	26.2%	0.7 pp	
Net debt /EBITDA	1,5	0,9	0.6	
Investments made/Investments planned	68.1%	62.1%	6.0 pp	

# 1.2. Social

### Total employees, per region [GRI LA1]

REGION	NUMBER OF EMPLOYEES	
Northeast	3,627	
Southeast	9,037	
North	3,717	
South	3,850	
Midwest	8,199	
TOTAL	28,450	

# Employee turnover by gender\* [GRI LA2]

Ī	SEX	TURNOVER	
	Female	0.68%	
	Male	1.91%	
	TOTAL	2.59%	

 $<sup>^{\</sup>star}$  To calculate the turnover rate the number of disconnections in the period / number of own employees was considered.

# Social investment [GRI SO1]

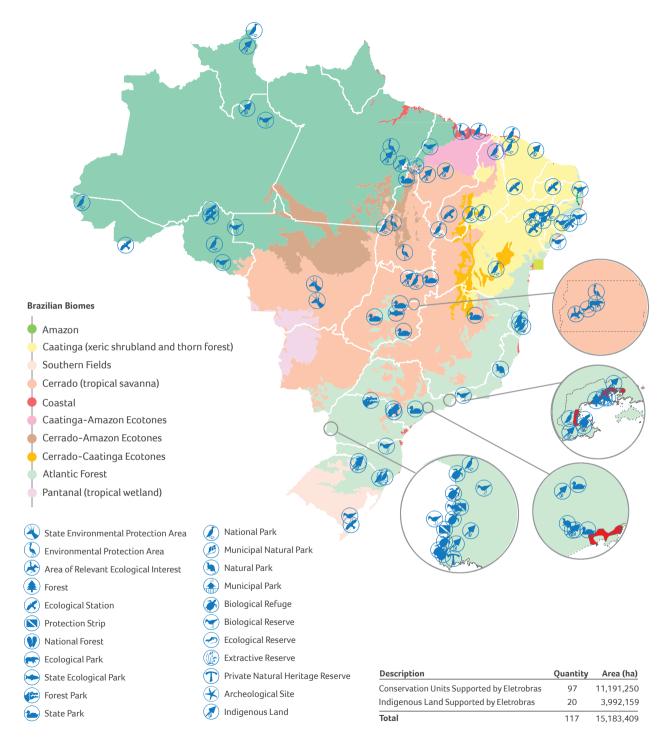
SOURCE	AMOUNT (R\$)	
Total local development / creation of jobs and income	R\$ 39,732,972.67	
Total energy efficiency program - aimed at low-income groups	R\$ 2,263,333.00	
Total education	R\$ 18,313,638.77	
Fund for Children and Adolescents (FIA) and Councils of Children's and Adolescents' Rights (municipal, state and federal)	R\$ 573,885.28	
TOTAL	R\$ 60.883.829.72	



### 1.3. Environmental



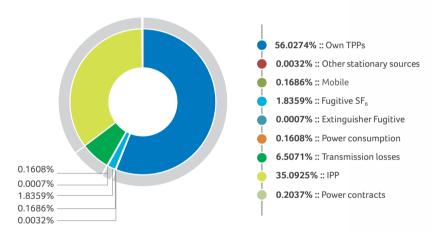
### PROTECTED AREAS SUPPORTED BY ELETROBRAS COMPANIES [GRI EN13]



### Greenhouse gas (GHG) emissions (tCO2e), by source [GRI EN16 and EN17]

	GHG PROTOCOL SCOPE	SOURCE	EMISSIONS	
		Own thermoelectric plants	4,883,604	
		Other stationary sources	280	
	1	Mobile	14,699	
		Fugitive (SF6)	160,025	
		Fugitive (extinguisher)	63	
	2 —	Power consumption	14,019	
		Losses in transmission	567,187	
	3	Independent Power Producer (IPP)	3,058,828	
	OTHER	Power contracts	17,758	
	TOTAL		8,716,463	

# GHG EMISSIONS (tCO<sub>2</sub>e), BY SOURCE [GRI EN16 AND EN17]

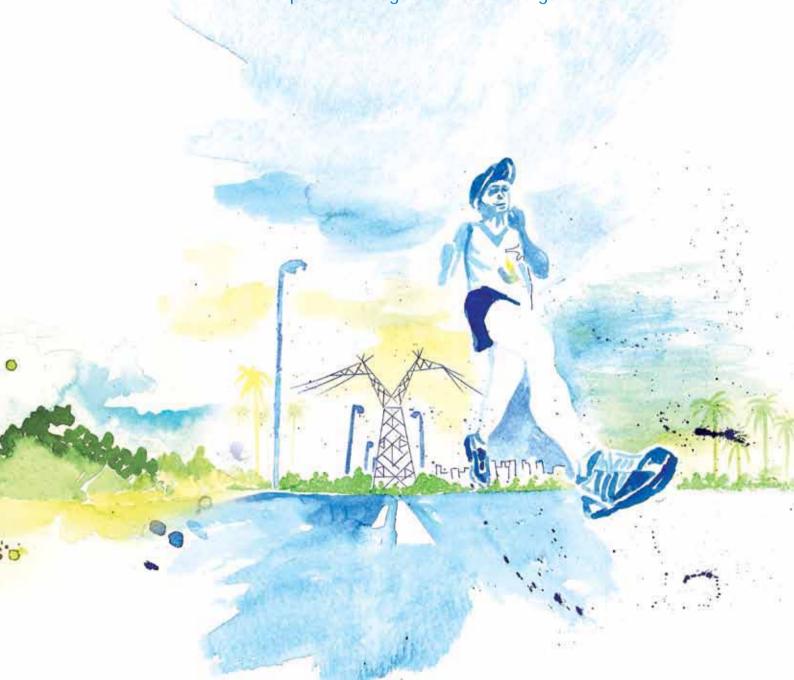






BUILDING THE LARGEST GLOBAL CLEAN ENERGY CONGLOMERATE IS A MAJOR CHALLENGE. EACH DAY ELETROBRAS COMPANIES TAKE NEW STEPS TOWARD THIS OBJECTIVE.

This chapter highlights some of these steps in relation to the improvement of corporate governance, reorientation of distribution businesses, institutional reformulation and corporate management model reorganization.



# 2. Main events of the year

### 2.1 Improvement of corporate governance

#### e8

Eletrobras established an association with e8, a group of the largest power companies in the world that serves as a discussion forum of practices, partnership actions and global projects in power area.

#### São Paulo Stock Exchange (BM&FBOVESPA) Corporate Sustainability Index (ISE)

For the fourth year in a row (2007, 2008, 2009, 2010), Eletrobras was included on the BM&FBOVESPA's ISE.

#### Carbon Efficiency Index (ICO2)

Eletrobras was included on the ICO2, developed by BM&FBOVESPA and the National Economic and Social Development Bank to measure the return of the theoretical portfolio composed of the 50 most traded stocks on the BM&FBOVESPA, weighted by the companies' levels of emission efficiency.

#### Sustainability Committee

The Eletrobras Sustainability Committee was overhauled to become the Eletrobras System Sustainability Committee, incorporating the respective companies' representative coordinators, in addition to the creation of specific project management for each operating area of the holding.

#### Tucuruí Pact

A letter of intent was signed by the presidents of the Eletrobras companies in a meeting in Tucuruí in September of 2009, committing to the adoption and improvement of good corporate sustainability management practices. The deadline for meeting the targets established in the covenant was March 2010. About 30% of the targets were reached in 2010.

#### **Furnas Pact**

Confirming its commitment to sustainable development, in a meeting at Furnas in August 2010 the presidents of Eletrobras companies established the Furnas pact with a deadline of June 2011. Besides the unmet goals of Tucuruí Pact, it included new goals based on gaps established in the par-

ticipation processes of BM&FBOVESPA's ISE and New York Stock Exchange's Dow Jones Sustainability World (DJSI).

# Board of Directors and Executive Board Performance Evaluation

Resolution No. 3 of the Government Inter-ministry Corporate Governance and Shareholding Commission (CGPAR) establishes that state-owned enterprises should adopt formal performance evaluations of executives and members of Boards of Directors.

# 2.2 Reorientation of distribution businesses

### Operating and Financial Performance Improvement Project

In 2010, the World Bank approved a loan of US\$495 million for the Operating and Financial Performance Improvement Project, which aims to improve the supply quality, reduce electricity losses and increase companies' sustainability through more efficient fee policies in distribution and retail.

### 2.3 Institutional reformulation

#### Law no. 12,353

Law no. 12,353 of December 29, 2010 requires that the bylaws of state-owned and government-linked companies provide for the participation of employee representatives on their Boards of Directors, reserving for the government the right to elect a majority of their members. Representatives must be elected directly, in accordance with applicable law.

#### Law no. 12,375

Law no. 12,375 of December 30, 2010 abolishes the requirement of an executive decree for amendment to Eletrobras' bylaws. Only the approval of an Extraordinary General Meeting is now required for these amendments

#### Law no. 12.377

Law no. 12,377 of December 30, 2010 withdrew Eletrobras from the primary surplus calculation, a situation that hindered the company's investment expansion. The move opens the way for Eletrobras to leverage its businesses.

# 2.4 Enterprise management model reorganization

#### Strategic Plan

The first Eletrobras System Integrated Strategic Plan defined corporate strategies for the period from 2010-2020, based on a study of various scenarios, unifying the mission, vision and values of System companies.

#### New brand

The strategy of creating a new Eletrobras System brand was in line with the 2010-2020 Strategic Plan, which emphasizes System integration.

#### Corporate policies [GRI 4.8]

Continuing the standardization of policies of all Eletrobras companies, the Information Technology, Telecommunications and Automation, Sponsorships, Sustainability, Energy Efficiency, Personnel Management, Environment and Water Resources policies were disclosed.

#### Code of Ethics [GRI 4.8]

The Unified Code of Ethics for Eletrobras Companies is the result of the team effort of all group companies, drawing on the new ideals expressed in the mission, vision, and values established by the 2010-2020 Strategic Plan.

#### Internal risk control

The improvement of the internal control environment ensured the effectiveness of the risk management process, based on the Committee of Sponsoring Organizations Enterprise Risk Management (COSO-ERM) and International Organization for Standartization (ISO) 31000 models. The initiative has also enabled compliance with the Sarbanes-Oxley Law and supports the maintenance of the company's American Depositary Receipt (ADR) rating.

#### Subsidiary capitalization

The holding capitalized its subsidiaries with R\$ 11.7 billion, converting debt into equity to improve the





tax efficiency of the Eletrobras System. To realize this operation, the companies pledged to meet performance targets and to distribute 100% of dividends to the holding company.

#### Corporate Performance and Goals Contract

The Corporate Performance and Goals Contract established, among other obligations, the fulfillment of annual targets for the period from 2010 to 2014 for the Eletrobras company, aiming to improve the operating efficiency and business performance of the Eletrobras System.

#### Climate Survey\*

The first Eletrobras System Unified Climate Survey recorded 68.93% favorability. Based on this study, the company will elaborate action plans for improving the organizational climate.

#### Career and Compensation Program\*

The Career and Compensation Program has unified career, position and compensation policies and guidelines for the Eletrobras System, in addition to establishing the general responsibilities for the job categories and managerial and advisory functions.

#### Performance Management System (SGD)

In 2010, SGD started as a pilot project at the holding company. 2011 marks the beginning of the First Eletrobras Unified SGD Cycle. Thus, the planning, monitoring, evaluation and development stages will be carried out in a unified manner across the System companies.

#### Eletrobras System Corporate University (Unise)

Activities of the business school at Unise started in 2010. Unise integrates the Eletrobras System Corporate Education model, based on the premises of integration and cooperation, in line with the strategic purposes of integration, competitiveness and profitability.

THE HOLDING'S CAPITALIZATION OF ITS SUBSIDIARIES CONVERTED DEBT INTO EQUITY AND WILL IMPROVE THE TAX FFFICIENCY OF THE FLETROBRAS SYSTEM

Due to its differentiated regime of corporate governance, established by international treaty, Itaipu Binacional did not participate in these programs.



# 3. Awards and recognition [GRI 2.10]

#### 3.1 Institutional

#### The 500 Largest Companies in Latin America | AmericaEconomía

Eletrobras is the 17<sup>th</sup> largest company in Latin America, according to *AmericaEconomía* magazine's ranking. In 2009, the company was 19<sup>th</sup> on this list.

### Brazil's Most Prestigious Companies | Época Negócios, Grupo Troiano

For the second year in a row, Eletrobras was named the most prestigious company in Brazil in the energy sector by *Época Negócios* in partnership with Grupo Troiano (a branding company).

# Consumer Satisfaction Index (IASC) Award | National Electric Energy Agency (Aneel)

Eletrobras Distribution Roraima won in the "Fastest Growing" and "Best of the North Region" categories in the tenth edition of the IASC, awarded annually by Aneel for electricity distributors.

#### 3.2 Innovation

# The Most Innovative Companies in Brazil | *Época Negócios*, A.T. Kearney

Eletrobras Eletronorte was selected as the 17<sup>th</sup> most innovative company in the second edition of the award sponsored by *Época Negócios* magazine in partnership with the consulting firm A.T. Kearney. From a total of 120 eligible companies, the award recognizes the top 20.

# Finep Award for Innovation | Studies and Project Financing Foundation (Finep)

Eletrobras Eletronorte won the category "Innovation Management" in the Midwest stage of the 2010 Finep Award for Innovation, with 885 companies competing.

# Innovative Company Seal from the Research, Development and Engineering Association of Innovative Companies (Anpei)

Eletrobras earned the seal from Anpei, which recognizes and identifies companies that invest the most in R&D+I in Brazil.



### 3.3 Quality

#### National Quality Award | National Quality Foundation (FNQ)

Eletrobras Eletronorte was featured in the "People and Society" category at the 2010 edition of the annual award sponsored by FNQ. The award is based on eight criteria, seeking to highlight excellence in business management and stimulate competitiveness among organizations.

### 3.4 Information Technology

#### IT Leaders | Computer World

Eletrobras Eletronorte placed second in the "Government" category of the 2010 edition of the IT Leaders Award, sponsored by *Computer World* magazine.

#### The 100 Most Innovative in IT Application | Information Week Brasil

Eletrobras Eletronorte took first place in the "Public Services/ Government" category of the most important survey on the applicability of technology in innovation in the country, produced by *Information Week Brasil* magazine.

In the same survey, the company was ranked 11<sup>th</sup> among the hundred most innovative companies in using information technology.

#### 3.5 Human resources

#### The Best Companies to Work For | Você S/A Exame

Eletrobras Eletrosul was one the 150 best companies to work for in 2010 according to *Guia Você S/A Exame* magazine.

#### Good Compensation Company | Salary Information Exchange Group (Grupisa)

Eletrobras was chosen as the Company of the Year in the area of Compensation for the Beverly Zimpeck award sponsored by Grupisa for companies that have excelled in activities and practices for professional appreciation and compensation plan management.

#### **Coge Foundation Award**

Two Eletrobras companies won the 2010 Foundation Coge Award: Eletrobras Chesf ranked first in "Personnel Training and Development" with the project Allocation, Integration and Monitoring of New Employees, and Itaipu Binacional won in the category "Environmental Responsibility Initiatives," with the Electric Vehicles for Recyclables Collectors project.

Eletrobras Furnas and Eletrobras Eletronorte, in turn, were awarded the Rogério Morgado Trophy in the categories "Social Responsibility Initiatives" and "Personnel Training and Development," respectively, standing out as companies that presented the largest number of projects in each category over the award's ten years.

#### Gender Pro-Equity Seal

In 2010 all Eletrobras companies were awarded the Seal Pro-Gender Equity. This program is an initiative of the Women's Policies Secretary in partnership with the International Labor Organization (ILO) and UN Entity for Gender Equality and Empowerment of Women (UN Women). Seeking to contribute to the elimination of



all forms of discrimination, its main goal is to promote equal opportunities between men and women in the workplace, being structured in two areas: People Management and Organizational Culture.

# 3.6 Sustainability

#### GRI Reader's Awards | GRI

The 2009 Eletrobras Sustainability Report won second place in the "Civil Society" category of the 2010 GRI Readers' Awards.

The Eletrobras Furnas Sustainability Report was fourth in the same category, and took third in the category "Most Effective Report" and fourth in "GRI Readers' Choice."

The Itaipu report took second place in "Most Effective Report" and third in "Civil Society."

# Socially Responsible Company | Centro Universitário Augusto Motta (Unisuam)

Eletrobras was awarded the prize "Socially Responsible Company" promoted by Unisuam. The company was recognized for the social projects undertaken by its Department of Social Responsibility and projects with the community such as "Hands On", which provides professional development for women to work in construction, and "Living with Peace of Mind," which contributes to reducing the rate of adolescent pregnancy in the Vila Cruzeiro neighborhood in Rio de Janeiro.

#### ANA Award | National Waters Agency (ANA)

In recognition of its program Cultivando Água Boa (Cultivating Good Quality Water), Itaipu Binacional won in the "Companies" category of the 2010 ANA award, Brazil's most important award for water conservation. In 2010, the award had record participation, with 286 entries by public and private companies, governmental units and nongovernmental organizations (NGOs) from across the country.

ACHIEVEMENT OF
NATIONAL AND
INTERNATIONAL
AWARDS IN
RECOGNITION OF SOCIAL
AND ENVIRONMENTAL
ACTIONS AND
PROGRAMS

#### Chico Mendes Award | Chico Mendes Institute

The program Cultivando Água Boa also earned Itaipu Binacional the 2010 Chico Mendes Award. The company was chosen for its "constant efforts to raise awareness of environmental sustainability, decreasing environmental impacts, and commitment to environmental conservation, while being eco-friendly and not causing greater damage, which means continuously 'thinking and acting ecologically,' with total harmony between company, man, and nature."

#### Clean Tech & New Energy Awards 2010 | The New Economy

Itaipu Binacional was elected South America's "Best Clean Energy Company" in 2010 by British magazine *The New Economy*. Projects such as the program Cultivando Água Boa, the Renewable Energies Platform, the Electric Vehicles, and the Itaipu Technological Park were mentioned as examples of successful initiatives. The Renewable Energy Condominium of Family Agriculture and the implementation of biodigestors were also emphasized.

# Ozires Silva Award for Sustainable Entrepreneurship | Getúlio Vargas Foundation, Paraná Communication Network

Itaipu Binacional won in the "Mid-Cap Social or Civic Enterprise" category of the 2010 Ozires Silva Award sponsored by the Getúlio Vargas Foundation in partnership with the Paraná Communication Network.

The award was a recognition of the Itaipu Technological Park's initiatives in support of sustainable entrepreneurship, in partnership with the International Center of Hydro-informatics and Itaipu Binacional through the Cultivando Água Boa program.

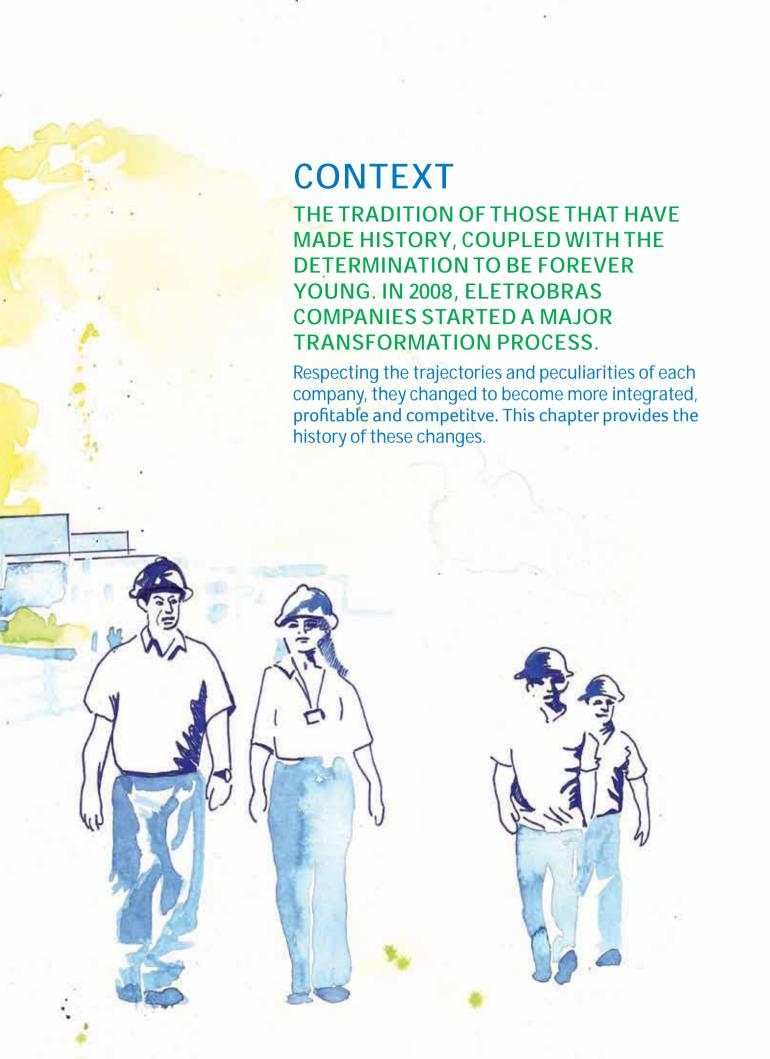
#### ACRJ Sustainability Award | Rio de Janeiro Chamber of Commerce (ACRJ)

Eletrobras Eletronuclear won the ACRJ-sponsored award for its positive sustainability-related entrepreneurial initiatives in the state.

# National Environmental Responsibility Leader Award | Brazilian Association of Marketing and Sales Directors

On March 18, 2010 in São Paulo, the president of Eletrobras Eletronuclear, Admiral Othon Luiz Pinheiro da Silva, was presented with the National Environmental Responsibility Leader Award by the Brazilian Association of Marketing and Sales Directors.





# 4. Context

The new Institutional Model of the Brazilian Power Industry, implemented with the ratification of the Brazilian Constitution in 1988, caused profound changes in the operations of several industry players. Regulation came after 1995, when the Brazilian Congress approved the General Concessions Law (Law no. 8,987) establishing rules for bidding processes for concessions in several infrastructure segments, including power. The government began privatizing energy companies to transfer to the private sector the task of making the necessary investments for expanding the country's installed



# May 2008

- · Unified distribution division.
- Restructuring of distributors' Boards of Directors.

# **April 2008**

- Amendment to the bylaws establishes the requirements of review and approval of Eletrobras' participation in consortiums and Special Purpose Companies (SPCs).
- Law no. 11,651 authorizes Eletrobras to participate in SPCs as a controlling shareholder and to make investments abroad.

# **July 2008**

- Superintendent of Operations Abroad.
- Eletrobras Transformation Management Committee.

capacity. This marked the end of state control over the power industry, which had begun in the 1950s.

Nonetheless, the reforms were not enough to prevent energy rationing in 2001, in which the lack of public investment was a decisive factor. In December of 2003 the government announced Provisional Measure no. 144, transformed into Law no. 10,848 of March of 2004 which implemented the new institutional model in the power industry. One of the main changes introduced is

related to the way power is sold: auctions started being held after environmental licensing and with guaranteed Power Purchase Agreements, according to the lowest tariff principle, that is, the winner will charge the least for the power. Generation remained competitive; however, its competition began to be "guided."

In parallel, for the execution of this model, some attributes of existing organizations were altered and new institutional agents were created.



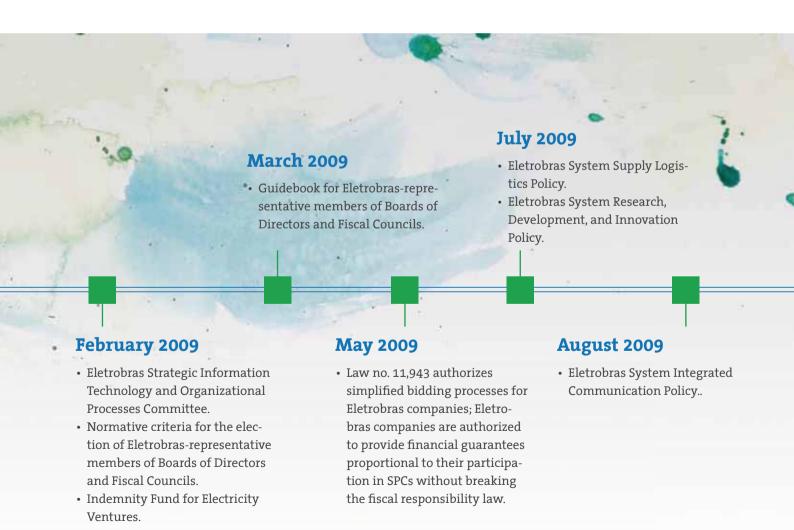
Created in 1962 with the mission of coordinating and planning for the industry, Centrais Elétricas Brasileiras S.A., Eletrobras, has also been subject to major changes, which led to a sort of existential crisis with the successive losses of its roles. In the 1990s, coordination and operations were transferred to the National System Operator (ONS), formed by members of the former Operation Division.

In 2004, centralized planning was transferred to the Energy

# **NEW MODEL POWER INDUSTRY: MAIN INSTITUTIONS** CNPF Level of concession, regulation, oversight, planning and monitoring **CMSE** MMF **EPE** Power Sector onitoring Commit Energy Research Company ANFFL ational Electri Level of services

CCEE

Power Trading Chamber



ONS

National Power System Operator

Research Company (EPE), linked to the Ministry of Energy and Mines (MME) [GRI 2.1].

2004 also brought good news. Eletrobras System companies on the privatization list were excluded from the National Privatization Program. At that time, Eletrobras began to regain its market leadership in its business area. For this, the company needed to incorporate international management best practices so that the Eletrobras System could take advantage of market opportunities and fulfill its destiny as one of the largest global clean energy conglomerates in the world.

In 2008, the MME established four main guidelines for strengthening the System, which were transformed into the Eletrobras System Transformation and Strengthening Plan.



# September 2009

- Emergency plan for Process
- Adaptation (Corporate Adaptation Plan).
  - Tucuruí Pact.

### November 2009

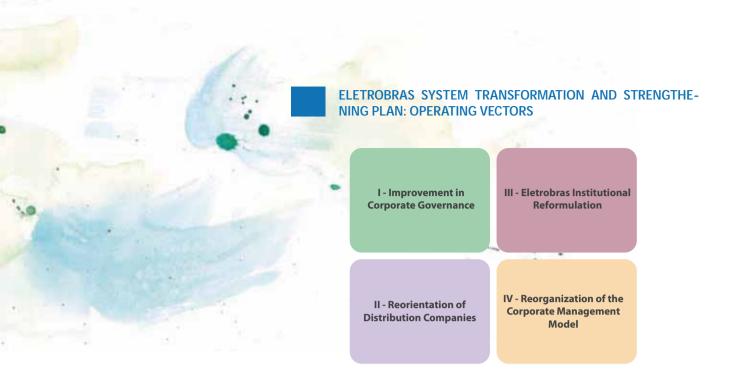
Eletrobras System plan for company capitalization.

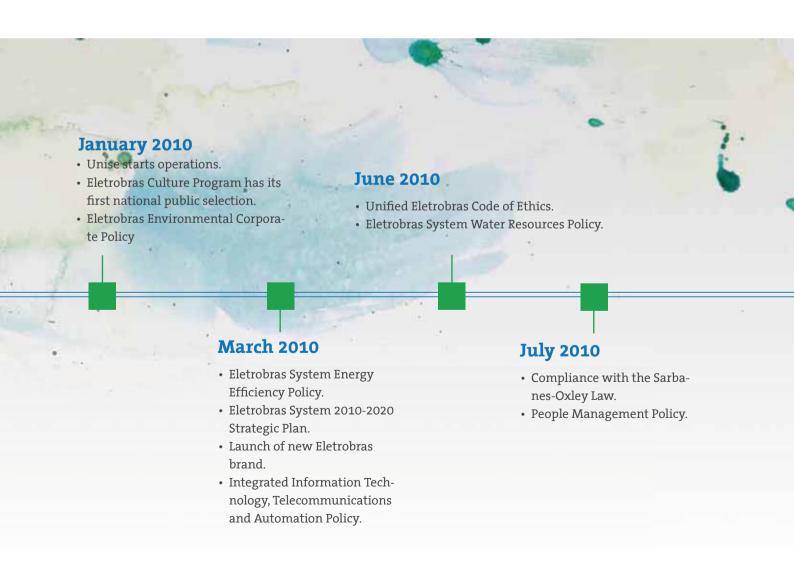
### October 2009

- Corporate Performance and Goals Contract (CMDE) with Eletrobras System companies.
- Hedge policy..

### December 2009

- Eletrobras System Laboratory Network (Relase).
- Law no. 12,111 establishes rules for energy trading for the Angra 1 and 2 plants, relieving Furnas, and defines the rules for generation and energy trading in Isolated Systems.
- Financial pre-requisites for participation in new enterprises.

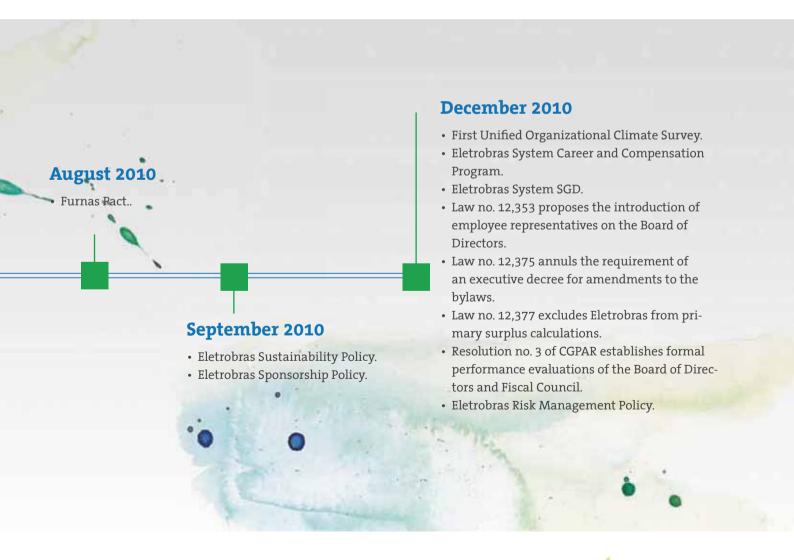




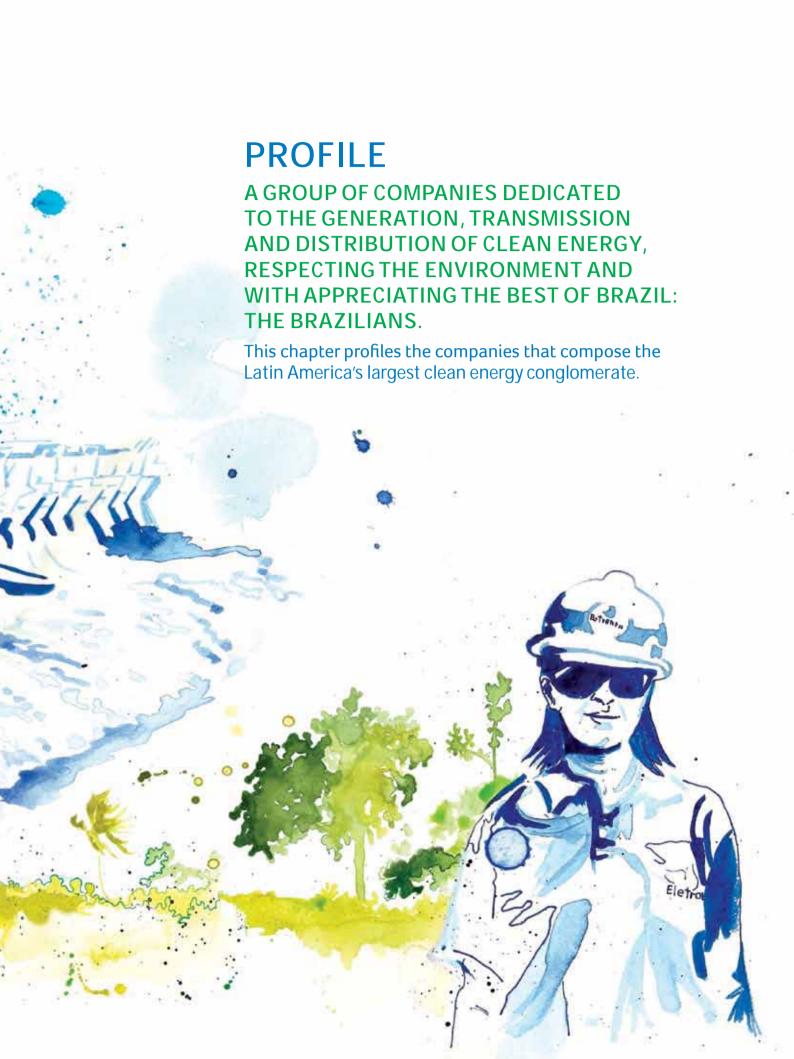
The establishment of the Transformation Plan is the result of the work developed since 2008 by the Eletrobras companies Executives Boards. The plan consists of 57 projects and initiatives distributed among four operating vectors defined by the MME. The aim is to inaugurate a new vision of the future in line with the new institutional environment of the Brazilian power industry, focusing on corporate efficiency and value generation for the System's various stakeholders.

At the end of 2010, 31 out of 57 projects had been concluded, six were in their final stages and 20 were in progress and advancing quickly.

THE ELETROBRAS
TRANSFORMATION PLAN
RESULTED IN A SET OF 57
PROJECTS, OF WHICH, IN
2010, 31 HAD ALREADY BEEN
COMPLETED AND SIX WERE
NEAR COMPLETION







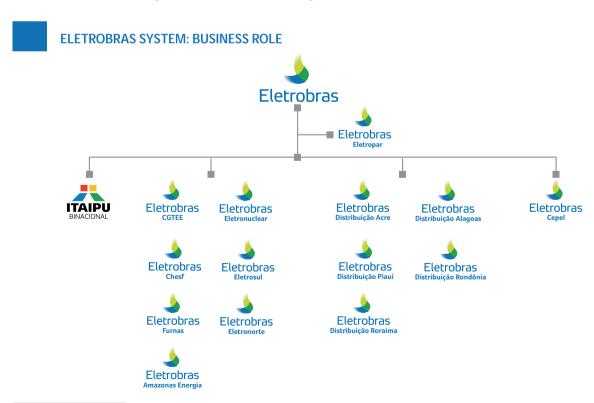
# **5. Profile** [GRI 2.4, 2.5, 2.6, 2.8, 2.9, 3.4, 3.6 and 3.7]

The Eletrobras System is Latin America's largest clean energy¹ conglomerate, composed of 16 companies operating in the generation, transmission and distribution (G,T&D) of electricity, in addition to a research center, holding company and Itaipu Binacional. In 2010 the System employed more than 28,450 employees with net income of R\$2,247 million. Managed by the holding Centrais Elétricas Brasileiras, Eletrobras is a publicly-held government-linked company with shares traded on the São Paulo, New York, and Madrid (Latibex) stock markets. Eletrobras is headquartered in Brasilia, with central office in Rio de Janeiro and offices in Lima, Peru, Montevideo, Uruguay, and Panama City.

The Eletrobras System simultaneously exercises corporate and government functions

THE ELETROBRAS
SYSTEM, LATIN AMERICA'S
LARGEST CLEAN ENERGY
CONGLOMERATE, IS
COMPOSED OF 16
COMPANIES

### 5.1. Business role [GRI 2.2, 2.3 and 2.7]



<sup>&</sup>lt;sup>1</sup> The concept of clean energy adopted by Eletrobras refers to power produced with low carbon emissions.

As a holding company, Eletrobras controls a large part of power generation and transmission systems in Brazil through six subsidiaries: Eletrobras CGTEE, Eletrobras Chesf, Eletrobras Eletronorte, Eletrobras Eletrobras Eletrobras Furnas and Eletrobras Eletronuclear. In addition to being the controlling shareholder of these companies, it holds 50% of Itaipu Binacional on behalf of the Brazilian government.

The holding also controls the Electric Power Research Center (Eletrobras Cepel) and Eletrobras Participações S.A. (Eletrobras Eletropar). In distribution, Eletrobras controls the companies Eletrobras Amazonas Energia, Eletrobras Distribuição Acre, Eletrobras Distribuição Roraima, Eletrobras Distribuição Rondônia, Eletrobras Distribuição Piauí and Eletrobras Distribuição Alagoas.

#### 5.1.1. Generation

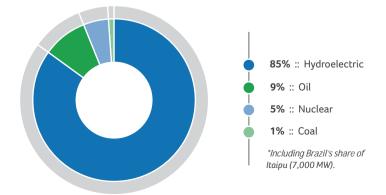
The installed capacity of the Eletrobras System, including the 50% of Itaipu Binacional and partner power plants is 42,080 MW, which corresponds to 37% of the country's total installed capacity.

#### Installed capacity, by generation source (MW) and type of property [GRI EU1]

PROPERTY	WATER	COAL	OIL*	NUCLEAR	TOTAL	
Wholly-owned	26,415	840	3,648	1,990	32,893	
Itaipu Binacional (50%)	7,000				7,000	
Shared	1,487				1,487	
SPCs	689		11		700	
TOTAL	35,591	840	3,659	1,990	42,080	

<sup>\*</sup> The bi-fuel fired plants (diesel and natural gas), currently operating with diesel, are included.

# INSTALLED CAPACITY, BY SOURCE\*



The Eletrobras System produces mainly clean energy, with 85% of its installed capacity in hydroelectric plants and 5%, nuclear plants. Just 9% is derived from oil and 1%, coal.



The Eletrobras System's generating complex is composed of 164 power plants, including the partner plants. 36 of these are hydroelectric plants, including Itaipu, and 128 are thermoelectric plants, two of which are thermonuclear plants.



#### **GENERATING COMPLEX: PLANT LOCATIONS**



#### Net power generated by source \* (MWh) [GRI EU2]

SOURCE	GENERATION	
Coal	612,516	
Oil	3,955,528	
Uranium	14,543,807	
Natural Gas	5,593	
Hydroelectric	169,105,230	
TOTAL	188,222,674	

<sup>\*</sup>The following Eletrobras companies were considered: Amazonas Energia, Cepel, Chesf, CGTEE, Distribuição Acre, Distribuição Piauí, Distribuição Rondônia, Eletronorte, Eletronuclear, Eletrosul, Furnas, Holding and Itaipu Binacional.

Average efficiency of thermoelectric generation, by energy source (9	
SOURCE	AVG. EFFICIENCY
-	
SOURCE	AVG. EFFICIENCY
SOURCE Coal	AVG. EFFICIENCY 19.3

	AVERAGE UPTIME RATIO OF PLANTS* (%) [GRI EU30]	
	SOURCE	FACTOR
0	COAL	17.2
	OIL	40.8
7 7	URANIUM	84.5
	NATURAL GAS	83.0
	HYDROELECTRIC	92.3
	*The following Eletrobras companies were considered: Chesf, CGTEE, Eletronorte, Eletronuclear, Furnas and Itaipu Binacional. Furnas considered the power plants at Serra da Mesa and Manso, in which it has stakes of 48.6% and 70%, respectively.	

#### 5.1.2. Transmission

In transmission, Eletrobras System companies have 247 substations and 58,361.32 km of transmission lines, of which 51,764.65 km are lines with voltage greater than or equal to 230 kV. Eletrobras System lines correspond to 57% of the total across Brazil.

In the service of consumption by generation, electrical losses that occur in the transmission network are directly measured by the difference between what is generated or imported by an area and what is exported to other areas of the system.

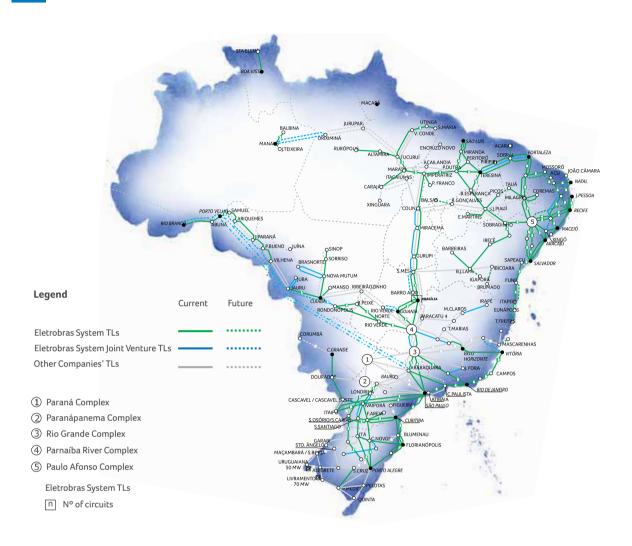
The transmission losses are taken into account in the planning phase of the project. When the concession is granted, the proprietary transmitting company re-

sponsible for the implementation of the project cannot change the project, and therefore has no control over the rate of losses in the transmission system.

Therefore, until 2009, Eletrobras companies did not have a single method to calculate the rate of losses, which were calculated individually by each company, preventing the establishment of an average index for Eletrobras.

Under the coordination of Eletrobras, in 2010 a unified methodology was established in order to estimate the electrical losses in transmission, based on calculations using the electrical power flow cases. Thus the rate of 2.25% of transmission losses was defined [GRI EU12].

## ELETROBRAS SYSTEM: TRANSMISSION LINES (TLs)



### Transmission lines (km), by voltage range (kV) [GRI EU4]

VOLTAGE	LENGTH	
750	2,698.00	
600	1,612.00	
500/525	15,859.32	
345	6,220.50	
230	25,374.83	
Subtotal	51,764.65	
 Between 230 and 69	6,596.67	
TOTAL	58.361.32	

The Eletrobras System companies also have four mid-sized and large scale interconnections with other South American countries.

INTERNATIONAL INTERCONNECTIONS	VOLTAGE	COUNTRY
Four lines connect the Itaipu Dam to the substations at Margem Direita (Paraguay) and Foz do Iguaçu (Brazil).	500 kV	Paraguay
The line connects the Frequency Converter Station at Rivera (Uruguay) and the substation at Livramento (Brazil).	230 kV	Uruguay
The line connects Ciudad de Paso de los Libres (Argentina) and the Frequency Converter Station at Uruguaiana (Brazil).	132 kV	Argentina
The line connects Ciudad de Santa Elena (Venezuela) and Boa Vista (Brazil).	230 kV	Venezuela

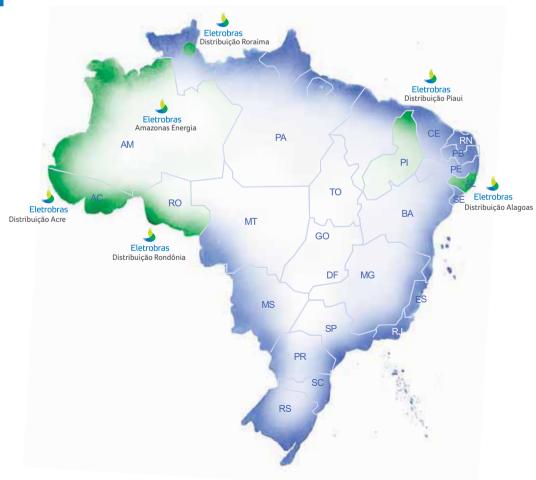
#### 5.1.3. Distribution

In distribution, Eletrobras System activities are concentrated in the northern and northeastern regions, through the following companies: Eletrobras Amazonas Energia, Eletrobras Distribuição Acre, Eletrobras Distribuição Alagoas, Eletrobras Distribuição Piauí, Eletrobras Distribuição Rondônia and Eletrobras Distribuição Roraima.

Together, in 2010 the Eletrobras distribution companies traded 12.78 GWh of electricity to 3.29 million customers in 463 municipalities, 40% being low-income consumers.



#### **ELETROBRAS DISTRIBUTION COMPANIES**



#### Power distribution (MW), growth and share, compared to the national market

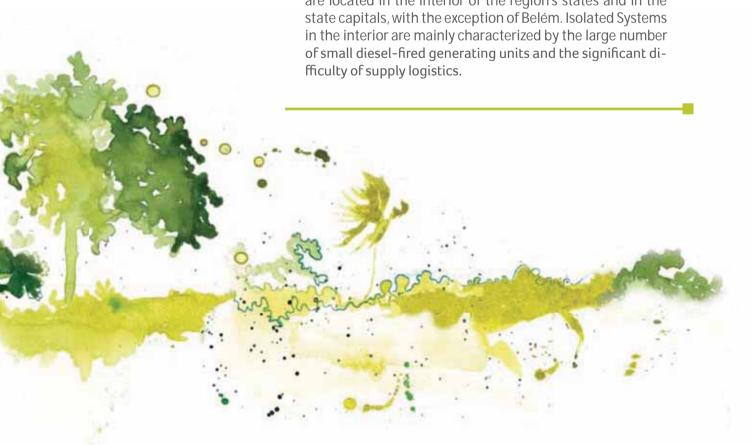
CC	OMPANIES	2010	2009	GROWTH	SHARE
Ele	letrobras System	12,782	11,426	11.9%	3.1%
Br	razil	419.016	388.204	7.9%	100%

#### Service to energy distribution customers

	2010	2009	
Consumers served	3,292,599	3,124,017	
Cities served	463	464	
Agencies and Service Points	351	348	
Service Points	162	131	
Services provided (agencies and points)	2,750	2,388	
Calls received (Central Call Center)	4,237,033	4,141,506	

### **Isolated Systems**

The Brazilian Isolated Systems, which are predominantly thermoelectric and scattered across the northern region, serve an area of 45% of the country and about 3% of the population, or approximately 1.2 million consumers. They are located in the interior of the region's states and in the state capitals, with the exception of Belém. Isolated Systems in the interior are mainly characterized by the large number of small diesel-fired generating units and the significant difficulty of supply logistics.



#### 5.1.4. Research, Development and Innovation (R&D+I)

Eletrobras Cepel is the central executor of R&D+I programs and projects for the Eletrobras System. It has 30 laboratories that support projects and conduct prototype tests and product development, technical and compliance analysis for certification.

Eletrobras companies also have a diversified R&D+I structure, with the support of a broad network of laboratories, including Cepel, and partnerships with research and education entities nationwide.

#### 5.1.5. Equity investments

Eletrobras Participações (Eletrobras Eletropar) is a publicly-held company whose main corporate purpose is the ownership of equity interests in power utilities. In addition, Eletrobras companies have direct and indirect holdings in energy companies and SPCs related to generation and transmission projects.

#### 5.2. Government role

In the government role, on behalf of its controlling shareholder, Eletrobras manages programs and industry-specific social interest and development funds in the power industry. It is responsible for ensuring that feasibility criteria and standards of economic and financial balance in associated enterprises are met.

The Eletrobras System works with executive, legislative and judicial authorities through the Office of Institutional and Congressional Relations under the holding's president [GRI SO5].

**ELETROBRAS SYSTEM: GOVERNMENT FUNCTION** 

#### e e opment Industry-specific Resources Management rading • CDF • PROCEL • IT I U • LU S • R R • PR I • BUSA • CCC **ELETROBRAS ELETROBRAS** o ernment **Business** Research & inancing and e Business i idends e e opment · Contro ed companies • Funds granted • Internationa i ation • CEPEL Balance due • Border Interconnections · Minority participation • ITAIPU Strategic artnerships Own Enterprises

• Carbon Credits



#### 5.2.1. Government programs

# Luz para Todos (Light for Everyone) Program [GRI EU23]

The National Program for Universal Access to and Use of Electricity - Light for Everyone aims to provide, by 2010, electric power to the Brazilian rural population still without access to this public utility. The functions of Eletrobras in this operation are: technical and budget analysis, management of programs involving executors, works oversight; and making available funds from the Global Reversion Reserve (RGR) and the Energy Development Account (CDE).

#### National Electricity Conservation Program (Procel)

Procel's objective is to promote the efficient use of electricity and to combat waste. The benefits provided by the program consist of both energy savings and reduced investments in industry expansion, which benefits society. Eletrobras, in its role as Executive



Secretary of Procel, is responsible for planning and executing program initiatives and providing technical and financial support for its operation. Procel uses resources from Eletrobras and RGR, as well as resources from international agencies. R&D + I actions aiming at energy efficiency are also supported by Procel.

# Alternative Energy Source Incentive Program (Proinfa)

Proinfa seeks to diversify the Brazilian energy mix, supporting wind, biomass and small hydroelectric plant projects, as well as the use of local energy sources. The program is run by Eletrobras, with funds derived from fees charged to all classes of final consumers served by the National Interconnected System (SIN), except for low-income consumers.

# 5.2.2. Industry-specific funds Fuel Consumption Account (CCC)

The CCC is intended to reimburse distributors for their spending on energy production for Isolated Systems, which includes fuel used in thermoelectric generation, the cost of buying additional power, the cost of generating their own power, and the fees and taxes paid by distributors. Its revenue is derived from the collection of fees from distributors, licensees and transmission companies, in proportions and amounts determined by Aneel. These fees are

passed through to all electricity consumers, except for low-income consumers.

#### **Global Reversion Reserve**

The RGR was established with the purpose of providing resources for cases of reversion<sup>2</sup> and repossession<sup>3</sup> of electricity services. While not being used for these intended purposes, resources are applied in funding the expansion of the Brazilian power industry and improved electricity services, such as the revitalization of thermoelectric parks and the acquisition of meters and remote controls for substations. They are also used in government programs such as Luz para Todos and Procel. In 2010, the collection of RGR contributions was extended through the end of 2035.

#### **Energy Development Account**

The CDE is intended to promote the energy development in the states with projects that universalize electricity services, subsidies for low-income consumers and the expansion of the natural gas network to serve states that do not have pipeline networks. It is also used to ensure the competitiveness of energy produced from alternative sources (wind, small hydroelectric and biomass) and coal. Established on April 26, 2002, the CDE is slated to exist for 25 years and is managed by Eletrobras in compliance with the timeline established by the MME.



<sup>&</sup>lt;sup>2</sup> Reversion is the return to the concessionary (the conceding power) of the service(s) or property(ies) in the concession and effected on the concession expiry date.
<sup>3</sup> Repossession is the taking back of the service (s) or property(ies) by the concessionary (conceding power) during the concessionary period whose return is authorized by the specific law in defense of the publici interest and is implemented after previous indemnity payments by the concessionary of outsanding investiments or depreciated ones.







In 2010, many advances have been achieved with the incorporation of governance best practices and implementation of improvements in the relationships with all the stakeholders. This chapter highlights the main changes, the strengthened commitments and the unceasing evolution.





The evolution of corporate governance is a cornerstone of the Eletrobras System Transformation and Strengthening Plan, and the holding company has been working to improve the management tools of its subsidiaries to ensure, first, market credibility and, second, the best results for its various stakeholders. In 2006, Eletrobras joined BM&FBOVESPA's Level 1 of Corporate Governance and, in the next year, joined the portfolio of BM&FBOVESPA's ISE. Eletrobras also has Level 2 ADRs traded on the New York Stock Exchange (NYSE).

Since 2008, many measures have been promoted internally to bring strategic business decisions that were previously made separately by subsidiaries within the scope of the holding company. Issues such as loans and participation in auctions and consortia have entered into the decision-making of the holding, which considers the interests of the Eletrobras System as a whole. Initiatives implemented in 2010 were instrumental in consolidating the statutory changes necessary to achieve the corporate governance improvement goals.

Best governance practices are also continuously incorporated. Among those already adopted are: definition of normative criteria for the selection of Eletrobras representatives on the Boards of Directors and Fiscal Councils of the subsidiaries and companies in which Eletrobras has representation, the development of guidance manuals for Eletrobras Fiscal Council and Board of Directors members; and the preparation of the Eletrobras Code of Corporate Governance Practices, which unites the principles and practices provided in various statutes, rules, policies, codes of ethics, standards and procedures into a single document.

In December 2010 the president of Brazil signed Law no. 12,375, which eliminates the requirements of specific presidential decrees for approval of amendments to Eletrobras' bylaws. Now, the changes only follow internal assessment by the Executive Board and the Board of Directors, and approval by the Extraordinary Shareholder's General Meeting, like any other company subject to the Brazilian Corporation Law.

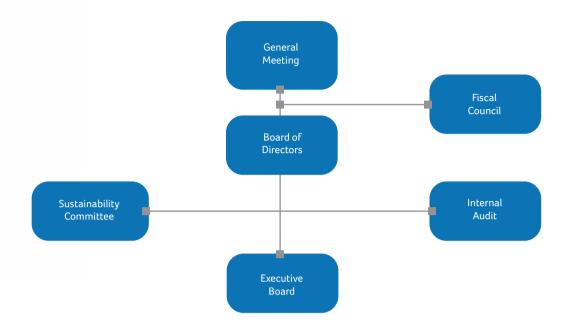
Another important development came with the publication of Law no. 12,377, with which the National Congress approved the removal of Eletrobras from the list of companies that make up the calculation of the primary surplus, the fiscal measure adopted by the government to pay off its debts, which previously hindered further investment.

In late 2010, CGPAR issued Resolution No. 3 determining the adoption of formal performance evaluations of the Board of Directors and the Executive Board. This will help the beginning of the process in Eletrobras.

## 6.1. Governance structure [GRI 4.1]

Corporate governance in the Eletrobras System companies is exercised through a formal structure, composed of Boards of Directors and Fiscal Councils, as well as executives. In the case of the holding company, the main acting governing bodies which have been formally established are illustrated below.

## GOVERNANCE MODEL



#### Composition of governing bodies\* [GRI LA13]

COMPANIES	HOLDING	
105	15	Men
11	2	Women
2	0	< 30 years
37	5	30 – 50 years
77	12	> 50 years

 $<sup>{}^* \</sup>textit{Including Eletrobras Boards of Directors and Fiscal Councils, as well as the Executive Boards}$ 

#### General Shareholders' Meeting

The General Meeting assembles Eletrobras' highest governing body. It normally takes place before the end of the fourth month following the end of the fiscal year, to report, examine, discuss and vote on the financial statements, decide on the allocation of net income and dividend distribution, and elect members to the Board of Directors and Fiscal Council. Decisions are made by majority vote, the vote of each shareholder representative being proportional to his/her shareholding in the company. At General Shareholders' Meetings, the government is represented in accoradance with specific federal legislation.

#### Board of Directors [GRI 4.2, 4.3, 4.5, 4.6 and 4.7]

The Eletrobras Board of Directors is a joint decision-making body elected by the General Shareholders' Meeting. The council is composed of up to ten members, eight of whom are elected by a majority vote of shareholders, one by minority common shareholders, and another, through a separate vote excluding the controlling shareholder, by the minority preferred shareholders representing at least 10% of company's capital stock.

In 2010, the final composition of the Board of Directors was eight members, including one woman and two independent members. The minority preferred

shareholder representative was not elected due to failure to comply with the requirements set forth in the bylaws, while one of the majority shareholder seats remained unoccupied after the resignation of a Board member. The nomination process includes choosing executives with exceptional knowledge of the energy sector, public administration, and the financial and capital markets, with unblemished reputations and moral integrity.

**Employee participation** [GRI 4.4]

On December 28, 2010, the president of Brazil signed Law no. 12,353, which provides for the participation of employees on the boards of state-owned and government-linked companies, their subsidiaries and affiliates and other companies in which the government directly or indirectly holds the majority of voting capital. The representative must be chosen from active employees by direct vote of his or her peers, in an election organized by the company in conjunction with the union entities that represent them.

Members of the Board of Directors are elected for a term of one year with the possibility of re-election. The president of Eletrobras is a member of the Board but cannot be chairman – a position filled by election at the General Meeting. In 2010, besides the 12 regular monthly meetings, the Board held three extraordinary meetings. Decisions are made by majority vote, while the bylaws may establish matters that must be approved by a qualified quorum. In cases of conflict of interest, Board members should abstain from discussion and vote on the respective matter.

Resolution no. 3 of CGPAR supports the start of the formal performance evaluations of the Board of

Directors and the Board of Executive Officers. Board members' compensation is fixed at 10% of the average compensation of the company's managers, according to Article 1 of Law no. 9,292 of July 12, 1996 and they have no variable compensation. In 2010, the total annual compensation of the Board of Directors was R\$322,297.50.

#### **BOARD OF DIRECTORS**

Márcio Pereira Zimmermann Chairman

Arlindo Magno de Oliveira Independent Member

Virgínia Parente de Barros Independent Member

José Antonio Corrêa Coimbra José Antônio Muniz Lopes\* Lindemberg de Lima Bezerra Luiz Soares Dulci Wagner Bittencourt de Oliveira

\* Until February/2011. From this date, José da Costa Carvalho Neto has been his replacement.

#### **Fiscal Council**

The Fiscal Council is permanent and responsible for, among other things, overseeing the actions of the company's Board of Directors and verifying its compliance with its legal and statutory duties. The council consists of up to five members and their respective alternates, all elected for renewable one year terms. Three members are appointed by the majority shareholder, one by minority common shareholders, and another by minority preferred shareholders. As per the requirements of the Securities and Exchange Commission, one member is a financial specialist.

The Fiscal Council currently meets once a month with a minimum quorum of three members, and

conducts special meetings whenever necessary. In 2010, 12 meetings were held. Member compensation is fixed at 10% of the average compensation of the company's managers with no variable compensation. In 2010, the total compensation of the Fiscal Council amounted to R\$187,600.00.

#### **FISCAL COUNCIL**

Édison Freitas de Oliveira Chairman

Charles Carvalho Guedes Financial Specialist

Ana Lucia de Paiva Lorena Freitas Danilo de Jesus Vieira Furtado

#### **EXECUTIVE BOARD**

José Antonio Muniz Lopes\*
Chief Executive Officer

Miguel Colasuonno Administration Officer

Pedro Carlos Hosken Vieira Distribution Officer

Valter Luiz Cardeal de Souza Planning and Engineering Officer

Armando Casado de Araújo Financial and Investor Relations Officer

Ubirajara Rocha Meira Technology Officer

\* Until February/2011. From this date, José da Costa Carvalho Neto has been his replacement.

#### **Executive Board**

In 2010, Eletrobras' Executive Board was composed of the Chairman and five other executive officers responsible for Administration, Distribution, Planning and Engineering, Finance and Investor Relations and Technology. The chief executive is chosen from the members of the Board of Directors and he/she is responsible for chairing the General Meetings. Complying with the guidelines established by the Board of Directors, he/she is responsible for guiding management policy and the company's business. For this the chief executive relies on the support of the Executive Board, whose members are appointed by the Board of Directors.

According to functions specified in the bylaws, the Executive Board is responsible for the general management of Eletrobras and the meetings are conducted weekly. Seeking to avoid potential conflicts of interest and the use of confidential and strategic information, the chief executive and executive officers are prohibited from exercising management or administration functions in electric utilities that are not subsidiaries, affiliates or concessionaires con-

trolled by the states, in which Eletrobras has equity interests. In 2010, the Executive Board received total compensation of R\$4,310,745.35.

#### Internal Audit

Internal Audit shall verify the adequacy, efficiency and effectiveness of internal controls; compliance with legislation and internal and external normative acts; and compliance with plans, goals, objectives and policies defined by the company. Its Annual Action Plan is submitted to the Board of Directors and the Budget Office (CGU), and the implementation is monitored by the Fiscal Council.

#### Sustainability Committee [GRI 4.9]

The Sustainability Committee of Eletrobras was restructured in 2010, changing its name to the Sustainability Committee of Eletrobras System, incorporating representatives of the coordinators of the respective companies, and assigning specific project management by the holding company's business areas. Among its main responsibilities are: monitoring sustainability actions of System companies, planning targets and improvements, planning and preparing the Sustain-

ability Report, and participating in the evaluation of BM&FBOVESPA's ISE and the NYSE's DISI.

#### Ombudsman

Eletrobras System companies have ombudsmen acting as permanent channels of communication between senior management and its various stakeholders. They receive several kinds of communication, including whistle blowing, ethical deviations, complaints, and others.

For shareholders, there are also channels for contact disclosed on the main page of the Eletrobras "Investor Relations" website; an area for "Investor Relations" in the "Contact Us" Eletrobras Portal, and the newspaper "Energy in Shares." In addition, every six months the company holds meetings at the regional Associations of Investment Analysts and Professionals of the Capital Market (APIMECs): Rio de Janeiro, São Paulo, Minas Gerais, Federal District, South and Northeast.

### 6.2. Risk [GRI 4.11]

The Eletrobras System corporate risk management model, currently undergoing implementation at the holding company and the generation and transmission companies, is methodologically based on COSO-ERM and ISO 31000. Based on this model, a single risk matrix for the entire System was defined, in which the major risks to which the companies are exposed are listed. With the development of a unified risk management policy for all Eletrobras companies, principles, guidelines and responsibilities for each company involved in risk management were defined.

The entire process is in line with the risk profile established by senior management and coordinated by the holding company. Integration provides a systematic view of results and standardized processes. To support its implementation, operating (risk and internal control departments) and governance (risk committees) structures are being created in the subsidiaries, under coordination of the Eletrobras Risk Committee. Also, cultural adaptation and training programs were held with the support of the Communications Department and Unise. The

improvement of the internal control environment was another important measure in ensuring the effectiveness of risk management processes and in becoming compliant with the Sarbanes-Oxley Law, as well as for maintaining Eletrobras' ADR rating on the NYSE.

The identification of risks associated with any new venture is part of the risk management process. With regard to environmental sustainability, for all new energy projects potential environmental impacts are identified and evaluated and Environmental Impact Assessments (EIAs) and their respective Environmental Impact Reports (RIMAs) are prepared. In the operational phase, companies conduct ongoing monitoring of issues related to local communities and wildlife.

Risk management will gradually mature with the expansion of its scope and emphasis on quantitative analyses, contributing to the consolidation of the corporate vision and systematic monitoring and reporting.

#### 6.3. Ethics

One of the main landmarks of corporate governance in 2010 was the publication of the Eletrobras Companies Unified Code of Ethics, which has reduced the gap between possible ambiguities and distortions caused by free interpretation of ethical principles and conduct commitments in the relationships between management, employees and all stakeholders of the Eletrobras System.

In 2009, the president of the holding company, along with presidents of other Eletrobras companies, proposed a joint effort in establishing a code of ethics. As a priority, beginning in February of 2010 the companies sponsored seminars for employees to gather suggestions to consider in their respective codes of ethics. The ethics committees of the Eletrobras companies formed a working group that met regularly for seven months to write, consolidate and validate the document.

The draft code was submitted to restricted public consultation of all System companies through the intranet for a period of one month. Each of the approximatly 300 suggestions submitted was reviewed

and received a response from the working group. In September 2010, the Code of Ethics was published on the intranet and internet, and since December, printed copies have been delivered to all employees and other Eletrobras stakeholders. Audio, Braille and large print versions for the visually impaired, as well as customized versions for suppliers and investors were also published.

#### Conflicts of interest

Situations where personal interests overlap with the public interest or the interests of the company are considered conflicts of interest. The topic is clearly addressed in the Code of Ethics and complaints about possible violations are handled by the ethics committees of each company, which meet monthly.

#### Unfair competition [GRI SO7]

As an energy service provider and a public utility regulated by the government, there are no lawsuits for unfair competition, anti-trust or monopoly filed against Eletrobras System companies.

#### Corruption

Even though it is prepared to prevent corruption, Eletrobras listed seven cases in 2010. As with every complaint sent to the company via the Ethics Commission, ombudsman or external oversight bodies such as the Federal Audit Court and the CGU, all cases were investigated and appropriate measures were taken.

RESPONSE TO CASES OF CORRUPTION [GRI SC	04]	
MEASURE	No.	COMPANY
DISMISSAL OR PUNISHMENT OF EMPLOYEES	6	ELETROBRAS AMAZONAS ENERGIA ELETROBRAS CHESF ELETROBRAS ELETRONORTE
CANCELLATION OR NON-RENEWAL OF CONTRACTS	1	ELETROBRAS HOLDING

#### Discrimination [GRI HR4]

In 2010 four cases of discrimination were identified involving internal and/or external stakeholders in Eletrobras System operations. Of these, two are under investigation, one was dismissed and another generated an Agreement for Personal and Professional Conduct, which will be monitored for two years and then extinguished if the employee does not repeat this behavior.

# 6.4. Stakeholder engagement [GRI 4.14, 4.15, 4.16, and 4.17]

The Eletrobras System 2010-2020 Strategic Plan established a general framework for the stakeholders

associated with its companies and through management tools, particularly corporate policies, Eletrobras companies have sought to engage them in decision making, emphasizing continuing dialogue. With these instruments, the Eletrobras Integrated Communication Plan established key messages for each of the priority groups in 2010, creating opportunities for building strong relationships and motivating companies to communicate with stakeholders.

- Shareholders and investors: publication of the newsletter "Energy in Shares"; implementation of the Investor Relations site on the Eletrobras Portal; General Meetings, road shows and APIMEC meetings.
- **Employees:** internal communication vehicles (newspaper, newsletter, magazine, radio, in-



tranet, elevator TV, pamphlets); internal campaigns related to specific themes; Internal Communication Evaluation Study; Organizational Climate Survey.

- Media: meetings between the president of Eletrobras and journalists specializing in the energy sector for better relationships with the media; journalist visits to Eletrobras company units for project presentations; regular press releases on Eletrobras company projects and programs.
- Suppliers and partners: meetings with suppliers and sponsored partners to encourage them to align themselves with the company's new positioning and Code of Ethics; support for the Electricity Museum as part of the project of revitalizing the brand.
- **Local communities:** public hearings and technical meetings.
- Society: constant news updates on Eletrobras company portals; content publication via official Twitter (http://twitter.com/Eletrobras) and YouTube (http://www.youtube.com/sistemaeletrobras) accounts; institutional campaigns; speeches by the president and executives at project launches, universities, unions and trade associations; brand perception study; development of a study to revitalize Procel.
- Congress: preparation of booklets and specific informative material about the activities of Eletrobras companies; speech given by the president of Eletrobras about Belo Monte Hydroelectric Utilization at the House Commission of Mines and Energy; presentation about the company intranet on a technical visit from the House of Representatives.

The launch of the new Eletrobras brand in March of 2010 required communication actions aimed at all stakeholders. The launch plan was executed with more than 800 simultaneous actions, including internal campaigns, workshops, real and virtual events, press conferences, printed advertising and broadcast media, meetings with suppliers and the publication of a special newspaper.

In terms of institutional communication, the company held targeted campaigns concerning sustainability and other relevant issues related to its business. For this marketing campaign, guidelines of the Integrated Communication Policy were adopted, in line with the Eletrobras Code of Ethics and respecting applicable legislation as provided by the Executive Social Communication Secretary (Secom) [GRI PR6] .In 2010, there were no cases of non-compliance [GRI PR7].

# 6.5. Voluntary commitments [GRI 4.12]

#### Women's Empowerment Principles

Aiming to contribute to the appreciation and empowerment of women, in 2010, Eletrobras companies adhered to the seven Women's Empowerment Principles, an initiative of UN Women and the Global Compact, reinforcing its commitment to gender equality and respect for human rights.

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

Also in 2010, the Eletrobras holding company, Eletrobras Eletronorte, Eletrobras Furnas and Itaipu

IN COMMUNICATIONS WITH EMPLOYEES, ELETROBRAS USES TOOLS SUCH AS AN ELECTRONIC NEWSLETTER, NEWSPAPERS AND ELEVATOR TVs, AMONG OTHERS Binacional signed the Declaration of Corporate Commitment to Confront Sexual Abuse of Children and Adolescents, pledging to broaden the social responsibility agenda with the explicit inclusion of the protection of the rights of children and adolescents.

#### **Global Compact**

Eletrobras System companies are signatories of the UN's Global Compact, whose principles are realized through actions and programs.

#### Millennium Development Goals

The Eletrobras System has aligned its social responsibility guidelines with the Millennium Development Goals, which orient the development of social and environmental policies and are used as criteria for selection of social projects sponsored by the company.

### 6.6. Participation in strategic entities

Participation in strategic entities contributes to the improvement of corporate governance and of business environment, as well as to changing societal standards

#### e8

In 2010, Eletrobras became a permanent member of e8, an international nonprofit organization that brings together the world's ten largest power companies in the world with a mission to promote sustainable energy development. At the organization's 2010 annual meeting in Tokyo, representatives reiterated their commitment to cooperation with public and private partners in the development and application of creative solutions to reduce current carbon footprints.



#### **E8: COOPERATION COMMITMENT**



Appendix A of this report gives the complete list of entities in which Eletrobras System companies participate.

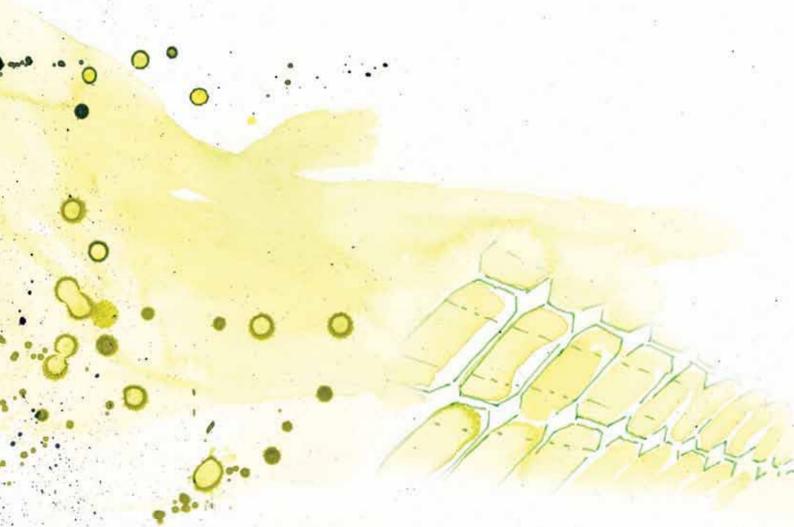




# **STRATEGY**

THE FIRST ELETROBRAS SYSTEM
STRATEGIC PLAN WAS BUILT JOINTLY BY
PROFESSIONALS FROM ALL COMPANIES
AND CREATED A SENSE OF BELONGING TO
A SINGLE BODY THAT INCORPORATES THE
ELETROBRAS COMPANIES DIVERSITY.

This chapter details how the Eletrobras System Strategic Plan 2010-2020 was developed and what its bases are.



# 7. Strategy [GRI 1.2]

The main project spearheading the reorganization of the Transformation Plan Business Management Model was the preparation of a strategic plan for the Eletrobras System. Although some of its subsidiaries have worked with these concepts - and some, like Eletronorte and Eletrosul, had been sharing structured processes - others had never done any strategic planning. The challenge was to overcome this imbalance and build a unified corporate vision, considering the objectives of the entire group, led by the holding company.

Eletrobras opted for a participatory construction model with the involvement and commitment of the System companies. Planning and Management representatives from the company formed a working group, whose integration and efforts for convergence throughout 2009 gave rise to a new mentality: the fragmentation of the past gave way to a sense of belonging to a single body. In January 2010, the document was approved by the Eletrobras Board of Directors and Executive Board and was also presented to the Minister of Mines and Energy. In March, the Eletrobras System 2010-2020 Strategic Plan was officially launched at a large video conference with all the presidents and executives of System companies.

THE STATEMENT THAT THE ELETROBRAS SYSTEM WANTED TO BECOME THE LARGEST GLOBAL CLEAN ENERGY CONGLOMERATE IN THE WORLD INTRODUCED THE CONCEPT OF SUSTAINABILITY IN ITS MISSION, VISION AND VALUES

It is worth noting that the strategic planning project occurred in parallel with the construction of the new brand, and it was presented to employees jointly under the new communication standards through a video on the intranet, as well as posters and exhibition stands in the workplace. Afterwards, the document was published in its entirety and made available for download on the Eletrobras website, in addition to being widely publicized in the media and the capital market - which started to demand the implementation of the strategic planning and coherence with the principles disclosed.

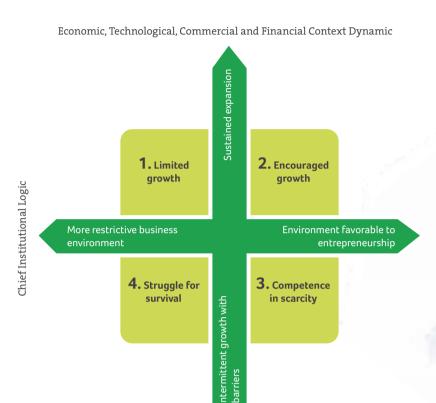
The public statement that the Eletrobras System wants to become, in ten years, the world's largest global clean energy conglomerate with a standard of profitability consistent with the best companies in the sector introduced the concept of sustainability into the System's mission, vision and values, sealing the commitment of its managers and leaders to the principles and goals declared in the document.

#### 7.1. Reference scenario

Although the company's management was fully aware of the boldness of the decision taken, among the various scenarios identified for future company action, "Encouraged Expansion" was chosen as the one most favorable to Eletrobras System businesses.

This approach requires the System to be able to take risks and act competitively, thereby developing internal conditions that support this type of operation.

## SCENARIOS OF INTEREST TO THE ELETROBRAS SYSTEM 2010-2030



In this encouraged expansion scenario, Brazil is experiencing a period of strong economic growth with abundant capital at low cost. Demand for electricity is high and growing at rates higher than gross domestic product (GDP), while sector regulation has clear, market-oriented rules, reducing the institutional restraints placed on the Eletrobras System and creating an environment conducive to entrepreneurship.

Government policies appear to favor a more proactive and autonomous approach. Government interventions are almost exclusively strategic in nature, making independent operation possible. Finally, environmental licensing is becoming faster, more consistent and more manageable, facilitating investment in new ventures.



Sustained economic, technologic	al,
commercial and financial expans	ion

High, continuous Brazilian economic growth, above the global average.

Abundant, low cost capital.

High domestic demand for electricity with faster growth than GDP.

Rapid technological advances, with gradual absorption into the power industry.

Government policies that allow leveraging of the Eletrobras System with minimal intervention.

Stable regulation with clear rules, reflecting a market focus.

Significant reduction of institutional restraints to the Eletrobras System.

Flexible environmental licensing with homogeneous environmental requirements.

Political-institutional environment favorable to entrepreneurship

### 7.2. Opportunities

The encouraged expansion scenario forecasts a wide range of opportunities for both the intensification of the Eletrobras System's present business lines and new business development.

#### Sustainable, fast economic growth

This general context puts the Eletrobras System in a very favorable environment for development, providing highly relevant opportunities with a broad scope, with emphasis on the following:

- High, sustained growth in electricity demand in the country;
- Prospects for new investments in generation, transmission and distribution;
- Increasing expectations of returns and attractiveness in the electricity market;
- Availability of financial resources for investment in Brazil at rates lower than opportunity costs;

- Environment conducive to creative financial engineering to attract investment;
- Environment conducive to partnerships, mergers and acquisitions in the power industry, involving energy companies, contractors, suppliers and large customers.

# Strengthened, more diverse integration into the world economy, especially with other Latin American countries

Progressive advances in Brazil's insertion into the world economy, the new Mercosul frontiers and stronger partnerships and trade flows with other countries in the region provide many opportunities for the Eletrobras System in foreign markets, including:

- Prospects for expansion and diversification of power grid interconnection between Brazil and neighboring South American countries;
- Investments in generation and transmission of electricity on other continents.

THE ELETROBRAS SYSTEM CONTRIBUTES
DECISIVELY TO BRAZIL'S POSITIONING
FOR GLOBAL MANAGEMENT OF CLIMATE
CHANGE

# Diversification and improvement of the Brazilian power industry

To meet the demands of development and globalization, the Brazilian power industry will undergo significant change, which opens up broad prospects for the industry, including the Eletrobras System:

- Emergence of new markets, products and inputs for electricity, capable of promoting a major, radical reconfiguration of the industry;
- Growing business market in energy conservation and energy efficiency;
- Development and delivery of new technology in the areas of generation, transmission and distribution, as well as in management, information technology and telecommunications.

### 7.3. Challenges

As opposed to the opportunities, the encouraged expansion scenario also poses risks and threats that can jeopardize not only the System's performance, but also its ability to take advantages of the opportunities that arise. Among the major challenges for the Eletrobras System are:

#### Strong competition in the Brazilian power industry

The prospects for high growth rates lead the Eletrobras System to face challenges such as:

- Competition from new players, including large international corporations, encouraged by the existence of fewer entry barriers;
- Formation of cartels of suppliers of basic materials and resources:
- Pressure to reduce tariffs for large consumers;
- Demand for skilled labor at Eletrobras System companies;
- Loss of market share through product replacement and self-production.

#### Improvement of climate change agendas

Having the largest renewable energy generating capacity in Latin America and due to the importance

given by the Strategic Plan to maximizing clean energy in its matrix, the Eletrobras System contributes decisively to Brazil's positioning for global management of climate change as well as in the leadership that the Brazilian government seeks to assume in international discussions on the topic. The following key strategies have been established:

- To develop new technology for clean energy generation;
- To invest in new experiments for generation from new renewable sources:
- To participate in projects related to renewable energy sources with guaranteed technical feasibility;
- To invest in reducing emissions from thermoelectric sources, ensuring return on investment;
- To increase coordination with environmental entities and local communities to tackle the challenge of increased demand for electricity in the Brazilian market.

# Elevated risks of inadequate choices of technological solutions, given the increasing complexity and rapid pace of innovations

The technology used in products, processes and raw materials in the power industry is highly complex with a high rate of innovation that makes the risk of being prematurely outdated constant, as well as making it difficult to absorb the necessary knowledge to fully understand technology's characteristics and take advantage of its full potential.

#### Risks involving renewal of existing concessions

Several concessions for electricity generation, transmission and distribution are due to expire starting in 2015 and, in the case of current rules being kept, they will be auctioned off, posing a risk to all utility companies, including many of the companies in the Eletrobras System. There are risks of delay or paralysis of necessary expansion if the available or likely resources must be used by the System to acquire old assets. There are several alternatives under evaluation and debate by the government, experts and the businesses concerned,

but there are no definitive solutions in sight. As part of the organization's risk mapping, the holding company has been studying alternative scenarios for the continuity of its businesses.

### 7.4. Positioning

Positioning is the core of the Eletrobras System Strategic Plan. It makes the commitment to sustainability the backbone of System expansion, flowing through all its processes and business developments. The groups involved represent a synthesis, in four large blocs, of several specific stakeholders, consolidated according to the most important benefits expected from the performance of the Eletrobras System.



#### STRATEGIC POSITIONING

Mission ffcting in energy markets in an integrated, profitable and sustainable ffay

ffaffies ffocus on resuffs | Entrepreneuship and innoffation | ffppreciation and commitment to peopfe | Ethics and transparency

ffision In ffffffff, to be the fårgest gf6baffcf6an energy company system, ffith a profitabiffty comparabf6 to the best companies in the ef6ctric sector

Re ards for target pub ic

#### **SHAREHOLDERS**

ttracti e profitabi ity

Shares ith high i uidity,
o o ati ity and market
a ue comp iant ith the
asset a ue

#### CUSTOMERS

ean e ectric energy in uantity, ith ua ity and at competiti e prices throughout the supp y chain

#### GOVERNMENT

Enabffing structuring profects for moderate ff6ff for the consumer, fair for the entrepeneurffariffs fenergy prices and taxesff

ffifferentiation of ffraffiffas a gf6baffreference in cf6an ef6ctric energy generation

#### SOCIETY

Inducing deffef6pment

ffommitment to cfean energy

strategic ob ecti es o increase and impro e the generation, transmission, distribution, and trading e ectric energy business in a competiti e and profitab e ay

o maximi e the production of c ean energy, inc uding ne rene ab e sources, in the E etrobras System po er grid o se ecti e y expand the internationa operation in generation, transmission, and trading, a igned ith the company business and oriented to the mericas o support e ectric energy programs of go ernment interest, agreeing on goa s and the economicfinancia ba ance o ensure that the pro ects of E etrobras System are ectors of sustainab e de e opment for the areas around them

Strategic ob ecti es of ompetence managemen

o imp ement a ne business and organi ation management mode to ensure an integrated, profitab e and competiti e operation

o impro e the corporate go ernance, based on the best market practices o attract, de e op and retain ta ent in the E etrobras System o impro e the business, participation and partnership management o e erage the reputation, credibi ity and re iabi ity of the E etrobras System before its emp oyees, the market and society o minimi e the interna and externa institutiona ties to ensure an operaration under competiti e conditions

o intensify the integrated action in R& +I and measure its contribution to the resu ts of the E etrobras System



Indeed, to the extent that other levels of strategic positioning (final strategic objectives, management and responsibilities) progress, new stakeholders are identified, which include minority shareholders, final energy consumers, remote communities still without access to electricity, various ministries that interface with the company's business, regulatory and oversight bodies, trade associations, environmental organizations, suppliers, Eletrobras company employees and the related labor market, partnerships and consortia, neighboring communities, academic and scientific communities, the media, civil society organizations, and others.

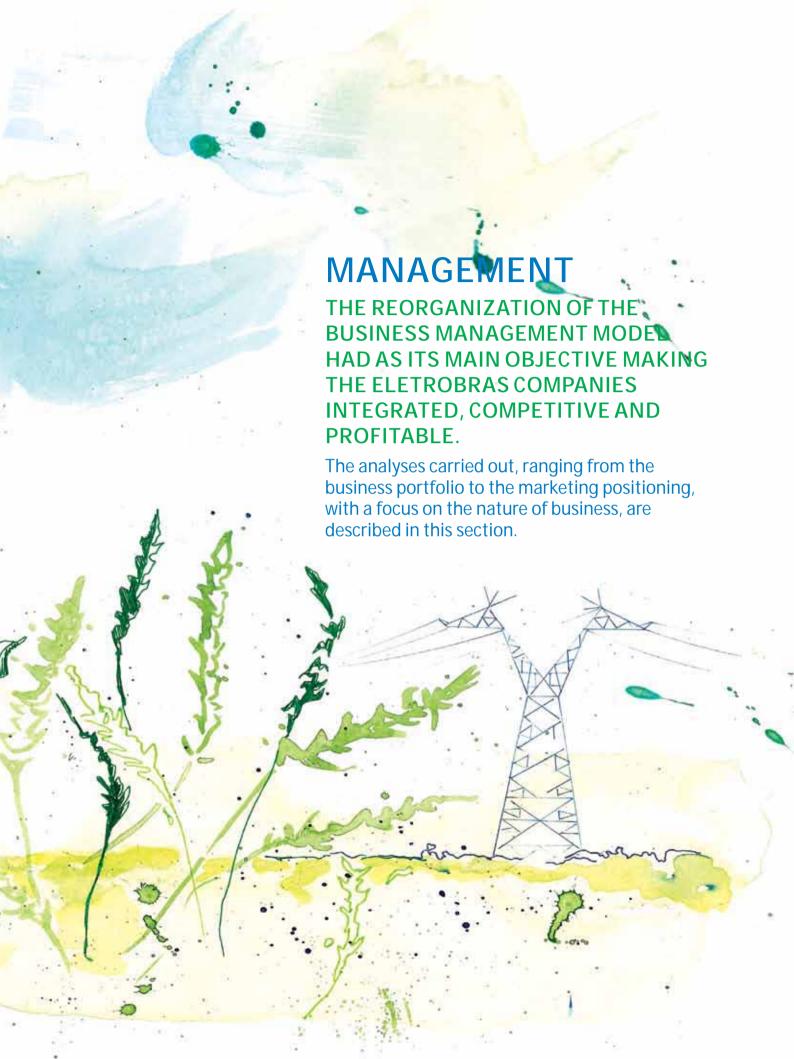
Relationships with these stakeholders are consolidated and standardized System-wide through formal documents aligned with the Strategic Plan, in policies (Sustainability, Environmental, Supply Logistics, R&D+I, Communication, Sponsorship), plans (Career and Compensation, Development and Training), codes (Ethics and Professional Conduct), systems (Performance Management) and guidelines (Social Responsibility).

### 7.5. Business plans

With the Eletrobras System 2010-2020 Strategic Plan completed, it was necessary to break it down into quantitative short- and medium-term targets and establish performance indicators. These would be defined in business plans, which establish a new paradigm in the history of Eletrobras. The concept of Eletrobras being a project, which had always marked the company's performance, has been replaced by the concept of being a business. The change is subtle but important: in the past, efficiency and effectiveness were sought; today, Eletrobras seeks to create value for shareholders and stakeholders.

An Eletrobras System Business Master Plan has been elaborated, capable of guiding major targets for generation, transmission, distribution, marketing and corporate management, while still allowing the creation of economic and financial guidelines for each subsidiary. An outline of conditions for a comprehensive business process that results in the company's proposals of specific business plans, broken down into operational action plans, has been created. The consolidation of the whole process produced the Eletrobras System Business Plan, which is to be approved and disclosed in 2011.





# 8. Management

The reorganization of the Eletrobras System business management model was one of the projects in the Transformation Plan. The System needed an integrated and competitive business structure committed to profitability, and capable of ensuring its sustainability in the increasingly competitive environment of the Brazilian power industry.

With this objective, a comprehensive diagnosis was made of the System's businesses and its corporate structure. The aim was to identify possible areas for improvement resulting from the historical process and political circumstances that influenced the formation of the companies, in addition to verifying its suitability for the Brazilian and world energy markets. Existing and planned organizational structures, macro processes, functions and resources were analyzed. Alternative accounting, economic, financial, tax, operational, pension, actuarial, labor, market, regulatory, corporate and sustainability proposals were also analyzed, focusing on management according to the nature of the business.





#### THE NEW ELETROBRAS SYSTEM MANAGEMENT MODEL: ELETROBRAS PERFORMANCE PILLARS



#### Corporate policies

To provide an integrated management model for the Eletrobras System, all companies need consolidated, unified management tools. In 2010, the holding company led the System in an effort to create corporate policies related to various issues that had previously been handled independently by each company. They are:

- Environmental Policy;
- Integrated Communication Policy;
- Energy Efficiency Policy;
- · People Management Policy;

- Risk Management Policy;
- Supply Logistics Policy;
- · Sponsorship Policy;
- Water Resources Policy;
- Sustainability Policy;
- Policy on Information Technology, Telecommunications and Automation.

By integrating policies, the companies also become integrated, strengthening the guiding role of the holding company and making the whole System more cohesive. As an act of transparency, all policies are available on

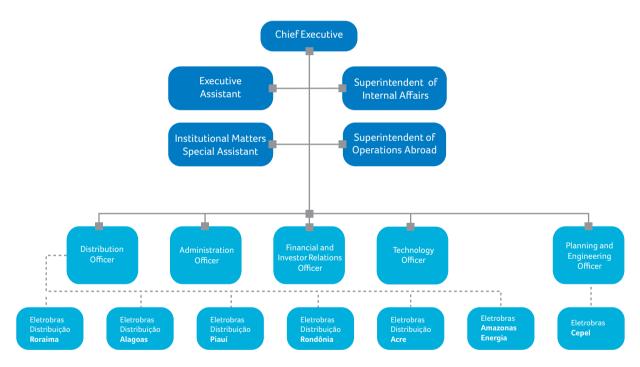
the Eletrobras website, making company management practices public.

### 8.1. Holding structure

The new management model for the System also required the support of an organizational structure at the holding company – one that was more flexible, compatible with new guidelines established by the majority shareholder, and closer to the "market player" paradigm instead of that of the "government agent." The current structure seeks to encourage teamwork, delegation of authority and establishment of processes and departments to strengthen its role as a holding company.



#### MANAGEMENT STRUCTURE



#### MANAGEMENT STRUCTURE

José Antonio Muniz Lopes\*
Chief Executive Officer

Armando Casado de Araújo Financial and Investor Relations Officer

Miguel Colasuonno Administration Officer Pedro Carlos Hosken Vieira Distribution Officer

Valter Luiz Cardeal de Souza Planning and Engineering Officer

Ubirajara Rocha Meira Technology Officer

\* Until February/2011. From this date, José da Costa Carvalho Neto has been his replacement.

#### **Chief Executive**

The Chief Executive Officer of Eletrobras is chosen from among the members of the Board of Directors and he or she is charged with presiding over the General Shareholders Meetings. Respecting the guidelines set by the Board of Directors, the president shall guide the management policy and oversee the company's business in conjunction with the Executive Board, for which he or she calls and presides over weekly meetings.

#### **Executive Board**

In 2010, the Eletrobras Executive Board was composed of the Chief Executive and five additional officers: Distribution; Administration; Finance; Investor Relations; Technology; and Planning and Engineering.

#### Committees

The management structure also has several technical and issue-specific committees supporting the Executive Board. Currently functioning are:

- Business Management Support Committee;
- Energy Trading Committee;
- Strategic Supply Logistics Committee;
- Strategic Organizational Processes Committee;
- · Management Integration Committee;
- Corporate Research and Technological Development Integration Committee;
- Integrated Energy Efficiency Committee;
- Investment Committee;
- Operations, Planning, Engineering, and Environment Committee;
- Sponsorship Committee;
- Risk Committee:
- Sustainability Committee;
- Information Technology, Telecommunications and Automation Committee.

# Eletrobras System Business Management Support Committee

This committee was created in July of 2010 to monitor the results achieved in corporate projects

and activities, providing periodic information on the analyses and consolidation resulting from this monitoring to support the decision-making process. The committee, composed of representatives from every Eletrobras company, meets periodically for analysis and recommendations on corporate projects and activities, to support the decisionmaking process.

The Eletrobras Executive Board members receive, monthly, an Executive Summary that briefly provides information on the performance of the company's assets listed and traded on stock markets, the main generation and transmission ventures, Eletrobras' equity participation portfolio and budgetary management numbers focusing on investments, among other information necessary to evaluate the performance of the Eletrobras System.

### 8.2. Financial management

In 2010, the holding's centralized financial management made a broad financial restructuring process possible, in addition to the approximately R\$15 billion capitalization of Eletrobras System companies, which has reduced debt and increased investment capacity for expansion. At the same time, the operation increased the tax efficiency of the System as a whole, as many of the businesses that had historically accumulated losses began to generate positive results and take advantage of deferred tax credits. This financial rebalancing generated annual savings of more than R\$400 million

The improved capital structure of the subsidiaries was only possible with amendments to their bylaws, such as the provision that the annual dividends payment would correspond to 100% of the adjusted net income. New corporate governance rules were also adopted by the subsidiaries, such as additional attributes of their Board of Directors that allowed them to monitor and approve

CMDE goals that every business adhered to, together with the holding, and committing to fulfill the strategic guidelines for the following fiscal year.

The payment of dividends retained since 1979 in the amount of R\$10 billion in four annual installments (2010 - 2013) was another operation of note. In addition to increased credibility and reassuring shareholders that changes in management set in motion by the Transformation Plan were going in the right direction, this measure provided significant savings in financial expenses with the restatement of the retained dividends.

# CORPORATE PERFORMANCE AND GOALS CONTRACT

The CMDE seeks to establish management results and goals with the use of financial and economic. technical-operational and social and environmental indicators. Quarterly monitoring is carried out through the holding's integrated management process with its subsidiaries according to specific procedures and activities. Therefore, the CMDE constitutes a tool applied to seek corporate financial and operating improvements.

#### The brand case

"It is painful that Eletrobras' R\$80 billion in assets is worth no more than R\$30 billion on the market".

(José Antonio Muniz, Chief Executive Officer of Eletrobras, March 2009)

The transformation of the Eletrobras System would not have been as effective without the implementation of strategy and the new brand management model, which plays a fundamental role by symbolically representing the efforts for its modernization. Before the new model, each company had its own brand without any alignment or integration across the System. The lack of visual identification reflected the lack of an effective integrated management, in turn compromising the companies' value. Now, the brand should mirror the positioning of a great organization with attributes such as integration, competitiveness, and profitability.

The process was carried out based on analysis of the market, employees and other stakeholders, including: shareholders, investors, the media, suppliers and partners. With respect to the market, global trends in the energy sector and competitors were considered. To learn about external stakeholder perception, interviews with opinion formers and social network analysis were carried out.

The bulk of these efforts, however, was focused on employees. The process involved interviews with all executives from all System companies, as well as visual analysis and analysis of the content of communication material and the Transformation Plan. Internal communication was also a priority, with constant publications on the project's status in internal media already entrenched in the System culture.

The new brand was launched in March of 2010 at the National History Museum in Rio de Janeiro in an event that gathered the Minister of Mines and Energy and the presidents of all Eletrobras companies, in addition to senior managers and 20 randomly-chosen employees from each company. The next day, all System employees received badges with the new brand. The same standardization was applied to the facades of buildings and their main displays of information.

### 8.3. Sustainability management

"We of Eletrobras companies are committed to effectively contributing to the sustainable development of areas where we work and our neighboring communities and to investing in research and the use of new socially and environmentally responsible technologies.

We stand out among global clean and renewable energy leaders and we conduct our businesses according to internationally recognized management practices, seeking to optimize positive social and environmental impacts while minimizing the negative impacts of our activities.

We seek financial, social and environmental balance in our operations, without compromising the quality of life for future generations.

We work to adopt corporate governance best practices and, through the Eletrobras Code of Ethics, we reaffirm our ethical commitment to our employees, shareholders, customers, suppliers, business partners, society and government, in addition to making these commitments explicit in the Eletrobras System Strategic Planning."

Eletrobras Sustainability Policy Statement

The mission to sustainably operate in the energy market and vision of becoming, by 2020, the largest global clean energy conglomerate in the world have put sustainability at the core of the Eletrobras System business strategy. In 2010, important events marked the evolution of Eletrobras' governance and sustainability management in the System, some of which are worth noting.

Sustainability Policy: established the commitment to sustainability and guidelines for Eletrobras companies in matters related to social responsibility, the environment, and financial stability, in addition to defining the responsi-



bilities of Eletrobras companies' Sustainability Committees and Executive Boards.

Sustainability Committee: the main Eletrobras System sustainability management body, directly subordinate to the Board of Directors. With its restructuring in 2010, it incorporated the participation of representative coordinators from each company and assumed the main tasks of monitoring System sustainability initiatives, elaborating goal and improvement plans, planning and elaborating the Sustainability Report, and participating in the application processes of the BM&FBOVESPA's ISE and the NYSE's DJSI.

 Furnas and Tucuruí Pacts: represent the strategy adopted by the Eletrobras System to mobilize and obtain commitments from all companies with continuous management of sustainability and corporate governance issues through shortand medium-term actions and goals.

- Eletrobras Portal: corporate portal dedicated to sustainability, with specific sections for governance, the environment, social responsibility, and financial information, as well as pages with economic, social, and environmental management indicators.
- Social and Environmental Indicators for Corporate Sustainability Management (IGS): institutionalizated by the Executive Board, the IGS Database is a computer system for storing, editing, processing, retrieving and viewing information related to sustainability, developed by Cepel. The indicators are developed considering the realities of the Brazilian energy sector, to assist the management of corporate sustainability strategy and long-term communication, focusing on social, environmental and economic-financial aspects. The testing of the environmental module was completed in August 2010 and the module was implemented in all companies in the same year. The completion of all modules will allow Eletrobras to manage indicators from all dimensions of sustain-

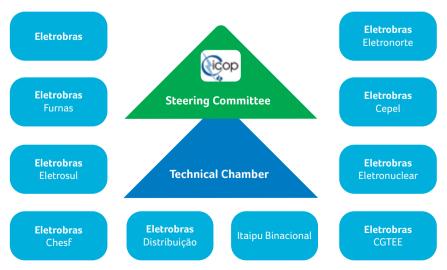
ability, through parameterized and traceable information, including by external audit.

# 8.4. Research, Development, and Innovation management

Eletrobras System R&D+I activities transcend its own frontiers. Among its beneficiaries are the MME, sector entities such as the EPE, ONS, the Power Trading Chamber (CCEE) and Aneel, as well as concessionaires and manufacturers, and even society as a whole.

The main management instrument is the Corporate Research, Technological Development, and Innovation Integration Committee (Cicop), which coordinates and encourages R&D+I activities of Eletrobras System to create synergy and optimize fund allocation. Among its main activities are defining operating strategies, encouraging the development of a culture of innovation, and providing incentives for obtaining patents and protecting intellectual property. For this, Eletrobras has two levels for action: a Steering Committee, coordinated by the Eletrobras holding, and a Technical Chamber, composed of R&D+I representatives for all System companies.

## CORPORATE RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION INTEGRATION COMMITTEE



Inter-company coordination for the management of R&D+I, created in 2003



Among Cicop's activities in 2010 were:

- Strategic technological planning: start of development of the Eletrobras strategic technological planning, which will define the Strategic Plan and the Management System for all Eletrobras companies, projecting the primary goals and technological challenges for the period 2011-2015.
- Inventories of projects and products: continuation of inventorying all ongoing or completed R&D+I projects at Eletrobras companies for the creation of a database that can support the definition of future project portfolios. In parallel, the technological products inventory is being carried out by the companies' technical areas, which generates an activity and innovation report to support product management.
- Results indicators: structuring of the R&D+I Project Results Indicators Book.
- Strategic technological innovation management: conclusion of the Strategic Technological Innovation Management course offered by

Campinas State University in 2009 and 2010. In addition to the training, it offered to R&D area representatives of all System companies a forum for discussion and reflection on the topic.

Investments in R&D+I projects are located in strategic areas, and include contributions to the sector fund CT-ENERG, EPE and Cepel's projects portfolio. Note also in 2010 the consolidation of RELASE.

#### **Electric Energy Research Center**

Created in 1974 to build research infrastructure for advanced technological development of Brazilian power equipment and systems, Cepel is the main executor of R&D+I projects and programs for the Eletrobras System. It has an extensive collection of methodologies and computational programs applied to planning and expansion of generation and transmission, as well as operation of interconnected hydrothermal systems across the power industry. It also supports important government programs and projects, such as Luz para Todos, Proinfa, Procel and the National Public Lighting and Efficient Traffic Light Program – Procel Reluz.





The center has a network of 30 laboratories used to support research and development projects, prototype testing and product development, and technical and compliance analysis for certification. Moreover, it carries out studies and research that generate transmission technologies that have allowed an increase in installed capacity, improved power grids and safety clearance width, equipment monitoring and diagnosis, conservation and efficient energy use, in addition to metallurgy and materials.

In 2010, as part of the Cepel's guarantee project financing, Eletrobras provided R\$125 million through annual contributions, with R\$16 million allocated to infrastructure investment. In the same year, Cepel developed several important corporate R&D+I projects.

CREATED IN 1974, CEPEL
IS THE MAIN EXECUTOR
OF R&D+I PROJECTS
AND PROGRAMS FOR
THE ELETROBRAS
SYSTEM, HAVING AN
EXTENSIVE COLLECTION
OF METHODOLOGIES
AND COMPUTATIONAL
PROGRAMS

## Cepel: corporate R&D+I projects for Eletrobras companies

RESEARCH AREA		No.	
Generation and Transmission Expansion Planning		5	
Environment		5	
Stochastic Hydrology, Water Resources and Winds		4	
Energy Operation Planning		5	
Network Planning, Operation and Analysis		8	
Scada/Ems – Sage (Network Supervision and Control, R Analysis, and Studies)	Real Time	6	
Local Automation and Disturbance Analysis		2	
Transmission Technologies		11	
Metallurgy and Materials		7	
Equipment and Facilities Monitoring and Diagnosis		16	
Energy Conservation and Efficient Use		14	
Renewable Energies and Distributed Generation		6	
Energy Distribution and Measurement and Loss Reduct	tion	3	
Applied Computational Techniques for Energy		2	
Financial Analysis of Projects and Tariffs		1	
Reliability		1	
Energy Quality		2	
Database Integration		1	
TOTAL		99	

#### 8.5. Supply logistics management

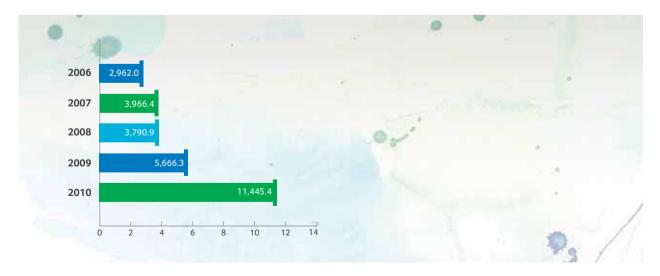
Until 2008, Eletrobras companies had independent material and equipment supply policies for generation, transmission, and distribution. The lack of unified classification made integrated material and equipment management impossible, impacting deadlines, costs and profitability. The Eletrobras Supply Logistics Policy, disclosed in 2009, started a new phase of efficiency and competitiveness by integrating goods and services supply logistics, increasing purchasing power and reducing acquisition and administration costs.

In 2010, the policy's results became apparent, especially: supply logistics manual revision; elaboration of a proposed methodology for supplier performance evaluation; elaboration of a supplier management manual; elaboration of a contract management manual; rules for simplified Eletrobras bidding processes; standardization of transmission equipment and material technical specifications; and standardization of insulating oil and SF6 gas technical specifications.

The contracting process was benefited with the creation of a Contract Management Department at the holding. In 2010, it adhered to new policy of the electronic invoice system and executed 13 corporate contracts for Eletrobras companies from among the 73 contracts through bidding processes or processes where bidding was waived. In 2010, the volume of Eletrobras purchases surpassed R\$11.4 billion, with the major investments by Electronuclear, which alone was responsible R\$7.5 billion.

THE ELETROBRAS SUPPLY
LOGISTICS POLICY
STARTED A NEW PHASE
OF EFFICIENCY AND
COMPETITIVENESS BY
INTEGRATING SUPPLY
LOGISTICS, INCREASING
PURCHASING POWER AND
REDUCING COSTS

#### **GROWTH OF ELETROBRAS COMPANY PURCHASES (R\$ MILLION)**



Eletrobras contracting and purchases are made through bidding processes in compliance with the Biddings and Contracts Law (Law 8,666/93), which regulates purchasing by state-owned companies. Exceptions are as provided by Law 8,666/93, which exempts the bidding process requirement in contracting by Itaipu Binacional, which is subject to specific legislation.

Thus, equitable treatment in bidding processes is guaranteed to participants. However, according to the provisions in the Small Businesses Statute (Federal Complementary Law 123/2006), Eletrobras companies guarantee preference of small businesses in cases of technical ties.

To assure transparency in purchasing, Eletrobras has created the Eletrobras System Biddings and Contracts Portal, giving public access to information regarding calls for bids, current contracts and a price record report of all System companies. Companies periodically publish their bidding and contract reports on the Federal Government Transparency Portal.

#### Unified management

The overhaul of the Unified Materials and Services Suppliers Record System, managed by the holding, will give an integrated view and allow information exchange among Eletrobras System companies, focusing on the incorporation of the unified supplier evaluation model, with economic, technical, and social and environmental criteria. It will be an important management tool for all Eletrobras companies.

#### Quality

The Supply Logistics Strategic Committee adopted quality criteria based on ABNT NBR ISO 9000<sup>4</sup> for product supply, standardization of oversight methodologies, a supplier technical performance evaluation system (under study) and ISO 9001 implementation in the supply chain. The NBR 19000 Program has already certified 37 auditors, ten in 2010, and 22 audits of suppliers were carried out in the same year.

NBR 19000 Program
COMPANY

COMPANY	AUDITORS
Cepel	5
Chesf	4
Eletrosul	2
Furnas	8
Eletronorte	4
Eletrobras holding	4
Eletronuclear	4
Itaipu Binacional	6
TOTAL	37

# Eletrobras Eletronuclear Quality Assurance Programs

Due to important safety requirements for its operation, Eletrobras Eletronuclear is a special case. In addition to the stipulations in the Code of Ethics and the Eletronuclear Code of Conduct, there are other criteria used in goods and services supplier selection, considering the specifics of any good or service involving hazardous material, particularly radioactive material. These suppliers must comply with the quality criteria established by the National Nuclear Energy Committee (CNEN), and the quality system

which requires technical audits by qualified Eletrobras Eletronuclear personnel or independent institutions before products are manufactured or services provided. They also require environmental licensing and compliance with current safety legislation relative to people, the environment, and historical and cultural heritage.

Finally, these contracts have specific Industrial Hygiene and Safety Rules that stipulate the presentation of an Occupational Safety Plan listing chemical products and/or hazardous materials to be used, as well as storage, handling, disposal, storage, and final

<sup>&</sup>lt;sup>4</sup>ABNT NBR is the symbol for Brazilian Standards (NBR) approved by the Brazilian Association of Technical Standards (ABNT), the body responsible for technical standardization in the country.



disposal methods. Specifically for polychlorinated biphenyl disposal, technical qualification and proof of environmental performance are required of the contracted company; for supplying nuclear fuel, companies must be licensed for operation by the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) with approval from CNEN and the State Environment Institute.

The contracts of other suppliers have requirements related to industrial waste disposal in compliance with Global Compact principles. Eletronuclear supports supplier development when the acquisition of a product is imperative for the company and there are no qualified suppliers for its manufacture. In these cases the company provides know-how and monitors the whole process, from manufacture to delivery.

#### Human rights [GRI HR1]

With the goal of including human rights clauses in all contracts signed by System companies with critical suppliers, Eletrobras is standardizing the criticality concept in supplier contracts. For companies where these criteria are not yet established, clauses for all supply contracts are adopted. Some examples of the issues addressed in these clauses are:

- Slave labor. Slave or slave-like labor and any other form of illegal labor;
- Employment of children under 18 on night shifts, and in dangerous or unhealthy work, and employment of children under 16 in any capacity, except in the young apprentice program, starting at the age of 14;
- Discrimination or prejudice on the basis of gender, origin, race, color, physical condition, religion, marital status, age, family status or pregnancy;
- Environmental protection and conservation, as well as prevention and eradication of harmful practices;
- Proof of payment of severance pay when of any labor contract is terminated;
- Presentation of contractual guarantees to cover any social security or labor obligations for continuous services;
- Proof of provision of meal vouchers with minimum face value adequate to regional prices for companies with no specific collective wage increase or collective bargaining agreements.

Contracts with human rights clauses	Contracts with human rights clauses				
COMPANY	TOTAL CONTRACTS	CONTRACTS W/ CLAUSE			
Chesf	397	397	100%		
CGTEE*	158	158	100%		
Eletronorte	42	42	100%		
Eletronuclear	51	51	100%		
Eletrosul	87	87	100%		
Furnas*	870	870	100%		
Eletrobras <i>holding</i>	41	41	100%		
Itaipu Binacional*	3511	3511	100%		
Amazonas Energia*	845	845	100%		
Distribuição Alagoas*	170	170	100%		
Distribuição Piauí	17	15	88%		
Distribuição Acre	41	41	100%		

<sup>\*</sup>Companies that do not apply any limitations for critical investment contracts but that include clauses in all of their contracts.

# 8.6. International businesses management

The internationalization of the Eletrobras System aims to preserve its relative importance internationally and to drive the increase in market value. New business prospection seeks to build a profitable asset portfolio,

taking advantage of economies of scale and focusing on generation of clean energy and power transmission, essential System attributes. With offices already established in Montevideo, Lima and Panama City, Eletrobras is studying ventures in different countries involving about 16,000 MW in hydroelectric generation and 10,000 km of transmission lines.

To support the execution of this strategy, the international operations' superintendency, created in 2008, has sought partnerships with the Brazilian private sector and large international energy groups to identify joint venture opportunities in businesses abroad. In this period, technical and entrepreneurial cooperation agreements were signed with several companies, such as Électricité de France (French Electricity), Instituto Costariquenho de Eletricidade (Costa Rican Electricity Institute), Administração Nacional de Usinas e Transmissões Elétricas do Uruguai (UTE - National Administration of Electric Transmissions and Power Plants of Uruguay) and Eletricidade de Moçambique (Mozambique Electricity).

These agreements deal with development of studies for the implementation of hydroelectric power plants and other renewable energy projects and transmission lines of electricity in Central and South America and Africa. If any of those projects prove to be technically and economically feasible, it will be explored through an SPC.

In 2010, Eletrobras kept up its efforts of opportunities prospection in South, Central, and North America, in addition to analysis of some investment opportunities in Portuguese speaking sub-Saharan African countries. In South America, studies for opportunities in hydroelectric generation in Peru, wind farms (WPPs) in Uruguay and transmission in Peru have been started. Three countries currently present the best prospects for generation projects: Argentina, Uruguay, and Peru. In the transmission segment, the Brazil-Uruguay line is already being implemented on the Uruguay side.

In Central America, studies remain focused on opportunities to expand hydroelectric generation in order to face countries' internal demand, to export excess energy, and to reinforce the existing transmission system – considering that the region can become a door to future north-south integration. The predominant use of fossil fuel for power generation in most of these countries opens up prospects for implementation of hydroelectric plants which clean up the regional energy matrix and offer better rates to the population.

# HYDROELECTRIC POWER PLANT (HPP) PROJECTS AND TRANSMISSION LINES (TLs) UNDER EVALUATION BY ELETROBRAS



In the USA, the Obama administration's clean energy target has been attracting significant investments. Moreover, the USA has large grids that are not yet completely interconnected, providing business opportunities in this direction.

Eletrobras is also interested in the possibility of direct monitoring and the absorption of technological advances happening in the USA power industry, particularly in new means of renewable generation.

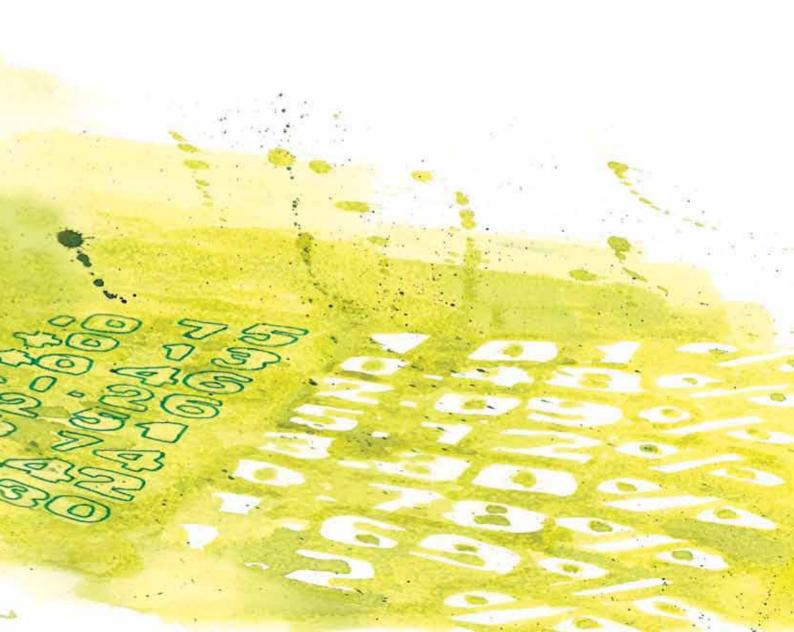






THE 7.5% GDP GROWTH INCREASED POWER CONSUMPTION BY 7.8%, ESPECIALLY IN THE INDUSTRIAL CLASS, WHICH REACHED 10.6%.

These and other data on Brazilian power industry, and their impact on the Eletrobras System, are discussed in this chapter.



## 9. Economic Performance

Power consumption in Brazil increased 7.8% in 2010, just above the 7.5% GDP growth in the same period. This increase crossed all consumer classes, with industrial consumers posting growth of 10.6%. After a significant decline in industrial production in the last quarter of 2008 and the near-stagnation of 2009, in 2010 there was a strong recovery of industrial production, with consequent increases in industrial power consumption.

The Southeast region presented the highest expansion in industrial consumption, with growth of 13.1%. It should be noted that, in 2009, the Brazilian Southeast saw a significant decrease in the same indicator (-9.6%). The strong performance of mining and metallurgy, which had high export rates and which were heavily affected by the crisis in 2008 and 2009, explains the recovery of power consumption in this region.

Power consumption and economic growth expectations in the short and medium term are based on growth in emerging economies, particularly China, which will continue to benefit Brazilian exports in the industries where it has comparative advantages, such as pulp, agriculture, steel, and mining. Because these industries, especially agriculture, are large power consumers, power consumption is expected to increase.

Domestically, maintenance (and eventual expansion) of investments in infrastructure, the recovery of the housing industry, industrial expansion (although on a smaller scale than in 2010) and a booming service industry should drive power consumption in the coming years. Other relevant factors are increases in average real wages and per capita income growth, as well as credit expansion, which will continue to keep residential power consumption on the rise.

#### Power consumption, by consumer class and region (GWh)

REGION	RESIDENTIAL	INDUSTRIAL	COMMERCIAL	OTHERS	2010	2009-2010 VARIATION (%)	
North	5,918	13,069	3,489	3,438	25,914	7.6	
Northeast	19,280	29,422	10,286	12,005	70,993	8.8	
Southeast	56,781	103,731	38,118	26,478	225,108	8.4	
South	17,079	30,884	11,723	11,117	70,803	6.1	
Midwest	8,101	6,638	5,471	5,990	26,200	5.2	
Source: Permanent Powe	r Market Monitoring and	Analysis Commission	/ EPE.				

Brazil's installed capacity on December 31, 2010 reached 112,398 MW, while the Eletrobras System had a total installed capacity of 42,080 MW or 37% of the total. The 2009 - 2012 Eletrobras System PAE provides for the establishment of a large project portfolio in

generation and transmission, the scale of which is almost unprecedented worldwide. Highlights are Brazilian Nuclear Program projects and viability studies for the Belo Monte and the Tapajós Complex hydroelectric power plants.

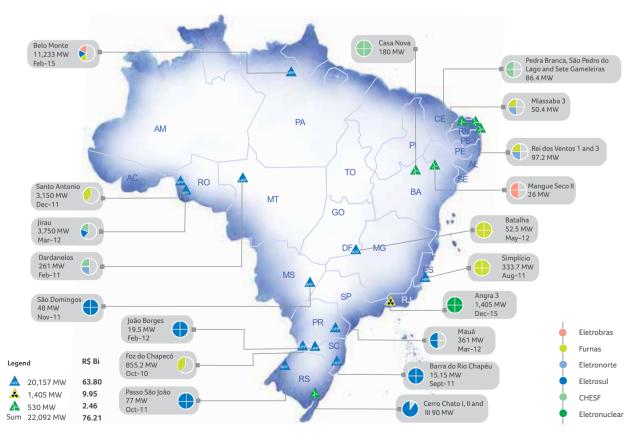
#### 9.1. Generation

In 2010, R\$2.815 billion was invested in expansion of the Eletrobras System generation business, up 7.4% compared to the previous year, which helped installed capacity to increase from 39,402 MW to 42,080 MW, including its participation in partnerships. The power added to the System by partnerships amounted to 487 MW, corresponding to the Eletrobras participation in 1,150 MW of the installed capacity added with three new hydroelectric power plants that came on stream.

	POWER PLANTS CONCLUDED IN PARTNERSHIPS		
	POWER PLANT	TOTAL INSTALLED CAPACITY (MW)	ELETROBRAS INSTALLED CAPACITY (MW)
- 2	RETIRO BAIXO	82	40
100	SERRA DO FACÃO	213	105
	FOZ DO CHAPECÓ	855	342
100	TOTAL	1,150	487

In addition, Eletrobras System companies are building nine power plants with a total installed capacity of 2,426 MW, including the Angra 3 nuclear power plant, which will come on stream in 2015.

#### MAP OF PLANTS UNDER CONSTRUCTION



#### Own plants under construction

OPERATION	SOURCE	PLANT	INSTALLED CAPACITY
		Simplício/Anta	334 MW
2011 Hydroelectric	Hydroelectric	Passo São João	77 MW
		Barra do Rio Chapéu	15 MW
	Thermal	Candiota 3 *	350 MW
		Batalha	53 MW
2012	Hydroelectric	São Domingos	48 MW
		João Borges	19 MW
2013	Wind	Casa Nova	180 MW
2015	Nuclear	Angra 3	1,350 MW

<sup>&</sup>lt;sup>\*</sup>Candiota 3 power plant came on stream in January 2011.

Source: Reports from the Generation Services Oversight Board (SFG) of Aneel from January 2011 and power auction results, EPE.

Plants implemented through SPCs are still under construction and are also slated to come on stream in 2015, with total installed capacity of 20,213.2 MW.

#### SPC plants under construction

•					
OPERATION	SOURCE	PLANT	INSTALLED CAPACITY	SHARE	
2011	Hydroelectric	Dardanelos	261 MW	49%	
		Mauá	361 MW	49%	
		Santo Antônio	3,150 MW	39%	
2012	Hydroelectric	Jirau	3,300 MW	40%	
	Wind	Rei dos Ventos 1	48.6 MW	49%	
		Rei dos Ventos 3	48.6 MW	49%	
		Cerro Chato 1	30.0 MW	90%	
		Cerro Chato 2	30.0 MW	90%	
		Cerro Chato 3	30.0 MW	90%	
		Miassaba 3	50.4 MW	49%	
		Mangue Seco 2	25.2 MW	49%	
2013	Wind	Pedra Branca	28.8 MW	49.9%	
		São Pedro do Lago	28.8 MW	49.9%	
		Sete Gameleiras	28.8 MW	49.9%	
2015	Wind	Belo Monte *	11,233 MW	49.98%	
		Teles Pires	1,820 MW	49%	

<sup>&</sup>lt;sup>\*</sup>Construction of the Belo Monte Plant began in 2011.

Source: Reports from SFG of Aneel from January 2011 and power auction results, EPE.

Comparing only the installed capacity of the plants auctioned or granted concessions linked to the Eletrobras System, alone or in partnership, using the own load demand projected in the 10 Year 2019 Energy Expansion Plan (PDE) elaborated by EPE/MME, we have the following result: in 2010, the installed capacity of proprietary power plants and those in partnership represent 57% and 5% of demand, respectively; in 2015, 48% and 14% of demand; and in 2019, 40% and 23% of projected demand [GRI EU10].

Besides the construction of new power plants, the System is also investing in maintenance and modernization of its current plants to expand generation through more effective use of existing assets. In 2010, the most notable projects were:

- Power generation system maintenance in the Brazilian Northeast;
- Replacement of steam generators at the Angra 1 power plant (Rio de Janeiro State); and

Modernization of the Luis Carlos Barreto HPP.

Finally, the Eletrobras System is investing in viability studies for 16 hydroelectric projects that together reach 15,301 MW of installed capacity, equal to 82% of the total installed capacity of planned hydroelectric plants in the 2019 PDE.

Hydroelectric pov	Nor plants i	inder study hy	ıtho 10 Voar	2010 PDF

INSTALLED CAPACITY	POWER PLANT	OPERATION
63 MW	Cachoeira	
64 MW	Castelhano	
56 MW	Estreito	2015
113 MW	Ribeiro Gonçalves	
134 MW	Uruçuí	
76 MW	Toricoejo	2017
6,133 MW	São Luiz do Tapajós	2016
80 MW	Mirador	
320 MW	Água Limpa	2018
2,160 MW	Marabá	2018
1,328 MW	Serra Quebrada	
802 MW	Cachoeira do Caí	
528 MW	Cachoeira dos Patos	
881 MW	Jamanxim	2019
227 MW	Jardim do Ouro	
2,336 MW	Jatobá	

## 9.1.1. The option for power generation in the Amazon

Brazil has the world's largest water resources. According to EPE, 172,000 of the 261,000 MW of Brazilian hydroelectric generation potential are still available. Most of this unexplored potential in Brazil - approximately 65% - is in the northern region, home to the Amazon Rainforest, a focus of global environmentalists' concern. These groups criticize the construction of a major hydroelectric power plant in the region. Should Brazil give up on its natural potential and not use this energy?

In the opinion of the Brazilian government, no: Brazil needs these power plants to maintain the projected economic growth, avoid future blackouts and guarantee prices - and the Eletrobras System, with a vision of being the largest global clean energy business system by 2020, is entirely aligned with this positioning. The energy price of Belo Monte is R\$77.97/MWh, while for new thermoelectric power plants, it is R\$140/MWh.

The rejection of these projects occurred in the 1980s, when engineering solutions required the construction of large reservoirs. One of the symbols of that time is the Balbina Hydroelectric Power Plant, built on the Uatumã River in Amazonas State, whose reservoir occupied 2,360 km².

Today, however, things are completely different. The evolution of ethical standards and the Brazilian power industry's leadership in the incorporation of environmental variables in its projects – as well as engineering advances – brought optimized hydroelectric use and smaller reservoirs, seeking to minimize the environmental impacts associ-

ated with building hydroelectric power plants. Generation at 30 of the 47 new hydroelectric power plants in northern Brazil will occur using the river's natural volume of water; that is, they will not need extensive reservoirs with large water volumes for generation - the so-called run-of-the-river power plants.

Additionally, it must be taken in account that the hydroelectric projects are located in Pará State along the Trans-Amazon Highway – Belo Monte, Marabá, and Tucuruí - or BR-163 - Teles Pires and Sinop. These areas are already completely anthropic. The Jirau and Santo Antonio plants, part of the Madeira Complex, are located in Porto Velho, also quite anthropic areas.

With respect to social impacts, the modern guiding concept is "Regional Insertion". Large projects, due to the significant investments necessary to implement them, should be used as unique opportunities to leverage the development of the communities where they will be installed. Although a significant portion of the power generated will be integrated into the SIN, the projects will seek to generate benefits for local communities. If, as in the case of Belo Monte, it is located in a degraded area, the project should be implemented in such a way as to rehabilitate that area.



Aerial view from Altamira, Pará State, near the construction site of the Belo Monte Hydroelectric Power Plant on the Xingu River.



Another situation is when the project is located near urban areas, as is the case with the Santo Antonio and Jirau power plants. The installation of permanent factories, such as turbine and hydromechanics factories in Porto Velho, has generated a virtuous development cycle, with new investments and excellent opportunities for job creation, income generation and professional training. In both cases, the federal government established guidelines for allocating funds to these locations as part of the Accelerated Growth Program to minimize private investment and internalize development.

A third situation is when projects are installed in preserved areas, when the regional benefit is the guarantee that these forested areas do not suffer from deforestation pressure, through the creation and support of conservation units. This is the case of the Tapajós Complex, whose five reservoirs totaling 1,979 km² are limited to natural flood areas during the rainy season. Moreover, part of the income generated by the project will be invested to guarantee the physical integrity of 200,480 km² of forest, an area the size of Pernambuco, Paraíba, Alagoas, and Sergipe States combined.

#### 9.1.2. Belo Monte

The auction for the Belo Monte Hydroelectric Power Plant concession, held on April 20, was the most important event in generation in 2010. The Norte Energia Consortium – composed of Eletrobras Chesf, Eletrobras Eletronorte and the Eletrobras holding – won the auction by offering R\$77.97/MWh produced, a discount of 6.02% compared to the maximum price

of R\$83/MWh established by the Ministry of Energy and Mines. The 35-year concession contract gives the consortium the right to explore Belo Monte's generation potential and was signed on August 26, 2010 by then President Luiz Inácio Lula da Silva.

Brazil's largest hydroelectric power plant, Belo Monte should come on stream in 2015 with an installed capacity above 11,000 MW, enough to supply 27 million Brazilian homes. It will have 24 turbines - 18 vertical Francis turbines and six horizontal tubular

turbines – and, according to EPE data, will require investment of R\$19 billion.

The Environmental Impact Study and Report also provides for R\$3.3 billion in investments by the auction winner in social and environmental offsets such as fish and boat passage mechanisms, in addition to R\$500 million to support the Xingu Regional Sustainable Development Plan. The study also provides for the resettlement of about 5,000 families in rural and urban areas [GRI EN12].

#### **BELO MONTE HYDROELECTRIC POWER PLANT\***



<sup>\*</sup> Initial layout of the Environmental Impact Report - RIMA (May 2009).



The Belo Monte HPP will have a main dam on the Xingu River, about 40 km downstream from Altamira, at the Pimental Site. The main reservoir will be formed by the dam and water will be diverted to form an intermediate reservoir 50 km from Altamira. Due to this diversion, a 100 km stretch of the Xingu River (measured along the river channel) between the Pimental Site dam and the main powerhouse at the Belo Monte Site will have a reduced flow.

It is along this stretch that the licensing process established the maintenance of an outflow that simulates the river's natural variations throughout the year, with a water volume that is always enough to guarantee the necessary conditions for the population's quality of life and environmental integrity, such as navigation in the drought period and conservation of aquatic life.

About 248 km² or approximately 48% of the flooded area is located in Vitoria do Xingu City, and 267 km² or nearly 52% of the flooded area in Altamira City. Just 0.1% (1/2 km²) is in Brasil Novo City.

The project includes the construction of two powerhouses. The main powerhouse, which will be built at the Belo Monte Site, has an installed capacity of 11,000 MW and the complementary power house, which will be part of the dam at the Pimental Site, will have an installed capacity of 233.1 MW, enough to supply nearly half of the population of Belem City, Pará State - nearly 3.5 million people.

The discussions about the social, environmental, and economic impacts of Belo Monte have been ongoing for the last 30 years and the project has successively improved by complying with the main social and environmental demands.

- Construction of just one power plant. The Belo Monte HPP will be the only project on the Xingu River – and not seven, as planned in the inventory studies in the 1980s.
- Reduction of flooded area from 1,225 to 516
   km², divided as follows: 130 km² in the intermediate reservoir and 386 km² in the main reservoir, 228 km² of which are the river itself.
- Excavation of just one canal, instead of the two
  provided in the previous project. Despite being
  deeper than the previously planned canals, excavation of only one canal will represent a 20%
  reduction in excavation necessary.
- No flooding of indigenous reservations. In the
  engineering studies of the 1980s and 1990s, part
  of the Paquiçamba and Arara da Volta Grande
  do Xingu indigenous reservations would be
  flooded. Now, no indigenous reservations will
  be flooded.

Brazil has some of the strictest environmental legislation in the world. Power generation project licensing is carried out in three steps: Preoperational Environmental Licensing, Installation Environmental Licensing, and Operating Environmental Licensing. The Pre-operational Environmental License (LP) must be obtained through environmental organizations in the project viability study phase based on environmental impact studies (EIA/RIMA), which also consider social aspects. In the LP process, public hearings are usually held. The auction winner is in charge of basic project development with detailed studies that include the elaboration of Basic Environmental Project Reports for subsequent application for Installation Environmental Licensing. Finally, in the project execution phase, all necessary measures for plant implementation are taken so that the Operating Environmental License can be granted.

The Belo Monte HPP project fulfilled all of the inventory planning and viability study phases and the respective environmental licensing requirements. The Pre-operational Environmental License from

Ibama was obtained before being auctioned, according to current Brazilian power industry regulations. From 2007 to 2010, the following interactions with various stakeholders were performed:

- 30 meetings with Xingu River indigenous communities;
- 12 public consultations and 10 workshops with communities;
- 5,328 visits to families and 61 meetings with 2,100 people;
- Ten lectures at high schools and elementary schools for about 530 students;
- 15 technical forums and meetings with public administrators from the Xingu region;
- · Four public hearings.

In 2010, the Basic Environmental Project was developed and the installation license was requested.

#### 9.1.3. Tapajós Complex

With respect to viability studies in progress in 2010, the study regarding the Tapajós Complex, on the Tapajós and Jamanxin rivers in Pará State stands out. The complex is composed of five power plants with installed capacity of 10,680 MW, capable of generating about 50 million MWh/year, enough to light about 28.5 million homes.



Tapajós Complex   Plant installed capacity (MW)
POWER PLANT

POWER PLANT	INSTALLED CAPACITY	
São Luiz do Tapajós	6,133	
Cachoeira do Caí	802	
Cachoeira dos Patos	528	
Jamanxim	881	
Jatobá	2,336	
TOTAL	10,680	

The plants are built according to the floating plant concept, a method that modifies traditional construction processes to systematically reduce the social and environmental impacts of the project, increasing the sustainability of hydroelectric generation in the Amazon.

The floating plants are aimed at preventing the creation of housing units or villages in forest areas, that

later, by attracting migrants from other populations, would be transformed into new cities, permanently impacting these forest and environmental preservation areas. Thus, during the construction of the floating plants, temporary workers' villages will be built, which will be then disassembled followed by a vegetation restoration. During operation only people directly involved in each work shift (operation and maintenance) will remain in the location.

#### 9.1.4. The resumption of Angra 3

Another memorable event in the power generation business in 2010 was the progress of construction on the Angra 3 nuclear power plant in Rio de Janeiro, which has been authorized since 1975. Nuclear power represents 3% of electricity consumed in Brazil and more than 50% of consumption in Rio de Janeiro State. This share should be substantially increased after the conclusion of Angra 3, which should come on stream by the end of 2015 with an installed capacity to generate 1.4 thousand MW of power, increasing the production capacity of Brazil's nuclear power plants to 3.4 thousand MW.

In 2010, Eletrobras Electronuclear signed about R\$5 billion in contracts with national suppliers for the construction of Angra 3. These works should directly create about 5,000 jobs over five and a half years, with periods when this figure could reach 9,000 during the busiest period at the job site. The project requires approximately R\$9 billion in investments.

The expansion of nuclear generation is aligned with the Eletrobras System's vision of the future: to be the largest global clean energy conglomerate by 2020. Uranium can be used to generate clean energy, which does not release  $CO_2$  or other pollutants into the atmosphere.

## Brazil needs nuclear power plants

The resumption of construction of Angra 3 is part of a Brazilian MME plan that provides for the construction of four to eight new nuclear plants in the country, which could add up to 10,000 MW to the National Electric System. The government opted to resume the nuclear program due to:

- Meeting demand To meet increased demand for electricity, according to Aneel, the country requires an increase in generation of 3,000 MW to 4,000 MW on average per year until 2015. Angra 3 will have a gross power of 1,405 MW, being able to generate about 10.9 million MWh per year or one third of the consumption in Rio de Janeiro State.
- Competitive rates The cost of nuclear generation is competitive with other thermal sources. In the case of Angra 3, the rate foreseen by the MME in 2008 was approximately R\$148.00/MWh, near the R\$146.00 per

- MWh produced by thermal plants that won the "new energy" auction held that year.
- Uranium Reserves According to International Atomic Energy Agency data, with only 30% of its territory prospected, Brazil has the sixth or seventh largest recoverable uranium reserves in the world at present, in terms of deemed cost per kilo. This reserve is estimated at 309,000 metric tons, enough to fuel 32 nuclear power plants like Angra 3 for their entire lifespan.
- Proximity The location of the Almirante Alvaro Alberto Nuclear Center, in Angra dos Reis near Brazil's major consumption centers (Sao Paulo, Rio de Janeiro and Belo Horizonte) makes extensive transmission lines unnecessary, minimizing costs and energy loss in transmission.
- Diversification The energy generated by the Angra dos Reis plant allows Brazil to diversify its power sources, increasing supply security.

#### Security and Nuclear Energy

The recent accident in Fukushima, Japan, has raised concerns about nuclear energy, but the context in which it occurred should be emphasized. Japan is located at the center of the Pacific Ring of Fire - the only area on the globe where four tectonic plates meet - a

factor that puts the country at risk of major earthquakes, like the one that measured 9.0 degrees on the Richter scale and caused a 10-foot tsunami that swept across northeastern Japan in March of 2011.

Brazil, by contrast, is at the center of the South American Plate, which greatly limits the risk of

earthquakes in its area. Considering the country's geography and the high safety standards of Angra 1 and Angra 2, the Eletrobras System, in line with the guidelines of its majority shareholder, will continue to invest in adding nuclear energy to the Brazilian energy matrix.

#### **INFORMATION CENTERS**

Eletrobras Eletronuclear has two information centers to provide information on the nuclear power plants in Angra dos Reis. The Itaorna Information Center, at kilometer 522 on the Rio-Santos Highway, is open from Monday to Friday from 8:00 A.M. to 11:30 A.M. and from 1:45 P.M. to 4:30 P.M, and on Saturdays, Sundays and holidays, from 8:30 A.M. to 15:00 P.M. Electronuclear Space, located in Angra dos Reis (Av. Julio Maria, 160), is open from Monday to Friday, from 7:30 A.M. to 9:00 P.M., and on Saturdays from 9:00 A.M. to 2:00 P.M.

#### 9.1.5. International activities

#### **Argentina**

Garabi (1,152 MW) and Panambi HPPs (1,048 MW): Inventory studies about the Uruguay River where it forms the border between Brazil and Argentina have been completed, starting the process of preparing documents to develop engineering and environmental studies for the projects (Eletrobras and Emprendimientos Energéticos Binacionales S.A.).

#### Nicaragua

Tumarin HPP (253 MW): The SPC CHC is a 50%-50% joint venture between Eletrobras and Queiroz Galvão, in Panama, and has a wholly-owned subsidiary, SPC CHN, operating the project. In 2010, the basic design of the plant was completed, and engineering, procurement and construction contracts for power sales and generation licensing are under negotiation. The project is being financially structured and prepared for various internal and external approvals. After the confirmation stage, the construction can be initiated in 2011.

#### Peru

Inambari HPP (2,000 MW): The SPC Inambari Geração de Energia Corp. is an association with Construtora OAS Ltd. where Eletrobras (holding and Furnas) owns 49% of the development of the project. Studies are predicted to be complete by the first half of 2011 and the construction to begin in 2012.

#### Uruguay

Brazil - Uruguay interconnection (Transmission lines: 500 kV - 500 km, 60 km on the Brazilian side): Under construction on the Uruguayan side. In Brazil, the basic project design and the transmission lines environmental impact studies were completed and submitted to Ibama for evaluation and issue of the preliminary license, expected in mid-2011. The transmission lines and power substation construction is scheduled to start in early 2012 and entry into commercial operation in 2013.

#### 9.2. Transmission

The PDE provides for the active participation of the Eletrobras System in transmission expansion activities. In 2010, the System included 922 km of transmission lines, 2,568 MVA of transformation capacity at substations and 1,000 MVAR of reactive compensation. Eletrobras companies also incorporated another 64 km of transmission lines via SPCs with the private sector.

In Brazil, among the developments in progress are transmission system works to integrate the Madeira River Hydroelectric Complex, whose power up is expected by April of 2013. The year's highlights for this project were the start of construction and the granting of the installation license for the Porto Velho substation and the 230 kV Porto Velho TL.



Also worth mentioning is the fact that the main equipment for Rectifier Station No. 1 and Inverter Station No. 1 has already been contracted and is being manufactured. As for the direct current lines, although the conducting wire and steel structures have already been purchased, dipoles nos. 1 and 2 are still in the process of obtaining environmental licensing.

Another important event in northern Brazil was the granting of environmental permits (Pre-operational and Installation) for the 500 kV Oriximiná/Silves/
Lechuga project, which allowed construction on the site to begin, although with a ten-month delay in relation to the original timeline. In northeastern Brazil, most projects are still awaiting environmental licensing to start construction.

#### TLs UNDER CONSTRUCTION



#### Transmission line and substation auctions

Eletrobras System companies participated in three transmission auctions held by Aneel in 2010, buying ten of the 20 consignments, which correspond to 519 km of transmission lines or approximately 34% of the total 1,511 km auctioned. These projects should generate an Annual Allowable Revenue (RAP) of about R\$36.09 million.

#### TLs bought at auction – over 230 kV

LINE	VOLTAGE (kV)	LENGTH (km)	MVA	MVAr	
LT Monte Claro / Garibaldi	230	33.3	-	-	
LT Açu 2 / Paraíso	230	135	-	-	
LT Açu 2 / Mossoró 2	230	69	-	-	
LT Igaporã / Bom Jesus da Lapa 2	230/69	115	300	92.6	
LT Sobral 3 / Acaraú 2	230/69	97	200	20	
LT Extremoz 2 / João Câmara	230/138	82	360	485.2	
TOTAL		531.3	860	597.8	

#### Substations bought at auction - over 230 kV

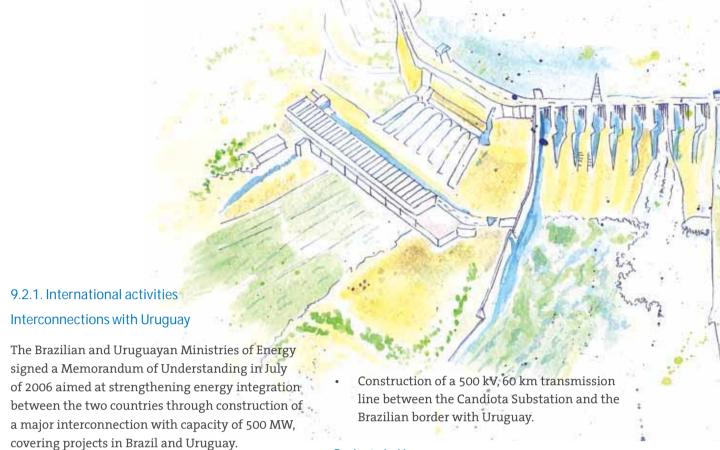
SUBSTATION	VOLTAGE (kV)	MVA	MVAr	
SE Caxias 6	230/69	330	-	
SE Ijuí 2	230/69	166	-	
SE Nova Petrópolis 2	230/69	83	-	
SE Tapera 2 – TR3	230/69	83	-	
SE Polo	230/69	100	-	
SE Arapiraca 3	230/69	100	60	
SE Lajeado Grande	230/138	75	-	
SE Biguaçu – AT3	230/138	150	-	
SE Foz do Chapecó	230/138	100	-	
SE Lucas do Rio Verde	230/138	75	-	
SE Biguaçu – AT2	525/230	672	-	
TOTAL		2,794	657.8	

Consignments were also bought at auction in partnership with private companies. These projects should generate a RAP of about R\$1.62 million.

SUBSTATIONS BOUGHT AT AUCTION – SPC OVER 230 kV SUBSTATION SHARE (%)

CORUMBÁ

SHARE (%) 49 VOLTAGE (kV) 345/138 MVA 150



#### Projects in Brazil

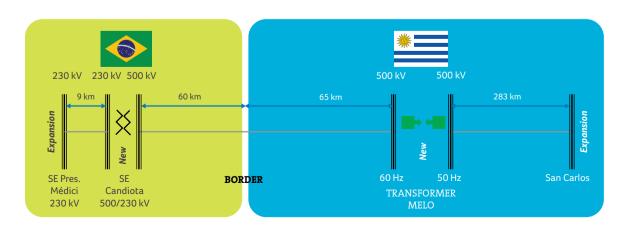
- Expansion of the President Medici Substation (line input of 230 kV);
- Construction of a 9 km, 230 kV transmission line between the Candiota and President Medici substations;
- Construction of a new Candiota 500/230 kV -672 MVA Substation;

#### **Projects in Uruguay**

- Construction of a 500 kV, 65 km transmission line, between the border with Brazil and the Melo Converter Substation;
- Construction of the Melo 60/50 Hz 500 MW Converter Substation;
- Construction of 500 kV, 283 km transmission line between the Melo Converter Substation and the San Carlos Substation; and
- Expansion of the San Carlos Substation.

# THE BRAZIL-URU

#### THE BRAZIL-URUGUAY INTERCONNECTION (390 km)



A commercial contract between Eletrobras and the Uruguayan company UTE, was finally signed in March of 2010. The basic project for the transmission line was completed in December of 2010, and the environmental impact studies are in progress. Construction of the line and its associated substation was scheduled to begin in January of 2012, while its power up is scheduled for February of 2013.

It should be noted that this is the first project to be fully implemented by Eletrobras, as owner of the facility, as defined in Aneel Authorizing Resolution No. 2280/2010 of February 23, 2010.

#### 9.3. Distribution

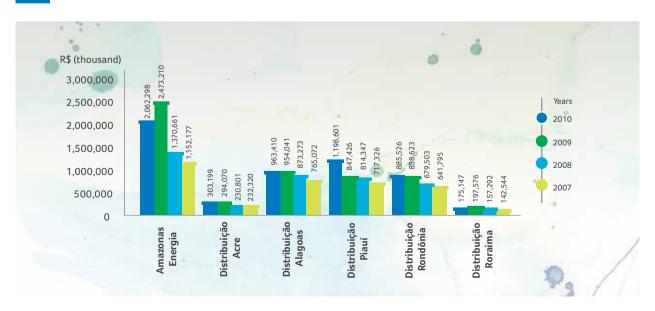
The recovery process of the Eletrobras Distribution Companies (EDs), still underway, has improved companies' management with some positive results that became visible this year, but still with problems. Investments are being made in 2011 with the goal of improving their performance.

Regarding financial results, the EDs, as a whole, recorded losses of R\$1.4 billion. Of this total, about R\$700 million is due to an accounting effect resulting from the provisions that had been booked due to the termination of asset concessions in 2015.

## Consolidated net income (R\$ million)

COMPANY	AMOUNT	
Amazonas Energia	-1,315	
Distribuição Acre	13	
Distribuição Alagoas	-43	
Distribuição Piauí	-69	
Distribuição Rondônia	14	
TOTAL	-1,400	

#### REVENUE EVOLUTION BY DISTRIBUTION COMPANY (R\$ THOUSAND)



#### 9.3.1. Tariff revision

Tariff Adjustment Indices (IRTs) for EDs were established by Aneel in 2010.

#### Tariffs Adjustment Indices

COMPANY	Economic IRT	Financial components	IRT total	Average consumer effect	
Amazonas Energia	3.22%	3.64%	6.86%	-2.08%	
Distribuição Acre	16.81%	0.00%	16.81%	7.42%	
Distribuição Alagoas	8.32%	4.39%	12.71%	6.56%	
Distribuição Piauí	7.45%	-1.36%	6.08%	1.80%	
Distribuição Rondônia	17.06%	0.00%	17.06%	10.60%	
Distribuição Roraima	3.71%	-1.86%	1.86%	1.31%	

For ED Rondônia and ED Acre, the total IRTs would be 22.61% and 21.76% respectively. To lessen the impact of high tariff increases on consumers, Eletrobras requested to defer the financial components of 5.55% and 5.58%, respectively. These values are considered financial components in 2011 adjustments updated by variations in the IGP-M.

#### 9.3.2. Supply

Despite the small market share of Eletrobras System distributors in the national power market, in 2010 their growth was still above market, showing an expansion trend. This year, the amount of power supplied to final consumers by all Eletrobras distribution companies increased by approximately 11.8% as compared to 2009.

#### POWER SUPPLY GROWTH, BY DISTRIBUTION COMPANY (2009-2010)



It is worth noting that in the case of ED Piauí, a major consumer standardization program was carried out. In the case of ED Rondônia, growth is linked to the large contingent of people attracted by construction of the Madeira River Hydroelectric Complex.

Among companies with a greater share in the power trading market are Eletrobras Amazonas Energia, with 37.4%, and ED Alagoas, with 19.4%. The first, unlike the others, sees a significant share of industrial consumption due to the importance of the Manaus Free Trade Zone, which represented 34.3% of total sales for the distributor in 2010.

With regard to growth by consumer category, the largest increase (15.6%) occurred among industrial consumers due to the resumption of production activities after the 2009 economic crisis. The residential (13.5%) and commercial (11.5%) categories also showed significant increases due to the substantial increase in new customer connections and wages.



## Consumer units, by category [GRI EU3]

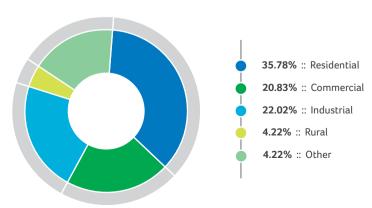
CATEGORY	UNITS
Residential	2,808,556
Industrial	12,915
Institutional (public agencies and services)	41,146
Commercial	241,084
Other (rural, own consumption, etc.)	199,324
TOTAL	3,303,025

#### Consolidated power supply (GWh) by consumer category

CATEGORY	2010	2009	2008	2007	2006
Residential	4,574	4,030	3,753	3,331	3,146
Commercial	2,662	2,387	2,226	2,009	1,895
Industrial	2,814	2,443	2,628	2,465	2,384
Rural	539	508	490	400	414
Other	2,193	2,159	2,061	1,561	1,718
TOTAL	12,782	11,527	11,158	9,766	9,557

The breakdown of total consumption by the main consumer categories has remained mostly stable in 2010.

#### CONSOLIDATED POWER SUPPLY (%) BY CONSUMER CATEGORY IN 2010



#### 9.3.3. Default

There was a 6.6% decrease in the nominal amount overdue, from R\$1.073 billion in 2009 to R\$1.002 billion in 2010. Even so, default continues to be a major challenge. A widely used market indicator to evaluate the effect of default is represented by the amount overdue over last 12 month sales, which in the case of System distribution companies was 19.8% in 2010, against a national average ranging between 8% and 10%.

# ALL ELETROBRAS DISTRIBUTION COMPANIES HAVE ADOPTED MEASURES TO REDUCE DEFAULT

BILLING AND DEFAULT FOR DISTRIBUTION COMPANIES

BILLED AND RECEIVED
BILLED AND NOT RECEIVED
DEFAULT RATE

R\$ (BILLION) 6,353 R\$ (BILLION) 1,002 19.80%

All Eletrobras distribution companies have adopted measures to reduce default. In 2010, the companies that contributed most to this reduction were Amazonas Energia (34.3%), Distribuição Alagoas (5.5%) and Distribuição Acre (21.5%). Amazonas showed a reduction of R\$113.4 million in payments overdue in relation to December of 2009, relative to the decline in doubtful accounts.

Amazonas Energia achieved a reduction of R\$113.4 million in defaults in relation to December of 2009.

relative to the decline in doubtful accounts. Distribuição Alagoas reduced default by approximately R\$100 million using the same write-off procedure coupled with debt negotiations with the industrial sector amounting to R\$17 million, with an additional R\$8.5 million as a result of negotiating with 34 cities and two hospitals between July and September of 2010. For Distribuição Acre, the reduction was 21.5%, mainly due to negotiation with public service companies in the amount of R\$17.6 million and with some cities in the amount of R\$8.8 million.

#### Consolidated default at distributors (R\$ thousands)

CATEGORY         2010         2009         2008         2007         2006           Residential         190,321         268,310         245,998         264,616         213,461           Commercial         113,374         127,401         119,962         117,130         101,092           Industrial         194,758         203,013         171,965         150,014         112,289           Rural         60,268         53,365         46,462         40,824         34,107           Public authorities         168,159         162,930         143,700         135,479         123,822           Public services         221,403         203,979         306,566         372,062         291,974           Public lighting         54,043         53,922         65,199         35,269         30,075						
Commercial         113,374         127,401         119,962         117,130         101,092           Industrial         194,758         203,013         171,965         150,014         112,289           Rural         60,268         53,365         46,462         40,824         34,107           Public authorities         168,159         162,930         143,700         135,479         123,822           Public services         221,403         203,979         306,566         372,062         291,974	CATEGORY	2010	2009	2008	2007	2006
Industrial         194,758         203,013         171,965         150,014         112,289           Rural         60,268         53,365         46,462         40,824         34,107           Public authorities         168,159         162,930         143,700         135,479         123,822           Public services         221,403         203,979         306,566         372,062         291,974	Residential	190,321	268,310	245,998	264,616	213,461
Rural     60,268     53,365     46,462     40,824     34,107       Public authorities     168,159     162,930     143,700     135,479     123,822       Public services     221,403     203,979     306,566     372,062     291,974	Commercial	113,374	127,401	119,962	117,130	101,092
Public authorities         168,159         162,930         143,700         135,479         123,822           Public services         221,403         203,979         306,566         372,062         291,974	Industrial	194,758	203,013	171,965	150,014	112,289
Public services 221,403 203,979 306,566 372,062 291,974	Rural	60,268	53,365	46,462	40,824	34,107
	Public authorities	168,159	162,930	143,700	135,479	123,822
Public lighting 54,043 53,922 65,199 35,269 30,075	Public services	221,403	203,979	306,566	372,062	291,974
	Public lighting	54,043	53,922	65,199	35,269	30,075

#### 9.3.4. Losses

Overall, in 2010 the Eletrobras System distribution companies saw a 0.87 percentage point reduction in the percentage of losses over injected power from 36.03% in December of 2009 to 35.16% in December of 2010. This level, however, is still well above the national average of about 15%. In this aspect, Eletrobras Distribuição Piauí and Eletrobras Distribuição Rondônia stand out in the last three years, having reduced their loss rates by 4.95 percentage points and 5.60 percentage points, respectively.

#### Energy loss index (%), by company [GRI EU12]

COMPANY	TECHNICAL	NON-TECHNICAL	TOTAL	
Amazonas Energia	2.10%	40.30%	42.40%	
Distribuição Acre	11.87%	12.22%	24.09%	
Distribuição Alagoas	8.42%	23.03%	31.45%	
Distribuição Piauí	12.60%	20.91%	33.51%	
Distribuição Rondônia	10.00%	23.99%	33.99%	
Distribuição Roraima	8.10%	8.03%	16.13%	

To accelerate the loss reduction to achieve acceptable regulatory levels according to Aneel, the Eletrobras System will launch its ENERGY+ project in 2011 with World Bank financing of around US\$500 million. The program aims to improve supply quality, reduce power losses and increase corporate sustainability through more efficient collection policies in distribution and retail.

The purchase of goods, equipment, construction and services will be financed to strengthen distribution networks and implement an advanced metering infrastructure, which will include remote sensing and real-time monitoring of about 370,000 consumer units in the six distributors, allowing screening of 64% of the revenue of the distribution companies. In addition, the project will support the modernization of information management systems and strengthening of the institutional and operating capacity of the six distribution companies in areas such as management by results, environmental and social impacts and community awareness.

Additionally, a research and training center to be established as part of the project in Acre State will

fund development of curriculum, research, training, scholarships and equipment for the development and implementation of courses in water resources and environmental management.

#### 9.3.5. Service quality

Significant improvements in the service quality indicators - average interruption duration by consumer unit (DEC) and frequency of interruptions by consumer unit (FEC) - require major investments in upgrading the system of substations and distribution networks, as well as continued improvement in preventive maintenance processes.

While investments already have been made, they were not sufficient to reduce these indices. Considering the target consumer groups defined by Aneel, in 2010 no company was able to achieve the service quality required by the agency.

In this sense, the ENERGY+ project, to be developed with World Bank funding in 2011, is expected to contribute to the establishment and maintenance of DEC and FEC levels within the range set by the regulator.

#### DEC (hours/year) [GRI EU29] and FEC (interruptions/year) [GRI EU28]

COMPANY	DEC	FEC
Amazonas Energia	72	60
Distribuição Acre	45	44
Distribuição Alagoas	20	14
Distribuição Piauí	41	32
Distribuição Rondônia	32	30
Distribuição Roraima	17	22

#### Balance between supply and demand [GRI EU6]

To ensure equipment availability, continuity of supply and meeting of planned demand, all Eletrobras System distribution companies carry out daily inspections of their substations to check equipment performance using the indicators of variations that may cause failures, and intervene in time to avoid outages. In addition, transmission lines and distribution networks are inspected, indicating the need for tree pruning and safety clearance. Scheduled annual inspections (visual, thermal imaging and electrical tests) are also carried out to identify the need for preventive maintenance.

In the case of Eletrobras Amazonas Energia, which owns its own generating facilities, periodic inspection and maintenance of components such as electrical generators or turbine bearings are also performed. Eletrobras Distribuição Piauí performs chromatographic and physical-chemical analysis of the insulating oil to identify the need for preventive maintenance on its transformers.

#### 9.3.6. Customer relations [GRI PR3 and PR5]

The Eletrobras System distribution companies always seek to be aligned with the best practices of transparency in their relationships with customers. The complaints and suggestions received are addressed with corrective measures, some

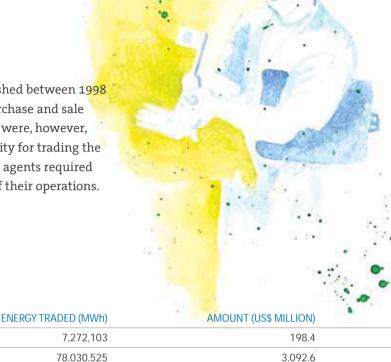
implemented immediately, and others in short-, medium- or long- term projects, creating a continuous cycle of improvement. All distribution companies promote meetings with Consumer Councils, but some still need to implement committees to analyze the results of the customers' satisfaction surveys, conducted by Aneel and the Brazilian Association of Distributors of Electric Energy, and their indicators.

The companies also seek to provide information on the characteristics of their products and services. Examples are the inclusion of messages about citizenship and conscientious consumption on electric bills, information on websites about safety regarding the power network, such as what to do in the event of accidents, and the graphical representation of information concerning the consumption and energy efficiency of field and service vehicles.

## 9.4. Trading

The highlight of 2010 in power trading was the regulation of sales of power generated by Eletronuclear. Starting in 2013, Angra 1 and 2 will no longer be required to sell their power to Furnas, but can do so directly to distributors. The power to be generated by Angra 3 will be sold through auction to final consumers, as reserve power.

The regulatory framework for power trading, established between 1998 and 2002, provides a model of full freedom in the purchase and sale of power between generators and distributors. There were, however, two exceptions, the first being Eletrobras' responsibility for trading the energy generated at Itaipu and under Proinfa – these agents required special treatment due to the unique circumstances of their operations.



3,291.0

The second was Furnas' compulsory purchase of all power generated at the Angra dos Reis complex. From 2013, Eletrobras Eletronuclear Distribuidora can sell its power directly to the market. Power from Angra 3, to be generated starting in 2016, will be traded through the

suffered losses in trading power from Angra 1 and 2.

Another significant event in trading in 2010 was the holding company's auction for the purchase of excess energy from Chesf, within the regulatory framework. For this reason, Chesf was the leader in power trading in 2010 while at the same time, the cash flow to serve the Rio

Grande do Sul State market remained within the Eletrobras System.

CCEE. The change will have a significant impact on Furnas, which has

THE HIGHLIGHT OF 2010
IN POWER TRADING
WAS THE REGULATION
OF THE SALE OF
POWER GENERATED BY
ELETRONUCLEAR

85,302,628

Trading by Itaipu Binacional

**BUYER** 

Ande

TOTAL

Eletrobras

COMPANY	POWER TRADED (MWh)	AMOUNT (R\$ MILLION)
Chesf	56,048,205	4,356
Eletronorte	52,258,019	4,384
Furnas	43,350,532	3,120
Eletronuclear*	13,361,400	1,782
CGTEE	4,463,495	590
TOTAL	169,481,651	14,232

<sup>\*</sup> All energy produced by Eletrobras Eletronuclear is acquired by Furnas.



## **SOCIAL DIMENSION**

THE FOLLOWING PAGES EXPRESS THE ELETROBRAS COMMITMENTS TO ITS EMPLOYEES, USING BEST EMPLOYMENT PRACTICES, AND THE COMPANY'S RELATIONSHIP WITH THE COMMUNITIES IT SERVES.

The management of government programs and the cultural and sports sponsorship policy are also detailed in the following chapter. The results of the 2010 social audit can be found in Appendix B.



# 10. Social Dimension

## 10.1. Employees

The Eletrobras System currently has 28,450 employees distributed nationwide.

#### Total employees, by region [GRI LA1]

REGION	EMPLOYEES	SHARE
North	3,717	13.1%
Northeast	3,627	12.7%
Midwest	8,199	28.8%
Southeast	9,037	31.8%
South	3,850	13.5%
TOTAL	28,450	100%

#### Total employees, by region and gender [GRI LA1]

REGION	MALE	FEMALE
North	2,952	675
Northeast	6,623	1,576
Midwest	3,091	646
Southeast	7,351	1,686
South	3,087	763
TOTAL	23,104	5,346
SHARE	81.2%	18.8%

#### Total employees, by age [GRI LA1]

AGE RANGE	EMPLOYEES	SHARE
18 - 25	877	3.08%
26 - 30	2,717	9.55%
31 - 40	5,658	19.89%
41 - 50	7,663	26.93%
51 – 60	9,911	34.84%
>60	1,624	5.71%
TOTAL	28,450	100%

In 2010, the Eletrobras companies registered 1,364 new hires and 738 cases of employee turnover, most of which were due to retirement or resignation, amounting to a low turnover rate of 2.59%.

EMPLOYEE TURNOVER BY GENDER [GRI LA2]	- P	
GENDER		TURNOVER
FEMALE		0.68%
MALE		1.91%
TOTAL		2.59%

#### Employee turnover by age [GRI LA2]

AGE RANGE	TURNOFF	TURNOVER
18 - 25	38	4.33%
26 - 30	104	3.83%
31 - 40	87	1.54%
41 - 50	59	0.77%
51 - 60	354	3.57%
>60	96	5.91%
TOTAL	738	2.59%

About 50% of employees in management positions in the Eletrobras System will eligible for retirement within the next five to ten years, but the distribution among companies varies significantly.

### Employees eligible for retirement in the next five to ten years, by occupational category\* [GRI EU15]

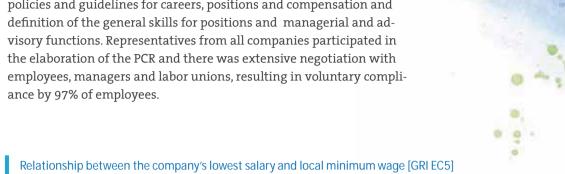
. , ,	•	•	•			
CATEGORY					SHARE	
Management					50%	
University level					36%	
Primary or high school level					42%	

<sup>\*</sup> The following Eletrobras companies were considered: Amazonas Energia, Chesf, CGTEE, Eletrosul, Furnas, Eletronuclear, Itaipu Binacional, Distribuição Rondônia, and Eletrobras holding.

2010 was characterized by important advances in the corporate staff management of the Eletrobras System, which included the disclosure of the People Management Policy, whose comprehensive, complementary programs create a work environment governed by meritocracy. Other initiatives should also be highlighted.

#### Career and Compensation Program (PCR)\*

2010 saw the implementation at Eletrobras companies of unified policies and guidelines for careers, positions and compensation and



	9 9	1
Relationship between the company's lowest s	alary and local minimum wage [GRI EC5]	
SALÁRY BASE	AMOUNT (R\$)	VARIATION
National Minimum Wage	510.00	178.94%
Minimum Salary in the Eletrobras System	908.79	178.94%

#### **Performance Management System**

The SGD is a management mechanism focusing on abilities and achievements that will allow Eletrobras companies to strategically develop and manage their employees, concentrating efforts on achieving goals and results that ensure profitability, sustainability, competitiveness and value creation. After the pilot program at the holding company, the SGD will be implemented at all Eletrobras companies, unifying planning, monitoring, evaluation and development.

Companies that already have a system of performance evaluation maintained their analyses in 2010 while still participating in integrated SGD planning.

THE PCR HAS UNIFIED CAREER, POSITION AND COMPENSATION **POLICIES AND GUIDELINES IN ADDITION** TO FSTABLISHING THE GENERAL **RESPONSIBILITIES FOR** THE JOB CATEGORIES AND MANAGERIAL AND **ADVISORY FUNCTIONS** 

Percentage of employees receiving regular performance and career development evaluations [GRI LA12]					
DESCRIPTION	NUMBER	PERCENTAGE			
Performance Evaluations and Career Development Assessments*	7,467	70.83%			

<sup>\*</sup> The following Eletrobras companies were considered: Cepel, Furnas, Eletronuclear, Itaipu Binacional and Eletrobras holding.

#### Professional development plan [GRI EU14]

To modernize and unify people management policies and practices across all Eletrobras companies based on contemporary theories and concepts and the best practices adopted by world class companies, in January of 2010, with the approval of Project IV.6.3 - People Development and Training Plan, part of the Eletrobras System Transformation

Itaipu Binacional did not participate due to its different governance status, established by international treaty.

Plan, Eletrobras established the premise of cooperative and integrated performance of all companies in the System, in line with the strategic purposes of integration, competitiveness and profitability.

This model is composed of Unise and 15 associated Corporate Education units representing each of the companies, aiming to promote the development of all employees in their requisite abilities.

As bases for the operation of this model, Corporate Education Policies and an Educational Model were defined to guide the planning, implementation, monitoring and evaluation of educational activities.

A Corporate Education Committee was established under Unise's governance with representation from all companies to ensure integrated, cooperative operations fully in line with the strategic purposes of integration, competitiveness and profitability of the System.

Unise is made up of five schools that reflect strategic guidelines of the Eletrobras System. The School of Social Responsibility, whose goal is to disseminate values and develop a culture for the Eletrobras System based on the principles of sustainability, is a highlight.

Unise is responsible for the actions that support Eletrobras System strategies, designed for:

- the development of general skills defined in the PCR;
- the development of Eletrobras System leadership;
- the development of critical technical and management skills for the Eletrobras System;
- the dissemination of culture and values in the Eletrobras System.



Indicators of Unise				
PROGRAMS	HOURS	STUDENTS	INVESTMENT	
52	67	2,120	R\$9 million	

Annual volume of training offered by Unise [GRI LA10]				
POSITION	HOURS	AVERAGE HOURS PER PARTICIPANT		
Management	52,686	124		
With university degree	127,106	138		
Without university degree	8,546	67		
ΤΟΤΔΙ	188 338	110		

Corporate Education Units at the companies develop the specific skills required by each one, aimed at ensuring the availability of skilled professionals as necessary for the Eletrobras System's process.

#### Annual volume of training offered [GRI LA10]

POSITION	HOURS *	AVERAGE PER EMPLOYEE **
Management	93,810	69
University level	313,721	59
High school level	441,894	45
TOTAL	849,425	51

<sup>\*</sup> The following Eletrobras companies were considered: CGTEE, Chesf, Eletronuclear, Eletrosul, Furnas, Itaipu Binacional, Distribuição Rondônia, and Eletrobras holding.

#### Organizational climate management\*

The first Eletrobras System Unified Employee Climate Survey, which had 17,271 respondents, reported a favorability index of 68.93%. From the results, action plans for continuous improvements in the organizational climate of the companies will be drawn up in 2011.

This survey sought to identify opportunities for improvements in the following dimensions: motivation, people management, management philosophy and work environment, and ability to make the organizational environment more pleasant and productive, enhance dialogue and contribute to the transparency of management Itaipu Binacional did not participate due to its different governance status, established by international treaty.

#### **Diversity**

Because of its legal nature and in compliance with universal principles of equality and impartiality that determine hiring through civil service examinations, the Eletrobras System has been considering the adoption of affirmative action policies as an alternative to boost minority access to its recruitment and selection processes. The appreciation of diversity among its staff is addressed in guidelines that safeguard rights such as accessibility. The right to health insurance benefits applicable to spouses of heterosexual employees is extended to partners of homosexual employees and incorporated into collective bargaining agreements in all System companies.

#### Gender

Eletrobras companies are part of the Standing Committee on Gender Issues of the Ministry of Mines and Energy and Related Companies. Moreover, its organizational structure provides for Gender Committees, which are charged with proposing actions and implementing practices that ensure equal opportunities for men and women in the workplace. In 2010, the Eletrobras System companies received the Pro-Gender Equity Seal, in its third edition, an initiative of the Women's Policies Secretary in partnership with UN Women and the ILO. The ratio between the wages of men and women in the Eletrobras System shows distinct variation according to hierarchical level and company.

RATIO 104%

101%

## BASE SALARY BY GENDER FOR EACH FUNCTIONAL CATEGORY (R\$)\* [GRI LA14]

	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	
CATEGORY	MEN	WOMEN
MANAGEMENT	6,846.62	7,093.22
UNIVERSITY LEVEL	3,834.96	3,650.86
PRIMARY OR HIGH SCHOOL LEVEL	1,619.27	1,639.74

\*The following Eletrobras companies were considered: Amazonas Energia, Distribuição Alagoas, CGTEE, Chesf, Eletronuclear, Eletrosul, Furnas, Itaipu Binacional, Distribuição Rondônia, Distribuição Roraima, Cepel and Eletrobras holding.

<sup>\*\*\*</sup> Eletrobras Cepel only provided information on management positions.

Itaipu Binacional did not participate due to its different governance status, established by international treaty.

#### Freedom of association

The Eletrobras System ensures the right to freedom of association and collective bargaining and all employees are covered by collective bargaining agreements. Agreement negotiation is coordinated by the holding company's Office of Labor Relations and Trade Unions, which also monitors compliance with commitments between the parties at regular meetings. In the case of a strike, the companies and the unions negotiate which employees are required to work to maintain power supply, as established in Article 9 of the Strikes Law (Law no. 7,783 of 06/28/1989) [GRI LA4].

Operations in which employees' rights of freedom of association and collective bargaining may be at risk have not been identified [GRI HR5].

#### Occupational health and safety

The Occupational Health and Safety Policy gives priority to the occupational health and safety of Eletrobras employees, focusing on prevention, compliance with legal requirements, promotion of continuous management improvement and reduction of accidents and incidents related to employees' health [GRI EU16].

The general guidelines outlined in this policy are:

- Act in a preventive manner to ensure the health and safety of Eletrobras companies employees;
- Promote occupational health examinations to protect employees' health, make early diagnoses of any abnormalities, prevent infectious diseases and assess employee health in relation to the activities performed at the company, always aiming at the identification of work-related illnesses and the elimination of their causes;
- Provide the employee with a safe and healthy work environment;
- Understand that no work can be performed without considering the safety and health of the employee, and no reason, be it urgency, importance or other, can be used as an argument to justify non-compliance with occupational health and safety requirements;
- Consider occupational health and safety as part of strategic people management, using the example of managers and other professionals as a success factor;

- Ensure that occupational health and safety goals and indicators are linked to business strategy;
- Consider the attitudes in occupational health and safety as part of the professional development of Eletrobras employees;
- Continually promote training and information as fundamental tools for awareness and training of Eletrobras professionals and other parties interested in occupational health and safety;
- Determine compliance with laws, regulations and other requirements for occupational health and safety that are in force and supported by the company;
- Identify, assess, monitor and mitigate risks to the health and safety of Eletrobras employees and other people involved, including those that affect the population, to prevent accidents in all production activities;
- Provide the occupational health and safety organs with the means necessary to carry out their activities;
- Act constantly in search of new technologies for occupational safety and health.

At Eletrobras companies, occupational health and safety are addressed through policies and practices that consider the specific characteristics of the eletricelectric energy sector. Trainings and guidancesguidance are offered to all employees and occasionally also to others, with the goal of reducing accidents and health-related incidents. Issues related to occupational health and safety, which are covered by formal agreements with unions, address the specific features of each company.

The exposure to risks for the effective exercise of activities must meet the following criteria:

- Electrical: legal and specific training for the activity; an Occupational Health Certificate (ASO) to perform the activity declaring the employee fit to work;
- Flammable or explosives: specific training for the activity; ASO declaring the employee fit to work; specific authorization to work with explosives;
- Ionizing radiation: specific training for the activity; ASO declaring the employee fit to work; individual dosimetric control.

The procedure for accrediting employees for exposure in hazardous areas shall comply with the following:

- Nomination for accreditation, under the responsibility of immediate manager, in accordance with expert reports and internal rules;
- · Proof of physical fitness;
- Approval of accreditation by the superintendent or Board, in accordance with internal standards;
- Notification to the unit stipulated in internal procedures [GRI LA9].

In the case of an incident characterized as an occupational accident, Eletrobras conducts an investigation and analysis and reports its results as follows:

 An On-the-Job Accident Report (CAT) is disclosed to legally responsible entities (Social Security, union); the annual summaries and the tables of the Safety Engineering Specialized Services and Occupational Health Standard are reported to the Regional Superintendent of Labor and Employment; On-the-job accident information (CAT, Investigation and Statistics Report) is communicated to internal company units.

Eletrobras companies have begun implementation of Occupational Health and Safety Assessment Series Management. Its objective is to organize the elements of an effective occupational health and safety management system that can integrate other management requirements to assist in achieving its objectives.

Each Eletrobras System regional unit has a specialized service in safety engineering and occupational health that verifies preventive actions at the operational units, such as the records of the Preliminary Risk Analysis, the Daily Dialogue on Safety and activities *in situ*. To calculate rates of injury, occupational diseases, lost days and deaths, Eletrobras companies use methodology based on NBR-14280 in accordance with the Regulatory Norms with the Ministry of Labor and Employment, adapted to ILO parameters and methodology.

#### Rate of injuries and occupational illnesses, number of days lost and deaths, by region [GRI LA7]

REGION	INJURIES	OCCUPATIONAL ILLNESSES	DAYS LOST	DEATHS
South	1.41%	0.03%	530	0
Southeast	1.09%	0.00%	1,121	0
Midwest	1.37%	0.07%	328	0
North	1.22%	0.03%	8,351	1
Northeast	1.46%	0.10%	4,956	2
TOTAL	1.27%	0.04%	15,286	3

The Internal Accident Prevention Commission (CIPA), present in several units, plays an important role in carrying out occupational health and safety activities in Eletrobras companies, observing Brazilian labor laws. Over 75% of employees are represented by formal health and safety committees.

NUMBER OF OCCUPATIONAL HEALTH AND SAFETY COMMITTEES\* [GRI LA6] CIPA

122

\*Composed of management and employee representatives.

LOCAL COMMITTEES 30

#### 10.2. Local communities

The Eletrobras System follows the guidelines of the Electric Sector Environmental Master Plan (PDMA – 1993) and the Environmental Policy of the Eletrobras Companies, regarding the relationships with social groups who live in the areas where electric energy projects may be installed. The guidelines suggest that dialogue with various social agents should take place from the start of planning actions, identifying their needs and expectations and providing them with continuous clarification in appropriate language.

Assessments of the impacts on these groups, such as possible shifts and changes in the way of life are studied as a priority, and projects can be revised at any stage of planning [GRI EU20].

As planning advances, the dialogue is consolidated with the affected social groups, seeking active and informed participation from communities in proposals for restoration of their ways of life. Sector guidelines suggest that the recovery of the living conditions of the affected population should be conducted in such a way that their lifestyles are at least equal to or preferably better than the previous ones [GRI EU19].

The guidelines also established alternatives of compensation for expropriated areas (usually by credit) and resettlement, as well for cases where human displacement is necessary. For small land owners or nonowners, collective bargaining procedures are recommended that favor those who have few dealings with the market.

The participation of affected groups occurs through meetings and other encounters for information about the project progress, as well as formal public hearings sponsored by environmental agencies. After a legal pre-operational license is obtained, the project is further developed, and programs provided in the EIA are detailed. At this stage, negotiation with social groups is essential to establishing collective agreements that fix minimum prices for expropriation, the means by which it is carried out and other conditions.

The Eletrobras companies seek to promote improvements in the local community related to the standard of living and infrastructure, such as health and roads, among others.

TOTAL

THE DIALOGUE WITH
VARIOUS SOCIAL
AGENTS TAKES PLACE
FROM THE START OF
PLANNING ACTIONS,
IDENTIFYING THEIR NEEDS
AND EXPECTATIONS
AND PROVIDING THEM
WITH CONTINUOUS
CLARIFICATION IN
APPROPRIATE LANGUAGE

# Displacements resulting from Eletrosul activities [GRI EU22] VENTURE NUMBER OF PEOPLE DISPLACED COMPENSATED Generation 108 107 R\$6,857,552.92 Transmission 9 547 R\$10,720,984.9

117

R\$17,578,537.61

654



Environmental Education Programs and Socio-environmental Action Plans (PASs) are also developed by Eletrobras System's companies. An example is the Socio-environmental Action Plan in which the Eletrobras Chesf developed a new methodology for environmental education and for communication that seeks a continuous process of environmental management with the participation of the communities involved in its projects. This Plan had been developed in the communities located in the areas affected by the reservoirs of the Paulo Afonso Complex, in partnership with the Instituto de Ecologia Humana (IEH – Human Ecology Institute). At the first stage, the IEH, under Eletrobras Chesf supervision, identified and worked with the communities and schools involved, considering the five municipalities around the reservoirs (Paulo Afonso and Glória in Bahia; Jatobá, in Pernanbuco State; Pariconha and Delmiro Gouveia, in Alagoas). Some actions were developed as the community organization programs: education, health and promotion of good citizenship and environmental projects. These projects are carried out in the communities, municipalities and institutions, always with the Eletrobras Chesf as a facilitator and supporter. In the coming years the PAS actions will be continued and should be implemented gradually in other Eletrobras Chesf projects.

Another example it is the Environmental Education Program of the Batalha Power Plant currently under construction, developed by Eletrobras Furnas, wich promotes training courses for the state and municipal teachers of Cristalina (Goias State) and Paracatu (Minas Gerais State). The covered themes are: environmental sanitation, solid waste, biodiversity, land use and occupation, and culture and society. Lectures, workshops and guided tours which address aspects of the Batalha Power Plant enterprise, types of power generation, the importance of water and its various uses, preservation of water sources and destination of solid waste are developed for public schools. Training courses are also given at rural settlements affected by the project with the objective of fostering the local potential for entrepreneurship and associations. In Paracatu, Eletrobras Furnas has partnered with the departments of Education, Environment, Health, Culture and Tourism to prepare a proposal that consists of an Integrated Program for Environmental Education to be delivered to the school community of the city.

# Indigenous populations [GRI HR9]

Indigenous populations have their own guidelines in the PDMA - the Guidelines for the Relationships with Indigenous Population Groups. The practices are updated based on the experience of indigenous peoples programs conducted with the National Indian Foundation (FUNAI). From the planning stage, the existence of indigenous communities is assessed so as to avoid the drawing up of projects that might negatively affect them.

These guidelines are based on the rights of protected populations as enshrined in the Brazilian Constitution and current programs for compensation of indigenous people for the impacts of hydroelectric power plants. For example, the

Eletrobras Eletronorte programs with the Waimiri-Atroari and Parakanã groups, in place for more than a decade, are internationally recognized for restoring stability of lifestyles, cultures and food.

There are five cases of claims by the indigenous populations affected by transmission lines and hydro power plants planned in the 1980s and 1990s that have been handled by FUNAI. These are questions of renewal of agreements for support to indigenous groups and compliance with terms of adjustment of conduct.

### Child labor and slavery [GRI HR6 and HR7]

All Eletrobras companies contracts have clauses establishing supplier compliance with the Eletrobras System commitment to prohibit child labor, abuse and sexual exploitation of children and adolescents, forced or degrading labor, as well as any form of physical, sexual, moral or psychological violence, as stipulated in item 3.2 of its Code of Ethics. All contracts also include a binding clause that stipulates that the other party must maintain all conditions required for the contracting during the entire life of the contract.

Regarding child labor, as a requirement for licensing, all suppliers must submit a declaration that they

do not use child labor, in compliance with Law no. 8,666/93, Art. 27, V, in accordance with Art. 7, paragraph XXXIII of the Federal Constitution. Currently, not all Eletrobras companies monitor this compliance.

In case of allegations or identification of any incidents, the matter is addressed by the respective Eletrobras company's ethics committee, directly subordinated to the president of the holding. These committees are responsible for assessing and appropriately referring ethics allegations of any nature related to any stakeholder.

# Emergency management plan and training programs [GRI EU21]

Procedures for responding to emergency situations and risks vary according to the characteristics of each business and the dangers related to the operations and technologies used. Nuclear plants, for example, have specific plans to handle emergencies according to international safety standards. For hydroelectric power plants, plans consider dam security, flood control, and communication with surrounding neighborhoods in case of emergency.

The Eletrobras System also sponsors programs for education, prevention and risk control in the communities.

# Programs for education, prevention and risk control in the communities, by company [GRI LA8]

<u> </u>	· ·		3 1 3 -			
COMPANY	EDUCATION / TRAINING	COUNSELING	PREVENTION	TREATMENT		
Chesf	Х		Χ			
Eletrosul	Х	Х	Χ	Х		
Furnas	Х	Х				

# Number of accidents and deaths of the public involving company assets\* [GRI EU25]

OCCURRENCE	QUANTITY	
Accidents without death	51	
Accident with death	23	
TOTAL	74	

<sup>\*</sup> The following Eletrobras companies were considered: Distribuição Acre, Distribuição Alagoas, Distribuição Piauí, Distribuição Rondônia, Distribuição Roraima, CGTEE, Chesf, Eletrosul, Itaipu Binacional, and Eletrobras holding.

0		
PUBLIC HEALTH AN	ND SAFETY LAWSUITS* [GRI EU25]	
REFERRAL		
RESOLVED		
PENDING		
TOTAL		

NUMBER
25
81
106

<sup>\*</sup> The following Eletrobras companies were considered: Distribuição Acre, Distribuição Alagoas, Distribuição Piauí, Distribuição Rondônia, Distribuição Roraima, CGTEE, Chesf, Eletrosul, Itaipu Binacional and Eletrobras holding.

# **Employment and income**

A major focus for the Eletrobras System in terms of social responsibility is the development of actions complementary to rural electrification programs to encourage efficient electricity use as a vector to induce development of underprivileged communities. To this end, Eletrobras promotes the implementation of Community Production Centers (CCP) composed of machines and equipment for product processing, preservation or storage -- products produced with the aid of this equipment have a substantially higher sales value, compared to in natura or handmade products.

In 2010, the Santo Antônio do Rio Preto CCP was inaugurated in Minas Gerais – focused on women,

it is equipped with machinery for garment making. In the same year, seven agreements were signed for the installation of 12 new CCPs in different Brazilian states, an initiative that is generating jobs and income for several rural areas in the country.

The Eletrobras System also supports third party projects priority for job creation, income generation, education and training of youth and adult professionals. These projects address issues such as gender; racial equality; traditional and rural communities; promoting human rights, combating discrimination, and guaranteeing the rights children and adolescents; family agriculture; promotion of citizenship; and environmental education.

# Private social investment [GRI SO1]

FUNDING SOURCE	AMOUNT	
Total local development/job creation and income generation	R\$ 39,732,973	
Total Energy Efficiency Program - for low-income groups	R\$ 2,263,333	
Total education	R\$ 18,313,639	
FIA and Councils of Children's and Adolescents' Rights (municipal, state, and federal involvement)	R\$ 573,885	
Total	R\$ 60,883,830	

# 10.3. Society

### 10.3.1. Government programs

In addition to its business functions, the Eletrobras System also has functions determined by the government, supporting social interests and national development programs connected to its field, always aligned with governmental guidelines and financial balance requirements inherent to its corporate activity.

# National Electricity Conservation Program [GRI EU7]

In 2010, with investments of almost R\$13,909 million, excluding resources from the RGR, Procel developed projects that helped to conserve approximately 6.16 thousand GWh of power. This result is equal to the annual power consumption of nearly 3.3 million homes, representing postponed investments of R\$696 million in power generation expansion.

# POWER CONSERVED UNDER PROCEL (GWH/YEAR)



Another highlight is the granting of the Procel Seal to 3,778 home appliance and equipment models manufactured by 206 companies in 31 categories. In 2010, four new categories were incorporated: LED TV, in standby mode; electronic reactors for tubular light bulbs; split air conditioning units; and photovoltaic panels.







PROCEL BUILDS (Building Energy Efficiency) Buildings' energy performance ratings and certifications granted following a methodology developed at the Technical Office of the Buildings Working Group of the MME, which is published in decrees from the National Metrology, Standardization and Industrial Quality Institute (Inmetro).

22 certifications for commercial buildings, 5 for residential buildings, and 218 for housing units.

PROCEL GEM (Municipal Energy Management)

Support for cities to promote power savings and energy efficiency through the implementation of diagnostics, training of city technicians for medium and large cities, and establishment of educational communities to train technicians in small cities.

Seven City Energy Management Plans (Plamges) within the Upper Uruguay Project, in partnership with Eletrosul in the states of Rio Grande do Sul and Santa Catarina.

Two workshops entitled Saving Electricity at the City Halls in the cities of Caxias do Sul (Rio Grande do Sul) and Vila Velha (Espírito Santo), with the participation of 135 technicians from 56 cities.

The Seventh Edition of the Procel Energy Efficient City Award, with seven winning initiatives.

Update of Plamges methodology and Municipal Energy Information System software (Siem), including the training of 45 professionals for its application and use.

Preparation of three Electricity & Municipal Management Bulletin issues, with a circulation of 900 copies, targeting cities in the Energy Efficient Cities Network and those that participated in Procel GEM actions.

PROCEL EPP (Public Building Energy Efficiency) The program is being restructured, and is currently developing tools for the registration of public buildings and their respective administrators, a price database and project registration.

Technology Ownership Sharing Contract signed by Eletrobras, the Federal University of Minas Gerais and the Minas Gerais Federal Center for Technological Education (Minas Gerais), establishing the protection terms for patent application number 14090004329 entitled Instrumentation Module, Control and Automation, filed with the National Institute of Industrial Property on 9/17/2009.

Creation of database of public buildings and research on related market knowledge.

PROCEL MARKETING

Raising awareness among society of the importance of energy efficiency and generation of spontaneous media about the program.

The favorability index remained high, with the following evolution in the last three years: 100% in 2008 and 2009, 97% in 2010.

# National Public Lighting and Efficient Traffic Light Program (Procel Reluz)

With investments of R\$33.1 million (R\$24.8 million from Eletrobras) in 2010, Procel Reluz benefited ten municipalities, making 89,559 lighting points more efficient, which resulted in savings of 29,900 MWh/year and a reduction in power demand of 6,800 kW. Since the program began, with an investment of R\$510 million, more than 2.34 million points have been made efficient, providing power savings of 827,000 MWh/year and reduction of 190,800 kilowatts of demand at peak hours in the electricity system.

In 2010, we highlight the 74% increase in the financial value of the program project portfolio, which in the last 12 months went from R\$371.6 million to R\$646.6 million. The RGR resources made available by Eletrobras exceeded R\$45 million, representing an increase of 61% over the same period in 2009.

MORE THAN TWO
MILLION PEOPLE IN
BRAZILIAN RURAL AREAS
WERE BENEFITED IN 2010
BY THE LUZ PARA TODOS
PROGRAM, WITH 419,204
NEW CONNECTIONS

# Procel Reluz: actions and impacts, by region

	MIDWEST	NORTH	NORTHEAST	SOUTH	SOUTHEAST	TOTAL	
Investmer (R\$ million	7 /8 /	-	1.762	8.275	20.278	33.102	
Number o points ma efficient		-	4,058	27,114	50,496	89,559	
Power der reduction	//01	-	125	2,857	3,350	6,823	

# Luz para Todos

More than two million people in Brazilian rural areas were benefited in 2010 by the Luz para Todos Program, with 419,204 new connections. This corresponds to 72.5% of the overall goal of 578,429 connections for 2010, including the commitments of executors with Eletrobras and state governments.

### Contracted connections as of 12/31/2010 in Luz para Todos, including executors and Eletrobras

REGION	WORK PROGRAMS	SPECIAL PROJECTS	TOTAL	0
North	504,990	297	505,287	
Northeast	1,317,035	51	1,317,086	
Midwest	184,402	-	184,402	
Southeast	445,802	-	445,802	100
South	202,307	-	202,307	
BRAZIL	2,654,536	348	2,654,884	¥

The Luz para Todos Program received investments of R\$2.03 billion, with R\$1.57 billion in CDE funding and R\$0.46 billion from RGR. Additional resources of R\$7.15 million from the CDE were invested in special projects for 348 consumer units servicing locations of difficult access and distant from power distribution networks through decentralized generation by renewable energy sources and the construction of small distribution networks.

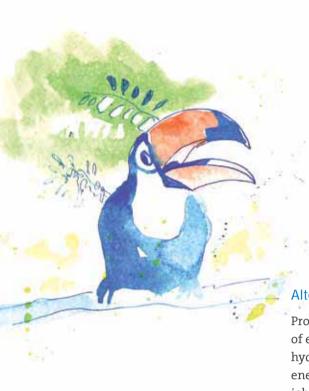
# Contracted funds as of 12/31/2010 for Luz para Todos, by region (R\$ million)

REGION	WORK PROGRAMS		MS SPECIAL PROJECTS		TOTAL	
	CDE	RGR	CDE + RGR	CDE		
North	2,963.87	318.40	3,282.27	6.07	3,288.34	
Northeast	5,161.84	842.45	6,004.29	1.08	6,005.37	
Midwest	765.48	590.60	1,356.08	-	1,356.08	
Southeast	850.85	1,194.66	2,045.51	-	2,045.51	
South	336.97	495.94	832.91	-	832.91	
BRAZIL	10,079.01	3,442.05	13,521.06	7.15	13,528.21	

# Funding made available as of 12/31/2010 for Luz para Todos, by region (R\$ million)

	•							
	REGION		WORK PROGRAMS		SPECIAL PROJECTS	TOTAL		
			CDE	RGR	CDE + RGR	CDE		
	North		2,050.22	234.97	2,285.19	1.23	2,286.42	
	Northeast		3,915.29	692.00	4,607.29	0.00	4,607.29	
	Midwest		575.61	461.66	1,037.27	-	1,037.27	
	Southeast		558.56	768.97	1,327.53	-	1,327.53	
	South	188	259.74	358.73	618.47		618.47	
(4)	BRAZIL		7,359.42	2,516.33	9,875.75	1.23	9,876.98	





# Alternative Energy Source Incentive Program

Proinfa fulfilled its main objective: to increase participation in the SIN of electric energy produced by wind farms, biomass (TPPs) and small hydroelectric power plants (SHPs). Its implementation helped diversify energy sources and create approximately 150,000 direct and indirect jobs across the country, providing large industrial demand and internalization of state of the art technology.

In 2010, 21 ventures came on stream, adding 451.61 MW of power to the Eletrobras System.

# Ventures that came on stream in 2010 under Proinfa

_	VENTURES	NUMBER	INSTALLED CAPACITY (MW)	
	Small hydroelectric power plants	6	94.20	
	Biomass power plants	1	36.00	
	Wind farms	14	321.41	
	TOTAL	21	451.61	

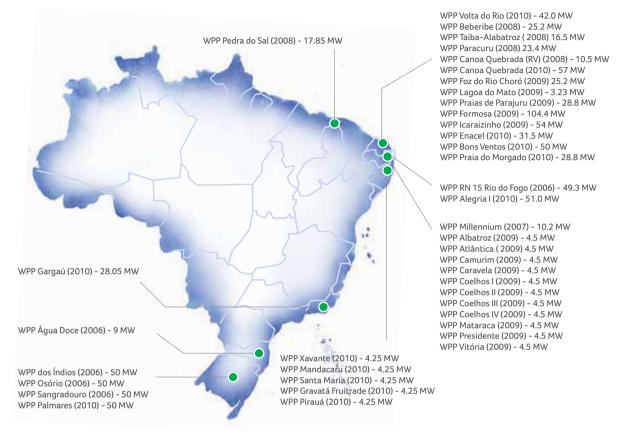
With these new ventures, by the end of 2010, Proinfa had deployed 113 power plants, representing the inclusion of more 2484.07 MW of installed capacity in the country.

	VENTURES ON STREAM AS OF 12/31/2010, L	JNDER PROINFA	
8	VENTURES	NUMBER	INSTALLED CAPACITY (MW)
-5	SMALL HYDROELECTRIC POWER PLANTS	53	1,049.74
	BIOMASS POWER PLANTS	20	540.34
	WIND FARMS	40	893.99
(4)	TOTAL	113	2,484.07

Proinfa played an important role in boosting renewable energy, especially wind power. The installed capacity increased in just over four years from approximately 22 MW to approximately 894 MW in December of 2010.

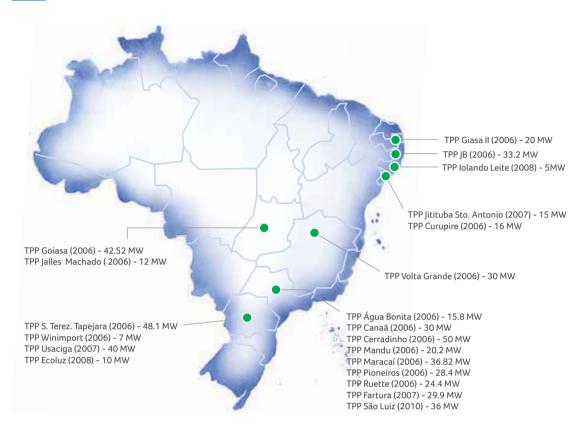


### WIND FARMS ON STREAM UNDER PROINFA

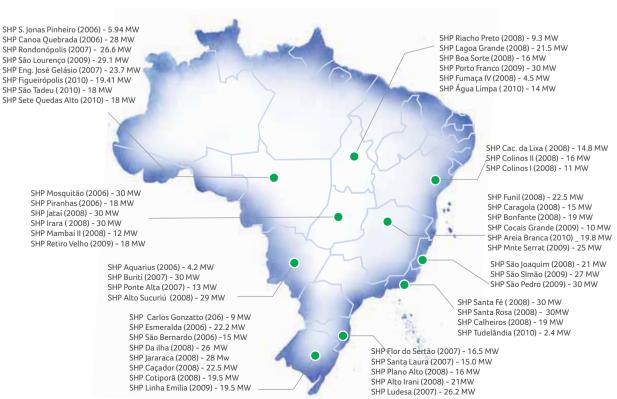


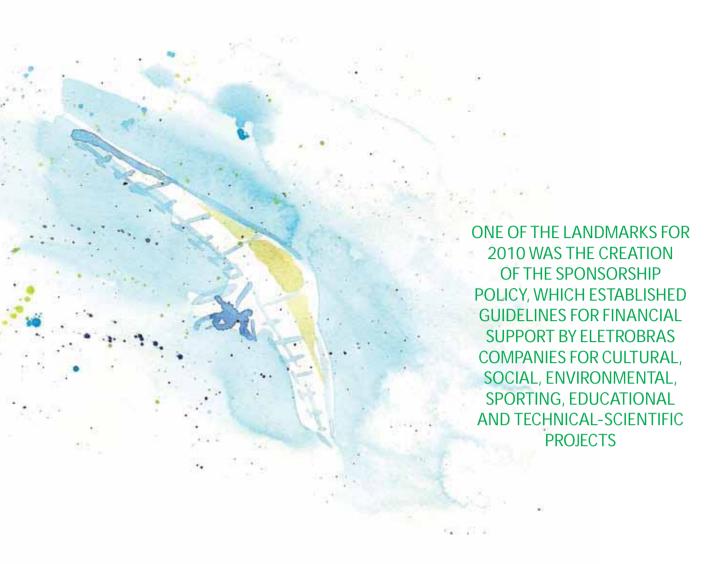


### **BIOMASS POWER PLANTS ON STREAM UNDER PROINFA**



# SMALL HYDROELECTRIC POWER PLANTS ON STREAM UNDER PROINFA





### 10.3.2. Support and sponsorship

Investment in support and sponsorship is part of the Eletrobras companies' corporate practices. The milestone for 2010 was the creation of the Sponsorship Policy, which established guidelines for financial support by all System companies for cultural, social and environmental, sporting, educational and technical-scientific projects.

# Investment in support and sponsorship, by area

AREA	AMOUNT (R\$)	
Culture	35,724,486.24	
Sport (encouraged)"	1,241,735.29	
TOTAL	36,966,221.53	

The following Eletrobras companies were considered: Chesf Eletronorte Eletronuclear, Eletrosul Furnas and Eletrobras holding

### Culture

In 2010, Eletrobras announced its first unified public call for projects for its cultural program, in the amount of R\$15 million. 27 projects for theater productions, seven theater festivals, four film productions, seven film festival projects and

17 projects considered related to intangible cultural heritage were selected. Among the projects supported through direct selection is the completion of the renovation and reopening of the Rio de Janeiro Municipal Theater.

 $<sup>\</sup>ddot{}$  The following Eletrobras companies were considered: Eletronorte Eletronuclear, Eletrosul and Eletrobras holding.

# **Sports**

Sports projects are evaluated for their potential media return and impact on image. The Unified Favela Center championships (Cufa) have provided a significant return for Eletrobras' image, increasing its identification with Brazilian basketball.

Besides having an exclusive sponsorship contract for the Brazilian men's and women's Brazilian Basketball Confederation teams, Eletrobras also sponsors:

- National Basketball League (Brazilian Adult Men's Basketball Championship);
- Master Brazilian Basketball Federation (World Master's Basketball Championship);
- Cufa Brazilian Street Basketball League;
- Brazilian Confederation of Wheelchair Basketball (regional wheelchair basketball championships).

Eletrobras is also an official sponsor of the Vasco da Gama soccer, rowing and Paralympic teams, besides supporting the club's social responsibility projects for professional sports training and introduction to sports.

# 10.4. Government

### 10.4.1. Industry-specific funds

Eletrobras manages industry-specific funds that are used for government programs in the electric energy sector. To this end, it was agreed that the administrative, financial and tax costs incurred by Eletrobras in exercising these functions would also be paid from these funds.

### **Global Reversion Reserve**

As the RGR fund manager, Eletrobras invested R\$1.634 billion in the 2010 fiscal year.

# Contributions to RGR resources (R\$ million)

CONTRIBUTION	AMOUNT	
RGR tax collection	1,590	
Other	1,536	
TOTAL	3,126	

### RGR investments (R\$ million)

REGION	FINANCING	%
North	320	30.5
Northeast	166	15.8
Midwest	138	13.2
South	248	23.6
Southeast	177	16.9
TOTAL	1.049	100.0

# Credit lines under the RGR (R\$ million)

PROGRAM	FUNDING MADE AVAILABE	%	
Luz para Todos	454	43.3	
Procel Reluz/Conservation	45	4.3	
Generation	184	17.5	
Transmission	279	26.6	
Distribution	72	6.9	
Thermoelectric parks	15	1.4	
TOTAL	1,049	100.0	

# **Energy Development Account**

In 2010, R\$3,247 million from was made available through CDE grants, in the proportion of R\$1,679 million to serve the underprivileged population involving several power distribution concessionaires and R\$1,568 million for the Luz para Todos Program.

# Contributions to the CDE (R\$ million)

MOVEMENT	AMOUNT	
CDE tax collection	3,127	
Other	849	
TOTAL	3,976	

# CDE investments (R\$ million)

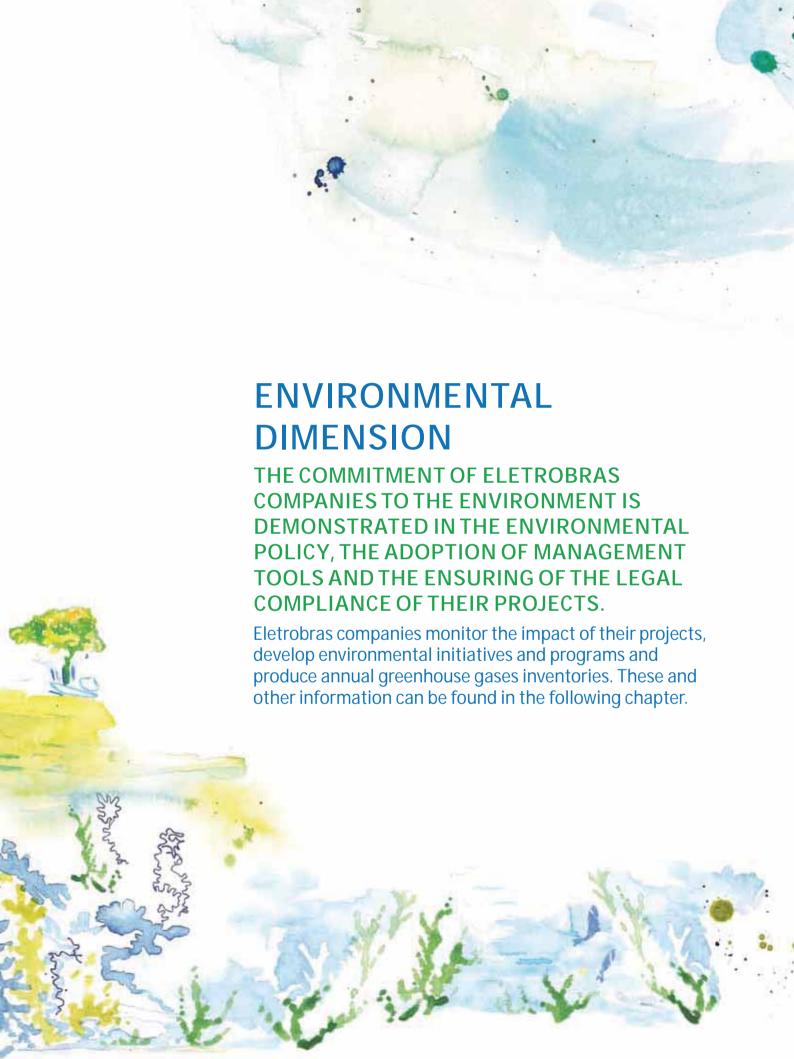
SUBSIDY	AMOUNT	
Luz para Todos	1,568	
Low-income groups	1,679	
Other	599	
TOTAL	3,846	
	Luz para Todos  Low-income groups  Other	Luz para Todos1,568Low-income groups1,679Other599

# **Fuel Consumption Account**

In 2010, this fund operated only to cover fuel costs and new project transfer costs, since the law has not yet been regulated by Aneel. For this, about R\$3.9 billion was collected through monthly payments from the distribution companies, transmission companies and licensees. This amount, with an addition of approximately R\$130 million from fines, payments in installments, and other payments, allowed pass-through of R\$3.6 billion, including R\$120 million for transfers and the remainder for fuel.

The difference between the amounts collected and refunded was allocated to a reserve account as established by Aneel, initiating the formation of a fund for the payment of differences due upon the application of Law no. 12,111/2009.





# 11. Environmental Dimension

Eletrobras companies are quite varied, in terms of their activities, operations, size and number of units. Eletrobras Chesf and Eletrobras Eletronorte have a large number of units, including hydroelectric and thermoelectric generation and transmission operations.

The same is true of Eletrobras Furnas, which added wind generation to its operations in 2010. Eletrobras Eletronuclear and Eletrobras CGTEE, for their part, have thermoelectric generation activities at a single site, but they use different fuels, while Itaipu Binacional is a single hydroelectric power plant. Eletrobras Eletrosul is more focused on transmission but is resuming its generation operations with wind farms and hydroelectric units. There is also Eletrobras Amazonas Energia, which, in addition to distribution, works with hydroelectric and thermoelectric generation in Isolated Systems.

Also in the Eletrobras System are power distribution businesses in Northern and Northeastern Brazil, namely: Distribuição Acre, Distribuição Alagoas, Distribuição Piauí, Distribuição Rondônia, and Distribuição Roraima. Cepel works in research, development and innovation. Finally, the Eletrobras holding carries out administrative and corporate management activities. To meet the reorganization and strategic repositioning process requirements that established the concept of sustainability in the Eletrobras System's mission, vision and values, mechanisms had to be created to enable the coordinated action of all these companies.

# 11.1. Policy and management tools

The revision of the Eletrobras Environmental Policy was one of the most important events in 2010, which included not only updating the holding company's environmental policy, but also the unification of the environmental policies of all subsidiaries. The

current Environmental Policy reaffirms the principles that epitomize the essence of the System's environmental commitment. They are:

- Principle of internal coordination;
- Principle of external coordination;
- Principle of relationship with society;
- Principle of sustainable energy resource use;
- Principle of scientific and technological development;
- Principle of environmental management.

In addition to the principles, the policy consists of guidelines for their implementation.

### Sustainability management indicators

The IGS tests were also concluded in 2010, which will be the primary tool of Eletrobras System companies in managing environmental impacts. Starting in 2011, four major issues will be monitored - water, energy, waste, and wildlife - through 39 indicators that will be continually updated [GRI EN12].

# 11.2. Environment Subcommittee (SCMA)

A joint decision-making body composed of Eletrobras companies' environmental department's representatives and coordinated by the Eletrobras holding's Environmental Department, the SCMA is the technical and institutional forum that guarantees companies' coherence with the principles and guidelines of its Environmental Policy. The SCMA is currently organized into ten thematic working groups and two committees, seeking solutions to environmental issues common to the Eletrobras Sys-

tem and enabling the implementation of procedures articulated in inter-institutional relationships such as the Electric Sector Environmental Forum, through which it is represented.

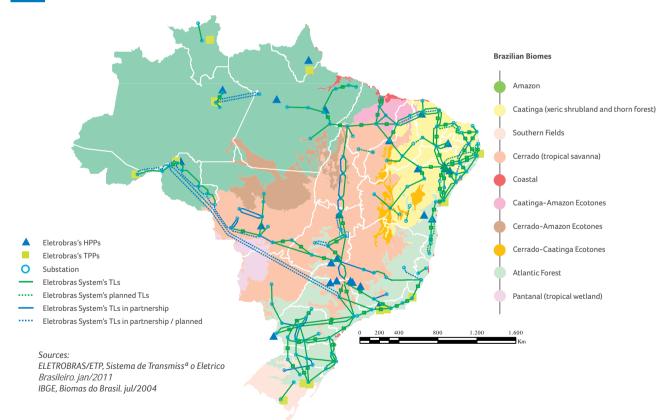
# 11.3. Impact management

Eletrobras System environmental activities are guided by Brazilian legislation, the Electric Sector Environmental Master Plan, the Eletrobras Environmental Policy and the international agreements to which Brazil is a signatory. In compliance with legislation, all the new electric enterprises identify and evaluate potential environmental impacts, elaborating their EIA and the respective RIMA.

In addition to identifying environmental impacts, the EIA proposes actions for mitigation, control, monitoring, and offsetting. As part of the environmental licensing process, after obtaining the pre-operational license, companies elaborate Basic Environmental Plans that review, expand and detail the EIA social and environmental programs at a level compatible with project engineering elements. Enterprises implemented before the application of the environmental law are also considered for environmental management actions in compliance with the same principles and practices.

Eletrobras companies are located across Brazil, which requires addressing different social and environmental realities.

# LOCATION OF ELETROBRAS COMPANIES IN RELATION TO BRAZILIAN HABITATS



The management measures of main impacts of Eletrobras activities are appropriate for these specific realities. Once identified, the environmental impacts give rise to programs, projects and monitoring and mitigation initiatives developed by each company, according to the location, the respective social and environmental aspects and compliance with legal requirements. In 2010, Eletrobras invested R\$204.877 million in environmental impact management.



# Investments and expenses for environment impact management (R\$ million) [GRI EN30]

DESCRIPTION	AMOUNT	
Maintenance of operating processes for environmental improvement	110.747	
Preservation and/or recovery of degraded areas	55.047	
Community environmental education	2.771	
Other environmental projects	32.336	
Environmental liabilities and contingencies	3.976	
TOTAL	204.877	

# 11.3.1 Biodiversity [GRI EN12, EN14 and EN15]

The Eletrobras companies have developed biodiversity recovery and conservation programs according to the PDMA. To rationally explore the energy resources and maintain the balance in the physical, organic and human and cultural occupation of spaces, all activities, from planning to operation, should simultaneously comply with energy engineering designs and respect environmental, social, and economic aspects. Mitigation and offset measures may lead to a review of the project, modifying, for example, its location and dimensions, always with the objective of minimizing and mitigating impacts. To joint actions are added the individual practices of each unit to manage biodiversity related risks, since Eletrobras operations may be close to areas that are protected or that have high biodiversity value.

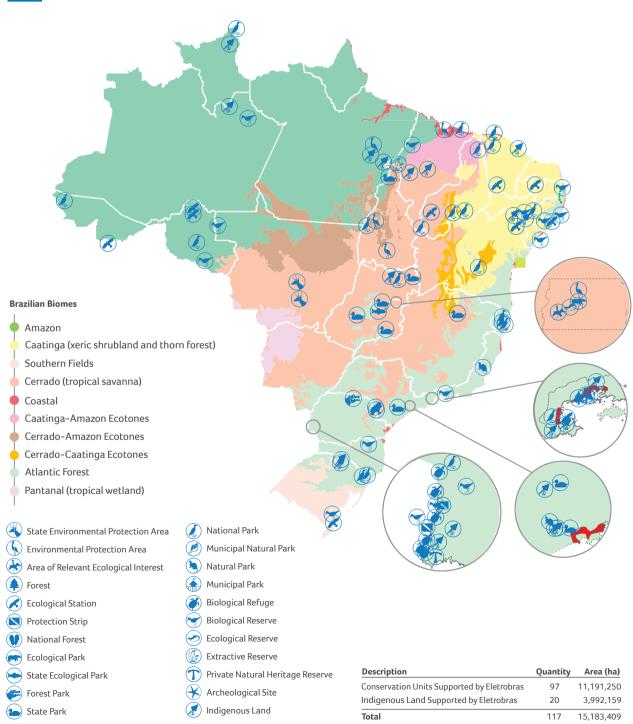
# Proximity of projects to protected and biodiverse areas [GRI EN11]

resiminity of prospector and production and product			
STATUS	PROJECT LOCATION	PROJECT	STATE
Reservoir of 2,917 km <sup>2</sup> within the state environmental protection area (APA).	Inside the APA	Tucuruí Hydroelectric	Pará
Power plant structure is also in the areas surrounding the APA.	In the neighborhood of the APA	Power Plant	raia
Property of 39 ha located in high-biodiversity area.	Inside high-biodiversity area	Rio Vermelho Small Hydroelectric Power Plant	Rondônia
Uatumā Wildlife Reserve was created to protect native, rare, vulnerable or endangered species as well as preserving the lake and island ecosystem formed by the project's reservoir.	Inside the Reserve	Balbina Hydroelectric Power Plant	Amazonas
Environmental conservation areas, habitats protected or restored by the company.	In the neighborhood of the conservation areas	Angra 1, 2 and 3 Nuclear Power Plants	Rio de Janeiro

Support for conservation units has been an effective strategy for biodiversity preservation. Parks, wildlife reserves and ecological stations, among others, are home to wild animals and several species of plants and form a true network of protection in various regions of the country. As of

2010, the Eletrobras System supported 117 legally protected areas - a total of 15,183,409 ha, 76.81% of which is managed by federal organizations, 22.52% by state organizations, 0.66% by Eletrobras, and 0.01% by cities and other organizations [GRI EN13].

# PROTECTED AREAS SUPPORTED BY ELETROBRAS SYSTEM [GRI EN13]



In the EIA of new projects, Eletrobras identifies the impacts on endangered fauna and flora on regional, national and/or international lists, such as the International Union for Conservation of Nature (IUCN) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora. The Itaipu Binacional identified at the region where the power plant is located, 74 wildlife species in different risk level. According to the endangered species red lists from the IUCN, two species are endangered. For this study, also were used the National List and the Paraná State List. The identification of these species led to the elaboration and implementation of specific programs to protect them.

The complete endangered species list identified by Itaipu Binacional is available in the company's 2009 Sustainability Report, at <www.itaipu.gov.br/en/social-responsability/sustainability-reports>.

Other programs conducted by Eletrobras System companies to manage wildlife impacts can be highlighted.

# ELETROBRAS FURNAS | LIMNOLOGICAL AND WATER QUALITY MONITORING SYSTEM (SMLQA) [GRI EN26]

The SMLQA is the most comprehensive reservoir water quality monitoring program in the Brazilian electric sector, which complies with and indeed exceeds the ANA guidelines. The program monitors the reservoirs through their entire life cycles.

Currently, ten reservoirs in operation and two under construction are being monitored, for a total area of about 5,500 km² – more than 500 thousand soccer fields – and a total volume of about 130 km³, or about 70 times the volume of Guanabara Bay, in Rio de Janeiro City.

# ITAIPU BINACIONAL | CULTIVATING GOOD WATER

Cultivating Good Water is composed of 20 programs and 66 initiatives throughout the hydroelectric region of the Paraná 3 Hydrographic Basin, an area of about 8,000 km² covering 29 counties and more than 1 million inhabitants. The program focuses on environmental education for sustainability, implemented in a participatory way by permanent educators in the region, aiming at establishing criteria to orient natural resource conservation initiatives, focused on water quality and quantity and people's quality of life.

The program is monitored and evaluated by a network of 2,146 partners, composed of members of the community, NGOs, government organizations and private initiatives, and distributed across several legally instituted management committees. The environmental quality monitoring of the micro basin, as well as program results, is carried out by the committees, chiefly at the annual county meetings where preparations are made for a major final meeting when commitments and quidelines are jointly agreed upon.

# Eletrobras Eletronuclear | Marine Fauna and Flora Monitoring Program

The Monitoring Program of Marine Fauna and Flora, developed by Eletrobras Eletronuclear, examines the effects on the marine ecosystem of the operation of units 1 and 2 of the Central Nuclear Almirante Álvaro Alberto (CNAAA), in the fields of plankton, benthos, Necton and physicochemical seawater.

Three areas have been established for the collection of samples in Angra dos Reis:



Saco Piraquara de Fora, representing the area of impact and Saco Piraquara de Dentro and Itaorna as control areas. During the sampling of marine fauna and flora, seawater temperature and residual chlorine concentration are measured. Thus, it is possible to evaluate the influence produced by the release of chemical and thermal effluent arising from the operation of the CNAAA units, enabling Eletrobras Eletronuclear to comply with the requirements of the State Environmental Institute.

# ELETROBRAS ELETROSUL | RIVER BANK PROTECTION AND REFORESTATION PROGRAM

The program, implemented at the Passo São João Hydroelectric Power Plant, has already planted 600 thousand saplings, in addition to other reforestation initiatives, such as: installation of artificial perches; transfer and spreading of topsoil (seed rain) in deforested areas of the Permanent Preservation Area reservoir; branch arrangement in the planting area (attractive environment for fauna); and isolation of planted areas from those with natural regeneration.

The Passo São João HPP is installed in the counties of Roque Gonzales and Dezesseis de Novembro, in Rio Grande do Sul State, and its reservoir stretches across the counties of São Luiz Gonzaga, São Pedro do Butiá, and Rolador, in the Northeast region of the state.

# ELETROBRAS ELETRONORTE | FOREST GERM-PLASM PROGRAM

Through the program, a gene bank of 82 forest species was assembled before the Tucuruí HPP reservoir was filled. Afterwards, it was expanded to native forest areas, identifying about 400 tree species that today are used to produce seeds and high-quality saplings used in reforestation programs. The Eletrobras Eletronorte Seed Analysis Laboratory, developed as part of the program scope as a condition for the Tucuruí HPP environmental licensing, analyzed 108 seeds of 57 different species in 2010.

The program is also an alternative for income generation among the Parakanã indigenous community, which is already selling the seeds of commercially valuable species, such as mahogany, tatajuba and Brazil nut.

# Eletrobras Chesf | Inventory of Aquatic Ecosystems

The Inventory of Aquatic Ecosystems Program developed by Chesf is based on the following activities: Inventory of Aquatic Ecosystem of Baixo São Francisco, covering the reservoirs of Itaparica, Moxotó, Delmiro Gouveia, Paulo Afonso IV and Xingó, beyond the downstream stretch of the river; Inventory of Aquatic Ecosystems of the Contas River, which covers the reservoirs of Pedra and Funil, beyond the downstream stretch of the river; and Inventory of

Aquatic Ecosystems of Parnaíba River. These programs have the task of monitoring and developing mechanisms for forecasting and prevention of possible environmental imbalances in the study area. A multidisciplinary approach is used that focuses on local aquatic fauna and flora, covering fish, crustaceans, microorganisms, and aquatic plants as well as physical-chemical and biological water. Among its results is the ability to make scientific discoveries of an ecological and biological nature pertaining to the hydrographic basin studied.

In 2010, the Eletrobras companies - Chesf, Eletronorte, Eletronuclear, Eletrosul, Furnas and Itaipu Binacional - produced and/or planted 1,542,887 seedlings and 220.67 kg of seeds of forest species for the restoration and reforestation of protected habitats. Under the Germplasm Program in Eletrobras Eletronorte, as of October 2010, 733,100 seeds has been collected, from 60 botanical species.

#### 11.3.2. Waste

Until 2010, the Eletrobras System companies' waste control was made only through the Waste Manifesto System. With the enactment of the Solid Waste Law in August of 2010, the companies are expanding their monitoring activities, mostly

in relation to energy generation processes and for support and maintenance of hydropower plant operations. The companies observe the Brazilian Association of Technical Norms and National Environmental Council waste disposal regulations, as well as the legal requirements related to industrial solid waste disposal.

Over the years, the amount of waste generated by Eletrobras has not changed significantly. Exceptionally, long stops for maintenance of boilers or auxiliary systems generate significant waste volumes. Moreover, the reported amount does not correspond to total waste generation, since some units do not have management systems, though these should be incorporated in the coming years, gradually increasing control.



# Waste, by type and disposal method (metric tons)\* [GRI EN22]

DISPOSAL METHOD	HAZARDOUS WASTE	NON-HAZARDOUS WASTE	
Common landfill	0	326.76	
Industrial landfill	15.69865	4.24	
Inert landfill	0	21	
Stored	35.35	3192	
Blending	7.966	0	
City collection	0	0.45335	
Co-processing	63.626	37.833	
Compost	0	1.14	
Decontamination	20.63	0	
Incineration	103.812	0	
Dumps	0	2.895	
Mine decontamination	0	379389	
Reuse	330.00555	113.12	
Recycling	75.057	285,609	
Recovery	0	0	
Refining	672.54	0	
Chemical treatment	0	138	
Specialized company (debris)	0	54	
Other	0.88685	0.504	

<sup>\*</sup>The following Eletrobras companies were considered: Distribuição Roraima, CGTEE, Eletronorte, Eletronuclear, Eletrosul, Furnas, Itaipu Binacional, and Eletrobras holding.

# Hazardous waste [GRI EN23 and EN24]

In 2010, Eletrobras System companies transported 744 metric tons of hazardous waste from their facilities and discarded 16.75 metric tons of askarel. Eletrobras Distribuição Piauí has called for bids to contract a specialized company for removal, breakdown, transportation and disposal of about 6 metric tons of waste from the capacitor cells and other materials contaminated with askarel in the main warehouse.

Also at Distribuição Piauí, the fall of two voltage regulators at the Parnaíba Substation in Luís Correia City caused an 800 liter spill of insulated oil, which has reached an area of approximately 100 m<sup>2</sup>.

#### Nuclear waste

The total solid nuclear waste produced in 2010 at the Almirante Álvaro Alberto Nuclear Center by the Angra 1 and 2 plants was 82.33 m3, a reduction of about 300% compared to 2009 (273 m3) and well below the goal of 120 m3 for the year. After use, the nuclear fuel (irradiated fuel) is transferred to boreholes at reactor buildings, and is not sent for any processing or reprocessing.

All of the radioactive waste generated by the nuclear power plants is safely stored, isolated from the public and the environment, based on safety, radiological protection, traceability and volume reduction conditions.

# Nuclear waste storage, by type and storage method\*

		3 . 3 31	
STORAGE	TYPE	CLASSIFICATION*	
Boreholes outside and inside of power plants with capacity for the full life of the plant.	Irradiated fuel elements	High radioactivity	
Properly designed buildings near the plant, with lifetime operation capacity.	Process fluids and purification resins	Average radioactivity	
Buildings located near the power plant.	isposable material used in operation and	Low radioactivity	

<sup>\*</sup>Due to the half-life of radioactive elements, the wastes are also classified as long life and short life.



### 11.3.3. Emissions

In 2010, the Eletrobras System formalized its commitment to conduct an annual inventory of its greenhouse gas emissions using the Intergovernmental Panel on Climate Change methodology and the Greenhouse Gas Protocol (GHG Protocol) guidelines. The efforts to identify and account for its emissions date from 2005, when a working group with representatives of all companies was created under the SCMA to support the preparation of a greenhouse gas inventory.

From 2005 to 2008, this inventory considered only the emissions from thermoelectric power plants and diesel groups (GHG Protocol Scope 1) of six of its companies, composing the first historic series of emissions data. Starting in 2009, the inventory considered the emissions of ten Eletrobras businesses, including Eletrobras Eletrosul and Itaipu Binacional, which do not generate thermoelectric energy, Cepel

and the holding company. In 2010, the inventory scope was once again increased with the inclusion of the distributors in Acre, Rondônia, and Piauí.

Also in 2010, the inventory scope was expanded to improve information coverage. In Scope 1, fugitive emissions from fire extinguishers, natural gas, and liquefied petroleum gas (LPG) estimates were added; in Scope 2, the emissions related losses in power transmission were added; and, for the first time, emissions estimates related to IPPs were included in Scope 3.

It is important to highlight that the Eletrobras greenhouse gas emissions inventory does not cover hydroelectric generation as there is currently not enough information on the carbon cycle in bodies of water and general reservoirs or a scientific consensus regarding the matter. Eletrobras is monitoring and, since the 1990s, has encouraged, scientific research on the issue.

# Greenhouse gas emissions (tCO2e), by source [GRI EN16 and EN17]

GHG PROTOCOL SCOPE	SOURCE	EMISSIONS	
	Own thermoelectric power plants	4,883,603.79	
	Other stationary sources	280.12	
1	Mobile	14,699.03	
	Fugitive (SF <sub>6</sub> )	160,024.54	
	Fugitive (extinguisher)	63.41	
2	Power consumption	14,019.21	
2	Transmission losses	567,186.57	
3	IPP	3,058,828.45	
OTHER	Electric energy contracts	17,757.87	
TOTAL		8,716,462.98	

NO<sub>x</sub>, SO<sub>x</sub> AND OTHER ATMOSPHERIC EMISSIONS, BY TYPE\* [GRI EN20]
NO<sub>x</sub>

TOTAL

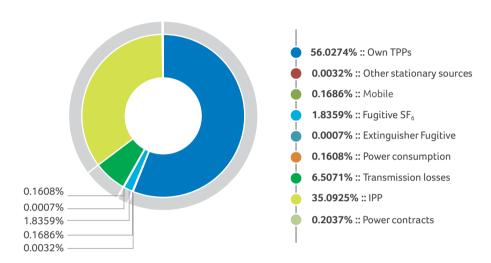
25,252.09 metric tons

\*The following Eletrobras businesses were considered: CGTEE, Eletronorte, and Itaipu Binacional.

 $SO_{\chi}$  31,201.62 metric tons

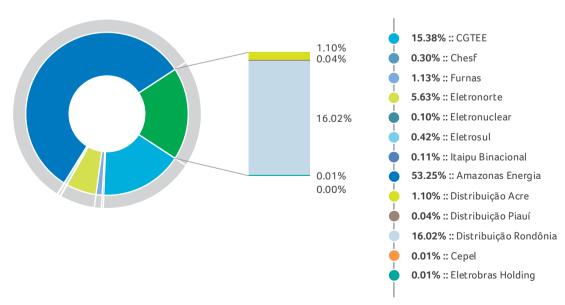
Most greenhouse gas emissions come from stationary large, medium-sized and small thermoelectric generation sources  $^5$  (4,883,603.79 tCO $_2$ e), which correspond to 56.03% of total emissions. Also in Scope 1, direct emissions related to fugitive SF $_6$  from electrical equipment reached 1.84% of the total and may be subject to reduction initiatives. In Scope 2, it should be noted that emissions related to transmission losses represent 6.51% of total inventoried emissions.

# GHG EMISSIONS (tCO<sub>2</sub>e) [GRI EN16 AND EN17]





# GHG EMISSIONS (tCO,e), BY COMPANY [GRI EN16 AND EN17]



<sup>&</sup>lt;sup>5</sup> The thermoelectric power plants connected to the SIN are dispatched, that is, they generate energy, and consequently, emissions, according to ONS regulations. The SIN thermoelectric power plants operate at the base of the system pyramid; they are complementary to hydroelectric power plant dispatch.



Greenhouse gas emissions by Eletrobras companies in generation are low as most of its generation is hydroelectric – an extremely favorable form of power with essentially clean production, as opposed to companies with greater thermoelectric generation.

# Emissions by total energy generated, in own thermoelectric power plants [GRI EU2]

SOURCE	EMISSIONS (tCO2e)	ENERGY (MWh)	ENERGY (tCO2e/MWh)
Oil	3,610,556.56	3,955,528	0.91
Natural gas	4,451.84	5,593	0.80
Mineral coal	1,252,337.16	612,516	2.04

# Initiatives to reduce greenhouse gas emissions and reductions obtained [GRI EN18]

The main Eletrobras System voluntary initiative to reduce greenhouse gas emissions concerns the use of electric engines or flex-fuel vehicles, in which ethanol is preferred. There are also studies and inventories to identify potential reductions and timely measures are taken to control these emissions, besides maintenance for preventing leaks and spills. In reforestation, there is also an initiative involving bidding for wind energy implementation. The initiatives of some companies should be highlighted.

# Eletrobras Eletrosul | SF, emission reduction

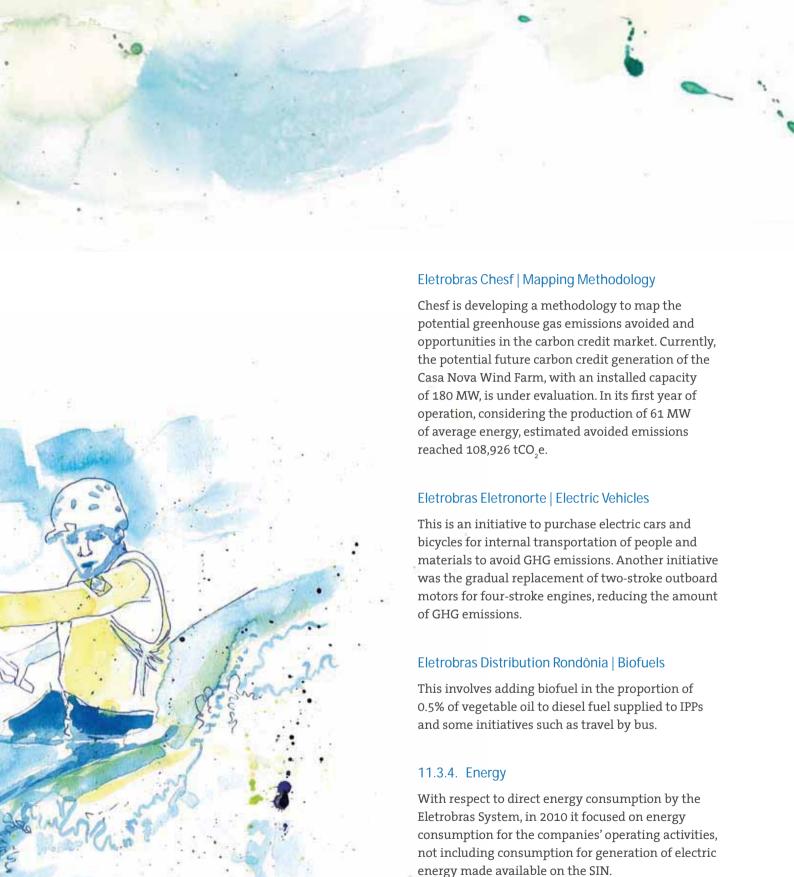
To reduce  $SF_6$  gas emissions, Eletrobras Eletrosul has adopted a series of measures, including:

- Use of gas machines for SF<sub>6</sub> storage and treatment in services that require removal of gas from the equipment for subsequent return;
- Installation of new instruments and devices for maintenance and commissioning that reduce emissions;
- Permanent installation of SF<sub>6</sub> gas pressure supervision manometers in breakers;
- Preparation of maintenance instructions to identify SF<sub>6</sub> gas leaks in breakers.

### Itaipu Binacional | Saplings planting

Itaipu Binacional planted saplings both in the reservoir conservation strips and the neighboring counties of the Paraná 3 Hydro Basin. With respect to transportation vehicles, the company renovated its fleet and today it is composed only of ethanol-powered vehicles. In 2010, it also replaced some of its passenger vehicles with electric vehicles that produce zero emissions.





# Direct energy consumption (GJ), by primary energy source\* [GRI EN3]

	SOURCE	CONSUMPTION	
RENEWABLE	Ethanol	30,722	
REINEWABLE	Solar	0.0255	
	Gas	78,636	
	Diesel	7,916,391	
NON-RENEWABLE	Natural gas	0.088	
NON-RENEWADLE	LPG	320.3	
	Jet kerosene	4,068	
	Fuel oil	1,217,499	

COLIDAE

Being produced by several sources, the energy consumed on the SIN cannot be classified as 100% renewable, although most is produced at hydroelectric power plants.

# Indirect energy consumption (GJ), by primary source\* [GRI EN4]

		SOURCE	CONSUMPTION	
	- RENEWABLE -	Hydroelectric	3,051.61	
		Wind	153.00	
	NON-RENEWABLE	Thermoelectric	2,425.98	
	SIN	Mixed	120,383.68	

<sup>\*</sup>The following Eletrobras companies were considered: Distribuição Rondônia, Chesf, CGTEE, Eletronuclear, Cepel, and Eletrobras holding.

# Energy Efficiency [GRI EN5 and EU7]

The Eletrobras System has made meaningful steps toward energy efficiency in 2010, with the creation of the Integrated Energy Efficiency Committee. Over the year R\$1,679,552.14 was invested in biodiesel and pure plant oil production projects aiming at power generation in isolated areas; installation of laboratories; wind generation potential surveys; and the continuity of Brazil Technology Network projects, started in 2007.

Several System companies began energy efficiency programs and initiatives, following the Sustainability Policy guidelines of acting as an agent for energy efficiency, seeking increased rationality in the use of natural resources and clean energy production.



CONCURARTION

<sup>\*</sup>The following Eletrobras companies were considered: Amazonas Energia, Distribuição Acre, Distribuição Alagoas, Distribuição Rondônia, Chesf, Eletronorte, Eletronuclear, Eletrosul, Furnas, Itaipu Binacional, Cepel, CGTEE, and Eletrobras holding.



In 2010, 784,390 students and 68,481 teachers from 9,149 schools in

2,404 cities participated.

	Furnas	Engineering: studies and projects for improvements in facilities and electrical systems of public and private areas to make them energy efficient.	Worth mentioning was the upgrade of 198 light fixtures located in the Office of Energy Conservation Studies and Programs and in all rooms in Block P of the Central Office, where the Corporate Education Department, part of the of the Human Resources Division and the Supplier Registration Division are located. After studying different solutions, leading market technology was used, replacing 32 W bulbs with a system called Ecosystem, a digital process with 28 W fluorescent bulbs and electronic reactors with digital dimmers, a pioneering system in Latin America. With an investment of R\$164,000, according to measurements made before and after the replacement, the program achieved cost reductions of around 80%, equivalent to 6.7 MWh/year, representing R\$3,000 per year.
			27 energy diagnostics were carried out in schools, hospitals, public buildings and the water supply and sewage systems in states where the company has facilities. The studies identified potential savings of 360.50 MWh/year and reduction in demand of 166.40 kW.
		Internally at Cepel, the use of solar panels in the Efficient Solar House and Efficient Technologies Application Center (Cate) allowed the operation of these demonstrations and training centers (products offered to Cepel visitors) with lower energy consumption from renewable energy sources used directly.	Estimated energy savings of 1,450 kWh or 5,220 MJ in 2010.
	Cepel	Solar roof at Cate: installation with a maximum power of 16 kW, injecting energy into the Cepel network through frequency inverters.	Energy savings measured at 5,654 kWh or 20,354 MJ in 2010.
		Laboratory tests for the efficiency of electric appliances - refrigerators, air	The classification for labeling, among other things, results in the technological improvement of electric appliances sold on the domestic market.
	_	conditioners, lamps, lighting fixtures and electronic reactors and electric motors.	In 2010 more than 500 models in the areas of refrigeration, lighting and motor systems were tested.
	in	Demonstrations of efficient technology in the use of electricity and of renewable sources (Cate)	High-quality information and training for staff involved with energy efficient and renewable energy sources (engineers, architects, students, business professionals in the electric system, managers of industrial utilities).
			In 2010, 1,014 visitors were served; three energy diagnostics were carried out and a course in energy efficiency was offered.
	Eletrobras Holding	Development of Qualification Program for Equipment in the Power Industry (Qualiequip), created in 2003 as a tool to standardize the quality of equipment in the power industry.	Aiming to reduce energy losses through the use of more efficient distribution transformers, a label has been developed to ensure minimum efficiency indices for this equipment, in a partnership between Cepel, the National Confederation of Industry (CNI) and the Brazilian Electrical and Electronics Industry Association (ABINEE).
			In 2010, Qualiequip was included in the Brazilian Labeling Program of Inmetro, with the intention of becoming compulsory by 2012, bringing savings of 30,000 MWh/year with the replacement of transformers. In 2010, an agreement was signed with the CNI for further impact studies of tariffs.

# Energy Efficiency Program for Eletrobras Distribution Companies [GRI EN6 and EU23]

The Eletrobras System distribution companies, in compliance with Federal Law 9,991/00, use 0.5% of their net operating revenues in projects aimed at

combating energy waste based on the guidelines established by law and Aneel resolutions. In 2010, Eletrobras System distribution companies adopted measurement and verification protocols in their energy efficiency projects.

The following table summarizes energy efficiency programs and projects characterized as efforts for supplying products with low energy consumption.

COMPANY	PROGRAM	<b>EQUIPMENT REPLACED</b>	RESULTS	
	Flatualamaa Diatuilavila sa	76,798 light bulbs.	8759.77 MWh/year	
Eletrobras Distribuição Alagoas	Eletrobras Distribuição - Alagoas Energy Efficiency Program (Agent Ceal project)	6,500 refrigerators.	3,549 MWh/ year	
Magado	Public Service Programs (Casal 800 project)			
Eletrobras Amazonas Energia	Energy Efficiency Projects for Low-Income Earners (R&D Project)	3,887 refrigerators.	N/A <sup>*</sup>	
		48,000 light bulbs.	R\$947.69 kW/ year**	
Eletrobras Distribuição Piauí	Agent Cepisa Project	343 refrigerators.	R\$126.48/MWh**	
		6,752 refrigerators.	3,744.02 MWh year***	
Eletrobras Distribuição Rondônia	Projects benefiting low income consumers through technical interventions	27,675 incandescent lamps with fluorescent bulbs.	5,292.79 MWh/year <sup></sup>	
Eletrobras Distribuição Roraima	Projects that benefit low- income consumers with technical interventions	Forecast to replace 1,000 refrigerators.	744 MWh/year <sup></sup>	
Eletrobras Distribuição Acre	Projects that benefit low- income consumers with technical interventions	Forecast to replace 750 refrigerators	540 MWh/year <sup></sup>	

Currently establishing criteria for measurement and verification, scheduled for April of 2012.

# 11.3.5 Water [GRI EN8]

Although the volume of water used by hydroelectric power plants is high, almost all the water is non-consumptive use. Water is removed from the reservoir, moves the turbines to generate electricity, and passes by the spillway or is used for cooling equipment, after which all water is returned to the river of origin.

In the case of Eletronuclear, the power plants use a large amount of seawater for cooling in an open circuit, about three billion m3 in 2010, but as this water is returned to the sea, in this case as well there is no consumption. Similarly, in coal-thermal CGTEE, the volume of water used for cooling in an

open circuit is also high, about nine million m3 in 2010, but the water returns to the river of origin, with no consumption.

Both at the Eletronuclear power plants as the CGTEE there are cooling systems in closed circuits, where there is consumption of water from the evaporative loss. The replacement of this loss, added to the water service, is performed with river water and in 2010 totaled about 800 thousand m3 of Eletronuclear power plants.

The water returned to bodies of water has its quality and temperature monitored.

<sup>&</sup>quot;Unit cost of demand reduction for low voltage.

<sup>\*\*\*</sup>Estimated potential.

Beyond this water consumption in the production process, the values presented below correspond to the administrative consumption of water in 2010 at the Eletrobras facilities.

# Water used for administrative consumption, by source (m<sup>3</sup>)\*

SOURCE	CONSUMPTION
Surface	10,091,360
Ground	19,935
Water companies	3,108,537
Other	213,149

<sup>\*</sup>The following Eletrobras companies were considered: Distribuição Acre, Distribuição Piauí, Distribuição Rondônia, Chesf, CGTEE, Eletronorte, Eletronuclear, Eletrosul, Itaipu, Cepel, and Eletrobras holding.

# 11.3.6. Legal compliance [GRI EN28]

In 2010, Eletrobras System companies received the following fines and non-economic sanctions:

FINES AND NON-MONETARY SANCTIONS		
EVENT	NUMBER	AMOUNT (R\$ THOUSAND)
FINES LEVIED	11	1,149
FINES PAID	3	37
NON-MONETARY SANCTIONS	3	-
TOTAL	17	1,186
*The following Eletrobras companies were considered: Amazon Furnas, Eletrosul, Itaipu Binacional, Cepel, and Eletrobras holdi		;





# 12. About this Report

[GRI 3.1, 3.2, 3.3, 3.4, 3.5, 3.8, 3.9, 3.10, 3.11 and 3.13]

The relevance of the topics covered in this report was defined in terms of market indicator references (Dow Jones, ISE, Aneel Report and GRI), which make up the external guidelines, and by planning tools and business management (strategic planning, research with employees, analysis of the relevance of themes), which make up the internal guidelines. Thus, each topic listed is assigned a score under the internal and external relevance guidelines according to which the subject is or is not covered by the report.

Each subject was weighted according to a specific methodology; for example, the topics addressed by Dow Jones (since Eletrobras intends to participate in this index) and by GRI (reporting methodology adopted) receive greater weight.

For the internal guidelines, the topics addressed by Strategic Planning received greater weight, as they are part of Eletrobras' business strategy. The information in this report refers to the activities of generation, transmission and distribution of Eletrobras companies, as well as Eletropar and Cepel. The survey of stakeholders was carried out through questionnaires, and they were invited by the areas with relationships with the companies' sustainability committees. The survey was carried out through the company's website and the goal is to do so annually.

In 2010, research with the public included the following stakeholders:

- Shareholders/investors;
- Community:
- Consumers/clients;
- Employees;
- Suppliers;
- Government;
- · Civil society organizations.

The Ethos methodology suggests that issues with relevance greater than 50% for internal and external guidelines be considered material, but the consulting firm that prepared the report and Eletrobras defined the topics with relevance greater than 40%

for internal or external guidelines as material, since the online report will not have more indicators than the printed version of the report, and also to satisfy internal and external stakeholders, since a topic may be of interest to only one group.

For each topic deemed as material, indicators were chosen based on three criteria:

- To include indicators commonly reported by electric utilities;
- To cover indicators already reported in previous years, in order to ensure comparability;
- To use managed indicators to ensure the reliability of information.

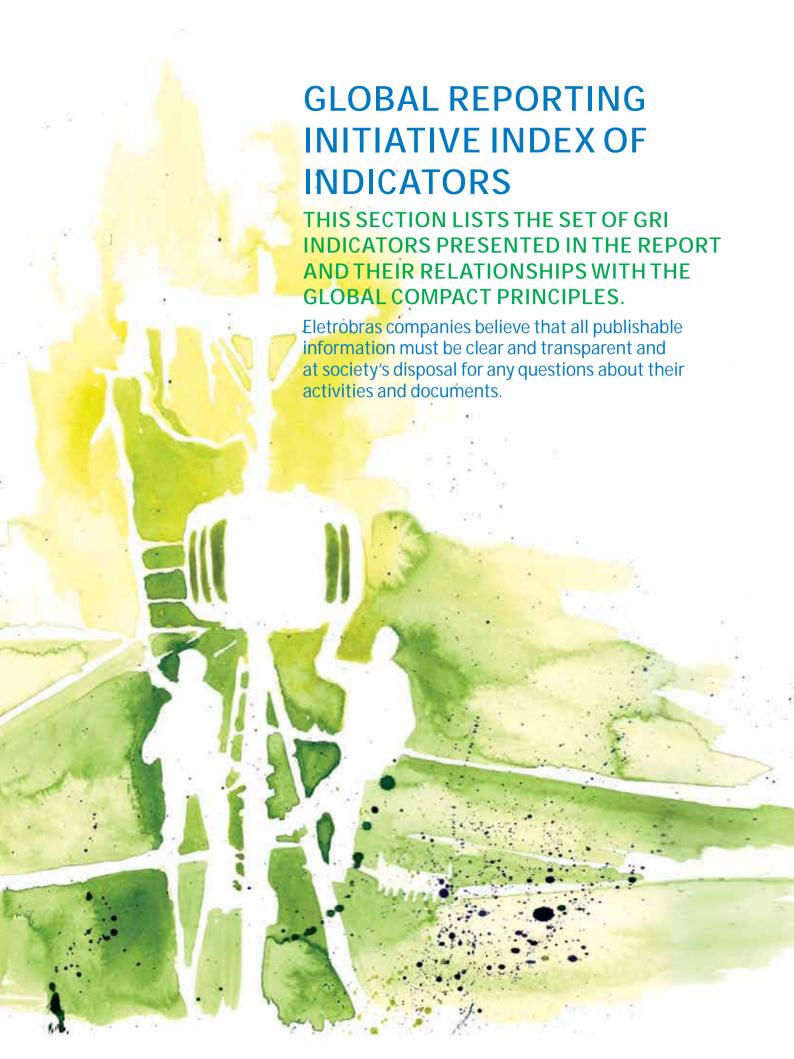
Eletrobras has reported on its social and environmental practices since 2005. Since 2008, the Eletrobras Sustainability Reports have been aligned with GRI guidelines and in 2009, versions in Portuguese, English and Spanish were included on the company website.

The report also used the guidelines of the GRI Electric Utilities Sector Supplement and the Brazilian Institute of Social and Economic Analyses, with specific indicators for the first time including the distribution companies. Through a bidding process, Eletrobras contracted PricewaterhouseCoopers to externally assure this document.

The Eletrobras Sustainability Report is prepared annually and the information reported here refers to the period from January to December 2010, with level B+ in the GRI application.

### **CONTACT DETAILS**

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# 13. GLOBAL REPORTING INITIATIVE (GRI) INDEX OF INDICATORS [GRI 3.12]

The answers to all GRI indicators presented in this report can be found in this document or in the Index of Indicators.

	INDICATOR	PAGE	PRINCIPLES OF THE GLOBAL COMPACT	
	PROFILE			
	Strategy and analysis			
1.1	Statement on the relevance of sustainability to the company	4		
1.2	Description of key impacts, risks and opportunities	4, 56		
	Organizational profile			
2.1	Name of the organization	28		
2.2	Primary brands, products and/or services	34		
2.3	Operational structure of the organization	34		
2.4	Location of organization's headquarters	34		
2.5	Number of countries where the organization operates and in which there are operations relevant to sustain- ability	34		
2.6	Nature of ownership and legal form	34		
2.7	Markets served by the organization	34		
2.8	Scale of the reporting organization	34		
2.9	Significant changes during the reporting period	34		
2.10	Awards received in the reporting period	20		
	REPORT PARAMETERS			
	Report profile			
3.1	Reporting period	142		
3.2	Date of most recent previous report	142		
3.3	Reporting cycle	142		
3.4	Contact point for questions regarding the report or its contents	34, 142		
	Report scope and boundary			
3.5	Process for defining report content	142		
3.6	Boundary of the report	34		
3.7	State any specific limitations on the scope or boundary of the report	34		
3.8	Basis for reporting	142		
3.9	Data measurement techniques and the bases of cal- culations	142		
3.10	Explanation of the effect of any restatements of infor- mation provided in earlier reports, and the reasons for such restatement	142		
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	142		
	Global Reporting Initiative (GRI) Content Index			
3.12	Table identifying the location of the Standard Disclosures in the report	144		

	INDICATOR	PAGE	PRINCIPLES OF THE GLOBAL COMPACT
	Assurance		
3.13	Policy and current practice with regard to seeking external assurance for the report	142, Appendix C	
	GOVERNANCE, COMMITMENTS, AND ENGAGEMENT		
4.1	Governance	4/	
4.1	Governance structure of the organization	46	
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	47	
4.3	State the number of independent members	47	
4.4	Mechanisms for shareholders and employees to pro- vide recommendations or direction to the highest governance body	46, 48	
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance (including social and environmental performance)	47	
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	47	
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics	47	
4.8	Internally developed values, codes of conduct, and principles relevant to economic, environmental, and social performance	3, 17, 26	
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance	49	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	Eletrobras does not have a formal evaluation process for the performance of the Board of Directors or its members.	
	Commitments to External Initiatives		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	50	
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	52	
4.13	Memberships in associations and/or national/inter- national advocacy organizations in which the organi- zation has positions, participates in projects or com- mittees, provides substantive funding and/or views membership as strategic	150	
	Stakeholder Engagement		
4.14	List of stakeholder groups engaged by the organization	51	
4.15	Basis for identification and selection of stakeholders with whom to engage	51	
4.16	Approaches to stakeholder engagement	51	
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	51	
	PERFORMANCE INDICATORS		
	Economic Performance		
EC1	Direct economic value generated and distributed	10	
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	102	6
EC6	Policy, practices, and proportion of spending on local- ly-based suppliers	Due to the legal form of the group's companies (government-linked companies), this indicator cannot be applied to the companies that comply with Law no. 8,666.	



	INDICATOR	PAGE	PRINCIPLES OF THE GLOBAL COMPACT	
EC7	Local hiring	Hiring at Eletrobras companies is done through civil service examinations, as established in the 1988 Constitution, which is incompatible with any form of guidance in selection, including the birthplace and residence of the applicant.	6	
	Environmental Performance			
EN3	Direct energy consumption by primary energy source	136	8	
EN4	Indirect energy consumption by primary source	136	8	
EN5	Energy saved due to conservation and efficiency improvements	136	8,9	
EN6	Initiatives to provide energy-efficient products and services	138	8,9	
EN8	Total water withdrawal by source	139	8	
EN11	Location and size of land owned	126	8	
EN12	Description of significant impacts of activities, products, and services on biodiversity	83, 124, 126	8	
EN13	Habitats protected or restored	13, 127	8	
EN14	Strategies for managing impacts on biodiversity	126	7, 8	
EN15	Number of International Union for Conservation of Nature (IUCN) Red List and other list species	126	8	
EN16	Total direct and indirect greenhouse gas emissions	14, 132, 133	8	
EN17	Other relevant indirect greenhouse gas emissions	14, 132, 133	8	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	134	7, 8,9	
EN20	NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions	132	8	
EN22	Total weight of waste by type and disposal method	131	8	
EN23	Total number and volume of significant spills	131	8	
EN24	Weight of transported waste deemed hazardous	131	8	
EN26 EN28	Initiatives to mitigate environmental impacts  Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws	128 140	7, 8,9	
EN30	Total environmental protection expenditures and investments by type	126	7,8,9	
	Social Performance			
	Labor Practices			
LA1	Total workforce by employment type, employment contract, and region	12,100		
LA2	Total number and rate of employee turnover by age group, gender, and region	12, 101	6	
LA4	Percentage of employees covered by collective bargaining agreements	105	1,3	
LA6	Percentage of workforce represented in formal joint management–worker health and safety committees	106	1, 3	
LA7	Rates of injury, occupational diseases, and lost days	106		
LA8	Education, prevention, and risk-control programs	109		
LA9	Health and safety topics covered in formal agreements with trade unions	106		
LA10	Average hours of training per year	103, 104		
LA12	Percentage of employees receiving performance reviews	102		
LA13	Composition of governance bodies and ratio according to gender, and group indicators of diversity	47	1,6	
LA14	Ratio of basic salary of men to women by employee category	104	1,6	
HR1	Human Rights  Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights. concerns, or that have undergone human rights screening	74		

	INDICATOR	PAGE	PRINCIPLES OF THE GLOBAL COMPACT
HR4	Total number of incidents of discrimination and actions taken	51	1,6
HR5	Policy of freedom of association and the extent of its application	105	1, 3
 HR6	Measures taken to contribute to the elimination of child labor	109	1, 2, 5
 HR7	Measures taken to contribute to the elimination of forced labor	109	1, 2,4
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	108	1
	Community		
SO1	Programs and practices that assesses and manage the impacts of operations on communities	12,110	
SO4	Actions taken in response to incidents of corruption	51	10
SO5	Public policy positions	41	10
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions	Public companies are prohibited by law from making financial contributions to political parties and other organizations of a similar nature.	10
SO7	Total number of legal actions for unfair competition	51 The energy service is a public utility regulated by the government	
SO8	Monetary value of significant fines and total number of non-monetary sanctions	In 2010, there were no significant fines or non-monetary sanctions resulting from non-compliance with any law or regulation for the Eletrobras System	
	Product Responsibility		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	96	8
PR5	Practices related to customer satisfaction, including results of surveys	96	
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications	52	
PR7	Incidents of non-compliance with regulations and vol- untary codes concerning marketing communications	52	
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	In 2010, CGTEE was issued a notice of violation issued by the Department of Revenue of R\$15,694,704.91 related to 2006 tax collection. However, the company is questioning the noncompliance with legislation.	
	Energy Sector		
EU1	Installed capacity, broken down by primary energy source and by regulatory regime	35	
EU2	Net energy output broken down by primary energy source and by regulatory regime	36, 134	
EU3	Number of residential, industrial, institutional and commercial customer accounts	93	
 EU4	Length of above and underground transmission and distribution lines by regulatory regime	38	
EU6	Management approach to ensure short and long-term electricity availability and reliability	96	1, 2
EU7	Demand-side management (DSM) programs including residential, commercial, institutional and industrial programs	110, 136	
EU8	Research and development activities and expenditure aimed at providing reliable electricity and promoting sustainable development	69	1, 2, 7, 8
EU10	Planned capacity against projected electricity demand over the long-term, broken down by energy source and regulatory regime	80	



	INDICATOR	PAGE	PRINCIPLES OF THE GLOBAL COMPACT
EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	37	
EU12	Transmission and distribution losses as a percentage of total energy	37, 95	
EU14	Programs and processes to ensure the availability of a skilled workforce	102	
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	101	
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	105	
EU19	Stakeholder participation in the decision making pro- cess related to energy planning and infrastructure de- velopment	107	
EU20	Approach to managing the impacts of displacement	107	1, 2
EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recov- ery/restoration plans	109	1, 2
EU22	Number of people physically or economically displaced and compensation, broken down by type of project	107	1, 2
EU23	Programs, including those in partnership with govern- ment, to improve or maintain access to electricity and customer support	42,138	
EU25	Number of injuries and fatalities to the public involv- ing company assets including legal judgments, settle- ments and pending legal cases of diseases	109, 110	1, 2
EU28	Power outage frequency	96	
EU29	Average power outage duration	96	
EU30	Average plant availability factor by energy source and by regulatory regime	37	



### A. Participation in Strategic Entities [GRI 4.13]

In the Eletrobras System, several companies' representatives are members, according to their specialties, of the following industry associations and civil society organizations:

International Atomic Energy Agency (IAEA)
American Nuclear Society (ANS)/ Latin American Section
Brazilian Association of Infrastructure and Basic Industries (ABDIB)
Brazilian Association of Publicly-held Companies (Abrasca)
Brazilian Association of Power Distribution Companies (Abradee)
Brazilian Association of Thermoelectric Generation Companies (Abrage)
Brazilian Association of Large Power Transmission Companies (Abrate)
Brazilian Electric and Electronic Industry Association (ABINEE)
Brazilian Association of Technological Research Institutions (ABIPTI)
Brazilian Association for Business Communication (Aberje)
Brazilian Nuclear Energy Association (Aben)
Brazilian Association for Non-destructive Testing and Inspection (Abendi)
Brazilian Association for Technical Standards - Brazilian Committee for Quality (ABNT/CB25)
Brazilian Association for Training and Development (ABTD)
Brazilian Association of Power Industry Accountants (Abraconee)
Brazilian Association of Power Traders (Abraceel)
Brazilian Association of Thermoelectric Generators (Abraget)
Brazilian Association for Nuclear Development (Abdan)
Rio de Janeiro Chamber of Commerce (ACRJ)
Association of Owners of Telecommunications Infrastructure and Private Systems (APTEL)
National Association of Collectors and Transporters of Recyclable Materials (Ancat)
Power Trading Chamber (CCEE)
American Chamber of Commerce (Amcham)
Organic Agriculture and Agro-ecology Chamber
Brazilian Center for International Relations (Cebri)
Celso Furtado International Center for Development Policy (Cicef)
Center for Innovation and Competitiveness (CIC)
Clean Coal Centre (CCC)
Engineering Club of Rio de Janeiro
ACRJ Environmental Committee
Commission for Regional Energy Integration (Cier)
Commission for Organic Production in Paraná (CPOrg-PR)
CIER Brazilian Committee (Bracier)
Brazilian Committee for Dams (CBDB)
Brazilian Committee for Electricity (ABNT/Cobe)
Brazilian Committee of the World Energy Council (CME)
Brazilian Committee of the Global Compact (CBPG)
Abendi Electromechanical Inspection and Testing Committee
Steering Committee and Board of Trustees of the Center for Social and Environmental Knowledge and Stewardship of the Plata Basin
Intergovernmental Coordinating Committee of the Countries of the Plata Basin (CIC)
Brazilian National Committee for Power Production and Transmission (Cigre)
Iguaçu National Park Advisory Council (Comparni)
World Water Council (WWC)
E8
Abring Foundation

Foundation Committee of Corporate Management (Funcoge)
National Quality Foundation (FNQ)
National Institute of Metrology, Standardization and Industrial Quality (Inmetro)
Ethos Institute for Corporate and Social Responsibility
National Investor Relations Institute (INI)
National Institute of Research and Development of Innovative Companies (Anpei)
Institute for the Development of Alternative Energy in Latin America (Ideal)
Quality Minas Institute (IQM)
International Energy Agency (IEA)
International Hydropower Association (IHA)
ISO/TC 176
Electricity Memorial
Competitive Brazil Movement (MBC)
Catarinense Movement for Excellence (MCE)
National System Operator (ONS)
United Nations Industrial Development Organization (Onudi)
Radiation Emergency Medical Preparedness and Assistance Network (Rempan)
National Network for Social Mobilization (Coep)
Technology and Innovation Network of Rio de Janeiro (Redetec)
Section of the Latin American Nuclear Society (LAS)
National Service for Industrial Learning (Senai)
Electrical Workers' Union of Rio Grande do Sul (Senergisul)
Engineers' Union of Rio Grande do Sul (Senge)
Social Service of Industry (SESI)
World Association of Nuclear Operators (Wano)
Brazilian Business Council for Sustainable Development (CEBDS)
World Nuclear Association (WNA)



## B. Annual Social Audit / 2010

•	1 - Basis of calculation	
	Net revenues (NR)	
	Operating results (OR)	
	Gross payroll (GP)	
	2 - Internal social indicators	(R\$ thousand)
	Food	224,927
	Mandatory payroll taxes and benefits	974,801
	Private pension plan	196,871
	Health	316,326
	Safety and health at workplace	310,320
	Education	45,660
	Culture	2,064
	Training and Professional development	63,096
	Day care or stipend for day care	19,294
	Profit-sharing	396,182
	Other	144,710
	Total - Internal social indicators	2,416,470
	3 - External social indicators	(R\$ thousand)
	Education	24,255
	Culture	47,890
	Health and sanitation	70,800
!	Sports	18,505
	Hunger relief and food security	4,637
	Other	184,608
	Total contributions to society	350,695
	Taxes (excluding payroll taxes)	3,530,263
	Total – External social indicators	3,880,958
	4 - Environmental indicators	(R\$ thousand)
	Related to company operations	169,895
	External projects	35,107
	Total invested in environment	205,002
	Regarding the establishment of annual targets to minimize toxic waste and consumption during production/operation and to	
	improve the better use of natural resources, the company:	
	5 - Employee composition indicators	
	# of employees at the end of term # of birds during term	
	# of hires during term	
	# of outsourced employees # of interns	
	# of employees over 45	
	# of women working at the company	
	% of management positions occupied by women	
	# of black employees working at the company	
	% of management positions occupied by blacks	
	# of employees with disabilities	
	6 - Information relating to the exercise of corporate citizenship	
	Ratio of highest to lowest compensation at company  Total # of accidents at the company	
	Social and environmental projects developed by the company were selected by:	( ) top-level executives
	The company's standards for safety and cleanliness in the workplace were set by:	( ) top-level executives and mid-level management
	Concerning freedom of association, the right to collective bargaining and employee representation in unions, the company:	( ) does not interfere
	The company pension plan covers:	( ) top-level executives
	The profit-sharing program covers:	( ) top-level executives
	In the selection of suppliers, the standards for ethics and social/environmental responsibility used at the company:	( ) are not taken into consideration
	With relation to volunteer work by employees, the company:	( ) does not interfere
	Total number of consumer complaints and criticism:	with the companyNA
	% of answered and solved complaints:	with the companyNA%
	Total Added Value to be distributed (in thousands of reais)	
	Distribution of Added Value:	6.15% government 7.14% employees 40.8
·	7 - Other information	



2010 Amount			2009 Amount		
(in thousands of reais) 25,166,788			(in thousands of reais) 24,581,033		
5,625,644			2,673,372		
3,193,548			2,909,468		
% of GP	% of NR	(R\$ thousand)	% of GP	% of NR	
7.04%	0.89%	174,653	6.00%	0.71%	
30.52%	3.87%	782,939	26.91%	3.19%	
6.16%	0.78%	176,531	6.07%	0.72%	
9.91%	1.26%	280,391	9.64%	1.14%	
1.02%	0.13%	28,096	0.97%	0.11%	
1.43%	0.18%	36,371	1.25%	0.15%	
0.06%	0.01%	2,182	0.07%	0.01%	
1.98%	0.25%	58,256	2.00%	0.24%	
0.60% 12.41%	0.08% 1.57%	18,225 304,642	0.63% 10.47%	0.07% 1.24%	
4.53%	0.58%	274,325	9.43%	1.12%	
75.67%	9.60%	2,136,611	73.44%	8.69%	
% of OR	% of NR	(R\$ thousand)	% of OR	% of NR	
0.43%	0.10%	15,991	0.60%	0.07%	
0.85%	0.19%	49,854	1.86%	0.20%	
1.26%	0.28%	45,449	1.70%	0.18%	
0.33%	0.07%	21,436	0.80%	0.09%	
0.08%	0.02%	3,426	0.13%	0.01%	
3.28%	0.73%	177,591	6.64%	0.72%	
6.23%	1.39%	313,747	11.74%	1.28%	
62.75%	14.03%	2,754,642	103.04%	11.21%	
75.22%	16.81%	3,382,136	126.51%	13.76%	
% of OR	% of NR	(R\$ thousand)	% of OR	% of NR	
3.02% 0.62%	0.68%	146,938	5.50% 0.70%	0.60%	
3.64%	0.14% 0.81%	18,714 165,652	6.20%	0.08% 0.67%	
	0.6176	103,032		0.0776	
does not establish targets			does not establish targets		
2010			2009		
28,450			NA		
28,450 1,364			NA NA		
28,450 1,364 8,172			NA NA NA		
28,450 1,364 8,172 2,103			NA NA NA NA		
28,450 1,364 8,172 2,103 11,413			NA NA NA NA		
28,450 1,364 8,172 2,103 11,413 5,353			NA NA NA NA NA		
28,450 1,364 8,172 2,103 11,413 5,353 NA			NA NA NA NA NA NA		
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28,450 1,364 8,172 2,103 11,413 5,353 NA NA			NA		
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28,450 1,364 8,172 2,103 11,413 5,353 NA NA NA O			NA N		
28,450 1,364 8,172 2,103 11,413 5,353 NA NA NA O 2010 targets NA	( ) all employees	( ) top-level executives	NA N	( ) all employees	
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## C. Independent Auditor's Limited Assurance Report on the Sustainability Report for 2010 of Centrals Elétricas Brasileiras S.A. - Eletrobras

To the Board of Directors Centrais Elétricas Brasileiras S.A. – Eletrobras

#### Introduction

We have been engaged to perform a limited assurance engagement on the Sustainability Report for 2010 of Centrais Elétricas Brasileiras S.A. – Eletrobras (the "Company" or "Eletrobras"), prepared by the Company's management. This responsibility includes designing, implementing and maintaining internal controls over the proper preparation and presentation of the Sustainability Report. Our responsibility is to provide a limited assurance report on the information disclosed in the Sustainability Report of Eletrobras for the year ended December 31, 2010. This report includes information on 16 companies operating in the segments of electric power generation, transmission and distribution that comprise the Eletrobras System.

#### **Procedures Applied**

Our limited assurance engagement was performed in accordance with the Brazilian standard for assurance engagements other than audit and review (NBC TO 3000) issued by the Federal Accounting Council (CFC). This standard requires compliance with ethical standards and planning and performing the engagement to obtain limited assurance that no matter has come to our attention that leads us to believe that the Sustainability Report for 2010 of Eletrobras is not fairly presented in accordance with the criteria described below (Scope and Limitations), in all material respects.

The procedures to obtain evidence in a limited assurance engagement are more limited than those in a reasonable assurance engagement; accordingly, the assurance level is lower than that which would be obtained in a reasonable assurance engagement. The procedures selected depend on the independent auditor's judgment, including the evaluation of risks that the Sustainability Report does not significantly meet the criteria defined below (Scope and Limitations). Within the scope of our work, the procedures conducted included the following, among others: (i) planning the work, taking into consideration the materiality and the volume of information presented in the Sustainability Report for 2010 of Eletrobras; (ii) obtaining an understanding of the internal controls related to the Sustainability Report preparation process; (iii) examining, on a test basis, evidence that supports the quantitative and qualitative data in the Sustainability Report; (iv) interviewing the managers responsible for the information; and (v) comparing information of a financial nature with that in the accounting records. Therefore, the procedures applied were deemed sufficient to allow a level of limited assurance and, consequently, do not include all those required for issuing a broader assurance report, as set forth in said standard.

#### Scope and Limitations

The objective of our engagement was to verify whether the data included in the Sustainability Report for 2010 of Eletrobras, with respect to obtaining qualitative information and measuring and calculating quantitative information, is presented in accordance with the criteria and guidelines for sustainability reports from the Global Reporting Initiative (GRI-G3). Opinions, historical information, descriptive information and information resulting from subjective evaluations and the evaluation of legal compliance of the information provided in the Sustainability Report for 2010 are not included in the scope of the work performed.

#### Conclusion

Based on our limited assurance engagement, we are not aware of any significant modification that should be made to the information included in the Sustainability Report of Eletrobras for the year ended December 31, 2010, for that information to be fairly presented, in all material respects, in accordance with the criteria used as described above (Scope and Limitations).

Rio de Janeiro, July 12, 2011.

PricewaterhouseCoopers Auditores Independentes CRC 2SP000160/O-5 "F" RJ

Guilherme Naves Valle Accountant CRC 1MG070614/O-5 "S" RJ

		D. Glossary	
S	Brazilian Association of Technical Standards	ABNT	
t	American Depositary Receipt	ADR	
	National Waters Agency	ANA	
/	National Electric Energy Agency	Aneel	
t	Association of Investment Analysts and Professionals of the Capital Market	APIMEC	
<del>,</del>	São Paulo Stock Exchange	BM&FBOVESPA	
r	Efficient Technologies Application Center	Cate	
t	Fuel Consumption Account	CCC	
٢	Power Trading Chamber	CCEE	
t	Energy Development Account	CDE	
ſ	Electric Energy Research Center	Cepel	
1	Government Inter-ministry Corporate Governance and Shareholding Commission	CGPAR	
<u>.</u>	Budget Office	CGU	
j	Corporate Research, Technological Development, and Innovation Integration Committee	Cicop	
1	Internal Accident Prevention Commission	CIPA	
t	Corporate Performance and Goals Contract	CMDE	
t	Commttee of Sponsoring Organizations Enterprise Risk Management	COSO-ERM	
t	Average Interruption Duration by Consumer Unit	DEC	
<	Dow Jones Sustainability World Index	DJSI	
1	Earnings Before Interest, Taxes, Depreciation and Amortization	EBITDA	
1	Distribution Company	ED	
t	Environmental Impact Assessment	EIA	
ò	Eletrobras Participações	Eletropar	
1	Energy Research Company	EPE	
t	Frequency of Interruptions by Consumer Unit	FEC	
<b>.</b>	Fund for Children and Adolescents	FIA	
t	Gross Domestic Product	GDP	
ò	Greenhouse Gas	GHG	

GRI HPP

Ibama

IGS

Global Reporting Initiative

Hydroelectric Power Plant

Brazilian Institute of the Environment and Renewable Natural Resources Social and Environmental Indicators for Corporate Sustainability Management

International Labor Organization	ILO
National Metrology, Standardization and Industrial Quality Institute	Inmetro
Independent Power Producer	IPP
Tariff Adjustment Index	IRT
Corporate Sustainability Index	ISE
International Organization for Standardization	ISO
Ministry of Energy and Mines	MME
Brazilian Standard	NBR
Nongovernmental Organization	NGO
Net Operating Income	NOI
National Electric System Operator	NSO
New York Stock Exchange	NYSE
Strategic Action Program	PAE
Career and Compensation Program	PCR
Energy Expansion Plan	PDE
Electric Sector Environmental Master Plan	PDMA
National electricity Conservation Program	Procel
Alternative Energy Source Incentive Program	Proinfa
Personnel, Materials, third party Services and Other expenses	PMSO
Research, Development and Innovation	R&D+I
Global Reversion Reserve	RGR
Environmental Impact Report	RIMA
Environment Subcomittee	SCMA
 Performance Management System	SGD
National Interconnected System	SIN
 Special Purpose Company	SPC
Transmission Line	TL
Biomass Power Plant	TPP
Eletrobrase System Corporate University	Unise
United Nations Entity for Gender Equality and the Empowerment of Women	UN Women
National Administration of Electric Transmissions and Power Plants of Uruguay	UTE
 Wind Farm	WPP

# **CREDITS**

The elaboration process of the 2010 Eletrobras Sustainability Report has the participation of employees in data collection and information gathering relating to operational, economic, social and environmental aspects. This report is the result of the commitment and collaborative work from the Eletrobras team, so that all involved were able to share knowledge and add important information to demonstrate our commitment to sustainability.

#### **General Coordination**

**Eletrobras Corporate Sustainability Committee** 

#### **Publication**

Communications and Press Relations Office

#### lechnical coordination and consolidation of information

**Key Associados** 

#### Editing

**Key Associados** 

#### Translation

**Key Associados** 

#### Graphic Design and Layout

I Graficci Comunicação & Design

#### Illustrations

Ayssa

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Buses take tourists to visit Itaipu Binacional. Stock Photos: Itaipu Binacional – Photo: Caio Coronel

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Proinfa - Alternative Energy Source Incentive Program
Wind turbines of Wind Power Plant Volta do Rio, in Ceará
Stock Photos: Eletrobras - Photo: Jorge Coelho

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500 kV Transmission Line from Luiz Gonzaga (Pernambuco) to Milagres (Ceará)

Stock Photos: Eletrobras Chesf – Photo: Severino Silva

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Stock Photos: Eletrobras Eletronorte

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Ajuricaba Residents´ Association, in Marechal Cândido Rondon (Paraná), where a power generation system from biogas is being installed.

Stock Photos: Itaipu Binacional – Photo: Alexandre Marchetti

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Students from Frade Community visit the Porá Track, an environmental education area of Eletrobras Eletronuclear in Angra dos Reis, Rio de Janeiro

Stock Photos: Eletrobras Eletronuclear – Photo: José Pederneiras

The 2010 Eletrobras Sustainability Report is available online (www.eletrobras. com) and in printed form.

Contact: pgc@eletrobras.com

Eletrobras - Centrais Elétricas Brasileiras

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