



**Eletrobras**

**Annual and  
Sustainability Report  
2015**

**Annual and  
Sustainability Report  
of the Eletrobras  
Companies**

GRI G4-56

## Mission

Operate in the energy markets in an integrated, profitable and sustainable manner.

## Vision

Be one of the three largest clean energy global companies, and one of the ten largest electric energy companies in the world, with profitability comparable to that of the best in the industry, and recognized by all stakeholders.

## Values

- Focus on results
- Ethics and Transparency
- Entrepreneurism and innovation
- Valorization of people and their commitment
- Sustainability

## 2015 Highlights

- **2015-2019 Business and Management Master Plan (PDNG):** sets the targets and projects for the goals of the 2015-2030 Strategic Plan to be met.
- **Ongoing independent investigation and contracting of an Investigation Management Independent Committee:** The Hogan Lovells office has been contracted to verify the existence of any violation to the FCPA Law, to Law No. 12,846/2013, and to the Code of Ethics.
- **Approval of the Existing System's Basic Network (RBSE) compensation:** Aneel has already approved, up to 2015, the amount of R\$ 1,007 million referring to the RBSE of companies Eletrobras Furnas and Eletrosul; the total amount claimed by all subsidiaries is R\$20,313 million.
- **Approval of the sale of Celg-D: at the 164th Extraordinary General Meeting, Eletrobras's shareholders approved the sale of the controlling stock of Celg-D.**
- **Renegotiation of the hydrological risk (Generation Scaling Factor - GSF):** generation subsidiaries have signed an agreement to mitigate the GSF risk under Law 13,203/2015 and Aneel Normative Resolution 684/205.
- **Operating performance:** increase of R\$32,589 million in the consolidated Net Operating Revenue.
- **Economic-financial highlight:** Adjusted EBITDA of R\$2,853 million.
- **Regulation of the conditions for extending distribution concessions:** Decree 8,461/2015 determines the criteria for extending distribution concessions for an additional 30 years.
- **De-verticalization of Eletrobras Amazonas Energia:** the 162<sup>nd</sup> EGM approved the segregation of Amazonas Energia's generation and transmission assets.

# Message from Management

# Leaders' Message

GRI G4-1, G4-15

Each year, the difficulties facing Eletrobras have been speeding up advances in the company's management. 2015 was not different. The year was marked with the deepening of an atypical water crisis, which has devastated the country and excessively affected the production of hydroelectric power plants in the whole country. As most of the country's electric power is generated by hydroelectric power plants, reserve thermal plants had to be used, whose fuel is more expensive and increases the rate paid by consumers.

Not only citizens have been affected by this adverse scenario, though. Electricity generators have also suffered the effects caused by the Generation Scaling Factor (GSF), which is an important agreement proposed to the power sector, according to which generation subsidiaries were able to make their choices in order to limit their financial exposure given the low level of the reservoirs.

Additionally, Operation Carwash has started investigating the Eletrobras companies for alleged irregularities in its operations, especially at the Angra 3 plant, whose construction works have been halted. It is important to mention that when the first investigations occurred, we were already implementing the Eletrobras Companies Anti-corruption Program—a set of actions to continually identify, correct and prevent fraud and corruption, ensuring the adoption of increasingly more precise and reliable governance and compliance rules, therefore minimizing the risks that the company be exposed to irregularities.

Investigations are still ongoing in 2016 and are followed by an external committee made of people of great legal and technical knowledge, reaffirming Eletrobras's commitment to transparency, and making the advances of these works one of our top priorities. Along with the investigations by the Brazilian justice, company Hogan Lovells has operated independently, investigating any violation to the U.S. Foreign Corrupt Practices Act, the Brazilian anti-corruption law, and the Eletrobras companies' Code of Ethics.

Even though it was a very difficult year, Eletrobras remained the leader electric power generator and distributor in Brazil, contributing to the country's progress and the welfare of Brazilians. The company is still determined to improving its operational performance, with lower costs and maximized gains, expanding the synergy among its companies, motivating its employees and respecting the environment and the people impacted by its entrepreneurships.

In 2015, Eletrobras invested a total of R\$10.4 billion, including R\$5.675 billion in generation, R\$3.414 billion in transmission, R\$1 billion in distribution, and R\$301.33 million in research, infrastructure, and environmental quality. In the period, Eletrobras and its partners implemented 2,975 MW, nearly 43% of the growth of the Brazilian installed capacity. In the transmission front, the projects Eletrobras operated in added 1,126 km to the National Interconnected System (SIN), out of which 503 km correspond to Eletrobras's interest in the projects. Distributors reported an addition of 200,845 customers.

After a succession of annual financial losses, we are rebuilding Eletrobras's solid bases so we can move towards sustained profit and development. In its 54 years of history, Eletrobras has always known how to respond to challenges and meet the expectations of Brazilians, reason why its thousands of employees are proud of building this company everyday for Brazil. The company will remain the market leader—reaffirming its commitment to the Global Compact Principles and helping our electric matrix become one of the cleanest in the world—and become a global benchmark in the electric power power sector through hard work, planning, and sustainable operations.

Enjoy your Reading,

**José da Costa Carvalho Neto,**

**Eletrobras CEO,**

and

**Wagner Bittencourt de Oliveira,**

**Eletrobras Board of Directors President.**

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# About this report

*GRI G4-17, G4-18, G4-28, G4-32, G4-48*

In line with its commitment to transparency, ethics and sustainability, Eletrobras publishes its new Annual and Sustainability Report, under the guidelines of the Global Reporting Initiative (GRI)—for the first time in its latest version, G4—the Global Compact Principles and the social accounting model of the Brazilian Institute of Social and Economic Analyses (Ibase).

This report covers the principles, management and performance of economic, social and environmental aspects, between January 1 and December 31, 2015, of the company and its subsidiaries, except for Celg Distribuição (Celg-D)—even though it was acquired in January 2015, we expected the shareholders to resolve for its privatization. The sale was approved by Eletrobras's shareholders in December 2015. Because of this perspective, most of the GRI indicators were not monitored in an appropriate manner, reason why they will be not consolidated in this report.

Eletrobras chose the essential application level of the GRI Guidelines. The report was assured by KPMG Brasil.

## Materiality

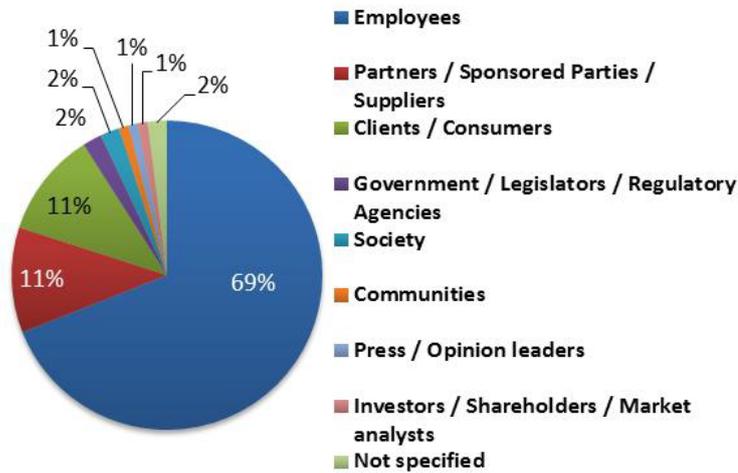
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In order to make a publication of consistent information, aligned with the expectations of our stakeholders, Eletrobras has analyzed the demands received through different communication channels, and made an online survey with the stakeholders identified in the strategic planning. The survey involved all our companies, with the primary goal of identifying the topics of greater interest that should consequently be detailed in this report.

The survey was made between November 9 and December 7, 2015, in Portuguese, English, and Spanish. 1,440 people responded to the questionnaire, broken down as follows:

GRI G4-18, G4-21, G4-24



The survey was based on the 17 issues resulting from the 2014 survey, as follows:

1° - energy supply	10° - stakeholder satisfaction
2° - water	11° - communities
3° - corruption and management of ethics	12° - institutional relations
4° - financial results	13° - suppliers
5° - health and safety	14° - biodiversity
6° - employees and employment	15° - human rights
7° - compliance	16° - innovation, diversification, and R&D
8° - risk and crisis management	17° - waste
9° - climate change	

Five priority issues for the stakeholders were revealed in this survey: **corruption and ethics management**, **power supply**, **health and safety**, **financial results**, and **water**.

In the last stage of the survey, the 17 issues mentioned above were taken to the Sustainability Committee of the Eletrobras Companies, in charge of, among other things, coordinating the production of the Annual and Sustainability Report.

The Committee chose eight material themes, four of which coincided with the aspects found in the stakeholders' survey. By the end of the process, nine material themes were chosen to be the key drivers of this report:

### Material aspects for Eletrobras in 2015



The process to identify, select and engage Eletrobras's stakeholders is based on the company's strategic planning. Likewise, it considers the group's commitment to sustainable development, favoring the dialogue with and engagement of stakeholders, according to the Eletrobras Companies Stakeholder Engagement and Communication Policy. In addition to the survey mentioned above, Eletrobras uses other mechanisms to identify the perception of stakeholder groups relative to its operation, including a climate survey, Ombudsman channels, the Eletrobras website, a direct survey with suppliers and investors, in addition to interactive channels like Twitter and Facebook.

Corruption and Ethics Management, Energy Supply, Financial Results, Water, Climate Change, Innovation, Diversification and R&D, Risk and Crisis Management and Health and Safety aspects were identified as materials within and outside the organization. The Employees and Employment aspect was identified as material only within the organization.

# Corporate profile

# About Eletrobras

GRI G4-4, G4-7

Centrais Elétricas Brasileiras S.A. is a mixed capital publicly held corporation controlled by the Brazilian government, with operations in electric power generation, transmission, distribution, and trading. With its stock listed in the São Paulo, New York (United States), and Madrid (Spain) stock exchanges, and focusing on profitability, competitiveness, integration, and sustainability, Eletrobras is made of 18 companies:

Holding, CGTEE, Chesf, Eletronorte, Eletronuclear, Eletrosul, Furnas, Amazonas Energia, Amazonas Geração e Transmissão, Distribuição Acre, Distribuição Alagoas, Distribuição Piauí, Distribuição Rondônia, Distribuição Roraima, Celg Distribuição (Celg-D), and it owns half of Itaipu Binacional. Moreover, the holding controls the Electric Energy Research Center (Eletrobras Cepel), and Eletropar Participações S.A. (Eletrobras Eletropar).

With 54 years of operations, the company is listed on BM&FBovespa's Corporate Sustainability Index (ISE Bovespa), which gathers the companies that have the best practices in terms of corporate citizenship, and on the Dow Jones Sustainability Emerging Market index.

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## Eletrobras in numbers

Eletrobras's total installed capacity, including half of Itaipu's capacity owned by the Brazilian government, is of 45,391 MW, which makes it the largest power utility in Brazil, with a share of 32% of the country's installed capacity.

Of the company's total installed capacity, 73% are projects wholly owned by Eletrobras, 10% derive from the interest held by Eletrobras companies in projects developed through Special Purpose Entities (SPEs), and 17% refer to jointly owned projects, including half of Itaipu Binacional's capacity (7,000 MW)—or 15% of the total—and ownership interest held in consortiums.

Eletrobras's generation assets consist of 47 hydroelectric power plants, 121 thermal power plants, two nuclear power plants, and one solar power plant, including the company's own projects and those in partnerships, distributed throughout the whole Brazilian territory.

On December 31, 2015, the company's transmission lines totaled approximately 68,085 km. Of that amount, 5,238 km are wholly owned by Eletrobras, 56,811 km refer to Operation and Maintenance concessions, and

6,036 km correspond to its ownership interest in projects developed by Eletrobras companies in partnerships with third parties and through SPEs.

Considering only the basic network of the National Interconnected System (SIN), that is, voltages of 750,  $\pm 600$ , 525/500, 345, and 230 kV, the company is responsible for 60,997 km of transmission lines, or 47.1% of all transmission lines in Brazil in said voltages. On the same date, the company wholly owned 53 substations with transformation capacity of 38,385 MVA, in addition to 230 renovated substations under Law No. 12,783/2013, totaling 228,723 MVA in transformation capacity.

Eletrobras's electric power distribution companies—including Celg-D, acquired in 2015 but consolidated for accounting purposes since September 2014—operate in two states in the Northeast, four in the North and in the State of Goiás, benefiting over 6.9 million consumers, equivalent to 8.5% of all customers in the Brazilian territory. On December 31, 2015, these companies used a low-, medium-, and high-voltage distribution network, extending for 471,485 km and a total of 555 substations, spanning across 700 municipalities.

## Shareholding structure

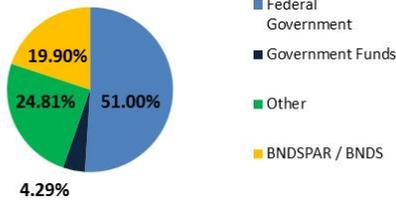
Eletrobras's stock is traded in three markets:

- The São Paulo Stock Exchange (ELET3 and ELET6), where it is listed on the Corporate Governance Level 1 index.
- The Madrid Stock Exchange (XELTO and XELTB), through the Latibex Program.
- The New York Stock Exchange (NYSE EBR and EBR-B), where it trades in American Depositary Receipts (ADR).

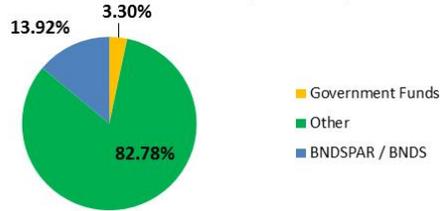
On December 31, 2015, Eletrobras had 1,352,634,100 shares; 81% held by residents in Brazil, and 19%, by non-residents. Its capital stock totaled R\$ 31.30 billion on the same date. No change was recorded in Eletrobras's capital stock structure, and by the end of the year the company's market cap was R\$ 8.9 billion.

## Total Shares (Common + Preferred)

### Common Shares (80.40%)

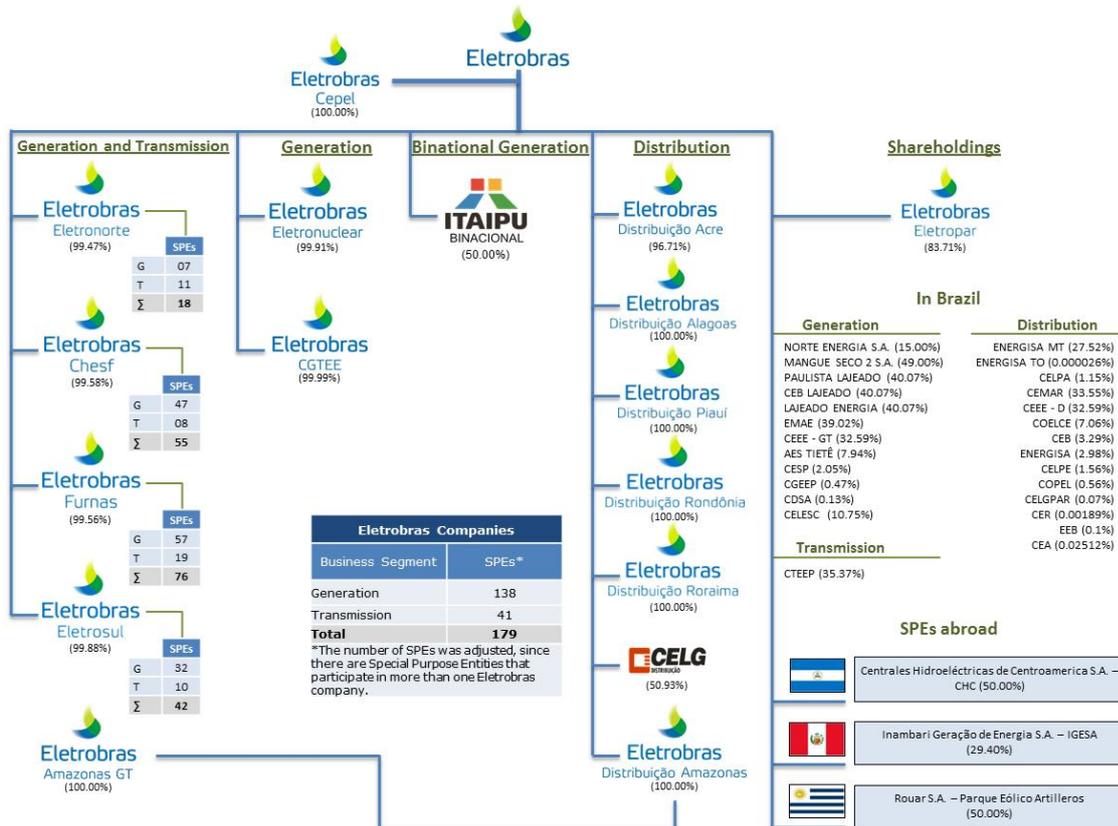


### Preferred Shares (19.60%)



## Organizational structure

GRI G4-6



## Awards and recognition

**Dow Jones Sustainability Emerging Markets Index – Eletrobras:** listed for the fourth consecutive time in the Dow Jones sustainability index of companies in emerging markets (Dow Jones and RobecoSAM).

**Corporate Sustainability Index (ISE) – Eletrobras:** listed among the companies that make up the 2015 portfolio of the São Paulo Stock Exchange (BM&FBovespa) sustainability index.

**Companies that Best Communicate with Journalists – Eletrobras:** winner in the “Electric Power” category, by Negócios da Comunicação magazine.

**Época Negócios 360° – Eletrobras:** it ranks 15th among the 500 largest companies in Brazil in terms of net revenue, and 62nd among the 250 best companies in the country in six management dimensions (financial performance, corporate governance, human resources practices, innovation capacity, vision of the future, and social-environmental responsibility), in the ranking by Época Negócios magazine and the Dom Cabral Foundation.

**Best and Largest – Eletrobras:** third-largest company in terms of shareholders’ equity, according to Exame magazine.

**The Sustainability Yearbook – Eletrobras:** listed among the most sustainable companies in the global power sector, by RobecoSAM.

**Valor 1000 – Eletrobras:** largest company in the Brazilian electric power sector in net revenue, and third-largest in shareholders’ equity, in the ranking by Valor Econômico newspaper, Serasa Experian, and the Getulio Vargas Foundation.

**Valor Large Groups – Eletrobras:** it ranks 4<sup>th</sup> among the 20 largest companies in the services sector, first in terms of shareholders’ equity, 12<sup>th</sup> in revenue growth, and 22<sup>nd</sup> among the 200 largest corporate groups in Brazil, in the ranking by Valor Econômico newspaper.

**Cier Quality Award - Customer Satisfaction – Eletrobras Distribuição Roraima:** honorable mention for the “Best Performance in the Quality and Customer Satisfaction Index,” by the Regional Energy Integration Committee (CIER).

**Citizen Company Award – Eletrobras Eletrosul:** winner in the “Community Participation” category for its Community Vegetable Garden, by the Sales and Marketing Executives Association of Santa Catarina (ADVB/SC).

**Aneel Consumer Satisfaction Index Award (IASC) – Eletrobras Distribuição Alagoas and Eletrobras Distribuição Rondônia:** The Alagoas distribution company won the 2014/2015 largest growth award, and the

Rondônia company was the best distributor of the North, by the Brazilian Electricity Regulatory Agency (ANEEL).

**National Quality Award – Eletrobras Eletronorte:** through the company's Hydropower Generation Superintendence, it was awarded with a Magna Cum Laude mention—granted to the organizations that have maintained or raised their management excellence level compared to the 2014 cycle—by the National Quality Foundation (FNQ).

**Chico Mendes - Eletrobras Social-environmental Award – Eletrobras Distribuição Amazonas:** awarded for its Project of a Mini-station for Collection, Treatment, and Reuse of Lubricant Oils in Thermal Power Plants in the Interior of Amazonas, chosen among several projects of companies throughout the country—this project was evaluated as “very good” or “good” in all indicators.

**Water for Life Award – Itaipu Binacional:** winner in the “Best Water Management Practices” category, with its Cultivating Good Water (Cultivando Água Boa) program, of this award granted by the United Nations (UN).

**Life Certification – Itaipu Binacional:** certification obtained after the assessment of the efficiency of the company's environmental management system and actions for biodiversity conservation.

**Pro-Gender and Race Equality Seal – 14 Eletrobras companies:** recognition for the company's commitment to promoting gender and race equality in the work place, by the Policies for Women Secretariat of the Brazilian Ministry of Women, Racial Equality and Human Rights, UN Women, and the International Labor Organization.

**Transparency Trophy – Eletrobras Distribuição Amazonas:** recognition for the quality and clarity of the information in its financial statements, by ANEFAC, FIPECAFI, and Serasa Experian.

**2015 Transparency Trophy –** Furnas and Eletrosul received the 2015 Transparency Trophy in the “Privately-held companies” category, and Eletronuclear received the Citizen Company Certificate from the Regional Accounting Board of the State of Rio de Janeiro (CRC-RJ).

# Business Strategy

Given the challenges posed by the current scenario in the Brazilian electric power industry, during 2015 Eletrobras focused on reducing even further its costs in relation to its expenses, on restructuring business processes, and on optimizing the efforts among the Eletrobras companies, based on the Eletrobras Companies' 2015-2030 Strategic Plan, which guides the operations of the companies through the five strategic guidelines described below:

**Eletrobras's 2015-2019 Business and Management Plan estimates investments of R\$50.3 billion. Less amounts referring to maintenance, research and other, the company intends to invest R\$35 billion in generation and transmission expansion in the period. In 2015, the company invested R\$8.3 billion, that is, 23.7% of the total estimated.**

Guideline	Description
<b>Top Economic and Financial Performance</b>	Improving the technical and economic-financial management of the projects, and adapting the financial structure to the new corporate management model of the Eletrobras System.
<b>Sustainable Expansion</b>	Maintaining the leading position of the Eletrobras System in the Brazilian electric power sector, and promoting a more expressive operation overseas, in addition to developing a portfolio of experiments in order to sustain its competitiveness.
<b>Operating Efficiency</b>	Developing plans to revitalize assets and make them more efficient to meet regulatory requirements, and adopting the best practices.
<b>Excellence in People Management and Culture of Excellence</b>	Improving the Eletrobras System's People Management model.
<b>Adapting the Business, Governance, and Management Model</b>	Changes in the Eletrobras System in the face of the new regulatory context of the Brazilian electric power sector. The changes include topics such as the revision of the corporate logic, strengthening of bylaws, adapting the organizational structure of the holding and of the Eletrobras companies, readapting processes and systems, and the sustainable management of financial resources.

This plan has 14 strategic goals. Each goal is related to one of the five strategic guidelines, according to the image below:

Superior Economic and Financial Performance	Ensure adequate return on investment and activities			Ensure the financial sustainability of the Eletrobras System		
Sustainable Expansion	Expand the electricity business WG in a competitive and profitable manner	Selectively expand international action in WG, in line with the company's business	Intensify IDP integrated operations and measure their contribution to Eletrobras System results	Operational Efficiency	Improve electricity GTD business in a competitive and profitable manner	Minimize internal and external institutional ties to ensure operations in competitive conditions
Excellence in People and Culture of Excellence	Attract, develop and retain talent for the Eletrobras System			Adapt people management processes to the new business and organizational management model of Eletrobras System		
Redesign of the Governance and Management business model	Implement a new business and organizational management model that ensures an integrated, profitable and competitive performance	Improve corporate governance based on best market practices		Enhance business management, investments and partnerships	Ensure that the projects are sustainable development vectors for their surrounding areas	Boost reputation, credibility and confidence of the Eletrobras System towards its employees, the market and society

The Eletrobras Companies' 2015-2019 Business and Management Master Plan (PDNG), approved by the Board of Directors on July 31, 2015, is the first development of the Eletrobras Companies 2015-2030 Strategic Plan, including targets and projects to meet these strategic goals, in line with Eletrobras's corporate identity – Mission, 2030 Vision, and Values.

It is an evolution of the previous PDNG (2014-2018), because it considers a scenario that is more aligned with the current scenario in the electric power sector, with the maintenance of investments for projects already contracted, addition of new projects respecting the investment capacity and the indebtedness level of each Eletrobras company, in addition to adjustments to adapt expenses. Regarding the actions included in the PDNG, the following stood out in 2015:

- The expansion of Eletrobras's electric power generation and transmission businesses. The company and its partners implemented 2,975 MW of generation installed capacity, equivalent to 42.84% of the Brazilian growth in the year. They have also added nearly 1,126 km of transmission lines (503 km corresponding to its interest), representing 16.4% of the estimated expansion of the country's lines. With this physical growth, Eletrobras's market share has reached 32% in generation installed capacity, and 47.1% of all transmission lines that make up Brazil's basic network.
- The proposal presented to Eletrobras's Executive Board and Board of Directors of a new business, governance, and management model for the Eletrobras companies, including readapting its corporate and organizational structures. Regarding the restructuring of the electric power distribution business, on December 28, 2015, the 164<sup>th</sup> Extraordinary General Meeting approved the sale of Eletrobras's interest at Celg-D (Centrais Elétricas de Goiás – Distribuição).
- Cumulative reduction of 15.7% in Personnel, Materials, Outsourced Services and Others (PMSO) between the third quarter of 2014 and the third quarter of 2015. This reduction was largely due to the implementation of an Incentive Program for Termination of Employment (PID) at the Eletrobras companies. In 2014, 4,778 employees were

dismissed in all Eletrobras companies, except for Eletrobras Eletronuclear, where the PID was implemented in 2015, resulting in 101 dismissals.

- The assessments made by the Eletrobras companies to identify the additional compensation referring to assets whose concessions were renewed under Law 12,783/13 were delivered to ANEEL. Claims referring to generation projects were delivered by Eletrobras Chesf and Eletronorte, and claims referring to transmission projects were delivered by Eletrobras Chesf, Furnas, and Eletrosul. ANEEL recognized the claims of Eletrosul and Furnas, in the amounts of R\$1.007 billion and R\$9 billion respectively. The other claims are pending analysis by ANEEL.
- Restructuring of the Eletrobras System Investment Committee (CISE), by replacing its participants and refining its work processes, aiming to strengthen the management of investments in generation, transmission, and distribution businesses, supporting the decision-making of Eletrobras's Executive Board and Board of Directors.
- Creating the Program for the Implementation of ERP Systems at the Eletrobras companies (ProERP), in order to standardize its corporate information systems to support the implementation of a new corporate management model that ensures a uniform, integrated, profitable and competitive operation for the Eletrobras System, and contribute to improve the corporate governance based on the best practices in the market;
- Approving the SPE Handbook, which will help improve the governance and management models of the Eletrobras companies that hold an interest in SPEs, by proposing practices that strengthen the development of new businesses and the management of these interests.

## Corporate performance monitoring

Eletrobras monitors the projects in the company's Business and Management Master Plan (PDNG), pointing out how the activities advance in the schedule, and the pending matters that are signs of risks to the success of these projects. All ongoing projects are included in this context, both corporate projects or those conducted in partnerships through Special Purpose Entities (SPEs), relating to the expansion of the generation, transmission, and distribution segments.

This performance is monitored by the Eletrobras Corporate Projects Management Office (EGP Corporativo), which, in addition to disseminating the project management culture in the Eletrobras companies and supporting project leaders at the holding, prepare monthly performance monitoring reports for the

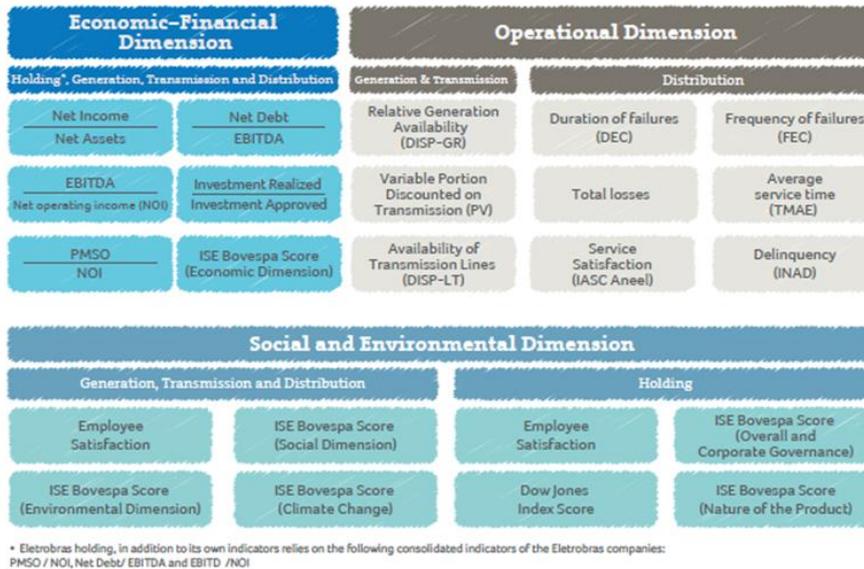
Eletrobras Board of Executive Officers (DEE) and the Eletrobras Board of Directors (CAE).

Through EGP Corporativo, Eletrobras has developed a methodology to measure the average delay in the projects portfolio of its companies in order to monitor the performance of the expansion and improvements in the generation, transmission, and distribution segments. Given its nature and relevance, the average delay of the projects portfolio, measured on a monthly basis, and the Internal Rate of Return (IRR), calculated periodically, of the priority projects are monitored and presented in monthly reports to the Board of Executive Officers and Board of Directors.

The Goals and Corporate Performance Agreement (CMDE), in effect since 2010, covering five-year cycles and reviewed annually, is an agreement signed between Eletrobras and its subsidiaries, serving as a planning and management tool. The indicators and annual goals that make up the CMDE Scorecard are determined in a negotiation between the companies and the holding, based on guidelines determined by the Board of Executive Officers and the Board of Directors, in line with the results and strategic goals to be met.

Eletrobras and its subsidiaries monitor the results, which are published in monthly reports reviewed by the Executive Officers and the Boards of Directors. By the end of each year, the weighted index of each goal (IPCM) is determined for each company, demonstrating the level of global compliance with the goals established for the period in question.

## CMDE Scorecards



The CMDE Scorecards and their monitoring and management process have been recognized in the Dow Jones Sustainability Indices (DJSI) as a global benchmark since 2013.

In 2015, no performance goals were contracted for the Celg-D companies, whose controlling stock was acquired in December 2014, and for Eletrobras Amazonas Energia e Transmissão de Energia, which started being recognized separately in July 2015, after the de-verticalization of Eletrobras Amazonas Energia.

In 2016, we expect to update the CMDE for 2016-2020 with a more comprehensive scorecard than the current one, considering the 2016-2020 Business and Management Master Plan (PDNG 16-20).

The Corporate Management Portal, launched in 2014 in testing mode, started offering in 2015, in an integrated and electronic manner, the corporate information that is important for the top management. The content of this website is a summary of the monthly publications sent to the Board of Executive Officers and Board of Directors of the holding. Another internal communication channel available to our employees is an intranet area where we present information about the holding's performance regarding the CMDE.

In addition to these two internal channels, we have a Governance Portal inside the Eletrobras website, where the Executive Report on Eletrobras's Performance for the Board of Directors is available for restricted and controlled

access. The Executive Report is a monthly publication for the top management of the company, and contains important information on the businesses of the Eletrobras companies, covering the following matters:

- Important news in the electric power sector;
- Regulatory scenario;
- Energy scenario;
- Operating performance;
- Expansion performance;
- Maintenance performance;
- Investment data;
- CMDE result;
- People management, sustainability, and sector programs.

## De-verticalization of Amazonas Energia

*GRI G4-13*

The process to de-verticalize Amazonas Energia started in 2015. The company is still the holder of a concession for exploring electric power distribution utility services, under Concession Agreement No. 20/2001, executed on March 21, 2001, and electric power generation, under Concession Agreement No. 001/2010, executed on July 22, 2010.

However, due to the interconnection of the Northern Region Standalone System, operated by Amazonas Distribuidora, to the National Interconnected System (SIN), Amazonas Distribuidora was submitted to the restrictions under paragraph 5 of article 4 of Law No. 9,074, of July 7, 1995, according to which electric power distribution utility companies of the SIN cannot operate in electric power generation or transmission or hold direct or indirect interest in companies that operate in these areas.

Also, under paragraph seven of article 4 of Law No. 9,074, utilities or companies authorized to operate in generation cannot be affiliates or parents of companies that operate in electric power distribution in the SIN.

Therefore, in order to segregate the electric power generation and transmission operations of Amazonas Energia (GT Operations) from the distribution operations in accordance with the legal requirements mentioned above, a process was initiated with the ANEEL for the de-verticalization of Amazonas Energia through the segregation of the portion of its assets related

to the GT operation, which would be transferred and registered with a new company—Amazonas Geração e Transmissão S.A.. This transaction was authorized through Authorization Resolutions No. 4,244 of July 16, 2013, and No. 4,836, of September 16, 2014.

On June 22, at the 162<sup>nd</sup> Extraordinary General Meeting, Eletrobras's shareholders approved the de-verticalization, according to the framework provided by ANEEL; the process is currently ongoing.

## **Sale of the controlling stock of Celg Distribuição S.A. (Celg-D)**

In 2015, the Company deposited the common shares representing Eletrobras's interest in Celg-D's capital stock in the National Destatization Fund (FND), including this utility company in the National Destatization Program (PND).

At the 164th Extraordinary General Meeting, Eletrobras's shareholders approved the extension of Celg-D's concession (ANEEL 063/2000) for another 30 years. The same meeting also approved the sale of the controlling stock of Celg Distribuição S.A. (Celg-D) at destatization auction to be promoted by BM&FBOVESPA, for the minimum price and under the conditions provided in Resolution 11/2015 of the National Destatization Board (CND).

The auction is being coordinated by the BNDES and is expected to be held by BM&FBOVESPA in the first half of 2016, injecting nearly R\$1.4 billion in Eletrobras's cash—since the company acquired its interest at Celg-D in 2014 for R\$59,532,810.

# Commitments and goals

GRI G4-22

Past commitments and goals		
COMMITMENT/GOAL	PERFORMANCE	Justification
<b>BUSINESS</b>		
Implement 3,180 km of transmission lines and an additional 9,140 MVA in power to the National Interconnected System (SIN). Of this total, 15% of the lines and 54% of the power will be operated by the Eletrobras companies, and the remainder through SPE partnerships.	Partially attained	In 2015, Eletrobras and its partners added 1,126 km of transmission lines and 5,172 MVA in transformation capacity. The goal is expected to be fully met by the end of 2016.
Develop a portfolio of projects related to the sale of energy efficiency services.	In progress	In 2015, the Energy Efficiency Business Plan was updated for 2015-2019, including 10 SPEs, a business plan for the retail sector, service providing for the International Copper Association and the Brazilian Metrology Society.
Implement a portfolio of contracted generation projects, equivalent to 22.6 GW.	Partially attained	In 2015, Eletrobras and its partners implemented 2,975 MW of installed power, nearly 42.8% of the growth of the Brazilian power grid in the same period. From 2016 to Dec/2019, Eletrobras and its partners will add 18.4 GW of installed capacity to the SIN. The goal is expected to be fully met by the end of 2019.
Implement a portfolio of contracted transmission projects, equivalent to 12,667 km of transmission lines.	Partially attained	Eletrobras and its partners implemented 1,126 km of transmission lines, equivalent to 30.0% of the growth of the National Interconnected System (SIN). From 2016 to Dec/2019, Eletrobras and its partners will add 12,100 km of transmission lines to the SIN. The goal is expected to be fully met by the end of 2019.

Prospect business opportunities in generation – new businesses: gas, biomass, solar.	Attained	The Eletrobras companies in the generation segment developed in 2015 a comprehensive study for prospecting projects in different sources for the period ranging from 2015 to 2019. Prospecting occurred during the development of the Business and Management Master Plan (PDNG).
ECONOMIC		
Invest R\$ 26 billion projects for the generation of electric power from clean sources. <b>*(GRI G4-22)</b>	Partially attained	Eletrobras invested R\$ 5.4 billion in company and SPE projects for the generation of electric power from clean sources in 2015. The goal is expected to be fully met by the end of 2019.
Obtain the remaining amount for compensation in GT assets arising from the renewal of concessions, pursuant to Law 12,783/13.	Partially attained	The Eletrobras companies have submitted appraisal reports to ANEEL referring to this compensation. The ANEEL has authorized the amount of R\$10 billion—R\$1 billion referring to Eletrobras Eletrosul and R\$9 billion referring to Eletrobras Furnas. These companies are waiting for the ANEEL to determine how this compensation should be paid. Eletrobras Chesf and Eletrobras Eletronorte have submitted appraisal reports for the amounts of R\$ 5.6 and R\$ 2.9 billion, respectively, and are waiting for the ANEEL to resolve on the recognition of these amounts. The base date for these amounts is December 2012.
SOCIAL		
Implement the inter- and intra-Eletrobras mobility plan.	In progress	The model containing the general guidelines and assumptions was approved in 2015, including the definition of the qualitative-quantitative workforce,

		expected to be completed in 2016. Therefore, we have reconsidered the completion of this goal for May 2017.
Implement the unified variable pay model (Profit Sharing) of the Eletrobras companies.	Attained	An Instrument of Agreement was executed between the Eletrobras companies and labor unions for 2015 and 2016.
ENVIRONMENTAL		
Develop a study to assess the impact of climate change on the businesses of the Eletrobras companies.	In progress	A Work Group was created in 2015, with members from the Risk Management, Strategic Planning, Water Resources, Environmental, and Financial areas. The environmental area prepared Technical Note "State-of-the-art in Risks, Vulnerabilities, and Possibilities for Adapting to Climate Change of the Electric Power Generation in Brazil," to inform the work group. The goal is expected to be fully met by the end of 2016.
Progressively reduce the use of fossil fuels in on-road mobile sources.	In progress	In 2015, a reduction of 439,441 liters was observed, down 7.27%, having as baseline the year of 2012, which totaled 6,046,702 liters of fossil fuels in on-road mobile sources. The goal is expected to be fully met by the end of 2019.
Reduce mobile sources by 6.6% (Scope 1) and power consumption by 3.6% (Scope 2).	Partially attained	In the period, the consumption of fossil fuels for ground vehicles decreased 439,441 liters, 7.27% less than in 2012. GHG emissions from this portion have exceeded the goal, reaching a decrease of 7.79%.  The goal concerning power consumption of the public grid was also successfully achieved; the reduction of all companies was 14,451,891 kWh, which corresponds to

	<p>20.6% less than the consumption in 2012.</p> <p>Despite the reduction in the power consumption (Scope 2) in the 2012-2015 period, the goal for emission of GHG equivalent was not met. This is explained by the higher dispatch of thermoelectric plants in the National Interconnected System (SIN) in this period to compensate for the reduced power generation by hydroelectric plants in the country, caused by the severe drought, which greatly increased the CO2 emission factor of the SIN and consequently the calculation of this portion.</p>
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\* In the 2014 report, the goal was mistakenly stated as "renewable energy". The correct is from clean sources, since the generation of Eletronuclear is clean, but not renewable. **(GRI G4-22)**

# Corporate governance and Management

# Principles

GRI G4-43

Implementing the best corporate governance practices represents Eletrobras's challenge of strengthening its credibility for shareholders and investors, showing the reliability of internal controls, management transparency, the importance of compliance, and attention to stakeholder interests.

To face these challenges, Eletrobras's corporate governance model is based on five principles:

- Ethics
- Transparency
- Equality
- Accountability
- Corporate responsibility

These principles reflect not only the company's concern with meeting the sustainability requirements necessary for its operations, but also that it is always seeking the best practices in stakeholder relations.

Eletrobras develops and continually updates mechanisms to strengthen its corporate governance; they are available on its website ([Eletrobras> Corporate Governance](#)).

Furthermore, Eletrobras identifies, on a yearly basis, the training needs of its corporate governance agents and implements actions focusing on their qualification, getting them involved with sustainability and perpetuity issues. In 2015, a Board Members Meeting was held to promote the improvement of the members of the Board of Directors and Supervisory Board.

## Governance structure

GRI G4-34, G4-35

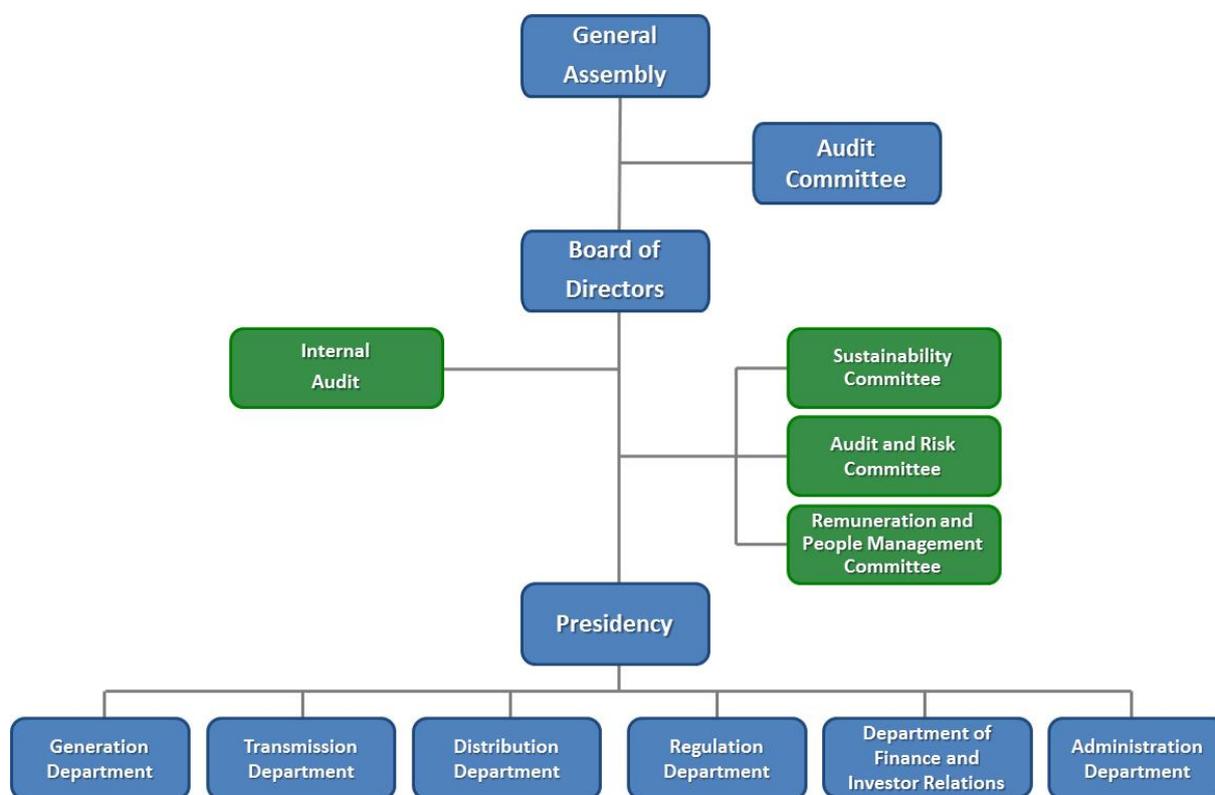
## Policies

Eletrobras's corporate governance is aligned by the management structure, which consists of practices and tools such as the Bylaws, policies, Statutes of the Board of Directors and Supervisory Board, the internal committees that support the Board of Executive Officers and Board of Directors, and the Guides for members of the Board of Directors and Supervisory Board that represent Eletrobras in other companies.

Eletrobras publishes on its website the management tools and policies that support its companies' governance.

## Governance bodies

Eletrobras's corporate governance model includes the Shareholder's Annual Meeting, the Board of Directors, the Supervisory Board and Board of Executive Officers. All these bodies are committed to the company's perpetuity, in a sustainable manner. The Audit Committee and the Board of Directors' Supporting Committees respond to the Board of Directors.



The roles and competencies of the Board of Directors, Supervisory Board and Board of Executive Officers of Eletrobras are determined in the Bylaws and relative board statutes, and in compliance with the law.

## Shareholders Annual Meetings

In 2015, the Annual General Meeting approved the financial statements for 2013; the allocation of income for the year and payment of dividends and/or interest on equity relative to 2014; the election of the members of the Board of Directors, including its chairman, and the members of the Supervisory Board and deputies, with term of office to end on the date of the first Annual General Meeting to be held in 2016; and the compensation of the members of the Board of Directors, Supervisory Board, and Board of Executive Officers.

The Annual General Meeting is held within the first four months following the end of the fiscal year.

The Extraordinary General Meeting is convened as provided by law and whenever deemed appropriate by the Board of Directors. In 2015, three Extraordinary General Meetings were held to approve the following:

- The exercise to of the right to request, in the de-verticalization of Amazonas Distribuidora de Energia S.A., the mandatory redemption of convertible and exchangeable debentures issued by Amazonas Distribuidora de Energia S.A., through the exchange of said debentures for all shares issued by Amazonas Geração e Transmissão de Energia S.A..
- Approval and election of new members of the Board of Directors, Supervisory Board and deputies, with term of office ending on the date of the 2016 Annual General Meeting.
- Extension of the concession, sale of the controlling stock, and actions to be taken for the capital increase in the distribution companies.

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## Board of Directors

*GRI G4-38, G4-39, G4-40, G4-42, G4-49*

**Roles:** it plays a core role in setting the company's strategy, mission, vision and values.

**Routine:** it holds ordinary meetings every month, and convenes extraordinary meetings whenever necessary. The agenda of the meetings and the documentation to inform their decision-making is prepared by the General Secretariat and the chairman of the board, and forwarded to the members before each meeting. The Board of Executive Officers participates in these meetings as invited, represented by Eletrobras's CEO, who is also a member of the board.

**Members:** formed by up to ten members, seven of whom are appointed by the majority shareholder; one, by minority shareholders holding common shares; one, by minority shareholders holding preferred shares; and one representing employees, which increases the possibility for communicating critical issues to the board.

The board also has one independent member, as required by BM&FBOVESPA and the Brazilian Corporate Governance Institute.

In 2015, Eletrobras's Board of Directors had nine members, including eight non-executive members (who are not executive officers at the company), and one executive member. The tenth chair, appointed by the minority shareholder holding common shares, was not filled due to noncompliance with the requirements in the Bylaws. The term of office of the members of the Board of Directors is one year, and they can be reelected; the member representing the can be reelected only once. The chairman of the Board of Directors and the Chief Executive Officer are not the same person.

All requirements and functions are determined in the company's Bylaws and in its statute, in addition to the law, and there is no gender discrimination or other types of discrimination.

Eletrobras's Board of Directors has one woman among the non-executive members. The composition of the board is as follows:

Member	Position
Wagner Bittencourt de Oliveira	Chairman
Jailson José Medeiros Alves	Director representing the employees
João Antônio Lian	Independent director
José da Costa Carvalho Neto	Director and Chief Executive Officer (executive)
Luiz Eduardo Barata Ferreira	Director
Maurício Muniz Barretto de Carvalho	Director
Pricilla Maria Santana	Director
Samuel Assayag Hanan	Director
Walter Malieni Junior	Director

Pursuant to CVM Instruction No. 480 and the listing rules of the Dow Jones Sustainability Indexes (DJSI), the directors fill out a statement indicating all management positions they hold in other companies or entities. The committees that support the Board of Directors are made up solely of directors, avoiding any conflicts of interest. The director elected by the employees is also member of the Sustainability Committee. The Audit and Risks Committee has one position for the director representing minority shareholders, who is currently chairing this committee. The Compensation and People Management Committee has one independent director among its members. Directors with an employee relation with the company or executive directors cannot participate in the Compensation and People Management Committee.

The CEO of Eletrobras cannot participate in the Audit and Risks Committee, or in the Compensation and People Management Committee. According to article 31, sole paragraph of the company's Bylaws, the CEO and the officers cannot hold any executive or consulting positions in privately held companies, utilities companies, or private law firms associated with the electric utilities sector, except in subsidiaries, affiliates, Special Purpose Entities (SPE), and utility companies controlled by state governments and in which Eletrobras holds ownership interest, where they may hold positions in their boards of directors and supervisory boards, under Law 9,292/1996, which provides on remuneration.

## Supervisory Board

**Roles:** its major roles include oversight, by any of its members, of management actions, ensuring compliance with their statutory and bylaw duties.

**Routine:** it holds ordinary meetings monthly and convenes extraordinary meetings whenever called by the Board of Directors, the CEO of Eletrobras, or by any of member of the Supervisory Board.

**Members:** formed by up to five members and relative deputies, three of whom are appointed by the majority shareholder; one, by minority shareholders holding common shares; and one, by minority shareholders holding preferred shares. They serve a term of office of one year and can be reelected. In compliance with the Sarbanes-Oxley (SOX) requirements, as the company is listed in the New York Stock Exchange, the Supervisory Board has been adapted to include one financial specialist among its members, in the function of Audit Committee.

**Selection:** the members of the highest governance body of Eletrobras are chosen among executives with renowned knowledge of the electric power sector, public administration, and the financial and capital markets, and have a faultless reputation and good moral standing. The members are elected at a General Meeting and the executive officers are chosen by the Board of Directors. The minutes of the election of the members of the Board of Directors and Board of Executive Officers of the company shall contain the qualification of each one and their term of office.

Eletrobras has prepared a Board Skills Matrix where it analyzes the gaps between the current combination and the desired combination of competences in its Board of Directors (this is an internal document, not publicly available for strategic reasons).

This board has one woman as sitting member and three women deputies, including one independent member chosen by the minority shareholders holding preferred shares. The composition of this board is as follows:

Member	Position
Eduardo Cesar Pisa	Chairman
Bruno Nuns Sad	Financial expert
Agnes Maria de Aragon da Costa	Director
Robert Junkman	Director
Felipe Luckman Fibro	Director

Internal Audit and the Board of Directors' Supporting Committees (Sustainability, Audit and Risks, and Compensation and People Management) respond to the Board of Directors.

## Internal Audit

This committee assesses the appropriateness, efficiency, and effectiveness of internal control systems, compliance with laws and internal and external normative acts, and the fulfillment of plans, goals, objectives, and policies established by the company. Also, the Internal Audit verifies, on a yearly basis, the effectiveness of the Eletrobras Companies Compliance Program, as part of the Internal Audit Annual Work Plan (PAINT).

## Board of Directors' supporting committees

Formed exclusively by directors, the committees assist the board in strategic issues, in order to ensure the decisions made by the top management

are technically informed. The members of the Board of Directors' Supporting Committees are chosen after the Annual General Meeting, and the attributes of each committee, as determined by their internal statutes and available on Eletrobras's website are as follows:

- **Audit and Risks Committee:** formed by four members, this committee advises the board in issues regarding accounting principles, risks and internal controls, legal claims, compliance, independent audit, and proceedings with regulatory agencies (Office of the Comptroller General, and the Federal Court of Accounts).

- **Compensation and People Management Committee:** formed by three members, it advises the board in decisions regarding policies on remuneration, people management, and development of the competences of the Eletrobras professionals.

- **Sustainability Committee:** formed by three members, it advises the board in establishing actions focused on corporate sustainability, and on monitoring the performance through indicators that make up the company's sustainability platform.

*GRI G4-36*

After the Sustainability Committee was created to support the Board of Directors, formed exclusively by directors, it formed the Executive Sustainability Committee of the Eletrobras Companies, connected to the company's presidency and reporting to the Sustainability Committee. This commission is responsible for implementing internationally recognized sustainable management processes, proceedings, and tools—and monitoring and assessing their results—for preparing target and improvement plans for sustainable development, among other activities. The Planning, Strategic Management, and Sustainability superintendent is the general coordinator of the Executive Sustainability Committee, responsible for supporting and interacting with the Eletrobras Sustainability Committee, disclosing the guidelines established by the Sustainability Committee, structuring plans for improvement and proposing them to the Sustainability Committee based on the results of the ISE/Bovespa, DJSI, assurance process, and others, and also for proposing to the Sustainability Committee the editorial model to be adopted for the Annual and Sustainability Report of the Eletrobras Companies.

## Board of Executive Officers

**Roles:** it is responsible for managing Eletrobras's businesses, in compliance with the guidelines determined by the Board of Directors.

**Routine:** The members of the Board of Executive Officers hold ordinary meetings every week, and convene extraordinary meetings whenever necessary.

**Members:** it is made up by six officers and one CEO, elected by the Board of Directors, with a term of office of up to three years, reelection being allowed. The composition of this board is as follows:

Member	Position
José da Costa Carvalho Neto	CEO
Renato Soars Sacramento	Chief Generation Officer (acting deputy)
José Antonio Muniz Lopes	Chief Transmission Officer
Marcos Aurelio Madeira da Silva	Chief Distribution Officer
Josias Matos de Araujo	Chief Regulatory Officer
Armando Casad de Araujo	Chief Financial and Investor Relations Officer
Alexandre Valhi de Arura Anise	Chief Administrative Officer

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Learn more about the members of the governance bodies on [Eletrobras's website](#).

## Business ethics management

*GRI G4-43, G4-45, G4-56, G4-57, G4-58, G4-S04*

### Adherence

As a government-controlled corporation, Eletrobras seeks the highest corporate governance standards, observing the law, being transparent in its actions, and having an ethical conduct.

In order to promote this culture of ethics in business, the Eletrobras companies have institutional and regulatory tools that establish guidelines and standards that steer and formalize the actions and commitments related to the

institutional conduct of the companies and of its employees, and interactions with their suppliers, business partners, clients, and other stakeholders.

You can find the Guide of the Employees Guidebook of the Eletrobras Companies on our website.

In addition to guidance, so that everyone acts in line with the values and practices established for an ethical conduct, these tools also identify, remedy, handle, and, in case of transgressions, penalize likely unethical attitudes. In that regard, all areas of the company undergo internal audit to verify whether internal proceedings and contracts with suppliers and clients are regular and adequate.

In May 2014, the Board of Directors and Board of Executive Officers approved the Program for Compliance with Anti-corruption Laws of the Eletrobras Companies—that is, the Foreign Corrupt Practices Act (FCPA), Brazilian Law 12,846/2013, and Decree 8,420/2015. The purpose of this program is to ensure compliance with anti-corruption laws by the Eletrobras companies and their employees, representatives, suppliers, business partners, joint venture partners, and other affiliates.

In 2015, Eletrobras promoted the Compliance Program training for directors, members of the supervisory board, and executive officers from all companies in the group, and published the Compliance Handbook. The Management and Supervisory Board Members Guide was also prepared for this group of executives. Compliance managers and assistants, and representatives of the areas that are more exposed to risks of violating the Compliance Program from all Eletrobras companies also participated in this training.

The handbook of the Anti-corruption Program of the Eletrobras companies provides for the implementation of Due Diligence proceedings in order to supervise and get involved with the legal verification of several issues that pose a risk to the company's business.

Also, the “Employee Guidebook”—a summary of the Compliance Handbook - Anti-corruption Program of the Eletrobras companies—was prepared for this public, and launched in March 2015, simultaneously at all companies of the group, also focusing on training.

Below are the key tools and bodies for the promotion of ethics, compliance with the law, and anti-corruption of the Eletrobras companies.

## Compliance

In December 2015 we created the Compliance and Risk Management Superintendence, which is responsible for implementing the Compliance Program of the Eletrobras Companies, as approved by the Board of Directors in May 2014, in compliance with the Brazilian Anti-corruption Act No. 12,846/2013, in effect since 1/29/2014, and the U.S. laws and regulations applicable to companies listed on the NYSE, such as the Foreign Corrupt Practices Act (FCPA).

Eletrobras uses the five aspects below to implement the Compliance Program. The goal is that in 2016 the program is fully implemented in all Eletrobras companies, through formalized policies and proceedings, communication, training, and monitoring (by the end of 2015, only three companies had already created a formal compliance structure: Furnas, Eletrosul, and Eletrobras itself).

**1 – Management environment:** This aspect helps sensitize the top management to the risks and impacts of noncompliance with or breaking anti-corruption laws. This is a core aspect and the origin of the whole program; in 2014, the top management was largely involved with the issue and contracted an international consulting firm to support the development of the first version of the compliance program.

GRI G4-50

Considering the alleged denunciations in depositions of the Car Wash Operation, where some projects and executives of the Eletrobras companies were mentioned, posing a risk of violation of the Compliance Program, it was necessary to start an investigation. In July 2015, Eletrobras contracted U.S. law office Hogan Lovells to conduct this investigation.

**2 – Formal policies and proceedings:** To sustain the compliance program and ensure everyone respects it, Eletrobras has been improving all formal guidance tools to make sure everyone conforms to the company's guidelines. This aspect will reinforce the importance of documents such as the following: Code of Ethics; Handbook of the Anti-corruption Program of the Eletrobras Companies; Antitrust Policy (preventing unfair competition practices, such as cartel formation, especially in auctions); SPE Management and Practices Handbook; Policy on Appointing Representatives at SPEs (when people are chosen as members of the Board of Directors, Supervisory Board, and Board of Executive Officers of SPEs); Board Member Guidebook (Supervisory Board and Board of Directors); Policy on Transactions with Related Parties (to avoid facilitating businesses among the companies of the same group, with no accounting maneuvers among subsidiaries and the holding, with fair business transactions); and Policy on Treating Conflicts of Interest.

**3 – Periodic risk analysis:** This aspect ensures that all corporate decisions are aligned with the company's mission, vision and values, so that these unfold into strategic guidance and become a detailed strategic plan for the company to continue to map the risks that will be included in the Corporate Risks Matrix, which will in turn support the execution of the strategic plans.

Eletrobras does not have a methodology defined to identify which of its operations are subject to corruption and, therefore, there is no risk assessment on them.

**4 – Communication and Training:** strategy appropriate for each type of audience. For governance bodies (councils and management) and awareness and engagement strategy was supported in conducting classroom training to 156 professionals, as well as periodic reports on the progress of the implementation of the Compliance Program. For the areas that are more sensitive to the corruption risk, 581 employees received classroom training. For employees in general, other managers and employees, institutional communication actions were taken by e-mail (newsletter) as well as the delivery of key documents related to the Compliance Program, in particular with regard to the Employees Guide, covering over 17,000 ( about 74%) professionals. Finally, for companies to which we do business, face meetings with suppliers were held and also Compliance Program Manuals were delivered. For the year 2016, the Eletrobras companies intend to expand the communication activities scope for over 80% of the professionals that make up the total workforce of the companies.

**5 – Compliance Program Monitoring:** This aspect's purpose is to detect gaps in the execution of the program to check if it is being correctly followed and observed. One of the bases of this monitoring will be Internal Audit, which will test the internal controls provided for in the program on a yearly basis, and the Ombudsman, which will centralize all denunciation channels existing in the companies (e-mail, forms, phone, and the denunciation channel on the Eletrobras companies' websites).

## Code of Ethics

The Company's Code of Ethics is based on the best market practices and complies with the Federal Constitution and the laws in effect. It is available for all employees, contractors, interns, and young apprentices of the Eletrobras companies.

The document sets forth, formalizes, and details the professional ethical conduct to be adopted in the workplace, in business relations, and in corporate decision-making, in order to protect its institutional assets and image; reject all forms and attempts of corruption and influence peddling; address conflicts of interest appropriately, and forbid the offering or receiving of gifts, privileges, or benefits; and enforce

Learn more about the Code of Ethics of the Eletrobras Companies on our website.

respect for free competition, rejecting anti-competitive, trust, and/or harmful practices.

## Conflicts of interest

GRI G4-41

Eletrobras's Bylaws provide for situations involving conflicts of interest, in which directors must abstain from debating and voting whenever such conflicts arise. Abstentions are recorded in the minutes of the respective meetings, and the directors have guaranteed access to the minutes and documents referring to the deliberations for up to 30 days.

**Preventing conflicts of interest in the Board of Directors:** directors must abstain from debating and voting whenever conflicts of interest arise. The director elected by the employees does not participate in debates and deliberations on matters involving union relations, remuneration, benefits, and advantages, including matters pertaining to supplementary pension funds and assistance; these cases constitute conflicts of interest, under paragraph 3 of Law 12,353/2010.

Directors are also responsible for monitoring and handling potential conflicts of interest involving executives, board members and shareholders, in order to prevent the misuse of company assets, especially abuse in transactions with related parties.

**Preventing conflicts of interest in the Board of Executive Officers:** In order to avoid potential conflicts and the use of confidential and strategic information, the CEO and the officers cannot hold any executive or consulting positions in privately held companies, utilities companies, or private law firms associated with the electric utilities sector, except in subsidiaries, affiliates, Special Purpose Entities (SPE), and utility companies controlled by state governments and in which Eletrobras holds ownership interest, where they may hold positions in their boards of directors and supervisory boards, under Law 9,292/1996, which provides on remuneration.

Officers must also present a Confidential Information Statement (DCI) to the Public Ethics Committee, listing the assets owned by the officers and the CEO; disclosing situations or ownership interests that may constitute conflicts of interest; and describing the measures taken by the officers and the CEO to mitigate these situations. Law 12,813/2013 sets out a list containing information that public officials are required to send to the Public Ethics Committee; this provision is also applicable to officers on leave of absence or away from their duties.

**Preventing conflicts of interests involving employees:** In general, employees shall not disclose privileged, strategic and confidential information they have access to at work, regardless of their rank; shall not control or

influence the management of companies in the same industry, suppliers or clients; nor get involved with transactions between the Eletrobras companies and companies where they hold an ownership interest, or whose shareholders or executives are direct or indirect relatives of the employee to the second degree.

In order to receive formal inquiries from employees with respect to situations that may involve potential conflicts of interest, pursuant to Law 12,813/2013, the Office of the Comptroller General (CGU) has structured an electronic inquiry system, called Electronic System to Prevent Conflicts of Interest (SeCI), to be used by the entire public administration; it has been implemented in Eletrobras and can be accessed by employees via intranet or on the [CGU website](#).

In December 2014, Eletrobras approved the Policy on Transactions with Third Parties Related to the Eletrobras Companies in order to discipline the transactions and monitor them.

## Risk management

*GRI G4-2, G4-46, G4-47*

The main purpose of the Integrated Risk Management in the Eletrobras companies is to reduce the occurrence of events that could have a negative impact on its strategic goals, seeking to safeguard and create value and provide transparent information to the market and shareholders.

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At the Eletrobras companies, risk management is governed by a single policy and coordinated by the holding, ensuring a systemic view of the results and its standardization across all companies of the group. This process is conducted by the risk and internal control management departments and by the risk committees of each of the Eletrobras companies. Its general guidelines are set out by the Risk Committee of the Eletrobras holding, and the results are forwarded to the Board of Executive Officers and Board of Directors of Eletrobras for their Audit and Risk Committee to analyze.

The integrated risk management model used by the Eletrobras companies is based on the ISO 31000 standards, and the COSO 2013 (incorporated to the internal controls structure in 2015) and COSO ERM frameworks. This model identifies and consolidates, in a matrix, the strategic, operational, financial, and compliance risks the companies are exposed to, for subsequent analysis, treatment, and monitoring through specific proprietary processes.

## Responsibilities

The risk management model adopted by the Eletrobras companies determines that the Board of Directors resolves on strategic matters referring to risk management, such as the company's level of appetite for risk, its tolerance ranges, the role of the Board of Executive Officers in managing risks, and the policy that should govern the whole process. For that matter, it is supported by the Audit and Risk Committee, formed exclusively by directors, and whose duties include monitoring the company's business risks and recommend mitigation actions to the Board of Directors, analyzing the works and performance of the internal audit, and follow up on proceedings and pending matters with external control bodies.

The Board of Executive Officers is responsible for allocating the necessary resources to the process, and the appropriate infrastructure for the risk management activities. The Risks Commission, formed to support and sponsor the risks process, is responsible for monitoring and validating the results of the risk assessments, prioritizing the risks with the largest impact and vulnerability, and guide and engage the action in the other Eletrobras companies. The risk management department supports and ensures the risks are identified and monitored by the proprietary areas, which in turn are responsible for managing and implementing the action plans that should mitigate the risks to their relative processes.

## Risk management processes

Risk is managed at the Eletrobras companies in five stages. The first is identifying the risks the company is exposed to and describe them, including their causes and impacts, and those liable for such risks. All people involved in the company's business, at all levels, participate in this stage, whose result is the company's corporate risk matrix. After the matrix is made, risks are prioritized for analysis and treatment, and it is reviewed every year. All companies of the group participate in this stage. Recommended by the Risk Committee and forwarded to the Board of Executive Officers for approval, the matrix is validated and recognized by all of the Eletrobras companies.

The second stage is assessing the risks identified in the first stage. Qualitative and quantitative analyses are made to determine the impact and vulnerability attributes to be used when prioritizing the risks to be addressed. That includes listing and reviewing existing controls in order to check for residual risks.

Risks are treated after the review. The company's stand should a certain risk materialize is also determined in this stage. Likely responses to risks would be to:

- prevent them
- mitigate them according to action plans and internal controls

- share them, or
- accept them

This decision mostly relies on the company's level of appetite for risk, previously authorized by the Board of Directors.

The next stage is monitoring managerial indicators through managerial activities or independent appraisals, supervising the implementation and maintenance of action plans, and checking the scope of the goals set.

The communication stage occurs in parallel with the other stages, and should reach all stakeholders in a clear and objective manner, respecting the good governance practices demanded by the market.

In order to support the risk management process, the internal controls area helps managers design the controls, and prepare and monitor the inefficiency remediation plan. Because the company trades in American Depositary Receipts (ADRs), and is consequently subject to regulation by the U.S. Securities and Exchange Commission (SEC), its controls must be SOX-certificated (Sarbanes-Oxley Act), which means the company has to assess the existing internal controls and submit this analysis to appraisal by its independent auditors. Therefore, the company files its 20-F Form with the SEC on a yearly basis, containing the Management statement on the internal controls of the group of Eletrobras companies deemed material.

*GRI G4-45*

**Every quarter and every year risk management reports are prepared based on information gathered from the areas involved. The key readers of this report are the members of Eletrobras's Board of Executive Officers, responsible for, according to the Risk Management Policy of the Eletrobras companies, sponsoring the implementation of risk management in the company, allocating the necessary resources to the process, and the appropriate infrastructure for the risk management activities. The Board of Directors is responsible for resolving on strategic matters referring to risk management, such as the company's level of appetite for risk (risk exposure level after which it should be mitigated, accepted, transferred, or avoided), and its tolerance ranges. Eletrobras's top management uses this report to inform its decision making. In addition to risk management reports, there are other ways the company reports on the results of its analyses and how it treats the risks it is exposed to, such as the 20-F Form, and the Reference Form of the Brazilian Securities and Exchange Commission. Specifically regarding stakeholder-related risks, there is the risk of institutional relation with stakeholders, which addresses the absence of a corporate strategy and/or the existence of inappropriate practices in stakeholder relations.**

## Precautionary Principle

GRI G4-14

Using the risk management process as reference, the Eletrobras companies apply the precautionary principle through the analysis and treatment of risks such as climate change, greenhouse gas emissions, impacts on biodiversity and the environment, and environmental accidents that are included in the matrix and have been prioritized for analysis given their relevance and the corporate interest they involve. By analyzing and treating these risks, and implementing specific projects—such as the programs that monitor the fauna and flora in the projects' surrounding area, the quality of the water, and projects relating to operating issues in effect—the companies of the group strive for facing the potential impacts and the threats of severe or irreversible environmental damage relating to the development of its core activities (generation, transmission, and distribution).

## Engaging in and disseminating a risk management culture

In order to engage in and disseminate a risk management culture in the Eletrobras System, the companies adhere to the risk management model adopted, and their managers, who fully understand the importance of this management aspect, have an active participation.

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The Audit and Risk Committee supports the company's Management in its commitment to the risk and internal controls activities. This is one of the three Board of Directors' supporting committees, and is in charge of analyzing and monitoring the issues regarding internal controls, audit, and risk management.

## Relevance

Eletrobras permanently monitors its business environment, managing to reflect its concerns, and those of its investors and the market, on its risk management process. Therefore, the risks recognized as the most relevant in the scope of the Eletrobras companies are prioritized and treated through action plans prepared based on the technical recommendations made by the risk management and internal controls managers together with the business managers, taking into account the exposure level validated by Management.

Below are the key risks being treated and monitored:

## Risk factors

### Compliance risk

The actions taken by Eletrobras to address issues relating to fraud, corruption, and unethical conduct are strongly sustained by its Compliance Program, which encompasses all Eletrobras companies, and count on the involvement of the holding company's Board of Executive Officers and Board of Directors.

In compliance with the group's policies, all employees, representatives of the companies, and partners should fully observe the anti-corruption laws and regulations they are subject to, whether in Brazil or abroad. In order to achieve this, the Eletrobras Board of Executive Officers approved in December 2014 the "Anti-corruption Policy Compliance Handbook". The guidelines in this document are currently being implemented.

For that purpose, compliance structures were created in 2015 in all companies of the group, and systematic actions were designed for the program and handbook to be extensively disseminated, including the creation of channels for reporting, solving doubts, and making suggestions about this issue, and also training classes.

With regard to managing operating issues connected not only to compliance, but also to risk management and internal controls, the holding created the Compliance and Risk Management Superintendence in December 2015. Later, in February 2016, the Board of Directors of Eletrobras authorized the creation of the Governance, Risks and Compliance Executive Office, strengthening the company's commitment to the fraud and corruption issue.

### Management risk of the Special Purpose Entities (SPEs) and consortiums

Currently, most of the Eletrobras companies' expansion is structured through SPEs. However, the companies of the group had not structured a uniform process for monitoring and managing these partnerships so far, especially for the holding to manage their consolidated information about financial, technical, and corporate issues, both in pre-operating and operating stages.

This is now addressed in the "Eletrobras Companies' SPE Handbook," approved in April 2015 by Eletrobras's Board of Directors, and which is currently being fully implemented. Based on the guidelines in the document, specific structures were created to treat and monitor these issues in the group's companies and the holding, including the Investment Committee of the

Eletrobras System (CISE), responsible for analyzing the companies' investment proposals.

The Corporate Interest Information Department and the Businesses and Ownership Interests General Consulting Department, both in the holding—the latter being responsible for coordinating the CISE—have been unfolding the guidelines contained in the handbook. The following actions are currently ongoing:

- Formalizing the CISE as the main decision-maker about new projects in the Eletrobras System.
- Determining the best governance practices for SPEs.
- Designing an integrated management model for SPEs.
- Preparing a policy for representatives.
- Developing and improving managerial tools for monitoring project performance.

Eletrobras understand the current revision of the management of SPEs addresses important issues regarding the control of its investments (in corporate, operating, and financial aspects), and the transparency of its practices. The measures being implemented are also aligned with the Compliance Program, regarding the determination and presentation of clear rules for selecting business partners, suppliers and contractors (due diligence).

## Budget and cash flow risk

By adhering to the provisions in Law 12,783/13, the companies are now responsible only for the operation and maintenance of the generation assets in its concession, which has substantially reduced their revenue. To offset this loss, as provided for by the law, and in order to be compensated for the investments made in such assets, the companies have requested to ANEEL that these amounts be refunded.

Even though some companies have obtained favorable decisions on the claimed amounts, payment will not be made immediately (at least for transmission assets). Therefore, in order to expand, the companies now solely rely on the result of their ownership interest in SPEs, and on the significant reduction in their operating costs. These measures demand time and resources to be implemented.

In an attempt to reduce the exposure to cash flow risk for the companies that have difficulties to generate resources by themselves, the Business and Management Master Plan (PDNG) brings several actions to improve the finances of these companies in the short-term, including the sale of non-strategic assets, owned by the company or in partnerships, and reducing the PMSO.

## Lawsuits and lawsuit management risk

Eletrobras and subsidiaries are involved in several lawsuits, mostly labor and civil suits, currently in different stages.

Management classifies the lawsuits where it is the defendant taking into account the risk of loss and the occurrence of a present liability due to a past event, based on the opinion of its legal advisers. In order to cover occasional losses, provisions for contingencies are formed in amounts deemed sufficient by Management, many times based on the opinion of legal advisers, to cover occasional losses in lawsuits.

Especially in suits regarding the credits of the compulsory loan, Eletrobras has revised the methodology to calculate and classify their risk. Following a recent decision by the Superior Court of Justice, the corresponding provisioned amounts have been adjusted to make the provisions more aligned with the status of the lawsuits. The company is now more conservative when provisioning the amounts involved in these suits to better reflect its actual risk exposure. Even though these adjustments have a strong impact in the financial statements at first, we expect our exposure to be reduced in the future, since the involved amounts will be accounted for more appropriately, reducing the volatility in that account.

Moreover, regarding the correction of inconsistencies in the booking of deposits with court, and the identification of likely noncompliance in the lawsuits database, both issues considered material weaknesses in the 2014/2015 SOX testing, new projects have been created with the goal of reviewing and readapting lawsuit management proceedings. These actions will be taken throughout 2016 at all the relevant companies for SOX Certification, and will contribute to reducing the company's exposure to the lawsuits and lawsuit management risk.

## Hydrological risk

As hydropower generators, the Eletrobras companies are subject to uncertainties when it comes to the country's hydrological conditions. Due to the impacts of these conditions and the large reduction in the generation scaling factor (GSF) of the Energy Reallocation Mechanism, and in order to mitigate or at least transfer part of this risk, Eletrobras asked its companies to file for preliminary injunctions to protect themselves from paying unfair settlement amounts and from the apportionment of the Mechanism

With the enactment of Decree 8,401/15, considered the Energy Reallocation Mechanism, the hydrological risk associated with generation at Itaipu (currently managed by Eletrobras), should be taken by the distribution utilities when setting time-of-use rates, which will no longer be passed through in the following year, as it used to be done so far. Therefore, since 2015, the holding no longer incurs the costs relative to Itaipu's hydrological risk.

due to the exclusion of third parties already protected by these kind of actions. This occurred after the significant rise in delinquency among generators in the market, and the results of their individual actions in trading the electric power of some subsidiaries.

Law 13,203/15, regulated by Resolution ANEEL 684/2015, allowed for companies to renegotiate the hydrological risk at more appropriate levels for the profile of their assets and sale agreements in the Regulated Contracting Market (ACR). None of the Eletrobras companies, however, renegotiated in the Free Contracting Market (ACL), given the high value of this business; instead, they chose to use traditional hedging mechanisms already used by their trading areas, in order to mitigate their exposure. In particular, Chesf has not renegotiated in either market, given the specifics of its electric power trading agreements in energy-intensive segments. Regarding SPEs, each company has made their own decisions based on the specific characteristics of each of their plants in this business regime.

**The GSF, Generation Scaling Factor, is a factor used to adjust the guaranteed power output and represents the ratio between the total power produced by the hydroelectric plants of the SIN that integrate the Energy Reallocation Mechanism (MRE) and their guaranteed power outputs. This represents, on average, the amount of energy committed to energy generation contracts. With insufficient rain in the system, the GSF equals to less than 1 and the hydroelectric generators that contracted their guaranteed power outputs will have to incur additional costs to acquire energy in the spot**

Furthermore, Eletrobras has concessions that have not been renewed and, under Law 12,783/2013, are exposed not exposed to this risk yet (the Law mandates that renewed concessions no longer incur this risk, since they are only responsible for the operation and maintenance of the power plants under their concession).

Therefore, under adverse hydrological conditions, Eletrobras's operating results and its financial conditions may be affected, and may incur higher costs in the distribution segment, due to the need to acquire electric power for resale, which may impact the cash flows of the Eletrobras distribution companies.

With regard to the specific aspect of exposure to the hydrological risk, the renegotiation will reduce the negative effects for the companies in periods of low rainfall (such as 2014/2015), by transferring part of the risk to consumers through the payment of the premium corresponding to each protection range.

The tables below summarize the renegotiation made by the Eletrobras companies, and the renegotiation by plant (company assets).

Company	ACR* Renegotiation	ACL Renegotiation
Furnas	YES	NO
Eletrosul <sup>(1)</sup>	YES	NO
Eletronorte	YES	NO
Chesf	NO	NO
Amazonas GT	YES	NO

\* Regulated Contracting Market (ACR)

(1) HPPs Passo São João, São Domingos, and SHPPs Barra do Rio Chapéu and João Borges (SHPPs do not adhere to the ACR and ACL).

Eletronorte Chesf did not adhere to the renegotiation due to the specific characteristics of allocation and transfer of most of the hydrological risk of the Sobradinho HPP to energy-intensive consumers, under Law 13,182/2015.

Company	Plant	Amount to be renegotiated (Average MW)	Renegotiation product	Unit risk premium (R\$/MWh)	Amount to be refunded for the effects of the renegotiation in 2015 (R\$/MWh)	Premium payment postponement as of January 2016 for refund relative to 2015
Furnas	Serra da Mesa HPP	644	SP100	9.5	33.55	4 years and 6 months
	Mascarenhas de Moraes HPP	269	SP100	9.5	33.55	4 years and 6 months
	Itumbiara HPP	230	SP100	9.5	33.55	4 years and 6 months
	Manso HPP	90	SP100	9.5	33.55	4 years and 6 months
	Simplicio HPP	187	SP100	9.5	33.55	4 years and 6 months
	Batalha HPP	47	SP100	9.5	33.55	4 years and 6 months
Eletrosul	Passo São João HPP	37	SP92	2.5	18.26	13 years and 3 months
	São Domingos HPP	36	SP92	2.5	18.26	13 years and 3 months
Eletronorte	Tucuruí HPP*	1063 (2016)	SP100	9.5	33.55	4 years and 6 months
		280 (2017-2019)				
Amazonas GT	Balbina HPP	132	SP100	9.5	33.55	4 years and 6 months

Contracting in the ACR will be discontinued starting in 2017.

Regarding Eletrobras's operations as the trader of the electric power generated by the Itaipu plant, under Decree 8,401/15, the hydrological risk associated with the plant's are now taken by the distribution utilities in the proportion of the amount of electric power allocated to each one, and the projection of this result for ear year should be considered by ANEEL when setting the rates of the plant.

## Measures to prevent and reduce damages

*GRI G4-DMA (former EU21)*

Each business unit has its own contingency plan, which specifically approaches their social concerns, environmental impacts, natural disasters, IT-related matters, strikes, image-related crisis, and fire hazards that could affect the internal and external audiences, considering the communities and the zones of influence.

So that all employees and contractors know and have the means to implement these plans in case of emergency, the Eletrobras companies invest in capacity-building activities and training courses. Specifically for employees, these actions are conducted through annual drills involving the employees affected in a given emergency situation, lectures, and plans posted on the intranet, which are accessible to all employees. For contractors, integration lectures on safety are offered when the provision of services starts.

The Emergency Action Plans of the Eletrobras companies are supported by management groups responsible for preparing and updating the action plans for specific contingencies, for coordinating test simulations, and training procedures for these plans. The plans are regularly tested. These events test the theoretical and practical knowledge of the members of emergency brigades and of all employees of risk areas in general.

At the generation companies, those that operate with hydroelectric plants have handbooks on the Control of Floods in the Drainage Basins where they operate their main reservoirs. These handbooks contain instructions about the operation during flood events and the steps required when they occur. Every year, the Annual Flood Prevention Plan is revised and updated, which is a document approved by (ANA) the National Water Agency and by (ANEEL) the National Electric Power Agency for the generation, transmission and distribution of electricity.

Specifically for nuclear power plants, the Almirante Álvaro Alberto Nuclear Center (CNAAAA) has an integrated emergency plan that was prepared by a number of defense organizations, such as the Civil Defense, the Police

Force, and the Fire Department. This plan is tested periodically, through drills overseen by the National Committee on Nuclear Energy (CNEN) and by international organizations, such as the International Atomic Energy Agency (IAEA), which ensure the suitability of the plan, whose goal is to safeguard the neighboring population and its employees. In order to maintain the External Emergency Plan (PEE) under appropriate deployment conditions, the Partial Emergency Drills are conducted on even-numbered years, when all actions reviewed in the Plan are put into practice, including the drill to evacuate the population in the vicinity of the Nuclear Plant.

It is important to point out the Emergency Response Plan in Transmission Lines, which ensures continuity of services in cases of accidents involving transmission towers. This plan is implemented after analysis of the location where the failure occurred: topography, access conditions, number of damaged towers, and other factors that can be used as input to quantify human resources and material required to respond in the least possible amount of time. Generally, emergencies involving these types of lines occur in inhospitable places, with heavy workloads and greater risks than those of regular maintenance activities. The contingency plans for transmission lines establish guidelines for the repair of the transmission lines affected and define the safety procedures of the team.

In case of blackouts, restoration of services follows an order of load priority (those who should receive energy first), of reenergizing the lines of transmission and distribution, by sector, and of synchronization of power plants. Generally, power plants do not shut down; instead, they are simply disconnected and operate without generating any power. As soon as the transmission lines are available (reenergized), the plants resume power generation. The rationale behind the restoration and the load priorities are governed by a complex set of operating rules established at various levels, from the operation of the interconnected system to the local operation of each power plant, substation, and energy distribution company.

Pursuant to the universal rules for the activities developed by Eletrobras, all workers involved are required to wear personal and collective protective equipment. All these activities comply with the requirements of the Ministry of Labor and Employment (MTE), of agencies such as the Fire Department and Civil Defense, and of environmental agencies.

In addition, various awareness campaigns are conducted to draw attention to the dangers involving live equipment. Alerts on the risk posed by sky lanterns to transmission lines, power plants, and substations, clarification on activities that should not be conducted within the right of ways of transmission lines and signage in the areas of the reservoir where fishing is prohibited are examples of these actions. These activities are conducted with the consent of or in partnership with public authorities.

For security reasons the contingency plans of Eletrobras companies are

not publicly available on their respective websites, except in the case of Eletronuclear, whose emergency plan is available at <http://www.eletronuclear.gov.br/Saibamais/PlanodeEmerg%C3%Aancia.aspx>

# Business performance

*GRI G4-8*

# Operations overview

## Industry overview

The slower economic activity and the increase in rates caused a reduction in demand for electric power in Brazil. According to the Brazilian Energy Research Agency (EPE), the total consumption of electric power reached 464,683 GWh in 2015 in Brazil, down 2.1% year-over-year, according to the table below. This decrease was mainly caused by the industrial and residential sectors.

Electric Power Consumption in the Network (GWh)			
Class	2015	2014	(%)
<b>Brazil</b>	<b>464,683</b>	<b>474,823</b>	<b>-2.14%</b>
Residential	131,315	132,302	-0.75%
Industrial	169,574	179,106	-5.32%
Commercial	90,383	89,840	0.60%
Other	73,411	73,575	-0.22%

Source: Permanent Commission for Electric Power Market Analysis and Monitoring – COPAM/EPE.

The sharpest drop was recorded in the industrial sector—5.3% year-over-year. Throughout 2015, this sector's consumption recorded monthly drops, which became more intense in the second half of the year (falling 7.7% in the fourth quarter, the sharpest decrease in the year).

The residential sector recorded a decrease of 0.7% compared to 2014. This was due to a combination of factors, such as the adverse economic scenario and the increase in the average electricity rate paid by the consumer. Furthermore, in 2015, the increase in the number of residential consumer units (2.5% compared to 2014), was not as high as the historical average recorded since 2004 (nearly 3.5%).

Commerce and services recorded an increase of 0.6% versus 2014, far below the expansion of the past five years (higher than 6%, on average). The scenario of slow economic activity and uncertainties in the short term, the slowdown in the commercial activity, and the decrease in this sector's investments may have had a significant impact on the consumption of electricity by the commercial segment.

The economic slowdown and the GDP fall, according to official data informed above, affected our operating and financial conditions that will be reported herein.

## Regulatory outlook

In 2015, important developments occurred in the regulatory scenario in Brazil, affecting the generation, transmission and distribution concessions of the Eletrobras companies, including the following:

### Time-of-use rates system

In 2015, users started being charged time-of-use rates. Each month, the operating conditions of the system are revalued by the Brazilian Electric System Operator (ONS), which determines the best electric power generation strategy to meet the demand and which thermal power plants should go online. Depending on the variable cost of the most expensive thermal power plant, the time-of-use rate is determined, to be used in the following month. Green, yellow, and red flags indicate whether the rate costs more or less, given the conditions for electric power generation. This system is used by all utility companies connected to the National Interconnected System (SIN). Further information can be found on ANEEL's website.



#### Green Flag

Favorable energy generation conditions.  
The tariff does not have any extra charge.



#### Yellow Flag

Less favorable energy generation conditions.  
Tariff increase of R\$0.025 for each kilowatt-hour (kWh) consumed.



#### Red Flag

More expensive generation conditions.  
Tariff increase of R\$0.045 for each kilowatt-hour (kWh) consumed.

### Extension of distribution concessions

Decree 8,461/2015 regulated the conditions for the extension of distribution concessions for another 30 years, provided that the criteria be observed for service quality efficiency—to be assessed using the Equivalent Outage Duration per Consumer Unit (DEC), and Equivalent Outage Frequency per Consumer Unit (FEC)—economic and financial efficiency (EBITDA and indebtedness level), rate reasonableness, and transparency and governance.

At the 164th Extraordinary General Meeting of Eletrobras Shareholders, held on December 28, 2015, the company's Board of Directors proposed that the renewal of Eletrobras distributors' concessions, except for Celg-D, be approved under two conditions: the capital injection necessary to meet the requirements of the ANEEL should be made by directly by the Federal Government into the distributors, and that immediate action should be taken for the sale of these distributors by the end of 2016.

The Federal Government requested that the issues regarding the extension of concessions be removed from the agenda for subsidiaries Eletrobras Distribuição Piauí, Distribuição Alagoas, Distribuição Acre, Distribuição Rondônia, Distribuição Roraima, and Amazonas Energia, reason why these concessionaires requested, on December 28, 2015, for an extension in the deadline for the execution of the addendum, under Provisional Measure 706, of December 28, 2015, granting 210 days after that date for the distributors to execute the addendum. In 210 days, Eletrobras's distributors will prepare new studies and submit them to a new Extraordinary General Meeting.

For Celg-D, the extension of the distribution concession was approved for another 30 years, as well as the sale of its controlling stock.

## Generation Scaling Factor (GSF)

The Energy Reallocation Mechanism (MRE) is a financial arrangement that seeks to share the hydrological risks affecting generators when targeting a better use of the hydropower resources in the Interconnected System. Reducing the generators' contracting level over their guaranteed power output generates less exposure in the short term. On the other hand, the higher the generators' hedge, the sharper the revenue reduction. This is taken into account by each generator when structuring their businesses. GSF is the percentage of hydropower that all participants of the MRE are generating in relation to the total guaranteed hydropower output in the MRE. When the GSF is lower than 100%, it means the plants are generating less power than their total guaranteed output.

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After January 2014, generation in the MRE significantly reduced in relation to the MRE total guaranteed output, reflecting the atypical hydrology of the last few years. Because 2015 had a high GSF, the financial effects were material for generators. The Eletrobras companies chose to renegotiate the risk, considering the following aspects:

- Plant's trading profile in the Regulated Contracting Market (ACR) and Free Contracting Market (ACL)
- Hedge strategies
- Expected contract discontinuation
- Energy simulations, economic-financial feasibility studies (VPL by type of product), accounting impact assessment
- Duration of concession agreements, risk premium cost, legal assessment, additional risks of contracting reserve electric power, projections of Difference Settlement Price (PLD) and allocation of secondary electric power, among others

For further details on renegotiation agreements, please refer to the Risk Management chapter, Hydrological risk section.

## Sobradinho HPP and Itumbiara HPP

In 2015, the concessions of the Sobradinho HPP and Itumbiara HPP, owned by Chesf and Furnas, respectively, were extended for 30 years, under Law 13,182/2015. With the extension of these power supply agreements with industries and the consequent extension of the concessions, these Eletrobras companies ensured an important source of financial resources for investment. The law also created the Northeast Energy Fund (FEN) and the Southeast and Midwest Energy Fund (FESC), which will provide resources for electric power projects, and will be supplied by Chesf and Furnas with the resources resulting from the difference between the revenue from consumer contracts and the amount exceeding the rate calculated by ANEEL, under Law 12,783/2013, less tax and charges.

## Compensation referring to Law 12,783/2013

According to the table below, the total amount claimed by the Eletrobras companies referring to the 2nd Tranche of the compensation relative to Law 12,783/2013 exceeds R\$26 billion (base date is December 2012). Up to December 2015, ANEEL had authorized the compensation claimed by Eletrosul and Furnas, corresponding to the portion of the electric power transmission assets existing on May 31, 2000—Existing Basic Network (RBSE) and Other Transmission System Facilities (RPC), not depreciated and amortized yet. These assets amounted to R\$10.007 billion.

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2nd Tranche: Claimed amount R\$26,427 million						
Eletrobras companies	Amount recognized (R\$ million)		Claimed amount (R\$ million)		Authorized amount (R\$ million) <sup>(1)</sup>	
	Generation <sup>(2)</sup>	Transmission	Generation	Transmission	Generation	Transmission
Eletronorte	-	1,733	-	2,926	-	-
Chesf	697	1,589	4,802	5,627	-	-
Furnas	996	4,530	1,312	10,699	-	9,000
Eletrosul	-	514	-	1,061	-	1,007
<b>Total</b>	<b>1,693</b>	<b>8,366</b>	<b>6,114</b>	<b>20,313</b>	<b>-</b>	<b>10,007</b>

The base date for these amounts is December 2012.

(1) Authorized amounts will be recognized in profit or loss after the final amount is determined and the payment conditions are regulated by the Grantor.

(2) Thermal power generation assets have not been included in ANEEL Normative Resolution 596/2014. When these are recognized, there is an additional amount of R\$557 million in Furnas and R\$357 million in CGTEE.

On April 20, 2016, Ministry of Mines and Energy Ordinance No. 120 regulated the conditions for receiving the compensation. According to the Ordinance, the amounts authorized by ANEEL will form the Regulatory Remuneration Base of electric power transmission utilities, and the capital cost will be added to the relative annual revenue allowed. The capital cost will be composed of portions of remuneration and depreciation, plus taxes, observing the corporate law, and will be recognized after the 2017 rate process, and adjusted and reviewed according to the concession agreement.

The portions of remuneration and depreciation will be determined considering the Periodic Rate Review of Existing Utilities' Revenues, approved by ANEEL, and the Regulatory Remuneration Base will be depreciated considering the residual life of the assets and restated using the Extended Consumer Price Index (IPCA)

## Distributed generation expansion

Normative Resolution ANEEL 687/2015 created the Electric Power Compensation System, allowing for consumers to install small generators—photovoltaic solar panels, wind microturbines, and other—at their consumer units and exchange electricity with the local distributor in order to reduce their power bill. These improvements facilitate and encourage this type of shared or group generation, enabling several people to install a micro- or mini-distributed generation plant and use the generated power to reduce their bills. On December 2015, the Ministry of Mines and Energy published Ordinance 538/2015-MME, creating the Electric Power Distributed Generation Development Program (ProGD Elétrica) and financing facilities that relieved taxes on equipment imports and improves the financial return of investments made in this type of generation.

## Annual rate adjustments of Eletrobras distributors

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In 2015, the annual adjustment was made on the rates of Eletrobras distributors, with the following base dates:

- Alagoas and Piauí, August 28
- Amazonas and Boa Vista, November 1st
- Acre and Rondônia, November 30
- Celg-D, September 12

The results were authorized by ANEEL, according to the table below:

% rate adjustments - IRT 2015	Distribuição Acre	Distribuição Alagoas	Amazonas Energia	Distribuição Piauí	Distribuição Rondônia	Distribuição Roraima	Celg-D
Average effect captive consumer (Final)	9.49%	6.48%	40.54%	5.53%	13.41%	41.52%	6.89%

At Amazonas Energia, the annual rate adjustment was made under Resolution ANEEL 1,980/2015, but the Prosecutor's Office of the State of Amazonas and other consumer protection agencies were granted, in November 2015, a preliminary injunction in the public civil liability lawsuit against Amazonas Distribuidora de Energia and the Brazilian Electricity Regulatory

Agency (ANEEL), for the rates not to be adjusted in 2015; this preliminary injunction was suspended in January 2016. At Eletrobras Distribuição Roraima, the authorized average rate adjustment was 41.52%, applicable as of November 2015. This adjustment has not been applied on the company's rates yet, due to a preliminary injunction granted by the 1st Region Federal Court of Appeals, prohibiting the adjustment in response to a claim by the Procon of the Roraima State House of Representatives.

## Energy efficiency

*GRI G4-EN6, G4-EN7*

Eletrobras's energy efficiency department was structured around two major lines: energy efficiency as a public policy, and energy efficiency as a corporate and business vision.

The line that deals with energy efficiency focused on public policies refers to the National Program for Electricity Conservation (PROCEL). You can learn more about this program on page 129.

In the corporate line, Eletrobras coordinates the Integrated Eletrobras Energy Efficiency Committee (CIEESE), whose purpose is to find technology solutions for the Eletrobras companies, technical cooperation, and excellence in corporate energy efficiency.

Through CIEESE, the holding monitored the goals for reduction in energy consumption in the Eletrobras companies in 2015, and proceeded with the work to implement ISO 50001, Energy Management System, in the Eletrobras Eletronorte facilities, at Tucuruí HPP (Eletrobras Chesf), Messias Substation (Alagoas), and Itaipu (Executive Center). The Tucuruí HPP received the first ISO 50001 certification visit in December 2015, and was certificated in January 2016, becoming the first Eletrobras company to obtain this certificate. In 2015, the holding sponsored the creation of three Energy Management System guidebooks—of Eletrobras Eletronorte, Eletrobras Chesf, and Itaipu—encouraging the creation of internal competences at these companies with the involvement of over 50 employees and training of 25 internal auditors.

Another highlight was the publishing of the 2013-2014 Energy Efficiency Book, reporting on 90 corporate actions executed by the Eletrobras companies, attesting to its commitment to corporate sustainability.

In 2015, the Internal Energy Conservation Committee (CICE) included members from different areas of the Eletrobras holding, such as back office, energy efficiency, communication, and the environment, and had the collaboration of employees to implement different actions to reduce electricity consumption in the company, including the following:

- Calling volunteers to be representatives at the CICE

- Working together with the computing and maintenance area to improve the energy performance of the datacenters
- Disseminating the energy efficiency issue, using in-company communication tools
- Creating a video with a message from the CEO about the World Energy Efficiency Day

The holding's area of new businesses in energy efficiency performed the following activities in 2015:

- Updating the Energy Efficiency Business Plan for 2015-2019, in order to align it with the 2010-2030 Strategic Plan and the 2015-2019 Business and Management Master Plan. The updating included: (a) a revision of the market potential, strategic focus, results indicators, cost of company capital and third party capital, governance and management practices in compliance with the SPE Handbook; (b) addition of a new chapter on project financing, considering the funding agreement Eletrobras executed with the International Bank for Reconstruction and Development (IBRD); and (c) a revision of the projects for 2015-2019, planning the formation of 10 SPEs.
- Business plan for the retail sector proposing a combination of energy efficiency and distributed generation.
- Providing services for the International Copper Association, for the technical organization of four seminars to promote the Premium Engine, an operational guide for Premium Engines, and the implementation of ISO 50001 in small industries.
- Providing qualification training on ISO 50001 for the Brazilian Metrology Society.
- Prospecting clients or partners for efficiency services in Public Lighting and commercial sector.
- Including energy efficiency clauses in the contract of the Eletrobras Distribution Companies with the World Bank, in the scope of the Energia+ Project.

Red-LAC-EE is a public-private environment that fosters and facilitates permanent integration between Latin American and Caribbean countries in issues concerning Energy Efficiency. In 2015, the Executive Committee of the Network held eleven virtual meetings and its website had nearly 38,000 new page views, an increase of 58% over the previous year. The network has a web-based discussion group with 800 members, and is active on social media channels such as Twitter, Facebook, Google+ and LinkedIn. Eletrobras is a diamond sponsor of the Network and has been playing a key role in this initiative since its inception, as a member of its Executive Committee.

Eletrobras distribution companies' energy efficiency projects comply with Law 9,991/2000, which determines that power utilities or licensed distribution companies must apply a minimum percentage of 0.5% of the net operating

revenue in Energy Efficiency Programs, according to regulation by the Brazilian Electricity Regulatory Agency (ANEEL).

Some of the energy efficiency initiatives in 2015 included educational projects like "Itinerant Energy Efficiency" of Distribuição Rondônia, "Multiply III" of Distribuição Piauí, and "*Luz do Saber*" of Distribuição Alagoas. These projects basically qualify educators and sensitize students in primary and secondary schools to concepts of efficient and safe energy use.

The figures of these projects in 2015 are as follows:

- 368 schools in 69 municipalities served
- 3,377 educators qualified
- 87,578 students sensitized

The reduction in electricity consumption after these and other projects developed by the distributors can be estimated at more than 100 GWh, which would, proportionately, be enough to supply nearly 50,000 homes for one year.

## Case

### CIEESE promotes ISO 50001 at the Eletrobras companies

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With the consolidation of the implementation of ISO 50001 at the Tucuruí HPP, the first internal audit of the Standard in the CIEESE, and the dissemination of the Standard in the company, in order to establish new systems and processes necessary for energy performance improvement, Eletrobras Eletronorte reduced its electricity consumption by 238,033 kWh in 2015, or 3.01% compared to 2014.

Itaipu Binacional used equipment modernization and optimization as the key strategy to reduce its internal consumption of electric power. Some of the actions in 2015 include the modernization of access roads' public lighting on the Brazilian margin, and the lighting systems of the administrative offices on the right margin, in addition to the optimization of the internal lighting system, electric infrastructure, and air conditioning system on the left margin. The ETA II treated water pumping system was also retrofitted. These actions resulted in a reduction of 477.814 MWh or 1,720.13 GJ in electricity consumption in 2015 compared to 2014.

Every year, Eletrobras Chesf promotes the Energy Efficiency week at its regional units, in an action to facilitate and raise awareness to the rational use of electricity inside the company, and disseminate the good practices to the residences of employees. This action resulted in a reduction of 1,413.96 MWh in electricity consumption in the company's facilities in 2015 compared to 2014.



# Generation

GRI G4-EU1

In 2015, Eletrobras reached an installed capacity of 45,391.2 MW in generation projects, an increase of 1,235.6 MW year-over-year. Of the company's total installed capacity, 73% are projects wholly owned by Eletrobras, 10% derive from the interest held by Eletrobras companies in projects developed through Special Purpose Entities (SPEs), and 17% refer to jointly owned projects, including half of Itaipu Binacional's capacity (7,000 MW)—or 15% of the total—and ownership interest held in consortiums.

Installed capacity by source				
Source	TOTAL Eletrobras 2015*	TOTAL Eletrobras 2014	TOTAL Eletrobras 2013	Addition 2014-2015
Hydro	38,722.2	37,756.6	36,279.3	965.6
Solar	0.9	0.9	0.0	0.0
Wind	896.1	258.5	149.8	637.7
Natural Gas	1,207.4	1,177.4	1,019.4	30.0
Oil	1,904.6	2,156.3	2,731.5	-251.7
Nuclear	1,990.0	1,990.0	1,990.0	0.0
Coal	670.0	816.0	816.0	-146.0
<b>Total (MW)</b>	<b>45,391.2</b>	<b>44,155.7</b>	<b>42,986.0</b>	<b>1,235.6</b>

\*Includes the Brazilian half of Itaipu Binacional (7,000 MW). Includes the plants in O&M agreements. The amounts consider the proportionate installed capacity of the corporate interest.

In 2015, the highlights include the expansion of the Livramento Wind Farm, the deployment of the Hermenegildo, VamCruz, Santo Sé II, Chapada do Piauí I, Geribatu, Chuí, and Serra das Vacas Wind Farms, and the deployment of Santo Antônio HPP's and Jirau HPP's generating units. On the other hand, commercial operations were suspended at the thermal power plants of Presidente Medici (Stage A), São Jerônimo, Nutepa, Electron, Cidade Nova, and Distrito, which together account for a reduction of 372 MW. Therefore, 1,236 MW were added to the system in 2015.

## Electric power net production

GRI G4-EU2

The plants owned by Eletrobras generated 151,756,589.9 MWh of electric power in 2015. Adding the SPEs, generation totaled 166,108,268.8 MWh. The most used sources, except for hydro, are uranium, natural gas, and oil. The tables below show the electric power generation of the Eletrobras companies by source.

### Company-owned plants

Electric power net production (wholly-owned, co-owned, including Itaipu Binacional)						
Primary source	Net generation (MWh) - 2015	Net generation (%) 2015	Net generation (MWh) - 2014	Net generation (%) 2014	Net generation (MWh) - 2013	Net generation (%) 2013
Hydro	126,128,986.1	83.11	148,042,000.00	84.00	157,958,000.00	84.80
Uranium	14,808,265.6	9.76	15,433,000.00	8.80	15,829,000.00	8.50
Oil	4,137,746.0	2.73	6,039,000.00	3.40	5,524,000.00	3.00
Coal	2,211,975.9	1.46	2,910,000.00	1.70	3,468,000.00	1.90
Natural Gas	4,170,044.5	2.75	2,463,000.00	1.40	2,836,000.00	1.50
Wind	299,293.3	0.20	788,000.00	0.40	477,000.00	0.30
Solar	278.6	0.00	500.00	0.00	-	-
<b>Total</b>	<b>151,756,589.9</b>	<b>100.00</b>	<b>175,706,000.00</b>	<b>100.00</b>	<b>186,093,000.00</b>	<b>100.00</b>

*Note: includes the generation of the plants wholly owned or co-owned by Eletrobras, proportionately to Eletrobras's interest in these co-owned companies; includes 50% of the Itaipu HPP generation, 48.45% of the Serra da Mesa HPP generation, and 70% of the Manso HPP generation.*

### Special Purpose Entities (SPEs)

Electric power net production (Special Purpose Entities - SPEs)		
Primary source	Net generation (MWh)	Net generation (%)
Hydro	13,175,871.8	91.81
Wind	1,175,690.7	8.19

Oil	116.4	0.00
<b>Total</b>	<b>14,351,678.9</b>	<b>100</b>

Note: Considers the generation of the plants where Eletrobras participates through SPEs, proportionately to its interest.

## All plants (wholly-owned and SPEs)

Amount of net energy generated by source (all plants)		
Primary source	Net generation (MWh)	Net generation (%)
Hydro	139,304,857.9	83.86
Uranium	14,808,265.6	8.91
Oil	4,137,862.4	2.49
Coal	2,211,975.9	1.33
Natural Gas	4,170,044.5	2.51
Wind	1,474,983.9	0.89
Solar	278.6	0.00
<b>Total</b>	<b>166,108,268.8</b>	<b>100</b>

Note 1: includes the generation of the plants wholly owned or co-owned by Eletrobras, proportionately to Eletrobras's interest in these co-owned companies; includes 50% of the Itaipu HPP generation, 48.45% of the Serra da Mesa HPP generation, and 70% of the Manso HPP generation.

Note 2: Considers the generation of the plants where Eletrobras participates through SPEs, proportionately to its interest.

## Average availability by plant

GRI G4-EU30

The three tables below show the availability factor of the Eletrobras companies by source. The first two segregate the factor into wholly-owned and SPE projects, and the third is the factor for all the plants.

## Company-owned plants

Plant's average availability factor (%) – wholly-owned and co-owned plants, and Itaipu Binacional		
Primary source	2015	2014
Wind	98.70	-
Hydro	88.44	89.60
Natural Gas	85.90	71.97
Oil	90.61	91.73
Coal	50.43	60.14
Uranium	84.61	88.84

## Special Purpose Entities (SPEs)

Special Purpose Entities – SPEs (%)		
Primary source	2015	2014
Wind	97.99	92.85
Hydro	61.33	98.64

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## All plants (wholly-owned and SPEs)

Plants' average availability factor (%)*	
Primary source	2015
Wind	92.24
Natural Gas	85.90
Hydro	89.05
Oil	90.61
Coal	50.43
Uranium	84.61

*\*Eletronorte did not report on the availability of Serra do Navio and Santarém; Eletrosul did not report on the availability of Capão do Inglês, Galpões, and Coxilha Seca; Furnas did not report on the availability of Santo Antônio. Reported different amounts on the availability factors of Miassaba 3, Rei dos Ventos 1 e 3 than those reported by Eletronorte. We believe they have reported on unavailability instead of availability, which is why the amounts have not been considered; Amazonas Energia did not report on the availability of Jacaré, Electron, AS São José, FO Flores, and Iranduba. Reported a very low availability at the Mauá TPP.*

## Thermal power plants' generation efficiency

GRI G4-EU11

### All plants (wholly-owned and SPEs)

Average annual generation efficiency of all plants by source (%)		
Primary source	2015	2014
Coal	28.34	29.60
Natural Gas	37.27	37.50
Oil	40.73	30.90
Uranium	35.80	35.40

## Planned capacity vs. projected demand

GRI G4-EU10

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The current institutional model assigns the main roles in the expansion of the electric system to the agents, responsible for the timely investments required for the implementation of new projects. The ten-year plan prepared by the Brazilian Energy Research Agency (EPE) seeks to provide guidelines to and support the upcoming auctions for the purchase of energy from new generation projects, in addition to steering the technical, economic, social, and environmental feasibility studies of new generation plants.

Planning the expansion of the energy supply, pursuant to the availability of new power plant projects, will guide the new energy auctions, based on the projects necessary to meet the requirements of the market, in line with the assumptions adopted in the Brazilian electric power industry.

Companies interested in developing new projects can enter the auctions individually or as a consortium. However, even though they take part in the studies conducted for new projects, in an auction, it is not possible to anticipate which companies will be the winners and will be granted the concessions for such projects. It is also important to consider that the auctions target new projects that should enter into operation in five years, while a long-term planning considers a period of at least 15 years.

Considering the installed capacity of the power plants of the Eletrobras companies that are members of SIN, including those for which the grant/authorization was issued or is pending authorization, whether wholly or jointly owned, and comparing it with the evolution of the planned installed capacity described in the 2024 Ten-Year Energy Expansion Plan (PDE 2023), prepared by the EPE/MME, we have the following:

Evolution of the installed capacity in the SIN									
Capacity of the Eletrobras System vs. Total Planned Capacity (2024 PDE)									
SOURCE	2015			2020			2024		
	Brazil - SIN (MW)	Eletrobras System (MW)	Share (%)	Brazil - SIN (MW)	Eletrobras System (MW)	Share (%)	Brazil - SIN (MW)	Eletrobras System (MW)	Share (%)
COAL	3,064	670	22	3,404	670	20	3,404	670	20
OIL	4,855	1,367	28	4,325	273	6	4,325	273	6
NUCLEAR	1,990	1,990	100	3,395	3,395	100	3,395	3,395	100
NATURAL GAS	11,317	1,207	11	16,419	1,451	9	21,219	1,451	9
HYDRO	86,540	38,521	45	102,115	45,935	45	109,972	45,935	42
BIOMASS+WIND+SHPP+SOLAR	24,840	1,098	4	36,445	2,316	6	56,445	2,316	4
PROCESS GAS	687	0	0	687	0	0	687	0	0
<b>TOTAL</b>	<b>133,293</b>	<b>44,853</b>	<b>34</b>	<b>166,790</b>	<b>54,040</b>	<b>32</b>	<b>199,447</b>	<b>54,040</b>	<b>27</b>

*Notes:*

*The evolution of the installed capacity in Brazil, of the National Interconnected System (SIN), was provided by the 2024 Ten-Year Energy Expansion Plan (2024 PDE), of the Brazilian Energy Research Agency (EPE).*

*Includes the Brazilian half of Itaipu Binacional (7,000 MW).*

*For jointly owned plants, the installed capacity considered was proportional to the ownership interest held by the parties.*

*Considers the decommissioning of some thermal power plants run on oil in the state of Amazonas, according to the Monthly Operation Program (PMO) of January 2016, prepared by the Brazilian Electric System Operator (ONS).*

*Eletrobras does not have plants running on biomass. However, the 2024 PDE aggregates the amounts of the biomass, wind, solar, and SHPP sources.*

*Considering the installed capacity of the Eletrobras companies connected to the SIN plus those in Standalone Systems (537 MW), the total generation installed capacity of the Eletrobras companies was 45,391 MW in 2015.*

The planned reduction in the amount of oil between 2015 and 2020 is due to the decommissioning of a portion of Amazonas Energia's generation park and only considers the park that will remain operational after the interconnection between Manaus and SIN, pursuant to the Monthly Operation Program (PMO) of January 2016, prepared by the Brazilian Electric System Operator (ONS).

The increase in the installed capacity of gas is due to the deployment of the Mauá 3 TPP, wholly-owned by Amazonas Energia. The nuclear capacity increased due to the deployment of Angra 3.

Concerning the hydroelectric park, the growth of the installed capacity planned for the coming years can be primarily explained by the deployment of

the last turbines of the Santo Antônio, Jirau, and Teles Pires Hydroelectric Power Plants, which are operational, and of the Generating Units of the Belo Monte, São Manoel, and Sinop Hydroelectric Power Plants.

The installed capacity of Eletrobras's wind farms grew, mainly because of its ownership interest in various parks, whether as a minority or majority shareholder in SPE, through its subsidiaries, or as full owner of the complex.

All projects Eletrobras participates in will become operational by 2010, which is why the amounts for 2020 and 2024 do not change.

## Transmission

GRI G4-EU4, G4-9

Eletrobras's transmission lines network totaled nearly 68,085 km in 2015. Of that amount, 5,238 km are wholly owned by Eletrobras, 56,811 km refer to corporate assets under O&M agreements, and 6,036 km correspond to its ownership interest in projects developed by Eletrobras companies through SPEs. Considering only the basic network of the National Interconnected System (SIN), that is, voltages of 750, ±600, 525/500, 345, and 230 kV, the company is responsible for 60,997 km of transmission lines, or 47.1% of all transmission lines in Brazil in said voltages.

According to information on the websites of ANEEL and other transmission utilities, the company ranking right below Eletrobras has 14,000 km of transmission lines, showing how important and significant Eletrobras's market share is in the country's transmission sector.

The credibility of the Eletrobras companies with regulatory agencies, environmental authorities, shareholders, suppliers, partners, financial agents and the society reflects the recognition for over 50 years of services provided in Brazil, sustained by its workforce that knows the transmission business in its planning, implementation, and operation stages.

Eletrobras companies	Transmission lines 2015 (km)						
	Wholly-owned	O&M assets	Total - Company (a)	SPEs % Eletrobras (b)	Total - Eletrobras (a+b)	Total SPE (c)	Total - Leveraged (a+c)
Eletronorte	754	10,023	<b>10,776</b>	2,072	<b>12,848</b>	<b>4,219</b>	<b>14,995</b>
Chesf	1,281	18,604	<b>19,885</b>	1,509	<b>21,394</b>	<b>3,077</b>	<b>22,962</b>
Furnas	1,148	18,758	<b>19,906</b>	1,368	<b>21,274</b>	<b>3,059</b>	<b>22,966</b>
Eletrosul	1,294	9,426	<b>10,720</b>	1,087	<b>11,807</b>	<b>1,740</b>	<b>12,459</b>

Amazonas GT	439	0	439	0	439	0	439
Amazonas Energia	322	0	322	0	322	0	322
<b>Total</b>	<b>5,238</b>	<b>56,811</b>	<b>62,049</b>	<b>6,036</b>	<b>68,085</b>	<b>12,094</b>	<b>74,143</b>

(b) Considers the proportion of Eletrobras's interest in SPEs.

(c) Considers the full extension of the SPEs transmission lines, regardless of ownership interest. In the SPEs where more than one Eletrobras company holds an interest, it considers the proportional leveraged amounts.

## Substations

Eletrobras wholly owned 53 substations in 2015, with transformation capacity of 38,385 MVA, in addition to 230 renovated substations under Law No. 12,783/2013. The overall transformation capacity, including interest in SPEs, totaled 228,723 MVA. The table below illustrates the total transformation capacity of substations Eletrobras invests in, considering the total transformation capacity of wholly-owned assets and SPE assets, in order to highlight the company's contribution to leveraging these projects in Brazil.

Eletrobras companies	Substations existing in 2015 (transformation capacity - MVA)						
	Wholly-owned	O&M assets	Total - Company (a)	SPEs % Eletrobras (b)	Total - Eletrobras (a+b)	Total SPE* (c)	Total - Leveraged (a+c)
Eletronorte	11,169	20,159	31,328	1,151	32,479	2,332	33,660
Chesf	9,227	42,785	52,012	6,064	58,076	12,368	64,380
Furnas	13,161	92,257	105,418	5,673	111,091	12,700	118,118
Eletrosul	3,613	21,413	25,026	836	25,862	2,035	27,061
Amazonas GT	1,215	0	1,215	0	1,215	0	1,215
<b>Total</b>	<b>38,385</b>	<b>176,614</b>	<b>214,999</b>	<b>13,724</b>	<b>228,723</b>	<b>29,435</b>	<b>244,434</b>

\*In the SPEs where more than one Eletrobras company holds an interest, it considers the proportional amounts.

## Transmission service quality

GRI G4-DMA (former EU6)

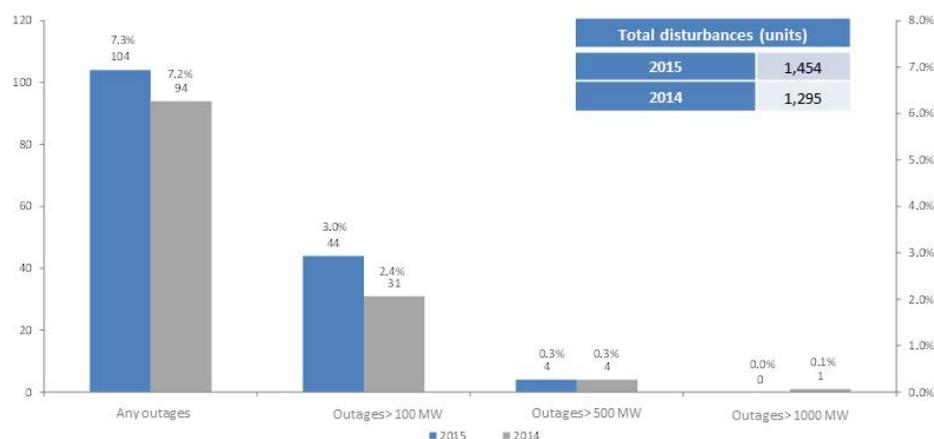
The transmission lines availability rate is calculated based on Network Proceedings. This rate considers all disconnections on Eletrobras companies' transmission lines, including those that cannot be managed by the company, such as in expansions, or random or force majeure cases.

The table below shows the Operational Availability rate of the Eletrobras companies, which represents the percentage of hours in one year that the lines remain available for the transmission system.

Availability rate of transmission lines (%)		
Eletrobras companies	2015	2014
Eletronorte	99.91	99.93
Chesf	99.82	99.88
Furnas	99.84	99.10
Eletrosul	99.78	99.59
Amazonas GT	n/a	n/a
<b>Total</b>	<b>99.84</b>	<b>99.62</b>

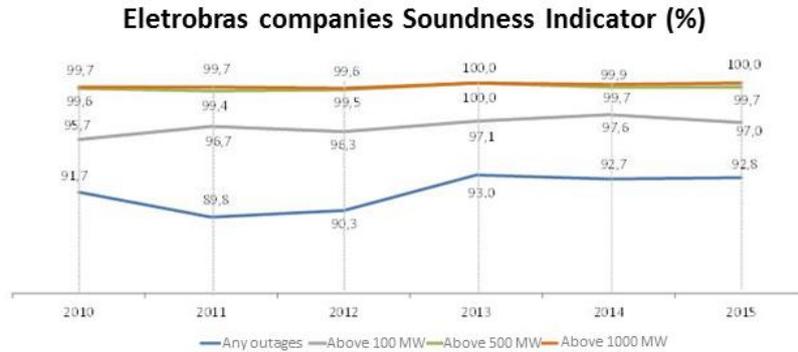
## Number of disturbances

The main causes for the rise in the number of disturbances were natural phenomena (lightning strikes) and the environment (land fire), but this increase does not significantly impact our revenues. The table below shows the number of disturbances originating in the Eletrobras companies' network in 2014 and 2015, and power cuts relative to these disturbances.



## Soundness indicator

The soundness indicator aims to assess the basic network capacity to accommodate contingencies without interrupting the supply of energy to consumers. The Eletrobras companies have maintained the same performance rate for disturbances originating in their transmission lines.



## Transmission losses

GRI G4-EU12

Transmission losses are calculated based on the difference between the sum of energy generated and imported and the sum of loads and energy exported. Since 2010, Eletrobras has been using a unified methodology to estimate energy losses in its companies' transmission network, based on electrical calculations using cases of power-flow. The table below shows the rate for each transmission company owned by Eletrobras.

Transmission Technical Losses		
Eletrobras companies	2015	2014
Eletronorte	1.35%	1.06%
Chesf	2.41%	2.10%
Furnas	2.19%	2.16%
Eletrosul	1.66%	1.43%
Amazonas GT	n/a	n/a*
<b>Total</b>	<b>1.98%</b>	<b>1.82%</b>

\*Not available because the de-verticalization of Amazonas GT started in 2015.

## Strategic expansion in transmission

In a country of continental dimensions like Brazil, where the largest hydropower generating parks—the major component of the country's electric power matrix—are located far from the large consumer centers, transmission lines play a strategic role in the outflow and optimization of these energy blocs, making sure the increasing demand is met. In this scenario, Eletrobras, through its subsidiaries, is a key player in the National Interconnected System (SIN).

Eletrobras has been expanding its operations at an average of 2,486 km per year of transmission lines for the past five years, especially through SPEs, showing the company is committed to its strategic guidance of being an important player in the transmission sector, keeping its leading position.

Companies	2015	2014	2013	2012	2011
Wholly-owned (a)	62,049	62,142	60,570	59,056	52,243
SPE (b)	6,036	5,440	3,794	2,665	3,936
Total (a+b)	68,085	67,582	64,364	61,721	56,179
Physical addition	503	3,218	2,643	5,542	527

(b) Considers the proportion of Eletrobras's interest in SPEs.

In terms of investments, the Eletrobras companies plan to energize nearly 10,548 km of transmission lines by 2018, in its own projects or through partnerships, and adding 18,900 MVA of power in substations, considering projects under construction or to be constructed. Investments in these projects are estimated at nearly R\$16 billion.

Below is a map illustrating the major transmission projects under construction in Brazil.



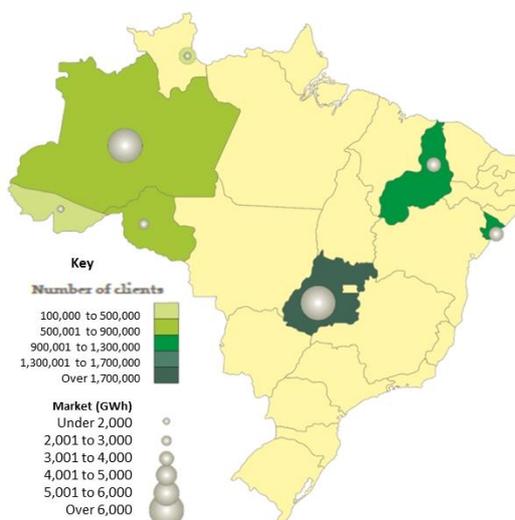
# Distribution

Eletrobras’s electric power distribution companies—including Celg-D—operate in two states in the Northeast, four in the North and in the State of Goiás, benefiting over 6.9 million consumers, equivalent to 8.5% of all customers in the Brazilian territory. On December 31, 2015, these companies used a low-, medium-, and high-voltage distribution network, extending for 471,485 km and a total of 555 substations, spanning across 700 municipalities.

System’s Physical Data – 2015								
Description	Eletrobras Distribuição Acre	Eletrobras Distribuição Alagoas	Eletrobras Distribuição Amazonas	Eletrobras Distribuição Piauí	Eletrobras Distribuição Rondônia	Eletrobras Distribuição Roraima	Celg-D	Total
Distribution Lines / Networks - km	19,218	42,043	47,806	87,929	57,647	3,553	213,289	471,485
# of Substations	15	40	24	84	60	3	329	555
# of Clients	245,344	1,045,270	898,365	1,172,997	589,332	106,236	2,801,309	6,858,853
# of Cities	22	102	62	224	52	1	237	700

In 2015, in line with the strategic and corporate goals in the 2015-2019 Business and Management Master Plan, Eletrobras started restructuring the electric power distribution business, and on December 28, 2015, the 164th Extraordinary General Meeting approved the sale of Eletrobras’s interest at Celg-D.

The regulatory scenario in 2015 brought several uncertainties to the electric power distribution sector because the regulation of the conditions for extending distribution concessions did not occur before October. This factor had a strong impact on investment funding. Except for Celg-D, all other distributors were removed from the agenda of the 164th Extraordinary General Meeting of Eletrobras Shareholders, held on December 28, 2015, as requested by a representative of the Federal Government, with the purpose of better analyzing the matter



and the model to be adopted in case the decision is made for an extension in distribution concessions. Therefore, subsidiaries Eletrobras Distribuição Piauí, Eletrobras Distribuição Alagoas, Eletrobras Distribuição Acre, Eletrobras Distribuição Rondônia, Eletrobras Distribuição Roraima, and Eletrobras Distribuição Amazonas requested, on December 28, 2015, for an extension in the deadline for the execution of the addendum, under Provisional Measure 706, of December 28, 2015, granting 210 days after that date for the distributors to execute the addendum.

In addition to the uncertain decision on the extension of distribution concessions, the mismatch between expenses from energy acquisition and revenues had a negative impact on the cash flow of some distributors, in certain cases preventing them from honoring important commitments, including in the spot market of the Regulated Contracting Market of the Electric Power Trading Chamber (CCEE).

Regarding the National Program for Universal Access to and Use of Electricity (LPT - Light For All Program), in spite of the adverse conditions in 2015, distributors managed to serve 6,733 new clients, including: 1,117 rural consumers in the state of Alagoas, 2,857 in Amazonas, 1,900 in Piauí, 1,028 in Rondônia, 227 in Acre, and 582 new units served by Celg-D, in a total investment of R\$184.7 million in the Light For All Program.

Nationwide consumption of electricity dropped 2.1% in 2015, according to data by the Brazilian Energy Research Agency (EPE). In the same period, the Eletrobras distribution companies (EDE) recorded an increase of 2.4% in the captive market, supplying 29,517 GWh to 6,858,853 consumer units.

In 2015, 200,845 new units were added, an increase of 3.0% year-over-year, reaching 700 cities in the states of Amazonas, Acre, Alagoas, Piauí, Rondônia, Goiás, and in the city of Boa Vista. In order to achieve this performance, distributors invested R\$1.1 billion.

### System's Physical Data – EDE Dec/2014

Description		ED Amazonas	ED Alagoas	ED Piauí	ED Rondônia	ED Acre	ED Roraima	Celg-D	Total
<b>Lines</b>	Distribution Lines (230kV) - km	374	0	0	0	0	0	0	374
	Distribution Lines (69 and 138kV) - km	348	1,818	2,696	696	417	71	0	6,046
<b>Networks</b>	MT (13.8 and 34.5kV) – km	30,091	21,918	62,053	50,517	14,794	2,108	0	181,481
	BT – km	13,706	17,058	22,251	5,916	3,841	1,329	0	64,101
<b>Total km</b>		44,519	40,794	87,000	57,129	19,052	3,508	0	252,002

### System's Physical Data – EDE Dec/2015

Description		ED Amazonas	ED Alagoas	ED Piauí	ED Rondônia	ED Acre	ED Roraima	Celg-D	Total
<b>Lines</b>	Distribution Lines (230kV) - km	390	0	0	0	0	0	0	390
	Distribution Lines (69 and 138kV) - km	348	1,827	2,824	806	442	72	0	6,319
<b>Networks</b>	MT (13.8 and 34.5kV) – km	33,527	22,467	62,371	50,665	14,891	2,132	0	186,053
	BT – km	13,931	17,749	22,684	6,176	3,885	1,349	0	65,774
<b>Total km</b>		48,196	42,043	87,879	57,647	19,218	3,553	0	258,536

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### System's Physical Data – YTD 2015

Description		ED Amazonas*	ED Alagoas	ED Piauí	ED Rondônia	ED Acre	ED Roraima	Celg-D	Total
<b>Lines</b>	Distribution Lines (230kV) - km	16	0	0	0	0	0	0	16
	Distribution Lines (69 and 138kV) - km	0	9	128	110	25	1	0	273
<b>Networks</b>	MT (13.8 and 34.5kV) – km	3,436	549	318	148	97	24	0	4,572
	BT – km	225	691	433	260	44	20	0	1,673
<b>Total km</b>		3,677	1,249	879	518	166	45	0	6,534

*\*With the de-verticalization of Amazonas Energia, the transmission and generation assets no longer belong to Amazonas Distribuidora.*

## Electric power trading by distribution companies

Eletrobras distributors billed a total of 29,517 GWh in the captive market in 2015, up 2.4% year-over-year, and 208 GWh in supply to other distributors, representing a total market increase of 2.45%. This increase is important because the country recorded a decrease of 2.1% in consumption nationwide, as mentioned in chapter 3.1.

Eletrobras's growth was positively impacted by the residential segment, up 5.1%—this segment fell 0.7% nationwide—and the residential segment accounts for 39.1% of the total energy supplied by the Eletrobras companies. This is, therefore, an unbalance factor when consumption decreases. The negative impact on consumption came from the industrial segment, down 5.5% for the Eletrobras companies, and down 5.3% in the country.

Another highlight was public lighting, which increased 7.9% due to the re-registration actions for the public lighting sector.

Consumption class	Energy sold (MWh)		
	2015	2014	(%)
Industrial	5,262,677	5,566,288	-5.45%
Residential	11,527,085	10,971,668	5.06%
Commercial	6,253,194	6,029,746	3.71%
Rural	2,076,915	2,038,532	1.88%
Public lighting	1,436,622	1,331,245	7.92%
Other	2,960,647	2,886,727	2.56%
<b>Total captive consumers</b>	<b>29,517,140</b>	<b>28,824,206</b>	<b>2.40%</b>
Supply	207,542	190,794	8.78%
<b>Total</b>	<b>29,724,682</b>	<b>29,015,000</b>	<b>2.45%</b>

## Quality of service

GRI G4-EU28, G4-EU29

The DEC (Equivalent Outage Duration per Consumer Unit) represents the total number of hours during which a consumer unit experienced power outage. The FEC (Equivalent Outage Frequency per Consumer Unit) represents the frequency of disruptions to power supply.

The quality of service provided to customers by distribution utilities is measured by ANEEL using the DEC and FEC.

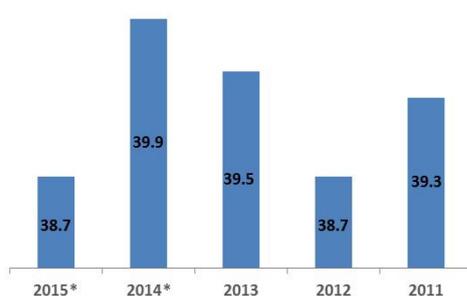
In 2015, the Eletrobras distribution companies had a positive consolidated result in the continuity index DEC of 1.2 hours when compared with the previous year, going from 39.9 to 38.7 hours. In relation to the FEC indicator, there was a consolidated decrease of 1.6 interruptions in the same period, going from 26.9 in 2014 to 25.3 in 2015.

In spite of the delays in construction works to improve the electric power network, given the difficulty to obtain investment resources in 2015, some actions had a positive impact on these results. Some of them were the construction and energizing of the new 138 kV circuits, expanding the power at substations, contracting new live line maintenance teams for 13.8 to 138 kV voltages, replacement of obsolete equipment at substations and distribution networks, installation of reclosers on the distribution network.

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### Equivalent Outage Duration per Consumer Unit (DEC)

Total DEC Eletrobras (hour/year)

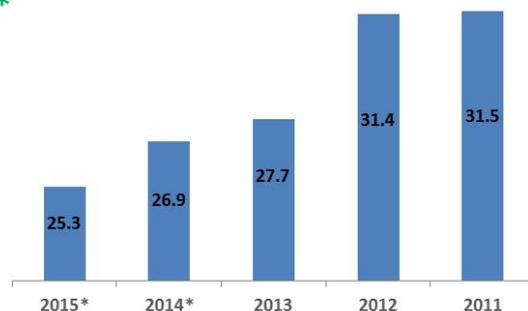


Standard DEC / Source: ANEEL.

\*Years 2014 and 2015 were consolidated with Celg-D figures; Celg-D is not consolidated in other years.

## Equivalent Outage Frequency per Consumer Unit (FEC)

**Total FEC Eletrobras (Number of interruptions / year)\***



Standard DEC / Source: ANEEL.

\*Years 2014 and 2015 were consolidated with Celg-D figures; Celg-D is not consolidated in other years.

## Distribution losses

GRI G4-EU12

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Loss in energy distribution, expressed in MWh, is defined as the difference between the energy injected in the network of the distribution company and the total energy sold and delivered. Losses can be either technical, that is, losses in distribution inherent to the transportation process, voltage transformation, and metering of energy in the utility company's network; or non-technical, that is, all other losses associated with distribution of electricity, such as electricity theft or fraud, metering errors, billing errors, and unmetered consumer units.

In 2015, all distributors but Eletrobras Distribuição Acre and Celg-D recorded an increase in losses. Consolidated losses went up from 23.62% in December 2014 to 24.69% in December 2015.

Eletrobras Consolidated	2015	2014
Technical losses	9.57%	9.51%
Non-technical losses	15.12%	14.11%
<b>Total losses</b>	<b>24.69%</b>	<b>23.62%</b>

Factors that contributed to this increase included the change in the population's behavior in the face of the rate increase, unfavorable economic conditions, and the reduced payment capacity of residential clients—this

segment recorded an increase in illegal connections as a response to suspended supply for late payment (combating delinquency).

In addition, several companies recorded delays in the Electric System Construction Program, given the difficulty to obtain financing in the scenario of uncertainty regarding the extension of the concessions, making actions to combat non-technical losses not enough to reach the regulatory level of losses.

Actions to regularize and inspect consumer units where electricity theft or fraud occur, and investments in network infrastructure allow for an improvement in the quality of the service provided, as well as its continuity and safety, contributing to reduce global losses. Out of a total of 87,157 illegal consumer units, 12% of the goal has been met, with financial execution of 21%, and completion expected for 2017.

## Delinquency

The main indicator that measures delinquency in the Eletrobras Distribution companies, the Delinquency Index (INAD), is obtained by dividing the Active Delinquency by Annualized Revenues, as shown in the chart. The different consumer categories showed a sharp improvement in non-delinquency as a result of a more effective collection process, through operational actions, such as disconnection of consumer units for lack of payment, installment plan to settle outstanding debts, legal actions, and other penalties.

In spite of the adversities in 2015, including the economic crisis, and high electricity rates because of the water crisis, which created an unfavorable condition for collection and consequent resource flow problems, preventing the hiring of disconnection teams to handle delinquent clients, the INAD improved from 11.29% in 2014 to 10.39% in 2015. This improvement was due to the rise in revenue in 2015, due to extraordinary revisions, time-of-use rates, annual adjustments, and consolidation of Celg-D in 2015.

Distributors' consolidated INAD (%)						
Class	2015	20 14	2013	2012	2011	Difference 2015x2014
Residential	8.51%	8.67%	67.11	12.61	10.10	-0.16
Commercial	6.33%	6.73%	8.14	9.46	10.27	-0.40
Industrial	5.29%	6.62%	13.35	17.20	24.37	-1.33
Rural	9.64%	10.42%	23.19	36.07	44.01	-0.77
Government	34.46%	33.83%	16.15	20.22	23.64	0.62
Utilities	46.84%	65.24%	101.06	107.63	128.76	-18.40
Public lighting	17.75%	14.21%	10.46	22.46	27.62	3.54
Other	4.96%	12.25%	15.54	11.95	16.81	-7.29

<b>Total</b>	10.39%	11.29%	<b>22.41</b>	<b>17.29</b>	<b>18.95</b>	-0.91
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Distributors' consolidated revenue (R\$ thousand)						
Class	2015	2014	2013	2012	2011	2015x2014 % change
Residential	7,284,899	5,069,994	451,414	2,848,049	2,297,026	43.7%
Commercial	3,914,012	2,610,829	1,423,912	1,620,771	1,308,353	49.9%
Industrial	2,587,238	1,790,862	842,854	1,077,049	945,200	44.5%
Rural	840,267	533,515	180,087	201,491	157,513	57.5%
Government	950,903	723,645	654,414	628,519	472,730	31.4%
Utilities	463,503	309,259	185,543	221,117	175,695	49.9%
Public lighting	566,446	341,376	211,384	167,258	136,623	65.9%
Other	114,223	76,812	49,218	68,054	52,084	48.7%
<b>Total</b>	<b>16,721,491</b>	<b>11,456,292</b>	<b>3,998,825</b>	<b>6,832,308</b>	<b>5,545,225</b>	<b>46.0%</b>

Distributors' consolidated delinquency (R\$ thousand)						
Class	2015	2014	2013	2012	2011	2015 vs. 2014 change (%)
Residential	620,219	439,524	302,962	359,11	232,05	41.1%
Commercial	247,645	175,671	115,965	153,28	134,39	41.0%
Industrial	136,820	118,502	112,485	185,21	230,39	15.5%
Rural	81,038	55,578	41,757	72,68	69,31	45.8%
Government	327,663	244,844	105,699	127,10	111,75	33.8%
Utilities	217,088	201,748	187,511	237,99	226,22	7.6%
Public lighting	100,533	48,516	22,113	37,56	37,73	107.2%
Other	5,668	9,409	7,649	8,13	8,75	-39.8%
<b>Total</b>	<b>1,736,673</b>	<b>1,293,792</b>	<b>896.142</b>	<b>1,181,101</b>	<b>1,050,635</b>	<b>34.2%</b>

## Research and Development

*GRI G4-DMA (former EU8)*

The pursuit of new ways of doing business and becoming increasingly more efficient in power generation, transmission, and distribution has always been the driving force of the Eletrobras companies. The commitment to explore ideas to access new markets and reinforce its presence where it already operates is part of the pursuit of sustainability in its operations and of improved results for the company.

All of the Eletrobras companies make annual investments in internal research and development and publish call for submissions of proposals and projects for their scientific research and technological development programs. Since 2009, they have complied with the guidelines of the corporate Research,

Development, and Innovation Policy and addressed this topic as a short-, medium-, and long-term corporate strategy. Thus, they strive to reach—and achieve—results that add competitive advantage and are critical elements to combine sustainable business growth with social and environmental responsibility.

In 2015, the company invested R\$ 223.7 million in R&D, up 12.3% year-over-year. The table below shows how much each Eletrobras company invested in research and development.

Investments in research and development*	
Company	Amount invested
Holding	R\$1,963,617.85
Amazonas Energia (without G&T)	R\$3,217,605.20
Cepel	R\$146,719,334.56
Chesf	R\$6,500,000.00
Acre	R\$1,191,991.75
Piauí	R\$2,855,006.43
Eletronorte	R\$16,530,489.72
Eletrosul	R\$61,104.51
Furnas	R\$16,386,358.70
Itaipu	R\$23,867,875.96
CGTEE	R\$54,015.50
Alagoas	R\$3,579,063.15
Rondônia	R\$743,647.57
<b>Total invested</b>	<b>R\$223,670,110.90</b>

*\*Eletrobras is released from this commitment under Law 8,987/95, and Eletropar is not a utility company. Amazonas G&T started operating in 7/1/15, reason why it has not developed any P&D project.*

## P&D project highlights

### Holding

In 2015, the holding supported the following energy efficiency P&D projects from the Technological Development Fund (FDT), through the National Program for the Conservation of Electricity (Procel), in an investment of R\$ 1,963,617.85.

- Federal University of Santa Catarina (UFSC) / Feesc: technical support to the building labeling program by creating the embryonic nucleus of the Brazilian Center for Energy-Efficient Buildings (CB3E).
- Federal University of Rio Grande do Norte (UFRN) / Funpec: technical and financial cooperation for the development of the Energy-Efficient Buildings Network (R3E). The works consist basically of integrating the parties through video conference, developing an electronic environment for concentrating content on energy-efficient buildings, and building labeling.
- Federal University of Itajubá (Unifei) / Fapepe: technical and financial cooperation among the members for integrating efforts and capacity in the implementation—through Procel—of actions to supplement the infrastructure of the Didactic and Pedagogical Energy Efficiency Lab of the Center for Excellence in Energy Efficiency (Excen). The lab provides technical qualification and professional certification on energy efficiency, and develops technical research and disseminates it in seminars focusing on Metering & Verification (M&V). It also focuses on perfecting the methodology for assessing the results of Procel, and expands its actions into new concepts.

The agreements that use FDT resources for energy-efficient actions are managed by Eletrobras through the monitoring of the physical and financial schedule.

## **Eletrobras Amazonas Energia**

In 2015, Eletrobras Amazonas Energia invested nearly R\$ 3.2 million in research and development projects. The highlights were the following:

- Voltmeter, Ammeter, Wattmeter Plier (AVAW) for the low and medium voltage distribution network up to 35kV;
- Mini-station for disposal, treatment and reuse of lubricant oils at thermal power plant in the interior of the state of Amazonas;
- Universal Anti-Fraud Shielding System for electric power meters;
- Development of a smart system to determine the harmonic impacts of multiple industrial consumers on electric power distribution networks;
- Market recovery – safe energy with theft inhibit systems; and
- Evolution of the proof of concept of the Parintins Smart Grid Project: analysis of the inter-operability of telecommunications and AMI network,

telecommunication network management, and assessment of the photovoltaic generation.

## **Eletrobras Eletrosul**

In 2015, Eletrobras Eletrosul invested nearly R\$ 61,100 in research and development projects.

The Research and Development Advisory department (APD) manages the R&D resources. Based on the corporate strategic plan, the lines of research are determined to guide the projects. All employees can contribute ideas to the development of the projects. Eletrobras Eletrosul has an R&D committee that periodically evaluates project proposals and chooses the ones that can be developed. The APD manages this whole process of selecting ideas, formatting projects, proposing the contracting of projects, and submitting them to the Board of Executive Officers. The final decision of contracting an R&D project is made by the company's Board of Executive Officers.

The resources allocated to each project depend on each theme's specifics, time of execution, the team involved, and the potential return of each project. This analysis is taken into account when formatting a project. The projects completed in 2015 and included in the previous categories are the following: Magnus Hydropower Turbine; Project for a Network of Passive Sensors for Measuring Equipment Integrity in Wireless Energy Transmission Systems; Development of Biodigestion Technology for Processing Agricultural Waste that Matches the Brazilian Rural Context; Development of a Microbial Fuel Cell for Distributed Electricity Generation.

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## **Eletrobras Chesf**

In 2015, Eletrobras Chesf invested nearly R\$ 6.5 million in research and development projects. The highlights were the following:

- Photovoltaic plant of the solar platform in Petrolina;
- From the idea to the market: developing and implementing an innovative methodology that ensures a systematic and continual value creation process in R&D+I projects for Chesf;
- Non-destructive and micro-mechanic techniques applied to the study of alkali aggregate reaction (AAR) mitigation;
- Development of a Methodology for the Electric-Energy Integrated Planning for the Northeast (DMPIER);

- Environmental management system supporting geospatial data, multimedia, and mobile devices;
- Geometrology system: detection, processing, analysis and monitoring of hydropower use at Eletrobras Chesf's structures; and
- Transmission lines' controlled switching.

## **Eletrobras Acre**

In 2015, Eletrobras Acre invested nearly R\$ 1.2 million in research and development projects. The highlights were the following:

- System prioritizing MV / HV expansion plans - 2012/2015; Analytical intelligence system of the electric power sector (ANEEL priority) - 2014/2015; and
- Universal anti-fraud shielding system for meters - 2013/2015.

## **Eletrobras Piauí**

In 2015, Eletrobras Piauí invested nearly R\$ 2.9 million in research and development projects. The highlights were the following:

- Methodology for calculating and managing losses in electric power distribution networks;
- Electric power management system based on energy efficient indicators;
- Reactive energy and harmonics offsetting to improve the energy efficiency of distribution networks;
- Integrated system for continued evaluation of the grounding system's safety at energized substations subject to lightning strikes; Methodology for optimized allocation of electric power quality monitors in distribution systems;
- Market recovery – safe energy with theft inhibit systems; and
- Development of an environment-friendly triphasic recloser.

## **Eletrobras Eletronorte**

In 2015, Eletrobras Eletronorte invested nearly R\$ 16.5 million in research and development projects. The Management of Innovation in Technology and

Energy Efficiency is based on three programs, managed by a superintendent based in Brasilia:

- The Eletronorte Research and Development Program (PEPD), whose goal is to manage technological innovation;
- The Eletronorte Intellectual Property Program (PEPI), which seeks to create a culture of innovation at the company; and
- The Eletronorte Energy Efficiency Program (PEEE), whose goal is to develop actions to fight electricity waste and reduce its cost, through energy-efficient programs and projects.

The resources used to support, fund and promote innovation at Eletronorte may be compulsory resources from Law 9,991/00, or optional resources targeted at innovative technological solutions developed by employees, and resources for the acquisition of innovation that is original only for Eletrobras.

Sources of optional resources include company or external resources through the Studies and Projects Funding Entity (FINEP). Resources passed through to the Electric Power Research Center (CEPEL) can be used to execute research projects that have a systemic vision for Eletrobras companies, and lab tests for R&D+I projects.

Eletronorte's Technological Innovation Master Plan (PDIT) is a funnel of ideas whose output is innovation, and it is responsible for orienting the company's R&D+I investments and adapt them to its strategy.

## **Eletrobras Furnas**

In 2015, Eletrobras Furnas invested nearly R\$ 16.4 million in research and development projects. The highlights were the following:

- Coconut fiber biomats - environmental use;
- High performance fiber concrete
- Rheology applied to HPP concrete;
- Comp. analysis of fragments and reforestation;
- Tip vortex cavitation;
- Atmospheric numeric modeling platform;
- Influence of network tanks on sediment;

- Structures modeling and optimization;
- Monitoring of erosion processes;
- Use of TFV generation synchronous machines;
- Photovoltaic plant - Jaiba;
- LAB UAT;
- Energy generation using pyrolysis;
- Offshore wave energy converter;
- Electric traction vessels;
- Electric traction buses;
- Strategic planning of new technologies for Smart Grid operation;
- Wind turbine with folding and articulated blades;
- Automation and monitoring of dams' safety;
- Methodology - projects optimization;
- Analysis of the macro-turbulence on stepped spillways;
- System for analyzing and forecasting the analytical matrix of risks to generation and transmission;
- Engineering regulation aspects; and
- Economic regulation aspects.

## **Itaipu Binacional**

In 2015, Itaipu Binacional invested nearly R\$ 23.9 million in research and development projects. The highlights were the following:

- Distributed energy: research on the scientific and technological methodology for distributed generation with environmental improvement;
- Distribution and transmission technologies: specialized development of research, and testing of the dynamic performance of equipment and systems associated with electric power generation, transmission, and distribution. A digital platform simulates electric systems in real time, and is dedicated to the real-time testing of the control and protection of

power systems; to studying the transitory, dynamic and permanent behavior of power systems, supervisory systems; and to power management and automation systems;

- Renewable energy technologies: research, and management and accreditation of Biogas labs; research and operationalization of the Hydrogen Production Plant in a pilot scale; support to the development of sodium batteries;
- Dams' safety: development of Applied Research in Dam's Safety through a center for studies on the behavior of these structures and their materials, to evaluate the results of the past measurements, to evaluate the correlation between the measurements made and the probable causes, and developing computational intelligence techniques relating to the behavior and safety of dams.

## **Eletrobras CGTEE**

In 2015, Eletrobras Eletrosul invested nearly R\$ 54,000 in research and development projects. The company continued executing the R&D agreements of the following projects: Microalgae, Air Quality, and CCR. It also started executing the Burn numeric modeling project, with no cost for CGTEE.

Seven project proposals are being contracted relative to Public R&D Call CGTEE 2014:

- Elastomer (using the ashes of the Candiota Plant);
- Selenium in the Environment;
- Microgenerator (using residual energy);
- Mercury (diagnosis and minimization of mercury in electrostatic precipitators and in the desulfurizer of the Candiota Plant);
- Solar energy (development of an integrated system for converting and storing solar power);
- Gasification (of the coal of Candiota); and
- Capturing CO<sub>2</sub> (post-combustion of mineral coal and synthesis of zeolites and pilot plant testing).

# Economic and financial performance

*GRI G4-9*

Eletrobras recorded net loss attributed to controlling shareholders of R\$ 14,442 million in 2015, versus net loss of R\$ 3,031 million in 2014. This result was influenced by the following factors:

- Provision for contingencies in the amount of R\$ 7,084 million, including a provision for a R\$ 5,283 million compulsory loan and adjustments in amounts referring to lawsuits involving Eletrobras Furnas, Chesf, and Eletronorte;
- *Impairment of R\$ 5,991 million, influenced by the impairment at thermal-nuclear power plant Angra 3 in the amount of R\$ 4,973 million; and*
- Losses recorded by the distribution companies in the amount of R\$ 5,195 million in 2015.

In addition to the abovementioned factors, the result for 2015 was also impacted by the following variables:



- Reversal of provision for losses in investment, amounting to R\$611 million, mainly influenced by the reversal of R\$ 1,100,499 relating to a lawsuit involving ICMS liabilities, due to a court decision in favor of subsidiary Amazonas Energia;
- Increase of 22.5% in operating and maintenance revenue in the transmission segment;
- Improvement of 146% in the results of equity investments; and
- Itaipu allocation of R\$234 million;
- Positive effect related to the Conta de Compensação de Variação de Valores de Itens da "Parcela A" – CVA (Variation Compensation Account of Items of "Portion A" – CVA), in the amount of R\$324 million.

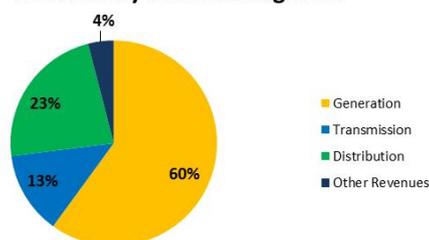


- Reduction of 53% on energy sales revenue at Câmara de Comercialização de Energia Elétrica (CCEE);
- Expenses related to energy purchased for resale in the amount of R\$ 10,766 million; and
- Reduction in compensations of the 1<sup>st</sup> installment of Law 12,783 / 2013, which showed a variation of 89% due to the decrease in the balance of payments from the 1<sup>st</sup> installment and to the recalculation of interest and updates of compensatory credits.

# Operating revenue

Net Operating Revenue of R\$ 32,589 million in 2015, an increase of 8.1% compared to the R\$ 30,138 million in 2014. Broken down by segments, the highlights were the following:

Revenue by business segment



- Generation revenues decreased by 6.1% to R\$ 19,959 million in 2015, down from R\$ 21,256 million in 2014. This was due to the reduction in revenue from the sale of energy in the spot market (CCEE), and the decrease in revenue from supply of the Eletronuclear subsidiaries, due to the scheduled shutdown of Thermal-nuclear Power Plant Angra 2 in October 2015, and CGTEE, due to the reduction in its plants' generation. Sale of energy in the spot market went down from R\$ 3,818 million to R\$ 1,812 million, especially due to the sale of energy by subsidiaries Furnas and Eletronorte in the A-1 Auction, in 2014, and the reduction in the Difference Settlement Price (PLD) in 2015. The reduction in sales at the CCEE was partially offset by the increase of 1.1% in revenue from supply, up from R\$ 12,175 million to R\$ 12,310 million, mostly due to the effect of the sale of energy at the A-1 Auction, where long-term energy was sold at an average rate above the current market value. Revenue from supply increased by 7.7% to R\$ 3,572 from R\$ 3,317 million in 2014. Revenue from construction has an equivalent amount recognized at construction cost.
- Revenues from transmission were up 20.2%, from R\$ 4,702 million in 2014 to R\$ 5,611 million in 2015, mostly influenced by the increase of 22.5% in revenues from operation and maintenance, and the rise of 17.3% in the return rate adjustment. This is mostly due to the inflation adjustment in the Allowed Annual Revenue (RAP), and the deployment of new investments. Revenue from construction went up from R\$ 1,786 million in 2014 to R\$ 2,078 million in 2015, with no effect in profit or loss because an equivalent amount is recognized as construction cost.
- Distribution revenues increased by 97% to R\$ 16,171 million in 2015, up from R\$ 8,184 million in 2014. Net of revenues relative to Celg-D, distribution revenues increased by 26.2% to R\$ 8,193 million in 2015, up from R\$ 6,491 million in 2014. The increase in revenue from supply is

mostly due to the implementation of time-of-use rates, which on the other hand increase sector charges. Net of revenues relative to Celg-D, revenues from supply increased by 5.2% to R\$ 7,689 million in 2015, up from R\$ 7,310 million in 2014. Revenue from construction has an equivalent amount recognized as construction cost.

Net Operating Revenue	2015 (R\$ million)	2014 (R\$ million)
Generation – Supply	12,310	12,175
Generation – Supply	3,572	3,317
Generation – CCEE	1,812	3,818
Generation – Operation and maintenance revenue	1,883	1,803
Generation – Construction revenues	148	240
Generation – Itaipu transfer (see II.3.a)	234	-98
Transmission – Operation and maintenance revenue	2,696	2,201
Transmission – Construction revenue	2,078	1,786
Transmission – Return rate adjustment	838	714
Distribution – Supply	14,835	7,310
Distribution – Construction revenues	1,012	873
Distribution – CVA and other financial components	324	38
Other revenues	1,484	1. 339
<b>Total</b>	<b>43,226</b>	<b>35,519</b>
<b>(-) Deductions from revenue</b>	<b>-10,637</b>	<b>-5,381</b>
<b>Net Operating Revenue</b>	<b>32,589</b>	<b>30. 138</b>

## Financial result

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The net financial result went down from net revenues in the amount of R\$ 695 million in 2014 to net expenses of R\$ 1,699 million in 2015. Net of the financial result from Celg-D, the financial result was an expense of R\$ 833 million in 2015, versus revenue of R\$ 823 million in 2014. This result is due to the rise in debt costs, up from R\$ 3,449 million in 2014 to R\$ 6,340 million in 2015, influenced by interest rates and late payment charges relative to the debt of the distributors with fuel suppliers due to the receiving of sector fund credits from the Fuel Consumption Account (CCC). Payment of compensation of the first tranche of Law 12,783/2013 went from a positive amount of R\$ 1,019 million in 2014 to a positive amount of R\$ 115 million in 2015, due to the reduction of the balance deriving from first tranche payments, and the recalculation of interest and adjustment of compensatory credits.

## Consolidated Result

Net Income	2015	2014
<b>Net Operating Revenue</b>	<b>32,589</b>	<b>30,138</b>
<b>Operating Costs</b>		
Energy purchased for resale	-10,766	-10,425
Use of the electricity grid	-1,738	-1,523
Fuel for electricity production	-1,250	-1,480

Construction	-3,238	-2,900
<b>Gross income</b>	<b>15,597</b>	<b>13,810</b>
<b>Operating Expenses</b>		
Personnel, material and services	-9,495	-8,485
Remuneration and reimbursement	-349	-387
Depreciation and amortization	-1,843	-1,777
Other expenses	-2,347	-2,146
	<b>1,563</b>	<b>1,015</b>
Equity interest	531	-1,217
Operating provisions	-14,639	-1,755
	<b>-12,545</b>	<b>-1,957</b>
Income from interest and financial investments	2,251	2,092
Inflation adjustment	2,403	346
Exchange rate variation	33	296
Debt charges	-6,340	-3,449
Charges on shareholders' funds	-41	-87
Compensation referring to Law 12,783/2013	115	1,019
Other financial results	-120	478
	<b>-14,244</b>	<b>-1,262</b>
Income tax and social security	-710	-1,701
<b>Net income for the period</b>	<b>-14,954</b>	<b>-2,963</b>
Minority interest	-512	69
<b>Consolidated net income</b>	<b>-14,442</b>	<b>-3,031</b>

## Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA)

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EBITDA was a loss of R\$ 10,702 million in 2015, with a negative margin of 33%, down 32 p.p. year-over-year. Adjusted EBITDA improved compared to 2014, and closed 2015 with a positive result of R\$ 2,853 million.

Consolidated EBITDA (R\$ million)	2015	2014
Income for the year	-14,954	-2,963
(+) Provision for income tax and social security	710	1,701
(+) Financial result	1,699	-695
(+) Depreciation and Amortization	1,843	1,777
<b>(=) EBITDA</b>	<b>-10,702</b>	<b>-180</b>
<b>ADJUSTMENTS</b>		
Loss from investments	-611	-314
Onerous contracts	366	-1,800
Provision for losses from financial assets	0	-792
Impairment	5,842	149
Provision for contingencies	7,084	3,656
Allowance for losses with property, plant and	0	235
Provision for doubtful accounts	659	-185
PID	214	380
<b>= Adjusted EBITDA</b>	<b>2,853</b>	<b>1,150</b>

## Segment reporting

Below is the result by business segment for 2015 and 2014. "Eliminations" refer to intercompany transactions that are subtracted from the consolidated profit or loss of Eletrobras.

Result by business segment (R\$ million)								
Results	Management	Generation		Transmission		Distribution	Eliminations	As at 12/31/2015
		Exploration	O&M	Exploration	O&M			
Net Operating Revenue	348	16,494	1,748	1,839	3,826	10,352	-2,018	33,589
Operating Costs and Expenses	-11,819	-21,212	-1,587	-3,254	4,008	-10,270	7,484	-45,665
Operating Result Before Financial Result	-11,471	-5,718	161	-1,415	-182	82	5,466	-13,076
Financial Result	3,958	-2,361	-657	-573	-241	-1,752	-74	-1,699
Equity interest	-6,092	-	-	-	-	-	6,623	531
Income tax and social security	-871	-127	0	257	20	11	-	-710
Net profit (loss) for the period	-14,475	-8,206	-496	-1,731	-404	-1,658	12,016	-14,954

Result by business segment (R\$ million)								
Results	Management	Generation		Transmission		Distribution	Eliminations	As at 12/31/2014
		Exploration	O&M	Exploration	O&M			
Net Operating Revenue	82	18,266	1,555	1,998	2,979	6,664	-1,407	30,137
Operating Costs and Expenses	6,075	-14,030	-1,756	-1,912	-2,792	-6,457	2,143	-30,877
Operating Result Before Financial Result	-5,993	4,236	-200	87	188	208	736	-740
Financial Result	2,463	-1,280	420	-271	-30	-596	-12	695
Equity interest	-1,484	-	-	-	-	-	268	-1,217
Income tax and social security	-242	-2,690	-1,309	3,422	-904	22	-	-1,701
Net profit (loss) for the period	-5,256	265	-1,089	3,239	-746	-367	991	-2,963

period								
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## Consolidated debt

Net debt	2015	2014*
Financing payable + Debentures - (RGR)	40,521	32,877
Cash + Securities	8,432	5,362
Financing receivable - (RGR)	15,353	12,093
<b>Net Debt</b>	<b>16,737</b>	<b>15,422</b>

\*Rectified using the new methodology

## Capital markets

On December 31, 2015, Eletrobras's capital stock was R\$ 31,305,331 thousand, represented by 1,352,634,100 shares, according to the table below.

The company's common shares are listed on the BM&FBovespa São Paulo Stock exchange under ticker ELET3, and its preferred class B and A shares are traded on BM&FBovespa under tickers ELET6 and ELET5 respectively. On the New York Stock Exchange (NYSE), the shares are traded through the ADR Level II Program, under ticker codes EBR and EBR-B. On the Madrid Stock Exchange, the shares are traded through the Latibex Program, under ticker codes XELTO and XELTB.

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Shareholders	Common		Pref. "A" (%)*		Pref. "B" (%)*		Total (%)	
<b>Controlling shareholder</b>	826,022,02	76	0	0	45,705,31	17	871,727,33	63
Federal Government	554,395,65	51	0	0	1,544	0%	554,397,19	41
BNDESpar	141,757,95	13	0	0	18,691,10	7%	160,449,05	11
BNDES	74,545,264	7%	0	0	18,262,67	7%	92,807,935	6%
FND	45,621,589	4%	0	0	0	0%	45,621,589	3%
FGHAB	1,000,000	0%	0	0	0	0%	1,000,000	0%
CEF	8,701,564	1%	0	0	0	0%	8,701,564	1%
FGI	-	-	0	0	8,750,000	3%	8,750,000	1%
<b>Non-controlling</b>	261,028,27	24	146,9	10	219,731,5	83	480,906,76	37
CBLC Custody	259,494,57	24	81,38	55	206,903,8	78	466,479,76	35
Resident	124,893,62	11	81,38	55	90,516,49	34	215,491,50	16
Non-Resident	53,229,265	6%	1	0%	95,124,43	36	148,353,70	11
ADR Program	81,371,686	7%	0	0%	21,262,87	8%	102,634,55	8%
Other	1,533,705	0%	65,53	45	12,827,76	5%	14,427,002	2%
Resident	1,533,459	0%	65,50	45	12,827,54	5%	14,426,516	2%
Non-Resident	246	0%	27	0%	213	0%	486	0%

<b>Total</b>	<b>1,087,050,297</b>	<b>100%</b>	<b>146,920</b>	<b>100%</b>	<b>265,436,883</b>	<b>100%</b>	<b>1,352,634,100</b>	<b>100%</b>
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The company's preferred shares do not have tag along rights.

In 2015, there was no material change in the Eletrobras's capital stock breakdown, such as increase, stock split, reverse stock split, bonus, or reduction.

## Outstanding shares

Number of outstanding shares				
Base date: 12/31/2015	Amount (Units)	ON	PNA	PNB
Individual shareholders	82,581,236	34,769,273	88,369	47,723,594
Corporate shareholders	1,019,064,118	917,679,827	58,523	101,325,768
Institutional investors	250,988,746	134,601,197	28	116,387,521

## Value-Added Statement

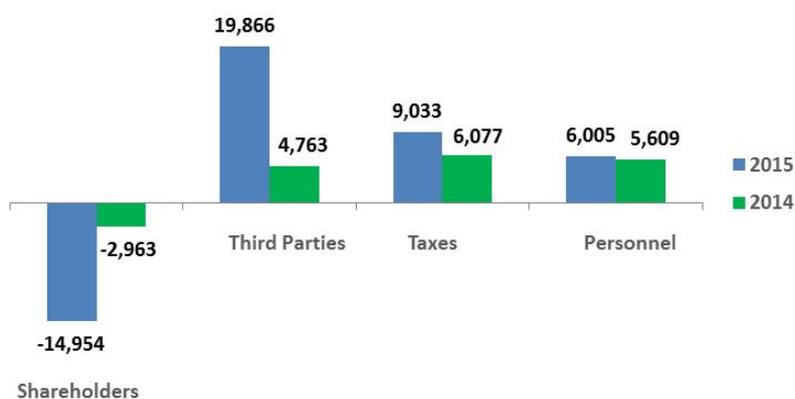
GRI G4-EC1

In 2015, the value added to shareholders recorded a negative variation of R\$ 11,991 million, down from a negative R\$ 2,963 million in 2014 to a negative R\$ 14,954 million in 2015. The increase of R\$ 15,103 in amounts to third parties mainly reflects:

- The foreign exchange impact on the foreign currency-denominated debt, reflecting on the "Loss from foreign exchange variation" account (increase of R\$ 7,220 million);
- Debt charges (increase of R\$ 2,892 million), due to a higher indebtedness and the adjustment of debts with fuel suppliers and CDI.

The increase of R\$ 2,956 million in taxes derives from the rise in taxes on revenue, especially due to the revenue from the distribution segment, which increased 97%, from R\$ 8,183 million in 2014 to R\$ 16,171 million in 2015, strongly influenced by the acquisition of Celg-D.

## Value added statement (R\$/million)



The 7.1% change in the personnel account—up from R\$ 5,609 million in 2014 to R\$ 6,005 million in 2015—is in line with inflation for the period, reflecting the salary adjustment (collective bargaining), PID of Eletronuclear, and other factors. Without Celg-D, the personnel account was up by only 1%.

This increase in amounts to third parties was offset by:

- An increase in financial income (R\$9,252 million), mostly in the “Gains from foreign exchange variation” account (R\$6,958 million) due to Itaipu’s receivables, and the “Gains from inflation adjustment” account (R\$2,923 million) for the adjustment of receivables and credits from sector funds;
- Increase in revenue from distribution.

Therefore, the change of R\$ 11,991 million for Eletrobras’s shareholders is mostly explained by the increase in provisions, including:

- Legal contingencies (compulsory loan and other), in the amount of R\$ 7,084 million; and
- Impairment of R\$ 5,991 million (including R\$ 4,973 million of Angra 3).

# Social performance

# Employees

Eletrobras understands its employees are key for the company's results and success. The Eletrobras People Management Policy sets the guidelines for providing an appropriate environment for developing, valorizing, and retaining people.

The company promotes actions that improve the work conditions and quality of life of its employees, and it goes beyond law requirements in offering a series of benefits and types of leave agreed upon on the Labor Collective Bargaining, usually negotiated every year. Eletrobras also offers benefits for employees' dependents, proving that caring for quality of life is more than worrying about the workplace.

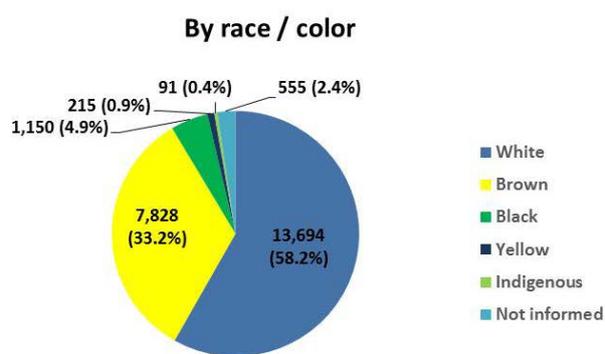
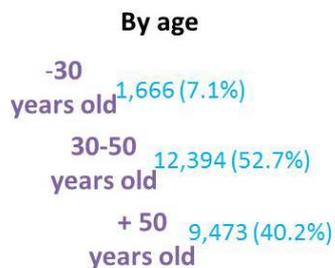
Because it is a government-controlled corporation, Eletrobras must hire its employees through public service exams, under the Federal Constitution of 1988.

Whenever it decides to call a new public exam, the People Management department checks with all other departments for their demand for professionals. The desired disciplines are chosen by Eletrobras, but the content of the exam is chosen by the institution contracted to organize it, which is approved by Eletrobras. The exams usually have an estimated number of positions plus a reserve for future calls, as necessary, for the exam's duration.

Recruiting focuses on knowledge, based on the result of the exam. The company analyzes the profile of the candidate to choose where they will be allocated to.

# Professional profile

GRI G4-9, G4-10, G4-LA12



**By employment contract**  
100% for undetermined time

**By type of employment**  
3,561 (15%) part time  
19,972 (85%) full time

# Turnover

Turnover is low at Eletrobras, with few employees leaving the company, and has remained nearly unchanged for the past few years, according to the table below.

Turnover Rate <sup>1</sup>			
Companies	2015	2014	2013
Holding	1.10%	1.70%	1.60%
Cepel	6.10%	6.20%	1.20%
CGTEE	0.70%	4.50%	2.50%
Chesf	0.40%	2.70%	2.40%
Eletronorte	0.30%	0.50%	0.50%
Eletronuclear	0.60%	1.90%	1.30%
Eletrosul	1.20%	2.00%	0.30%

Furnas	0.80%	1.10%	1.00%
ED Acre	1.40%	2.90%	2.40%
ED Alagoas	4.80%	1.10%	2.80%
Amazonas*	0.40%	0.70%	3.50%
ED Piauí	2.20%	1.20%	6.60%
ED Rondônia	0.80%	1.50%	0.40%
ED Roraima	1.30%	5.00%	1.50%
Itaipu	3.50%	1.40%	3.50%
<b>Total of all Eletrobras companies</b>	<b>1.50%</b>	<b>1.70%</b>	<b>1.66%</b>

<sup>1</sup> Refers to the admissions-to-dismissals ratio.

\* The percentage of Amazonas refers to Amazonas Energia (D) and Amazonas GT.

## Employee health and safety

Eletrobras manages occupational health and safety issues by anticipating, recognizing, assessing, and controlling occupational risks in the workplace, and promoting the health of its employees.

Medical exams, and occupational accident and disease prevention programs are promoted every year. The company also counts on the exclusive dedication of professionals of the Specialized Occupational Health and Safety Engineering Service (SESMT) in the companies' facilities and/or strategic situations.

In July 2015, the Unified Prevention Campaign was carried out on the National Occupational Accidents Prevention Day, focusing on transportation; each company addressed the matter with employees.

Employee work conditions and well-being is part of the Eletrobras companies' Sustainability Policy, and are enforced through the Occupational Health and Safety Policy, focusing on preventing accidents and occupational disease, in line with legal and regulatory requirements.

### G4-LA8

**Every year Eletrobras negotiates Collective Bargaining agreements, including health and safety issues. In 2015, the key aspects addressed in the agreements were the following:**

- **Maternity protection, reducing daily work hours by up to two hours for up to 180 days after the maternity leave.**
- **A leave is granted for the employee to accompany their spouse, first degree relatives, children, and health insurance dependents in hospitalizations for illness, surgery, home recovery, and/or emergencies.**
- **Leave for death of stepmother or stepfather in the same conditions as in the death of mother and father.**
- **Pay supplement, including in the thirteenth salary, for employees on leave, in the amount corresponding to the difference between their monthly pay and the Social Security benefit received as health assistance or occupational accident allowance.**

In 2015, the holding complied with environmental risk and dangerousness rules, and monitored employees that carry out external activities and construction work, projects and or service inspection. It also maintained the ergonomics committee, and extended the Occupational Safety and Ergonomics Programs to the offices in Brasilia.

Every year, all Eletrobras companies report on occupational risks and take necessary precautions. The Environmental Risks Prevention Program (PPRA) identifies, assesses and creates actions to neutralize the potential risk of accidents, disease and/or unfavorable workplace conditions, which are disclosed to all employees, contractors, and staff.

Eletrobras Eletronuclear uses specific tools and controls to identify and monitor workplace risks relating to nuclear energy, in order to prevent significant negative impacts. The company uses state-of-the-art technology, and has safety and emergency plans in place.

In addition to the SESMT, the Eletrobras companies also have Internal Accident Prevention Committees (CIPA). CIPA's mission is to prevent occupational accidents and diseases, in order to align work with the preservation of life and promotion of occupational health. The Internal Accident Prevention Week (SIPAT) is promoted at least once a year.

## Quality of life

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Eletrobras's different quality-of-life programs focus on preventing disease and promoting the health and quality-of-life of its employees, including actions for reducing chronic disease risk factors, encouraging the practice of exercises and promoting healthy eating habits, team spirit, and integration among employees. Therefore, the programs add value for occupational quality of life, and support the employees eligible for retirement.

In 2015, Eletrobras conducted the 1st Occupational Quality of Life Unified Survey, prepared by the Quality-of-life Work Group as part of the Transformation Plan of the Eletrobras Companies.

The goal of the action was to check the perception of the employees regarding their occupational quality of life and promoting improvement actions aligned with organizational goals. The survey had 32 questions divided into four scopes: biological, psychological, social, and organizational. Based on the answers from 5,183 employees, Eletrobras calculated that the occupational quality of life ratio is 62 (on a scale from 0 to 100).

Other actions carried out in 2015 included the following:

- Presentations of the holding's and Eletrobras Cepel's choirs

- Employees of the holding, Eletrobras Cepel, Eletronuclear, and Furnas participated in several street runs
- Annual flu vaccination campaign
- Celebration of Children's Day through the Family-Company Program, bringing employees' families closer to the company's routine, creating moments of synergy, learning, and fun at the holding
- "Pink October" and "Blue November" campaigns for breast cancer, prostate cancer, and diabetes prevention
- Occupational exercises at Itaipu and Eletrobras Furnas
- Music Festival at Eletrobras Furnas
- Ballroom dance, collective singing classes, Weight Watchers, and several art performances at Eletrobras Eletronuclear
- Workplace inter-personal relations actions, and anti-alcohol and drug abuse program at Eletrobras CGTEE
- Itaipu continued to develop the actions of the Reviver Program, whose goal is to propose a new way of seeing health, and encourage employees to be responsible for their own balance and well-being, in all spheres (physical, emotional, social, and organizational), through integrated and reflexive practices.

In the scope of the best people management practices, the holding participated in the following events to present its health and quality-of-life practices:

- HR Rio 2015 Congress;
- Annual Human Resources Congress of Latin American Energy Companies, and 3rd Annual LatAm HR in Energy;
- The company's Health and Quality-of-Life Division participated in the Panel "HR Strategies to Eliminate Health, Safety and Environmental Risk Factors";
- 4th Latin American Congress of Health, Safety, Security and the Environment in Energy Companies (4th Annual Latam HSSE Energy).

## Remuneration and Benefits

GRI G4-51, G4-52, G4-53, G4-EC3, G4-LA2, G4-LA13

Eletrobras's salary policy considers the salary matrix of each position, defined in the Career and Remuneration Plan (PCR), the resolutions of collective bargaining, and the variable pay in the form of profit sharing (PLR), agreed with unions.

The PCR is based on meritocracy, career development, promotions and salary raises, with no distinction of gender, race, or other characteristics that influence the access to the career. In 2015, women's base salary, compared to the salary of men on the same positions, was very close to being equivalent, with variations only for factors such as employment time. In managerial positions, women's average salary was 0.96 of men's salaries; in positions requiring higher education, 0.88; and in positions not requiring higher education, 0.96. The comparison between remuneration of women and men, presented by company, can be observed in the following table:

Mathematical ratio of salary and remuneration between women and men			
Company	Managerial positions	Positions requiring higher education	Positions not requiring higher education
Holding	0.95	0.98	1.11
Cepel	0.98	0.96	1.18
CGTEE	0.70	0.91	0.92
Chesf	0.81	0.81	1.00
Eletronorte	0.87	0.84	0.97
Eletronuclear	0.84	0.91	0.98
Eletrosul	0.97	0.92	1.03
Furnas	1.03	0.85	0.97
ED Acre	1.05	0.99	1.15
ED Alagoas	1.09	0.88	0.82
Amazonas Energia	0.92	0.88	0.96
Amazonas G&T	1.08	0.98	1.00
ED Piauí	1.16	0.72	0.85
ED Rondônia	0.99	0.86	1.06
ED Roraima	0.67	0.75	0.36
Itaipu	0.91	0.89	0.92
EletrobrasPar	1.23	-	-
<b>Total (average)</b>	<b>0.96</b>	<b>0.88</b>	<b>0.96</b>

In addition to the fixed and variable pay, the company also offers a series of benefits, as follows:

Caretaker program, funeral assistance, maternity leave and extended leave, paternity leave, health insurance, coverage for disability/invalidity, group life insurance, retirement funds, daycare/preschool assistance, variable pay, food/meal vouchers, vacation pay, dental insurance, public transportation voucher, leave for employees victims of domestic violence, maternity protection, leave for accompanying ill relative, leave for stepmother/stepfather death, education assistance, additional health assistance, assistance for undergraduate and graduate education in various areas, master's degree, doctorate, and specialization programs, foreign language courses, additional pay for time of service, psychological-pedagogical assistance for employees and/or dependents with special needs. The employees also have a pension fund.

## **Executive officers and top management remuneration**

The monthly remuneration of Eletrobras's executive officers is determined by the State-run Companies Governance and Coordination Department (DEST), under Decree 8,578 of November 26, 2015. The monthly compensation of the members of the board of directors and supervisory board of federal state-run and government-controlled companies shall not exceed, in any circumstance, ten percent of the average monthly remuneration of these companies' executive officers, under Law 9,292 of July 12, 1996. Members of the board of directors do not receive any additional pay for participating in board committees and/or advisory commissions. Remuneration consultants do not participate in determining the remuneration of board members and executive officers.

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Members of the Board of Executive Officers are entitled to fixed remuneration and the Annual Variable Pay (RVA) of executive officers, connected to profit sharing. In 2015, executive officers did not receive the variable pay due to a negotiation proceeding with the DEST.

## **Career plan**

The Career and Remuneration Plan (PCR) of the Eletrobras companies has been in place since 2010, and unifies the guidelines and policies on positions, career, and remuneration.

The PCR involves four dimensions— career, positions, remuneration, and performance—prepared based on the needs required by the companies'

operation model, the environment, and the reality of each organization, and based on the competence model concept.

In the competence career system, the employee evolves professionally by acquiring, developing, and delivering the competences predetermined and assessed by the organization.

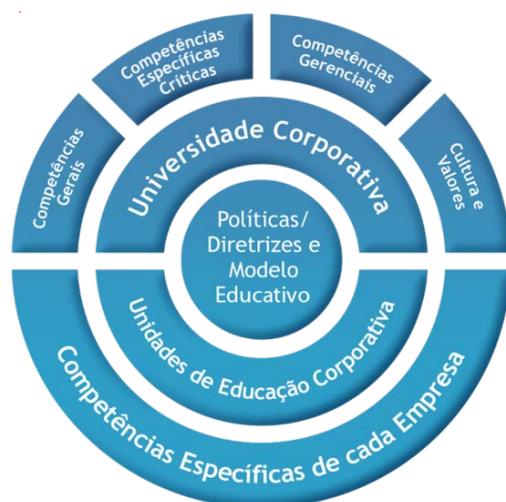
In managing people for competences, the career evolution criteria are no longer the position, activities or time, but the abilities of the professional that enable a superior performance, aligned with the organizational goals and translated into value creation. This means the career will evolve as a result of two variables: the needs of the organization and the employee's capacity to meet them.

A career model was created in this structure, encompassing a basic career and functions, with specific access and movement requirements.

## Professional development

Since its inception in 2009, the corporate education model of the Eletrobras companies provides for integration and cooperation among the companies of the system, in line with the strategic goals of integration, competitiveness, and profitability.

This model comprises the Eletrobras Corporate University (UNISE), and 15 associated corporate education units, each corresponding to one of the companies, and its goal is to promote the development of all employees in the required competences. The image below illustrates the Corporate Education of the Eletrobras Companies.



The operations of UNISE and the corporate education units is governed by the Corporate Education Plan (PEC 2015-2019), which addresses and prioritizes the actions that will be offered during the four years. Each year, due to the business dynamics, the PEC is reviewed for new strategic demands. In 2015, the plan's revision added new educational actions, like Project Management of Eletrobras Companies, qualification in the new ERP system to be implemented, Management of Special Purpose Entities, Compliance, and others.

Employee development and education provided for in the PEC are in line with the companies' strategies and are implemented through educational actions coordinated by UNISE and the Corporate Education area of each company, in addition to training that may be contracted from suppliers in the market or given by one of our professionals.

Since 2012, the Educator Employee Program allocates employees of the Eletrobras companies to promote educational actions with other employees. This creates a culture of education at Eletrobras, joining development and qualification, cost optimization, and employee valorization.

At the holding, 74 employees were trained in four educator employee actions in 2015, generating estimated savings of R\$ 62,000.00. This program is expected to be expanded in 2016, especially by using it for Individual Development Plan (PDI) courses, and other educational actions.

## Eletrobras Corporate University (UNISE)

UNISE plays a key role in developing the general competences set out in the Career and Remuneration Plan (PCR), leadership competences, dissemination of values, and critical specific competences, in order to enable Eletrobras's strategies.

UNISE is formed by five schools—Operational Excellence, Market Strategies, Management, Leadership, and Corporate Social Responsibility—and 18 areas of study according to the table below.

Transversal themes	School	Area of study
Integration, Competitiveness, Sustainability	1. Operational Excellence	1. Generation
		2. Transmission
		3. Distribution
		4. Government Programs
	2. Market Strategies	1. Trading
		2. Internationalization
		3. New Projects
		4. R&D and Innovation
		5. Sector Regulation
	3. Management	1. Management Technology
		2. Business Support
		3. Communication
		4. Corporate Governance
	4. Leadership	1. Leader Training and Development
		2. People Management
	5. Corporate Social Responsibility	1. Culture and Values
		2. Social and Environmental Responsibility
		3. Occupational Safety

The schools are great knowledge axes that reflect the Eletrobras companies' strategic guidance. The areas of study are core themes inside the schools that orient the educational programs for the development of critical professional competences that will enable these strategies.

In 2015, despite the restrictive scenario, but understanding how important certain on-campus actions are for corporate education, especially those targeted at the behavioral development of professionals and managers, UNISE adopted solutions for optimizing education resources.

Therefore, in order to maintain an appropriate budget and offer actions in a coherent and viable manner, UNISE focused on the following:

- Using the poles strategy, whose goal is to reduce/eliminate costs with transportation and hotel stays, without losing the integration of the companies. For that purpose, whenever possible, educational actions are offered in Rio de Janeiro, Brasilia, and Recife.
- Partnerships with institutions that add more value to the educational actions, and create a unique quality standard, such as the Dom Cabral Foundation (FDC), Getúlio Vargas Foundation (FGV), Brazilian Governance Institute (IBGC), the Accounting, Actuarial, and Financial Research Institute Foundation (Fipecafi), Amana-key, FIA/USP, Coge Foundation, among others.
- Using economy of scale, since the actions are negotiated in a unified manner.

In all, UNISE promoted 34 actions, including actions in the PEC and seminars sponsored by Eletrobras, with investment totaling R\$ 3.2 million, according to the table below.

UNISE 2015				
School	Investment	Number of Actions	Participants	Number of Hours
Operational Excellence	R\$ 1,440.00	8	94	2,752
Market Strategies	R\$ 596,020.00	6	167	12,796
Management	R\$ 1,338,804.93	12	364	12,362
Leadership	R\$ 1,319,415.00	6	128	19,942
Corporate Social Responsibility	R\$ 14,500.00	2	75	288
<b>TOTAL</b>	<b>R\$ 3,270,179.93</b>	<b>34</b>	<b>828</b>	<b>48,140</b>

<b>Hours of training per participant</b>	<b>58.1</b>
<b>Investment per participant</b>	<b>R\$ 3,949.49</b>

In 2016, we expect to maintain the same level, and add new distance-learning actions in order to expand the reach of UNISE's actions at optimized costs.

## Corporate education units

The Corporate Education units are responsible for developing the specific competences of its businesses by identifying the demands of the departments and based on each company's specific PEC, aligned to that of the group.

In all, the actions promoted by UNISE and the Corporate Education units totaled an investment of R\$ 38.5 million in 1.1 million hours of training, resulting in an average of 17.63 hours and R\$ 609.29 per participant in the year.

UNISE + Corporate Education Units in 2015					
Actions	Investment	Number of Actions	Participants	Participants	Number of Hours
<i>Stricto Sensu</i> Graduate Degree	R\$319,133.33	27	35	37	15,526
<i>Lato Sensu</i> Graduate Degree	R\$3,779,657.93	107	359	491	64,261
Other Educational Actions	R\$15,986,310.69	5,652	18,000	59,102	975,026
Congresses and Seminars	R\$2,490,383.94	463	2,324	3,251	51,209
Foreign Language Classes	R\$1,659,414.58	290	750	2,037	38,201
Travel and Transportation	R\$14,312,436.65	-	-	-	-
<b>TOTAL</b>	<b>R\$38,547,337.12</b>	<b>6,539</b>	<b>21,468</b>	<b>64,918</b>	<b>1,144,223</b>
Hours of training per participant					17.63
Investment per participant					R\$609.29

## Performance Evaluation

The Performance Management System (SGD) is currently in its fourth unified application cycle at the Eletrobras companies and includes the review of team goals by organizational unit, and a corporate goal set for each company, determined in the Strategic Planning of the Eletrobras System and of each company in the group.

The corporate goal is based on the 2015-2019 Management and Business Master Plan and on the Corporate Performance Goals Agreement of each company. In addition to a results review, the system also includes the assessment of general competences, which identifies the development level of the employees in their skills, knowledge, and attitudes, comparing the relation of these aspects with the behavior verified in the assessment period.

After the assessment, each employee's result is recorded in the performance classification matrix. This result allows for companies to monitor the evolution in their employees' career, and supports the Individual Development Plan (PDI) with the goal of filling in the gaps of required competences. The employees that stand out for their performance and meet the progression requirements described in the Career and Remuneration Plan (PCR) can be promoted horizontally (remaining on the same complexity level) or vertically (change in complexity level).

In each cycle, the companies share the lessons learned and seek to improve the assessment process, since the SGD allows for the company to strategically develop and manage its employees, channeling people's efforts to meet goals and achieve results that ensure profitability, sustainability, competitiveness, and value creation.

#### GRI G4-44

Eletrobras's directors and executive officers participate every year in a performance assessment process, according to the methodology contained in the Manual for Assessing the Performance of the Board of Directors and Board of Executive Officers, so that they perform their duties in line with the company's strategy, observing impacts, and economic, environmental and social risks.

The holding has standardized this methodology and enabled its replication to all Eletrobras companies. According to the methodology, directors and executive officers perform their self-evaluation and the evaluation of their respective board. Directors also evaluate the Board of Executive Officers.

The performance evaluation form of the Board of Executive Officers addresses the alignment of the management with the company's strategy and the guidelines of the Board of Directors. General results are scored and consolidated in a final report, in compliance with the methodology applied, and presented to the respondents at a feedback meeting.

## Climate research

Every two years, Eletrobras makes an organizational climate survey to monitor the workplace climate. This is an integrated survey, and all Eletrobras companies participate in it at the same time.

In November 2015, the 4th Organizational Climate Survey of the Eletrobras Companies resulted in a general favorableness rate of 69.03%. For 2017, the company goal is to reach the rate of 70%.

Employees participated and expressed their opinions voluntarily, answering questions about motivation, people management, management philosophy, and work environment. The result will help prepare actions to improve the organizational climate in each company, in line with strategic goals, coordinated by the people management department and with the participation of leaders and employees.

The organizational climate survey has also allowed for the calculation of the Corporate Performance Goals Agreement

#### Favorableness Rate

It is the benchmark for monitoring the organizational climate and shows the employees' perception about their relation with the company and its image in the market, work conditions, their work itself, people management practices, leaders and colleagues. This rate is calculated by analyzing the answers employees give to a questionnaire available for the survey. The questionnaire assesses four aspects: motivation, people management, management philosophy, and work environment.

(CMDE), whose goals include strengthening the corporate governance and corporate management process among the Eletrobras companies. These are indicators and goals that foster economic and financial, operational and strategic efficiency, reflecting on the corporate performance.

## Clients

### Product responsibility

The Eletrobras companies are known for the transparency and accessibility to information about their services. Therefore, in a standardized electricity bill model, the distribution companies provide their clients with a detailed account of their consumption, including tariffs based on tiered rates, scheduled meter readings (current, previous, and next), taxes, charges, voltage level, type of connection, meter, indicators of the quality of supply - such as DEC (Equivalent Outage Duration per Consumer Unit) and FEC (Equivalent Outage Frequency per Consumer Unit), contact points, among others.

The Eletrobras companies continue to evolve in the enhancement of the electricity bill model, which, based on a new graphic layout, provides on the backside information and images that clarify how energy can be used safely by the population. Important supplementary information is added to 100% of the bills sent out to clients. The companies disseminate information on the risks related to electricity, on energy theft and its legal consequences, low-income social tariff, regulatory information, customer rights about the calculation of indicators, concerning the duration and frequency of power outages, in addition to information about the possibility of paying electricity bills using direct debit, payment locations, and time-of-use pricing, in addition to details on overdue amounts and bill payment options.

Users can also use other channels to obtain information about energy, including the customer service centers of the distribution companies, company websites, and their Facebook and Twitter pages. The companies use their websites to provide clients with an electronic branch that offers a number of services, such as: print and request a copy, look up overdue amounts, information on the appropriate use of the service, information on the rights and responsibilities of fighting frauds, incentive for timely payment, rational use of energy—anti-energy waste—and safety in using the service.

## Customer satisfaction

GRI G4-PR5

The six Eletrobras distribution companies evaluate their customers' satisfaction through a survey conducted by the Brazilian Electricity Regulatory Agency (ANEEL) based on the ANEEL Customer Satisfaction Rate (IASC), and the survey by the Brazilian Association of Electric Power Distributors (ABRADEE), based on the Perceived Quality Satisfaction Rate (ISPO).

ABRADEE Survey – General Satisfaction Rate (ISG)			
Company	2015	2014	2013
ED Acre	44.1	55.4	44.8
ED Amazonas	68.3	78.4	71.3
ED Alagoas	57.0	74.0	66.9
ED Rondônia	52.0	62.1	61.5
ED Piauí	31.6	64.2	43.0
ED Roraima	64.0	75.5	83.5

ANEEL Survey – ANEEL Customer Satisfaction Rate (IASC)			
Company	2015*	2014	2013
ED Acre	45.25	56.66	40.17
ED Amazonas	45.93	62.59	54.64
ED Alagoas	54.56	52.30	56.33
ED Rondônia	52.15	56.21	57.24
ED Piauí	46.76	53.24	51.86
ED Roraima	51.87	57.33	58.73

\*Brazil's IASC was 50.03 in 2015.

In 2014, the holding implemented a unified biennial survey for the G&T segments, to demonstrate in a consolidated manner their customer satisfaction level. The global satisfaction and importance rate of the generation and transmission clients of the Eletrobras companies, in the commercial segment, was 86.32% and 92.00% respectively.

The methodology used to consolidate the survey was the Customer Window. This methodology measures the commercial generation and transmission customer satisfaction level based on their perception of value attributes and relating them to the importance level given by the client.

## Residential disconnections

GRI G4-EU27

In order to improve the power disconnection rate, the Eletrobras distribution companies contacted customers to investigate the causes of their debts and attempt settlement.

The table shows a comparison between the number of consumer units and the time it takes for reconnection, in the period between disconnection and payment of overdue bills.

Number of consumer units vs. Length of time between disconnection and reconnection				
	2015	2014	2013	2012
Under 48 hours	152,047	131,274	115,808	86,414
Between 48 hours and one week	51,373	41,812	47,529	35,337
Between one week and one month	67,829	57,712	77,218	49,529
between one month and one year	204,584	154,356	237,458	151,660
Over one year	N/A	N/A	N/A	N/A
Total	475,833	385,154	478,013	322,940

The Eletrobras companies also consolidated the information concerning the length of time for reconnection after payment of the installment plan negotiated for the debt.

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Number of consumer units vs. Length of time between payment of installment plan and reconnection				
	2015	2014	2013	2012
Under 24 hours	14,879	8,063	19,324	18,008
24 to 48 hours	8,153	5,045	5,281	2,905
49 to 72 hours	4,955	1,880	1,496	913
Over seven days	9,684	1,707	4,029	2,257
Total	37,671	16,695	30,130	24,083

## Educational projects

GRI G4-S01

Eletrobras also seeks, through educational and citizenship awareness projects, to strengthen its relationship with low-income communities in order to disseminate information about the appropriate use of energy, the risks and hazards of the power grid, and the rights and responsibilities of consumers.

## **Terra Nova Project**

The project brings the company closer to the residents of the Terra Nova district, by discussing issues like energy losses, distribution network safety, tips for the efficient use of electricity, focusing on their impacts. The social-educational actions were disseminated in six public schools in the district, benefiting 2,400 students. The benefits of the social rate were also explained, and there were sale services available. An event was made to report to clients on the result of the technical-operational works, and on social actions developed in the community.

Furthermore, the companies distribute booklets containing safety tips, written in plain language, about safety on power grids, commercial services, and tips on the efficient use of energy. In order to facilitate access, the distribution companies provide an accessibility portal with Offline Chat for people with hearing or speech disabilities, in compliance with the international accessibility standards set out by the Web Accessibility Initiative (WAI).

The companies have evolved especially with regard to the partnerships with utilities that provide services to the communities, such as public lighting. The Social and Environmental Responsibility and Sustainability Advisory team is developing actions in a partnership with a work group on energy losses, made of a team of multidisciplinary company professionals, facilitating the convergence in the execution of technical and social services in energy loss projects.

## **Project for the Regularization of the Distribution Network**

The Project for the Regularization of the Distribution Network in the planned perimeter is serving as a model for new projects of Eletrobras Amazonas Energia. This project was introduced at the First Meeting of Council Members of the Residential and Government Classes of the Electric Power Distribution Companies of the Southeast, in the city of Rio de Janeiro. The technical-operational project benefited 1,187 clients, by improving the distribution network and standardizing the installation at the consumer units included in the project.

# Suppliers

GRI G4-12

Eletrobras seeks to nurture a close relationship with its suppliers, monitoring the development of their activities and maintaining constant dialogue and transparent relationships, based on ethical principles and regular updates on the procedures used in hiring and contract management.

According to its Sustainability Policy, Eletrobras conducts its businesses using internationally recognized management practices, seeking to potentize positive environmental and social impacts, and minimize the negative impacts of its operations. Therefore, when the company recommends that its suppliers comply with sustainability parameters when making their products or providing their service, it is contributing for their suppliers to also act this way.

**Throughout 2015 the supply chain of the Eletrobras companies consisted of almost six thousand suppliers, totaling expenses of more than R\$ 19.7 billion in the period.**

The company is also committed to effectively contributing to the sustainable development of the areas where it operates, and therefore it requires that its suppliers and contractors prioritize clean and ecological manufacturing processes.

From an environmental perspective, Eletrobras's suppliers must preserve the environment in terms of the use of natural resources and generation of solid waste, liquid effluents, and atmospheric emissions, which must conform to the environmental standards and legislation in effect.

From a social and human rights perspective, suppliers and service providers of the Eletrobras companies enter into agreements that contain clauses governing the employment of minors under 18 at night shifts, unsafe, or unhealthy activities; minors under 16 in any activity whatsoever; or of any individuals in degrading or compulsory labor in their production chain. When suppliers register or enter bidding processes, they should attach to the documents a formal commitment not to engage in such practices.

To avoid contractual noncompliance with suppliers, Eletrobras has developed a proceeding to monitor suppliers and contracts for compliance with sustainability and human rights clauses, including the prohibition of child labor and degrading or forced labor. When there is noncompliance with these clauses, the monitored companies can be penalized according to the agreement.

## Meeting with suppliers

This meeting is periodically held by Eletrobras to add value to the relation between Eletrobras companies and its suppliers. The meetings intensify the integration, align contracting information, addresses the key guidelines and requirements for the maintenance and development of the supply chain, maximizes supplier performance, and minimizes noncompliance in contracting and executing the contracts.

This event, among other practices, engages the suppliers in the sustainability practices that permeate the company's contracting process.

## Critical suppliers

Critical suppliers provide inputs or services that are essential to the company's activities (generation, transmission, distribution, and research, in the case of Cepel), which cause a direct impact on the final quality of our services, as well as to the environment, health and safety of employees and whose activities may cause significant social risks. This definition includes all labor-intensive contractors.

These suppliers have access to confidential information that is part of the company's essential and critical business processes.

To determine whether a supplier is capable of meeting the requirements, Eletrobras adopts criteria for registering, selecting, and for bidding processes, available on the [Eletrobras](#) website, in the call for bid, in the Suppliers Handbook, the Bidding and Contracts Law, and relative legislation. Using these criteria, several aspects of the supplier are analyzed, including the following:

- **Legal license:** corporate structure, business purpose, legal nature, and others.
- **Tax compliance:** verification of whether the company has been in order with tax obligations with the government.
- **Economic and financial capability:** the company's balance sheet is analyzed to check whether the supplier is capable of honoring the commitments it intends to take on with Eletrobras.
- **Technical qualification:** the company must prove it has the necessary qualification to be a supplier of Eletrobras, through previous experience, documentation, technical visits, professionals, equipment, adequate infrastructure, and portfolio.
- **Technical Compliance with regard to the Terms of Reference (specifications of the contract):** the proposal is verified for including all technical specifications required for the execution of the purpose of the contract, including sustainability criteria.
- **Compliance with contractual clauses provided in the draft contract that is attached to the selection process:** this is

verified for the whole duration of the contract, through a contract management process. Noncompliance results in administrative sanctions (penalty) listed in the contract.

## Freedom of association

As a Global Compact signatory, Eletrobras supports the principles established therein, including freedom of association. This commitment is reflected in its Code of Ethics, valid for all suppliers and attached to contracts.

Pursuant to the laws in effect, Eletrobras is not allowed to intervene in negotiations between contractors and their employees, regardless of their presence at the company's facilities; however, all applicable measures are taken to ensure compliance with agreements and covenants.

## Engagement with communities

### Assessing the impacts of mitigation and compensation actions

*GRI G4-EU20, G4-EU22, G4-SO1, DMA*

When projects start being planned, the Eletrobras companies identify their social and environmental impacts and plan actions to minimize these impacts on the surrounding communities and to compensate them for possible negative factors.

The expectation for new jobs significantly increases inflow of migrants to the region, the substantial availability of workers overloads local infrastructure, road traffic increases, daily social interactions change, pollution and noise levels rises, there is the risk of leakage, soil contamination, and accidents—these are some of the impacts the company identifies and evaluates in the different stages of implementation of projects in the electric power sector.

However, the major potential impact on the life of these communities is the displacement of families for the implementation of hydropower generation projects and transmission lines. This is why the company always focuses on minimizing displacements, seeking alternative project designs and locations that avoid interfering with the communities.

Dialoguing and interacting with the surrounding communities—since they involve complex situations and multiple interests—takes the form of different types of engagement, especially through the involvement of the individuals affected in preparing participative diagnoses, public hearings and meetings. In their engagement with affected communities, the companies provide information and solve doubts about the stages of the study and construction of a project, the studies that will be made, the law, and commitments the companies take on. Agreements and partnerships are also made to determine how the Eletrobras companies will develop the initiatives, in a voluntary or compulsory manner—which is the case of licensing covenants.

Regarding the social and environmental impacts of their projects, the companies seek to promote actions that engage community representatives, social movements, NGOs, and universities, in addition to public administration representatives, city government, environmental agencies, INCRA, FUNAI, and Fundação Palmares.

In the areas of the reservoirs of hydroelectric power plants, in which displacement of populations is more frequent, since 2010, Brazil has relied on specific regulations that govern the identification, qualification, and public registration of the population affected. The Social and Economic Registration, conducted during the studies that predate the auction for the concession of developments, reinforces the commitment to the rights of the individuals affected and assesses the possibility of allowing residents to remain or use a remaining area of the reservoir. Inter-ministerial Ordinance 340/12 addresses the social and economic registration, and provides a series of guidelines for the execution of a social communication plan that informs the population on the registration and promotes the publicity, transparency, and the safety of those involved.

In other situations, such as for thermal plants or wind farms, physical and economic displacement is minimal and companies identify the population affected, pursuant to the instructions of environmental agencies. For transmission and distribution lines, alternative project layouts are assessed, to avoid displacement of people. If this change is not feasible, the right-of-way is registered for restricted use, upon payment of respective compensation and, when necessary, eminent domain is made through the acquisition of the property.

Eletrobras participated in the Dialogue Between Companies and Indigenous Peoples to prepare the “Proposal for Brazilian Guidelines on Good

**In 2015, Eletrobras Eletrosul allocated R\$ 4.8 million to the compensation of 200 people due to the opening of access ways and restriction of the use of the right-of-way of transmission lines. Eletrobras Distribuição Piauí used R\$ 226,622.83 as right-of-way compensation in the construction of DL 69 KV Nazária / São Pedro. Eletrobras Furnas spent R\$ 9.8 million in the compensation of 667 people and displacement of 39 people due to transmission line projects.**

Corporate Practices with Indigenous Peoples,” launched in 2015 with the goal of presenting the guidelines to govern the relation between the corporate sector and indigenous peoples in Brazil, in order to consolidate good practices that contribute to a mutually positive relationship. This articulation of the corporate sector and indigenous peoples started in 2012, with an initiative by The Nature Conservancy (TNC) to promote meetings of representatives of companies from different sectors, FUNAI, NGOs, and Brazilian indigenous peoples and organizations.

#### **Eletrobras Volunteering Program**

The Eletrobras Volunteering Program was launched in December 2015 with the goal of fostering the exercise of citizenship among its employees, strengthening the organizational culture, proximity with the community where it has operations, human and professional development, seeking to contribute to the achievement of the best results in the company’s organizational climate. Eletrobras volunteers use their time, knowledge and talent in a spontaneous and non-remunerated manner in volunteer actions with not-for-profit organizations, positively influencing the lives of the beneficiaries. Five institutions of the Professora Ismênia de Lima Martins Social Assistance Reference Center, and the Viva Rio NGO are currently supported by our volunteering program.

## **Social-environmental engagement and development programs**

*GRI G4-SO1, DMA*

Eletrobras is not only concerned with local community engagement, but also with their development. Therefore, it promotes actions to mitigate the social-environmental impact when building or remodeling one of its plants, to sensitize its population to conserving and preserving the environment, and social responsibility actions. Below are the main social development programs of the Eletrobras companies.

In 2015, the Eletrobras companies expanded their Environmental Policy to include Guidelines for Redistributing the Populations Affected by Electric Power Generation, Transmission, and Distribution Projects. These guidelines were prepared based on the relationship of the Eletrobras companies with the affected communities, on the good practices of Eletrobras companies, and on the national and international debate about this matter, including the debate on national legal frameworks.

## Holding

While conducting environmental impact and feasibility studies for electric power generation and transmission projects, the company implements social communication actions that include opening local offices, preparing and delivering communication materials such as folders, videos and radio programs, and holding meetings with different social groups in order to make consultations, disclose information, and promote social interaction. Opinion surveys can also be conducted in the project area to identify, among others, the population's expectations.

These activities are usually executed by the Social Communication Plan, which also maps the stakeholders, monitors the media, and helps promote dialogue and solve occasional social conflicts. The Environmental Impact Studies also include a diagnosis of the social aspects in areas influenced by the projects, with the participation in interviews and meetings of local communities and their representatives, and an assessment of the impacts.

One of the projects Eletrobras is responsible for are the social communication and interaction actions in the hydropower projects of São Luiz do Tapajós and Jatobá, currently in the environmental and feasibility licensing stage. Continuing the communication activities in the area, the Tapajós Dialogue team updated the mapping and diagnosis of stakeholders, visited institutions and communities, talked to students, international NGOs, and other stakeholders, joined technical teams at meetings with local communities, and produced printed and audiovisual material.

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In 2015, the meetings promoted by the Dialogue team gathered 2,100 people. Other highlights were the 2nd Pedagogical Workshop of Transversal Themes, with teachers from Trairão and Jacareacanga; the production of the booklet "The hydroelectric power plants of São Luiz do Tapajós and Jatobá" in the Munduruku language (not distributed yet), and the production and distribution of 9,700 "Voadeira" newsletters (published every two months) and 1,100 booklets about the São Luiz do Tapajós hydropower development (AHE), and 4,500 newsletters and 3,000 booklets about the Jatobá AHE. Also, 436 Environmental Impact Reports on the São Luiz do Tapajós were distributed.

In the first quarter of 2015, Eletrobras and its partner in Argentina, Ebisa, through the Uruguai River Energy Consortium, continued the communication actions in the Brazilian cities that could be affected by the Garabi AHE. Several meetings were held in the rural communities and with their representatives, such as municipal administration, associations, and unions, to provide information and discuss the Social-Economic and Property registration questionnaires.

The activities relating to the development of technical and environmental feasibility studies of the Garabi AHE were suspended in July 2015, while the

company awaits the development of the lawsuit that suspended the studies relating to the Panambi AHE.

The three “Leite Legal” Community Production Centers (CCPs) are part of a project in a partnership with Cooperativa Agroliteira Transamazônica (Coopetra) and Sebrae in the city of Rurópolis (PA). Located on side roads off of the Transamazônica highway, the Baianos, km 115, and Ouro Verde CCPs were implemented due to the efforts of Coopetra associates, who built the industrial sheds, and the private social investment of Eletrobras, used to acquire a 3,000-liter cooling tank for each center, and a 5,000-liter tank for the cooperative’s headquarters to store the additional milk coming from the CCPs. Electric equipment enabled a better processing of the milk and the production of its by-products. Therefore, in addition to the productive use of energy, the project helps generate income and improve the quality of life of the producers involved. In all, 71 producers were directly benefited. On the company side, there was an improvement of reputational favorableness rate (ISR), making the company’s brand recognized by various stakeholders.

The “Seeding Citizenship” Project (*Semeando a Cidadania*) is executed in a partnership with the administration of the city of Candiota (RS), and focuses on giving an opportunity for professional qualification to 120 kids and 80 adults in the city of Candiota, giving them equal conditions to access the labor market, and enabling the generation of income, social inclusion, and better quality of life, promoting local and regional development.

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11 classes have been implemented—boiler operation, ironware work, hydraulic installation, building painting, wood form carpentry, ceramic tile installation, masonry, general electrician work, industrial mechanics, industrial plumbing, welding—and 115 students completed the programs.

A Community Telecenter will be implemented in 2016, enabling the community to access, free of charge, the internet to send CVs, find jobs, and complete distance-learning programs.

In 2015, the partnership of Eletrobras and Norte Energia with the Kabu Institute in the Project for Supporting and Assisting the Kayapó Indians of the West enabled an increase of 274.56% in the amount of Amazon nut collected by these indigenous communities. In the previous year, the nine Kayapó communities included in the project, located in the Indigenous Lands of Baú and Menkrãgnoti, in the south of Pará, had collected 29,707 kg of nuts. In 2015, with the investment managed by Eletrobras in the acquisition of boats, engines, fuel, consumer material and clothing, the Kayapó Indians of the West managed to handle nut forests farther from their communities and structure the outflow of the product, having collected 81,565 kg of nuts. In addition to sustainable economic alternatives (stewardship of nuts, *cumarú*, and *babaçu*), the project invests in the institutional strengthening of the Kabu Institute, on inspection and protection of indigenous lands, and cultural valorization.

In 2015, with the support of consulting firm Comtexto, which specializes in indigenous matters, Eletrobras continued to negotiate with Norte Energia, FUNAI, and indigenous Kayapó communities living on the east side of the Xingu River, for the approval of and later execution of the Plan to Support the Autonomy of the Kayapó Indians of the East. In addition to contacts during the year to discuss and improve the work plan prepared with the participation of representatives of the indigenous communities, Eletrobras promoted a workshop with Funai and Kayapó leaders to present and negotiate the last details of the project, in August, in São Félix do Xingu (PA). Administrative actions have been taken among the partners with the perspective of beginning the implementation—following the example of Kayapó of the West, which has been in place since 2013—of the Plan to Support the Kayapó Indians of the East in the first half of 2016, in 22 communities represented by the *Floresta Protegida* Association.

## Eletrobras Distribuição Acre

The Energização Project is a social responsibility action involving volunteer employees and partners of ED Acre. The company develops a program to promote citizenship, with the support of its employees, for territorial development and the integration between the company and the communities where it has operations.

In 2015, this action was carried out in the Cidade do Povo district, in Rio Branco. This project brought to the city services such as registration in CadÚnico for the Social Tariff, tips on safety and electric power consumption awareness, legal advice through the “*Fala Comunidade* Project” of OAB/AC, and “MP in the Community” of the Prosecutor’s Office, in addition to actions focusing on health.

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## Eletrobras Eletronuclear

In 2015, Eletrobras Eletronuclear promoted community engagement, impact assessment, and development programs in a partnership with the city administration of Paraty (RJ), and institutions in Angra dos Reis (RJ).

In Paraty, an ambulance-speedboat was acquired for the program to re-equip the city’s Civil Defense department; the São Pedro de Alcântara Municipal Hospital was remodeled and expanded; the Jacu Road was paved and drained, with the construction of a bikeway and additional drainage in the Villa Princesa Isabel district.

In Angra dos Reis, equipment, furnishings, and a collection were acquired for building a library, to complete the installation of the Cefet campus (RJ) of Angra dos Reis. The Marine Repopulation Project of the Ilha Grande Bay (Pomar Project) continued, as well as the monitoring of Eletrobras Eletronuclear’s marine farm located in Ilha Comprida. Environmental education,

mariculture, and entrepreneurship classes were promoted, and five marine farms were donated to mariculture farmers in the surrounding area of the Nuclear Plant.

## **Eletrobras Eletrosul**

Eletrobras Eletrosul has continued the work developed with public schools in the Itinerant Open House Program for 5th grade students, with important information on electric power consumption awareness and the different energy sources.

## **Eletrobras Furnas**

In the city of Fronteira (MG), where the Marimbondo Plant is located, Eletrobras Furnas mobilized the population to clean the Grande River, through educational actions of the Environmental Education Program in 2015. Improvements were made in structures and population awareness at Jardim Veraneio regarding the rational use of water, the planting of vegetables in Permanent Preservation Areas (APP), release of fry, and lectures were given and dynamic discussions were made on the environmental theme with the kids of the "Guarda Mirim" (kid guards).

In January 2015, Eletrobras Furnas published the results of the Environmental Education R&D project in the licensing process: Methodological Construction. After three years collecting data from the populations living in the areas influenced by the Furnas transmission lines, a methodology was developed in a partnership with three universities for the implementation and evaluation of environmental education programs in the environmental licensing process of transmission systems. The methodology was presented to the Ibama and to consulting firms and companies in the electric energy sector. Thirteen scientific articles have been published so far on this study and presented in 13 national and international congresses and seminars.

## **Itaipu Binacional**

In order to meet strategic goals, Itaipu maintains direct or indirect relationships with different social actors. The company has several communication tools and involves the audiences in the preparation, planning, execution and evaluation of the programs, projects and actions it develops.

*Cultivando Água Boa* Program (Cultivating Good Water): it gathers over 20 programs and 65 actions, ranging from riparian forest reforestation, and monitoring the quality of water and reservoir levels to sustainable rural development, fish production, valorization of the institutional and regional heritage, and the sustainability of vulnerable segments. On March 30, 2015, CAB received the UN International Award for "Best water management

practices,” for its “potential to transform the lives of millions of people, because it has extraordinary possibilities.”

Developing West Program: its challenge is to raise one of the regions that grow the most in Brazil to a new development and structuring stage, focusing on propelling productive chains to expand and multiply prosperity. The region is formed by 50 cities that together have 1,291,492 inhabitants (2015 Census estimate).

Corporate Volunteering Program – Força Voluntária: introduced in April 2015, Força Voluntária resulted from an internal demand and was built by the Itaipu employees that had already been involved in volunteer work in social institutions. This was the first formal program of this type in the Eletrobras companies, and became a benchmark for the implementation of similar projects in other companies in the electric power sector and in other companies in the country. Força Voluntária is a corporate volunteering program that supports and encourages employee initiatives. The activities focus on volunteer work that transforms, that is, joining the employee’s desire to exercise their citizenship with the company’s strategies and social needs, contributing in the construction of a more egalitarian society. The initiatives are based on three pillars: Fostering Volunteer Work, Project Database, and Third-Sector Support.

## **Eletrobras CGTEE**

Eletrobras CGTEE maintained its social programs in 2015. The Native Trees Project—included in the Instrument of Conduct Adjustment with IBAMA—recovers forests in degraded areas of the drainage basins of the Jaguarão and Arroio Candiota rivers (RS).

Backyards Project (health and food safety): this project contributes to the social, economic, and environmental sustainability of socially vulnerable audiences, especially family farmers, settlers benefited by land reform, Indigenous communities, quilombo inhabitants, and students of rural and urban schools.

## **Eletrobras Amazonas G&T**

The Aquatic Mammal and Chelonia Preservation and Research Center (CPPNAQ) of Eletrobras Amazonas G&T rescues, rehabilitates and handles captive fauna, sets free apt animals (with authorization by IBAMA), and promotes educational campaigns and actions to sensitize local communities. The Center also produces scientific research, generating and disseminating information on handling and conserving the Amazon fauna. The Center has an internship program for high school students from the Balbina school, monitored visits, and partnerships with universities to foster student and research work improvement.

## Eletrobras Chesf

The environmental education programs of the 500kV Jardim/Camaçari, 230kV Banabuiú/Mossoró, 230kV Picos/Tauá, LT 230kV Messias/Recife II, and 230kV Milagres/Coremas transmission lines address land fires, and harmoniously living near the company's projects, in order to promote environmental safety and preserve the interconnected system.

In 2015, Eletrobras Chesf continued its campaigns for the Control of Sugarcane Field Fire under Transmission Lines in the state of Alagoas. 16 actions were carried out relating to environmental education, involving 992 people, including teachers, students, employees and suppliers of sugarcane mills, and inhabitants of the cities included in the program. The actions reached the following locations in the state of Alagoas in 2015: Murici, Chã de Pilar – Pilar, Boca da Mata – Atalaia, Satuba, Sumaúma mill - Marechal Deodoro, Utinga Leão mill - Rio Largo, São José da Laje Alto Piauí – Coruripe, Pindorama mill – Coruripe, Gulandin – Teotônio Vilela, Paísa mill – Penedo, Tabuleiro – Penedo, and Riachão – Junqueiro.

The actions managed to reduce the number of transitory and permanent failures of the transmission system, increasing its availability and preventing an expense of nearly R\$ 950,000 in monetary sanctions.

## Government and public policies

*GRI G4-SO1, G4-SO5, G4-DMA (former EU7), G4-DMA (former EU23)*

### Sector programs

The Eletrobras companies support important initiatives of the federal government, managing programs and sector funds in the most diverse areas of the electric power sector. These focus on universal access to electricity, energy efficiency, sustainable development, and on consolidating and expanding science and technology in the country, such as the National Program for the Conservation of Electricity (PROCEL), *Luz Para Todos*, Alternative Energy Source Incentive Program (PROINFA), and Science Without Borders.

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

Coordinated by the Ministry of Mines and Energy (MME), this is a federal government program executed by Eletrobras. The program was implemented

on December 30, 1985, to foster efficient energy use and fight waste. PROCEL actions contribute to increase the efficiency of goods and services, helps develop energy-efficient habits and knowledge, and postpones investments in the electric power sector, mitigating environmental impacts and contributing to a more sustainable country.

PROCEL promotes energy-efficiency programs in different sectors of the economy, in connection with education, information dissemination, buildings, environmental sanitation, municipal energy management, public lighting, and industry, in addition to the PROCEL Seal, helping the country save energy and generating benefits for the whole society.

The benefits for the society include both the saving of energy, and the investments postponed in the expansion of the electric power generation network.

In 2015, PROCEL contributed to savings of 11.68 million megawatt-hour (MWh), equivalent to the annual consumption of six million homes. It also avoided the emission of 1.453 million tCO<sub>2</sub> equivalent.

Indicator / Year	2015	2014	2013	2012	2011
Energy saved (million MWh/year)	11,680	10,517	9,744	9,097	6,696
GHG emissions avoided (thousand tCO <sub>2</sub> equivalent)	1,453	1,425	935	624	196
Decrease in peak demand (MW)	4,453	4,022	3,769	3,458	2,619

In 2015, the PROCEL Energy Saving Seal was given to 39 categories. The PROCEL Seal was also granted to 3,640 equipment and appliance models made by 190 companies. The PROCEL Seal Program was used by power utilities as a criterion for equipment replacement in their bonus campaigns and replacement of older for more energy-efficient equipment.

In the knowledge field, the following actions stood out in 2015 through PROCEL Educação and PROCEL Info:

- Support to power utilities in the Energy Efficiency Program (PEE) for implementing the “Energy that transforms” and “Nature of the landscape” methodologies, reaching 51,300 students, 1,290 teachers, and 200 schools.
- The episodes the “Vida de República” (Co-living) series—a partnership of Eletrobras, PROCEL, Roberto Marinho Foundation, and Canal Futura—were made available on YouTube and recorded over 15,000 views.
- Two classes completed the Energe course on energy conservation and efficiency, in 140 hours of distance learning (EaD), totaling 610 students from 89 universities throughout the country. This is a partnership with the Federal University of Itajubá.

The Brazilian Energy Efficiency Information Center's PROCEL Info website ([www.procelinfo.com.br](http://www.procelinfo.com.br)) registered, in 2015, 7,707 new users, totaling 41,662 users since it was created, in 2006. Over 1.1 million page views were recorded in the year, corresponding to a monthly average of over 90,000 views.

in 2015, PROCEL Indústria was responsible for updating the High Performance Engines Technical Guide, and for structuring the Energy Efficiency Project for the implementation of the ISO 50001 standard (Energy Management Systems) in companies that are members of the SEBRAE (RJ).

The actions developed by PROCEL Edifica in 2015 included the following:

- Implementation and consolidation of the PROCEL Building Seal (voluntary adoption by companies);
- Technical evaluation of the thermal power performance of two prototype projects in the *Minha Casa, Minha Vida Mais Sustentável* Program, in the cities of Rio de Janeiro (RJ) and Lauro de Freitas (BA);
- Publication of the Building's Operational Energy Performance publication, a benchmark for corporate offices and recommendations for DEO certification in Brazil, prepared in a partnership with the Brazilian Sustainable Construction Center (CBCS), and funded by the British Embassy, through the Prosperity Fund.

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In 2015, PROCEL EPP (Public Buildings) accounted for:

- Granting the PROCEL Building Seal, in the project stage, to the Bloco B building of *Esplanada dos Ministérios*, where the Ministry of the Environment and Ministry of Culture are located.
- Acting in the Work Group for the Implementation of ordinance 02/2014 of the Ministry of Planning, Budget, and Management (MPOG), and in the Technical Consulting Committee of the BRA 09/G31 Project – Transformation of the Energy Efficiency Market in Brazil, financed by the Global Environment Fund (GEF), executed and coordinated by the Ministry of the Environment (MMA), and operationalized by the United Nations Development Programme (UNDP). This project prioritized resources for professional qualification in energy-efficient buildings, emphasizing the public sector.

In 2015, PROCEL Sanear, in a partnership with the Federal University of Mato Grosso do Sul (UFMS), the Foundation for Support to Research, Education and Culture (FAPEC), and the LENHS Network (Sanitation Energy and Hydraulic Efficiency Labs), made the fifth edition of the hydro-energetic diagnoses qualification course, in Rio de Janeiro (RJ), for professionals of the companies that provide sanitation services in the Southeast.

In 2015, PROCEL Reluz actions resulted in energy savings of 120.67 million kWh, and a reduction of 27,510 kW in peak demand. Since 2000, nearly 2.78 million public lighting spots have been replaced in the country.

PROCEL Municipal Energy Management (GEM), in a partnership with Eletrobras Eletronorte, delivered, in 2015, four Municipal Electric Energy Management Plans to the public administration of the cities of Belém (PA), Sinop (MT), Cacoal (RO), and Porto Velho (RO), with potential savings of 9,021.3 MWh/year, 1,468.5 MWh/year, 1,078.1 MWh/year, and 4,977.4 MWh/year, respectively, totaling 16,545.3 MWh/year.

For more information on PROCEL's sub-programs, visit the [PROCEL Info website](#).

## ***Luz Para Todos Program***

The purpose of the National Program for Universal Access to and Use of Electricity - Luz Para Todos (LPT - Light For All Program), established in 2003 is to take, by 2018, electricity to the Brazilian rural population who does not have access to this service.

Considered one of the largest social programs in the world by the United Nations (UN), it promotes universal access to electricity and is an example to be followed by other nations.

**The Luz Para Todos Program has already benefited nearly 3.3 million families, or 15.6 million inhabitants of rural areas in Brazil. The initial target of reaching 10 million people was met in May 2009.**

In addition to taking energy to the rural population, the Program offers solutions for its use as a driver of social and economic development in low-income communities, contributing to reducing poverty and increasing household income. Access to electricity enables integration with health, education, water supply, and sanitation services and with the social programs of the federal government, helping retain families in rural areas. The program also provides for the free installation of up to three light boxes (one per room), two power outlets, conduits, light bulbs, and other materials required.

The initiatives of this program are prioritized to serve the communities assisted by the Citizenship Territory Program or by the Brazil Without Extreme Poverty Plan, in addition to rural settlements; Indigenous and quilombola communities; communities located within extractive reserves or within the areas of influence of energy generation or transmission projects for which the respective utility company is not responsible; schools; health centers; and community water wells.

*Luz Para Todos* is coordinated by the Ministry of Mines and Energy and implemented by Eletrobras, which manages contracts and monitors the execution of the work for rural electrification.

## Transparency in LPT's resource allocation

In LPT's structure, Eletrobras is responsible for the technical-budgetary analysis of the Construction Programs proposed by Enabling Agents, for executing the funding and subsidy granting contracts, and managing the carrying out of these contracts, releasing the financial resources and verifying their use.

Verification of the physical execution of the construction works is made through on site inspections, during which Eletrobras professionals visit a set of construction works selected in a sampling manner, and check the information registered in the LPT System.

### *Luz Para Todos: in numbers*

- Investments planned for the implementation of the Luz Para Todos Program, by the end of 2015: R\$ 22.85 billion, of which R\$ 16.60 billion (73%) refer to sector-specific resources managed by Eletrobras (Energy Development Account and Global Reversion Reserve).
- In 2015 alone, R\$ 0.66 billion were released from CDE resources.
- Since 2004, a total of R\$ 13.90 billion (funded by CDE and RGR) were released, from a total contracted amount of R\$ 16.60 billion, that is, 84% of the total resources contracted.
- In 2015, a total of 57,676 connections were made, adding to a total of 3,258,086 since 2004.
- Over 15.6 million people have benefited in the Brazilian rural area.
- 99% of the overall goal of 3,278,430 connections was reached, considering the commitment made by the enabling agents to Eletrobras and to state governments.

In 2015, a total of 12,851 projects were registered in the Project Management System of the *Luz Para Todos* Program (LPT), totaling 519,840 projects since 2004 (considering only the commitments made between the Enabling Agents and Eletrobras). This total has resulted in 2,786,062 new connections, which corresponds to 93% of the total number of connections contracted between the enabling agents and Eletrobras, as well as:

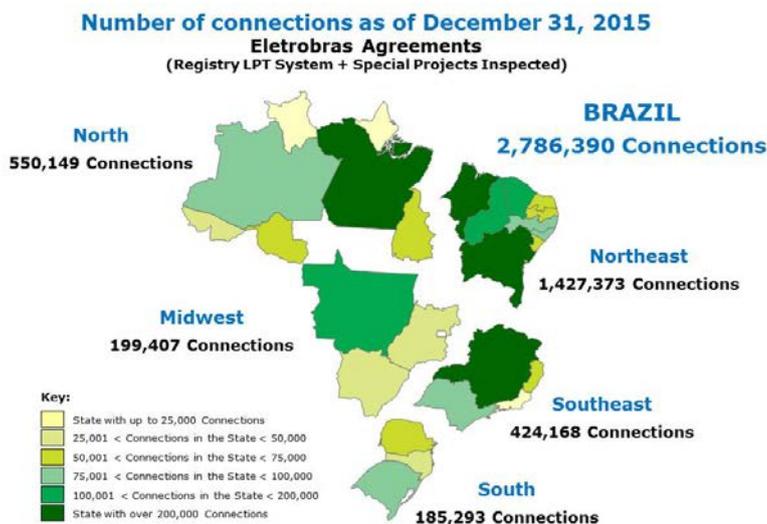
- Connection of consumer units in 5,432 municipalities in the Brazilian rural area.
- Construction of 716,892 km of high- and low-voltage networks.

- Implementation of 7.45 million poles.
- Installation of 1.06 million transformers.
- Installation of 2,258 photovoltaic systems.

Eletrabras also executed 18 agreements for Special Projects with Enabling Agents, with CDE resources, for the amount of R\$ 7.61 million, with the goal of serving 377 consumer units through decentralized generation, using renewable sources, and building small distribution networks (mini-networks). Of that amount, by the end of 2015, 328 consumer units were connected, according to on site inspections.

The table below contains the contracted amounts released from 2004 to 2015, broken down by region:

Region	Sector resources up to 12/31/2015 (R\$ million)					
	Contracted			Released		
	CDE	RGR	CDE+RGR	CDE	RGR	CDE+RGR
North	4,171.97	318.29	4,490.26	3,295.31	284.30	3,579.61
Northeast	6,818.83	942.14	7,760.97	5,865.02	837.42	6,702.44
Mid-West	864.24	589.77	1,454.01	746.95	526.96	1,273.91
Southeast	858.13	1,174.51	2,032.64	737.80	942.98	1,680.78
South	346.24	511.90	858.14	276.59	387.26	663.85
<b>Brazil</b>	<b>13,059.41</b>	<b>3,536.61</b>	<b>16,596.02</b>	<b>10,921.67</b>	<b>2,978.92</b>	<b>13,900.59</b>



The number of connections, mostly in the northern and northeastern regions of Brazil, reflects the program's focus on the regions that are farther from the South-Southeast region.

Since the implementation of the *Luz Para Todos* Program, in 2004, the Eletrobras distribution companies executed over 468,000 connections, benefiting over two billion people. The new connections made in 2015 generated additional revenue of R\$ 1.3 million for the companies.

## Indirect impacts of the LPT

The Ministry of Mines and Energy (MME) estimates that over 488,000 direct and indirect jobs were generated through the implementation of the program, considering the prioritization of local labor and purchase of domestic materials and equipment, manufactured in the areas surrounding the locations served.

The benefits generated in the economy are noteworthy, with the increased demand for home appliances and rural electric equipment.

## International technical cooperation agreement to assist remote regions

In order to support distribution companies in the provision of services to remote areas with systems based on renewable energy sources and to foster the social inclusion of the rural population of Brazil, Eletrobras maintains a technical cooperation project with the Inter-American Institute for Cooperation on Agriculture (IICA), called "Access to and use of electricity as an inclusion factor for communities in the Brazilian rural areas" (PCT BRA/IICA/09/001). The goal of the project, which completed six years of operations in October 2015, is to create processes and methodologies to qualify Eletrobras and its partners for the development and execution of projects focusing on expanding the electric power public service, emphasizing the use of renewable sources and the productive use of energy.

During 2015, this cooperation included actions such as studies on hydro-kinetic turbines for the rural electrification of riverside communities in the Amazon, viability analysis of the electrification of remote communities considering the energy efficiency aspect, and methodology for developing a computer tool to measure the costs of the main equipment of photovoltaic solar systems, joining efforts to help distribution companies in the challenge of providing universal access to electricity.

## Alternative Energy Source Incentive Program (PROINFA)

The world's largest alternative energy source incentive program, PROINFA was created on April 26, 2002, by Law 10,438, regulated through Decree 5,025/04, and started being implemented in 2004.

PROINFA has been playing its role of leveraging the diversification of the Brazilian energy matrix by increasing the share of projects based on wind, small hydroelectric power plants (PCH), and biomass sources. The right to purchase and trade energy contracted from PROINFA plants was ensured to Eletrobras for 20 years starting from the launch of the commercial operations of the projects.

PROINFA has contributed to diversify the country's energy matrix by using local energy sources, and has helped create nearly 150,000 direct and indirect jobs in the whole country, enabling large industrial demands and the internalization of cutting-edge technology.

A total of 131 new projects, shared among 60 PCHs (1,159.24 MW), 52 wind farms (1,282.52 MW), and 19 biomass-fired thermal power plants (533.34 MW), were added to the Brazilian energy matrix by PROINFA, amounting to an installed capacity of 2,975.10 MW. From the launch of the first project, in 2006, to the end of 2015, PROINFA's contribution to the system in terms of energy generated totaled approximately 70 million MWh. Energy contracting ended on December 31, 2011.

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For 2016, in order to set the annual electric power quotas referring to distribution and transmission companies, Ratification Resolution 2003 of December 15, 2015, determined that the amount to be apportioned during the year is of 11,192,200 MWh, at an estimated cost of R\$ 3.64 billion.

## Institutional relations

*GRI G4-15, G4-16*

The holding's mission is to lead the coordination of the matters concerning the regulatory framework of the electric power sector, the institutional relations, and the management of Federal Assets Managed by Eletrobras (BUSA).

## Participation in entities

Eletrobras takes part in the most important voluntary initiatives, recognized in Brazil and abroad, that promote sustainability.

- Global Compact (2006)

- Women's Empowerment Principles (2010)
- Statement of Corporate Commitment for the Protection of Children and Adolescents Against Sexual Exploitation (2010)
- 5th Edition of the Pro-Gender and Race Equality Program (2013)
- Statement of Commitment on Climate Change (2012)
- Mão Certa Program - Instituto Childhood Brasil (2010)
- Brazilian Greenhouse Gas Protocol Program - GHG Protocol (2008)
- Public Administration's Environmental Agenda (2012)
- Emissions Trading System of the Empresas pelo Clima Platform (SCE EPC) - Center for Sustainability Studies of the Business Administration School of São Paulo, of the Getulio Vargas Foundation (GVces), in a partnership with the Rio de Janeiro Green Exchange – BVRio (2014)
- Tri-national Plan Against Violence - Regional Strategy Against Trafficking of Children and Adolescents – Mercosur (2010)
- Responsible Corporate Education Principles (PRME) (2011)
- Certificate of Compliance with Transparent Management (2014)
- Treaty on Environmental Education for Sustainable Societies and Global Responsibility (2003)

The Eletrobras companies also take part in the discussion of important topics, since they are members of a number of entities, including the following:

- International Atomic Energy Agency (IAEA), where Eletronuclear is among the specialists representing Latin America
- Associação Brasileira das Companhias Abertas (Abrasca);
- Associação Brasileira de Concessionárias de Energia Elétrica (Abce);
- Associação Brasileira de Carvão Mineral (ABCM);
- Associação Brasileira de Distribuidores de Energia Elétrica (Abradee);
- Associação Brasileira das Empresas Geradoras de Energia Elétrica (Abrage);
- Associação Brasileira da Infraestrutura e Indústria de Base (Abdib);
- Associação Brasileira das Grandes Empresas de Transmissão de Energia Elétrica (Abrate);
- Associação Brasileira da Indústria Elétrica e Eletrônica (Abinee);
- Associação Brasileira das Instituições de Pesquisa Tecnológica (Abipti);
- Associação Brasileira de Energia Nuclear (Aben), where Eletronuclear is a member of the board and of the editorial board of Brasil Nuclear Magazine, published by Aben
- Associação Brasileira dos Geradores Térmicos (Abraget);
- Câmara de Comercialização de Energia Elétrica (CCEE);
- Câmara de Comércio Americana (Amcham);
- Centro Internacional de Energias Renováveis-Biogás (CIBiogás-ER);

- Centro para Inovação e Competitividade (CIC);
- Comissão de Integração Elétrica Regional (Bracier);
- Comissão de Integração Energética Regional (Cier);
- Comissão de Proteção ao Programa Nuclear Brasileiro (Copron);
- Comissão de Uso Racional de Recursos Naturais, of Rede Rio de Sustentabilidade, where the holding coordinates a work group;
- Comitê Brasileiro de Barragens (CBDB);
- Comitê da Bacia Hidrográfica do São Francisco (Cbhsf);
- Comitê Brasileiro de Eletricidade (ABNT/Cobe);
- Comitê Brasileiro do Conselho Mundial de Energia (CME);
- Comitê Brasileiro de Gestão e Economia de Energia da ABNT (which the holding coordinates);
- Brazilian Global Compact Committee (CBPG);
- Comitê Consultivo do Projeto Esplanada Sustentável (which the company is a member of);
- Comitê de Entidades no Combate à Fome e pela Vida (Coep);
- Comitê Gestor de Índices de Eficiência Energética do Ministério de Minas e Energia (MME), which the holding coordinates;
- Comitê Nacional Brasileiro de Produção e Transmissão de Energia Elétrica (Cigre);
- Comitê Permanente para Questões de Gênero do MME e Empresas Vinculadas (Eletrobras Amazonas Energia is a member);
- Conseil International des Grands Réseaux Électriques (Cigré);
- Conselho de Consumidores, where Eletrobras Distribuição Piauí is the Executive Secretariat;
- Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Cebds);
- Conselho Mundial da Água (CMA);
- Fórum Nacional da Gestão de Ética das Empresas Estatais;
- Fórum Brasileiro de Mudanças Climáticas (the holding used to coordinate this forum);
- Fórum de Meio Ambiente no Setor Elétrico (the holding used to coordinate this forum);
- Fórum de Meio Ambiente do Setor Elétrico Brasileiro (Fmase);
- Fundação Nacional da Qualidade (FNO);
- Global Sustainable Electricity Partnership (Gsep);
- Instituto Ethos de Empresas e Responsabilidade Social;
- Instituto Nacional de Investidores (INI);
- Instituto Nacional de Pesquisa e Desenvolvimento de Empresas Inovadoras (Anpei);
- Instituto para o Desenvolvimento de Energias Alternativas da América Latina (Ideal);
- International Electric Research Exchange (Iere);
- Instituto Nacional de Metrologia, Qualidade e Tecnologia (Inmetro);
- International Energy Agency (IEA);
- International Hydropower Association (IHA);
- Operador Nacional do Sistema (ONS);

- Organização das Nações Unidas para o Desenvolvimento Industrial (Onudi);
- Rede Latino-americana e do Caribe para a Eficiência Energética (Red-LAC-EE), where the holding chairs the Executive Committee;
- Section of the Latin American Nuclear Society (LAS);
- Sustainable Energy for All;
- World Association of Nuclear Operators (Wano);
- World Energy Council (WEC);
- World Nuclear Association (WNA);
- World Water Council (WWC) – Seção Brasil.

In addition to associations, the company also participated, by itself, in the debate of and support to several public policies and initiatives for the development of the sector and the society:

- Meetings promoted by SDH with the goal of preparing an Action Benchmark Document for the Promotion and Defense of Human Rights at State-Run Companies. This initiative of the SDH is part of the strategy of mobilizing companies, government bodies and the civil society to build a National Human Rights and Companies Plan, as recommended by the United Nations Human Rights Council Guiding Principles.

- Organization of the 1st International Workshop on Smart Grids Regulation, in a partnership with Cigré Brasil and Eletrobras Furnas.

- Participation and forwarding of contributions to the 12 public hearings of ANEEL, especially the 1st and 2nd stages of AP 032/2015, which aimed at obtaining subsidy and additional information for discussing the concept of the GSF and subsidies for the improvement of the instruments for the renegotiation of the risk of displacement of the hydropower generation participating in the Energy Reallocation Mechanism (MRE).

- Contribution to the MME public consultation referring to Ordinance 515 of November 10, 2015, including the report "Methodology for the Calculation of Guaranteed Power Output of Hydroelectric Power Plants Dispatched in a Centralized Manner," with the goal of establishing the methodology for the calculation of guaranteed power output of hydroelectric power plants dispatched in a centralized manner in the National Interconnected System (SIN).

- Preparation and forwarding to ANEEL of a proposal to improve ANEEL Resolution 063/2004, which addresses the proceedings to regulate the penalties to concession, permission, and authorization holders and other electric power installation and service agents, and to the entities in charge of operating the system, selling electricity, and managing the resources from sector charges.

- Follow-up on, at ABRATE and ANEEL, the developments of the public hearing 027/2014, which addresses the proposal to improve Resolution 270/2007; this

resolution sets the terms regarding the quality of the public electric power transmission service.

- Coordination of the work group for the standardization of rate review and adjustment proceedings, and their integration to the project for the Implementation of the ERP System in the Eletrobras companies (ProERP), and the work group for the merger of Amazonas GT into Eletrobras Eletronorte.

- Negotiations with ANEEL and SPU regarding the application and interpretation of law 1,383/74.

## Communication mechanisms

GRI G4-37, G4-50, G4-57, G4-58

Eletrobras seeks to provide an increasing number of mechanisms that contribute to strengthening its relationship with external and internal audiences. The Ombudsman's Office is one of the most important and relies on various channels to receive and forward suggestions, claims, reports, compliments, and requests for the improvement of internal processes, and provide transparency in Eletrobras's initiatives.

In order to facilitate and encourage participation of shareholders in the meetings convened by the company and to present contributions to understand the matters proposed, the company also makes available, on its website, the Eletrobras Shareholders' Meeting Participation Handbook. Shareholders can find detailed information about the matters discussed in these meetings through a link provided in this guidebook.

In all communication channels, the name of the reporting person is kept in secrecy and the content of the message is treated with seriousness, exemption, and in a reserved manner. The Eletrobras companies take on the commitment to not retaliate, and to make sure no employee will retaliate based on information supplied in good faith.

Eletrobras's website offers "*Fale com o RI*" (Talk to IR), which is another communication channel through which shareholders can reach the Investor Relations department, in addition to e-mail or over-the-phone contact, in case of questions, recommendations, or other relevant requests.

**Ombudsman's Office:** This office can be reached through the numbers (21) 2514-4526/5895, through regular mail sent to Av. Presidente Vargas, 409/17° andar - Centro - Rio de Janeiro/RJ - CEP: 20071-003, through personal contact, at the same address, or through the e-mail [ouvidoria@eletrobras.com](mailto:ouvidoria@eletrobras.com). Eletrobras website also provides a form to contact the Ombudsman's Office, found at [www.eletrobras.com/ouvidoria](http://www.eletrobras.com/ouvidoria). In 2015, the Ombudsman's Offices of the Eletrobras companies received 37,097 contacts, 34,158 (92%) of which were resolved and 2,939 (3%) were being processed on December 31, 2015. Compared to the previous year, there was a significant increase (100%) in the

number of contacts, partly justified by the addition of Ombudsman contacts of Celg-D in 2015.

**Gender Channel:** Created in consonance with the Federal Government's Pro-Gender Equity Program, the gender channel is dedicated exclusively to the internal audience and is available on the intranet. This tool receives contacts (suggestions, comments, or grievances) related to gender, discrimination, and sexual harassment issues.

**Reporting Channel:** Created to address requirements of the Sarbanes-Oxley Act (SOX), exclusively to receive reports about potential accounting and/or financial irregularities or frauds in the Eletrobras companies and about potential cases of corruption in Brazil and abroad, with strong emphasis on anonymous reports (websites of all Eletrobras companies or at [www.eletobras.com/canaldenuncia](http://www.eletobras.com/canaldenuncia)).

**Talk to the CEO:** This tool places employees and the CEO of the company in direct contact; the e-mail address [falecomopresidente@eletobras.com](mailto:falecomopresidente@eletobras.com) is an additional channel, exclusively dedicated to the internal audience and replies to e-mails are monitored by Eletrobras's Ombudsman's Office.

**Citizen Information Service:** Monitored by the Ombudsman's Office to address requests and inquiries that fall under the Access to Public Information Act. In relation to management of the demands concerning Law 12,527 (Access to Public Information), Eletrobras's Citizen Information System – SIC received 804 requests for information, all fully addressed, in 2015. Of those requests, 762 (95%) were answered, and 42 were being answered by the end of 2015. Among the Eletrobras companies, the holding received the most requests through e-SIC in 2015: 220 (27% of all requests received by all the companies), and 98% were answered.

# Environmental Performance

Eletrobras' Environmental Management System monitors all environmental actions of the companies. It is based on three core elements: the Environmental Policy, the Environment Committee (SCMA), and the System of Indicators for Corporate Sustainability Management (IGS System).

**Environmental Policy:** steers the treatment of social and environmental issues associated with the energy projects of the Eletrobras companies through a document that reinforces the company's commitment to the respect for the environment and the sustainable development of the country. In 2015, a new version of this policy was finalized, incorporating a guideline about the resettlement of people affected by electricity sector enterprises to the other five guidelines that refer to biodiversity, environmental communication, social, environmental, and equity management of reservoirs, environmental education, and climate change.

In 2014, Eletrobras approved the Internalization and Disclosure of Environmental Policy Plan in the Eletrobras companies. In line with this corporate guidance from the holding company, several actions were carried out by Eletrobras companies throughout 2015, using multiple communication channels with all employees. For a relevant example, we mention the production and propagation of the video "Eletrobras and the Environment", which presented the words "I care" as the campaign guiding element, also posters and booklets were created and distributed to employees. Policy internalization actions were developed in the companies during the week of the environment and a team from the environmental area of the holding company held presentations about Environmental Policy at the headquarters of Eletrobras distribution companies.

**Environment Committee (SCMA):** space for discussing practices and guidelines for the social and environmental issues of the companies. It is composed of managers of the environment department of the companies, who convene at least three times each year. Currently, SCMA has 13 working groups and a topic-specific committee.

**System of Indicators for Corporate Sustainability Management (IGS System):** since 2010, the IGS System has monitored the environmental indicators of all Eletrobras companies. As a strategic tool for the company, currently, the system has 187 indicators and 280 variables that involve topics such as water, energy, waste, biodiversity, volunteer actions, and compliance.

In 2015, the IGS System had 588 users registered across the Eletrobras companies. Its expansion to the social, economic, financial, energy efficiency and governance dimensions is being developed.

# Water

GRI G4-EN8, G4-EN10

The rational use of water resources is essential to maintain the provision of services to the energy market and develop the activities conducted by the Eletrobras companies.

The years 2012, 2013, 2014 and 2015 were characterized by periods of rainfall below historical averages in several regions of the country, causing reduction in water availability in some river basins, being named "water crisis", which, in addition to affecting water supply, hindered the generation of power by our hydroelectric power plants. Therefore, Eletrobras must guide and implement best practices in water resource management, aiming at the maintenance of the business, the prevention of the effects arising from critical hydrological events, the multiple uses of water, and the decrease in the impacts on the population and the environment.

In 2015, Eletrobras began to hold the vice-presidency of the Water Technical Committee of the Brazilian Business Council for Sustainable Development (Cebds).

The water used in the hydroelectric power plants to generate electricity is not consumed, but only diverted to move the turbines, therefore is not considered in the total volume of water consumed. Likewise, the seawater used by Eletrobras Eletronuclear (approximately 3,199 million m<sup>3</sup>) to cool the secondary system of the Angra 1 and 2 nuclear power plants is fully returned to the sea at Saco Piraquara de Fora with a slight rise in temperature, which is constantly monitored to comply with the standards established by environmental laws and to prevent any impact on the aquatic wildlife.

In 2015, a total of 4,615,056.94 m<sup>3</sup> of water were used for administrative purposes, including the volume used in fish farming stations of Eletrobras Furnas, and 3,196,741,779.89 m<sup>3</sup> for thermal power generation, as shown in the next tables. There was also an increase in water coverage data withdrawn from groundwater sources and from the supply network.

## Total volume of water used for administrative purposes, by source, in m3

Source	2015	2014	2013
Surface water <sup>1</sup>	3,611,235.02	3,609,999.68	3,621,391.50
Groundwater <sup>2</sup>	423,280.69	184,769.65	199,109.30

Supply network <sup>3</sup>	580,541.23	579,773.41	581,610.10
Total (in m <sup>3</sup> )	4,615,056.94	4,374,542.74	4,402,110.90

Data does not consider the following companies:

- 1- In 2015: Distribution companies, Chesf, CGTEE, Amazonas Energia, Amazonas Geração e Transmissão, Eletronuclear. Not applicable to Cepel and Eletrobras Holding. In 2014: Distribution companies, Chesf, Cepel, CGTEE, Amazonas Energia, Eletronuclear, Itaipu Binacional and Eletrobras holding. In 2013: Eletrobras Amazonas Energia, Eletronorte, Eletrosul, Furnas, and Itaipu Binacional.
- 2- In 2015: Amazonas Geração e Transmissão, Chesf, CGTEE, Acre, Alagoas, Rondônia, Roraima and Eletronuclear. Not applicable to Cepel and Eletrobras Holding. In 2014: Distribution companies, Chesf, Cepel, CGTEE, Amazonas Energia, Eletronuclear and Eletrobras holding. In 2013: Eletrobras Amazonas Energia, Eletronorte, Eletrosul, Furnas and Itaipu Binacional.
- 3- In 2014: Eletrobras Distribuição Roraima.

In Eletrobras' Business and Management Master Plan 2015-2019, Eletrobras established as an indicator the reduction of administrative consumption of water from the supply network. Based on 2014 consumption (579,773.41 m<sup>3</sup>) the goal is to achieve a consumption of 571,076.81 m<sup>3</sup> in 2019.

### Total volume of water used for thermal power generation, by source, in m<sup>3</sup>

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Source	2015	2014	2013
Surface water <sup>1</sup>	20,531,665.54	35,879,025.70	9,495,785.2
Groundwater <sup>2</sup>	193,229.30	207,900.00	4,176.00
Total (in m <sup>3</sup> )	20,724,894.84	36,086,925.74	9,499,961.2

Not applicable to Distribution companies, Itaipu, Eletrosul, Cepel and Eletrobras Holding.

In 2015, data does not consider the following companies:

- 1- Chesf.
- 2- Chesf, CGTEE, Amazonas Energia, Furnas and Eletronuclear.

In 2015, there was a decrease in the use of water drawn from surface sources in plants operated by Eletrobras CGTEE and by Eletrobras Amazonas Geração e Transmissão.

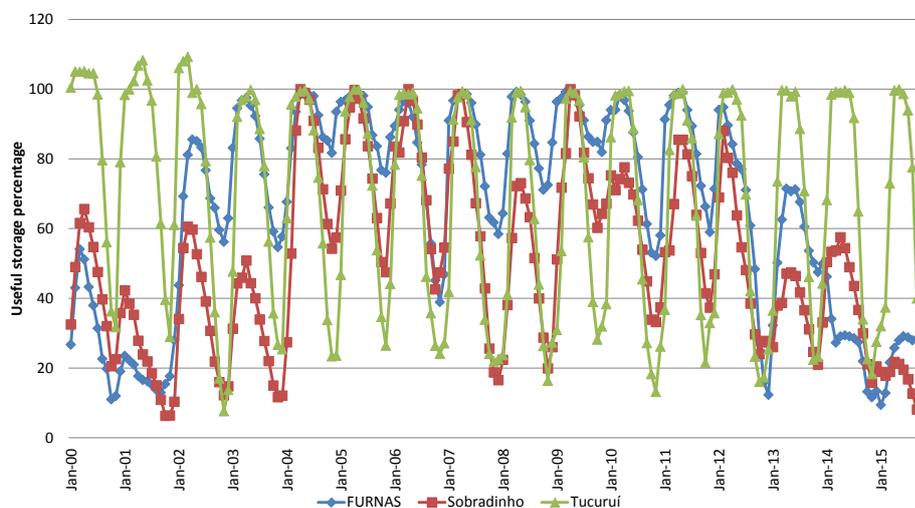
Eletrobras companies also promoted the reuse and recycling of water, mainly through wastewater treatment, capturing rainwater and intelligent use in cycles, adding about 3 million m<sup>3</sup> in reused water in 2015, in the Eletrobras, Eletronorte, Eletronuclear, Eletrosul, Furnas and CGTEE companies, in addition to Itaipu.

Eletrobras and its companies have a technical group to jointly assess and monitor the hydric resources topic. The Working Group on Water Resources and Hydroelectric Potential of the Eletrobras Companies (GTRH-EE) was established in 2005 in order to address the various issues related to the hydric resources topic that influence Eletrobras companies' operations and results. The group prepared the draft text for the Water Resources Policy of Eletrobras companies (PRH-EE), which was approved in June 2010.

The GTRH-EE has been monitoring the situation of water resources and has developed an evaluation of historical streamflow for the entire period currently provided by the Brazilian electricity sector (1931-2014), of all projects 100% Eletrobras, with the objective of evaluating the behavior of the basins in recent years. Still in 2015, the group began a diagnosis of water use for power generation in thermal and nuclear power plants of Eletrobras companies. These and other questions related to the issue were contained in the document "Panorama of Water Resources Situation for Eletrobras Power Generation companies", from April 2014, prepared by the group.

In order to illustrate the water resources situation a chart is presented below for the period 2000-2015 with the storage volume percentages of the three major reservoirs of Eletrobras companies and of the electricity sector. It is noted that the regulation reservoirs volumes are not only related to water availability, but also from centralized dispatch of power plants that are connected to the National Interconnected System, coordinated by the Electric System National Operator (ONS). The importance of regulation reservoirs for the country should be emphasized, as they provide the multiple uses of water and allow better conditions so that priority uses are maintained during periods of low rainfall.

### **Useful storage percentage achieved by the reservoirs of Tucuruí, Sobradinho and Furnas**



\* Calculation period: from January 2000 to December 2015. (Source: ONS, historical volumes of the reservoirs)

Observing the chart above, it may be noted that the water levels of the Sobradinho (PE) and Furnas (MG) reservoirs until the end of 2015 were influenced by the recent period of rainfall below historical averages in their basins, situation which has become a little more favorable after the rains that occurred in early 2016.

## Energy

GRI G4-EN3, G4-EN4, G4-EN6, G4-EN7

As a company committed to maintaining environmental and business sustainability, Eletrobras develops actions to mitigate and monitor power consumption. The direct energy consumption, renewable and non-renewable, happens in the use of equipment and machinery, in thermal power plants operation, in the vehicle fleet, among other operations.

On the other hand indirect energy refers to consumption by intermediate sources i.e., the energy consumed in the form of electricity. The following shows the power consumption of Eletrobras companies in 2015, inside and outside the organization.

Consumption Inside the Organization	
Fuels in TPPs in 2015	GJ
Biodiesel	1,758,730
Natural Gas	59,817,568
Coal	27,962,651
LPG	566
Fuel Oil	5,490,305
Diesel	25,018,119
SubTotal	120,047,939
Uranium	53,161,671
<b>Total</b>	<b>173,209,610</b>
Fuel in Administrative activities 2015	GJ
Biodiesel	17,104.00
Automotive Ethanol	30,574.00
Ethanol added to gasoline	18,211.00
Natural Gas	266.42
Coal	n.a.
Gasoline	72,886.00
Aviation kerosene	0.00
LPG	2,605.00
Two-stroke oil	62.48
Fuel Oil	0.00
Diesel	243,306.00
Aviation kerosene	6,384.00
<b>Total</b>	<b>391,398.90</b>

Consumption Outside the Organization	
Activity	GJ
Fuel transportation	112.87
PIE	45,444,402.00
Non Energy Products Transportation	64,737.00
Air Travel	159.65
Employee Transportation	68,838.00
<b>Total</b>	<b>45,578,249,52</b>

Electricity Consumption in 2015	
Atividade	Em Gj
Administrative activities	380,550
Thermal generation	500,814
Hydroelectric generation	615
Transmission	395,604
Distribution	24,125
<b>Total</b>	<b>1,301,707</b>

## Goals

In order to improve the management and environmental efficiency in Eletrobras companies in 2013, the holding company suggested that their companies establish goals for reduction in consumption of some resources, also in order to contribute to reducing the emission of greenhouse gases.

The suggested indicators were the percentage of reduction from fossil fuel use of own vehicle fleet (scope 1) and the reduction percentage in own consumption of electricity from the public grid (Scope 2). Having the year 2012 as baseline, which shall be completed by 2015, each company has set its own goals. On a consolidated basis, we tried to reach the 6.6% reduction in consumption in ground mobile sources and 3.6% relative to the consumption of electricity.

Goal	Year	Consumo (liters)	Variation %	Goal reached?	Emissions (tCO2e)	Variation %	Goal reached?
Scope 1	2012	6,046,702	-	-	15,375	-	-
6.6% reduction in consumption in ground mobile sources	2015	5,607,261	- 7.27	YES	14,178	-7.79	YES
Goal	Year	Consumo (liters)	Variation %	Goal reached?	Emissions (tCO2e)	Variation %	Goal reached?
Scope 2	2012	70,007,064	-	-	4,506	-	-
Reduction of 3.6% relative to the consumption of electricity	2015	55,555,173	-20.64	YES	6,750	49.79	YES

The Monitoring the overall goal for the Eletrobras companies was carried out as follows:

- Consumption goals: for the units of the companies defined for their individual goals having 2012 as the baseline, it was verified the values consumed, in 2015, of fuels (scope 1) and electricity (scope 2).
- Emissions goals: for the units of the companies defined for their individual goals having 2012 as the baseline, it was verified the GHG emission values, in 2015, of fuels (scope 1) and electricity (scope 2).

In the period, the consumption of fossil fuels for ground vehicles decreased 439,441 liters, 7.27% less than in 2012. GHG emissions decreased 7.79%, exceeding the target.

However, one must consider the target set by Furnas, not included in this calculation for being of a different nature: the scale increase of renewable fuels (ethanol) consumption, to 6% in 2015. In 2012, Furnas vehicles consumed 18,570 l of ethanol, while in 2015, this consumption rose to 234,334 l, an increase of 1.162%, representing a 1.090% improvement over the established goal.

The goal concerning power consumption of the public grid was also successfully achieved; the reduction of all companies was 14,451,891 kWh, which corresponds to 20.6% less than the consumption in 2012. Despite the reduction in the power consumption (Scope 2) in the 2012-2015 period, the goal for emission of GHG equivalent was not met. This is explained by the higher dispatch of thermoelectric plants in the National Interconnected System (SIN) in this period to compensate for the reduced power generation by hydroelectric plants in the country, caused by the severe drought, which greatly increased the CO<sub>2</sub> emission factor of the SIN and consequently the calculation of this portion.

In Eletrobras' Business and Management Master Plan 2015-2019, the company established new goals for these two indicators. The intention is to achieve a reduction of 0.2% per year until 2019, having as base line the 2014 consumption in all operating units of Eletrobras companies. For the fossil fuel consumption of own vehicle fleet, 301,655.62 GJ in 2014, the goal is to reach the consumption of 298,639,07 GJ in 2019. For the 884,134.27 MWh consumed in 2014, the goal is to achieve 835,692,93 MWh in 2019.

# Climate Change

*GRI G4-EC2, G4-EN15, G4-EN16, G4-EN17, EN21*

Eletrobras has the goal of contributing to the transition to a new development model based on a low-carbon economy. With this in mind, in 2012, Eletrobras' senior management signed a statement concerning climate change, in which the company makes commitments that steer the actions of Eletrobras and of its companies concerning issues on climate change. Such statement is included to the Environmental Policy of the Eletrobras companies (item 3.2.4).

In order to achieve this goal, Eletrobras companies, via its risk management integrated process, act identifying, analyzing, treating and monitoring risks, not only climate change and greenhouse gases risks, but also all their correlative identified in both environmental and in social fields.

So it is important to note that the Eletrobras system risk matrix is organized in pillars (strategic, operational, financial and compliance), divided into categories within risk events are organized. The events related to the environment, can be found both in the strategic and operational pillars. Among them we highlight the risks: Climate Change (physical and regulatory nature), Hydrological risk (physical and regulatory nature), Biodiversity and Physical Environment (physical and regulatory nature), Environmental Licensing (regulatory nature), Environmental Controls (physical and regulatory nature), Environmental Accidents (physical nature) and Greenhouse Gas Emissions (physical and regulatory nature), which were prioritized in 2015 and had their factors and impacts mapped and analyzed. Then for each of those risks, recommendations were defined and based on them, action plans were developed, whose activities aim to reduce the group's exposure to such risks.

These activities consist mainly of measures to reduce greenhouse gases emissions, greater control of the management of inputs and contaminants, adaptation and/or readjusting to impacts caused by climate change and projects for the prevention and/or compensation of possible impacts generated by businesses in their surrounding areas. These plans should be implemented by risk managers and monitored by appropriate authorities in order to verify its effectiveness in mitigating each of these risks. Regarding the costs associated with the implementation of these measures/projects, it is not business practice to measure them in a stratified manner and/or by project, since they are included in the budget of the areas responsible for their treatment.

To ensure the implementation of actions to manage GHG emissions, prioritize renewable energy projects, and encourage studies on climate change are some of Eletrobras companies' goals, mainly when significant climate changes took place, affecting the country's water availability in recent years,

and subsequently, the generation of hydroelectric power, forcing a higher dispatch from the thermal power plants, especially those that use fossil fuels.

Even facing this adverse situation, the greenhouse gas emissions of the Eletrobras companies were reduced, as can be seen in the following table:

Greenhouse Gas Emissions				
	2015	2014	2013	2012
Scope 1	8,413,812	9,358,352.2	10,270,406.6	8,169,468.0
Scope 2	1,839,372	2,544,950.0	1,771,779.4	1,654,495.0
Scope 3	2,991,807	1,985,312.3	1,828,086.1	1,948,184.0
<b>Total</b>	<b>13,244,991</b>	<b>13,888,614.5</b>	<b>13,870,272.1</b>	<b>11,772,147.0</b>

For more information on this subject, the questionnaire answered by Eletrobras relative to carbon is publicly available on the CDP website:

<https://www.cdp.net/en-US/Pages/HomePage.aspx>

The GHG emissions inventory of companies Eletrobras uses the IPCC methodology (2006) and the Greenhouse Gas Protocol - GHG Protocol (WRI, 2004) guidelines, having as organizational limit those companies in which Eletrobras holds the operational control. In the operational control approach, an organization is responsible for 100% of the GHG emissions of the corporate units over which it has operational control, not accounting for those emissions coming from operations in which the organization has only corporate participation. GHG Protocol is a corporate standard for accounting and reporting greenhouse gas emissions, launched in 1998 and revised in 2004, recognized internationally, and today the tool most used worldwide by companies and governments to understand, quantify and manage their emissions.

The information necessary for the preparation of this Inventory were collected in each company through their representatives in the GT3 - Climate Strategy Working Group, established under the SCMA - Subcommittee on Environment of Eletrobras companies.

The following figure presents the process of preparation of the GHG inventory of Eletrobras companies, its scope, general structure and sources listed.

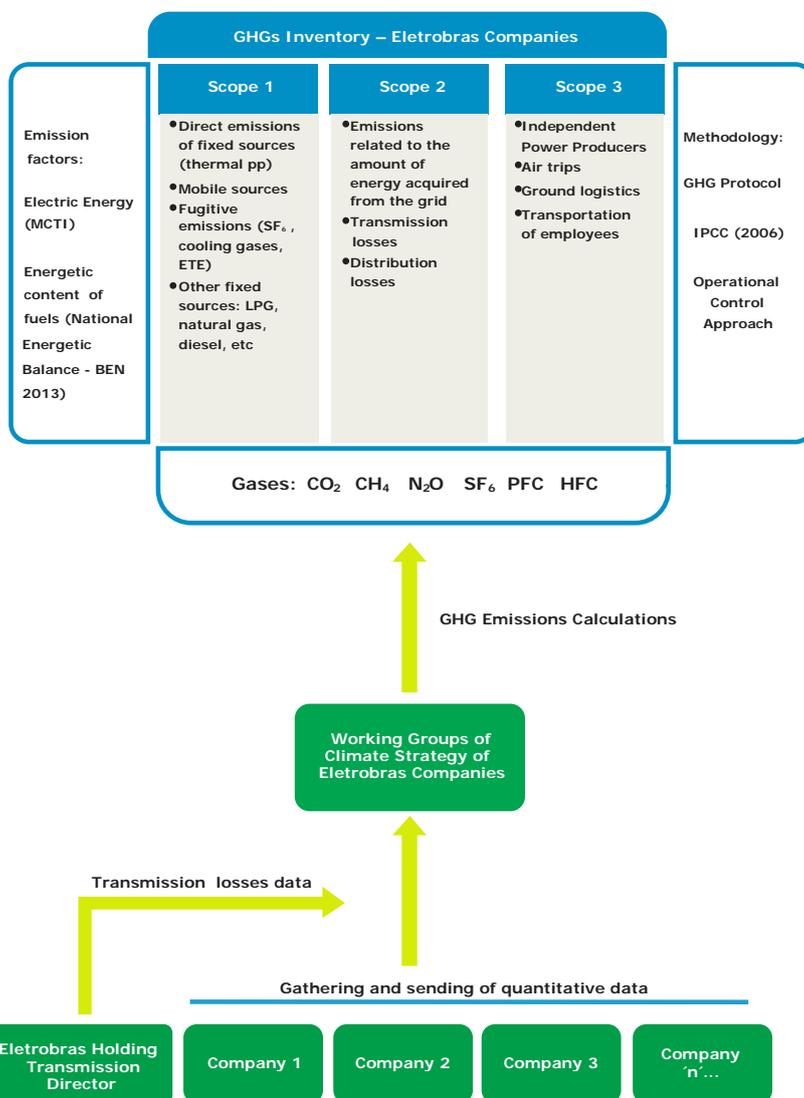


Figure 1 - Processes for Elaboration/Production of GHG Emissions Inventory related to Eletrobras companies.

For the calculation of emissions from electricity consumption and losses in transmission and distribution, emission factors for the transmission grid (National Interconnected System - SIN) were used, which are calculated and published by the Ministry of Science, Technology and Innovation-MCTI (available in the following web-site: <http://www.mct.gov.br/index.php/content/view/321144.html#ancora>).

In Brazil, since there is mandatory addition of a fraction of sugar cane ethanol in gasoline, and biodiesel in the diesel as well, oil derived fuels present less potential of pollution as those used internationally. Thus, the CO<sub>2</sub>

emissions from the consumption of biofuels (biodiesel, ethanol added to gasoline and ethanol in vehicles) are reported separately from the calculations of this inventory, because these emissions are reabsorbed through photosynthesis (in crops of sugar cane and soybeans, among other vegetables used in the production of these biofuels).

Due to this reason, since the last Eletrobras companies GHG inventory (base year 2013), for the fuel consumption of road mobile sources (ethanol, natural gas, gasoline and diesel), emission factors published in the first National Inventory of Atmospheric Emissions by Road Vehicles (MMA, 2011) are used replacing the IPCC factors.

Emissions resulting from the conventional thermoelectric generation from independent power producers of energy (PIE), whose energy is used by the distribution utilities and resold to their final consumer (e.g., Eletrobras Amazonas Energia, Eletrobras Distribuição Rondônia, Eletroacre and Eletrobras Distribuição Roraima), are quantified in the scope 3 and therefore they are presented separated from emissions related to the Eletrobras companies' own thermoelectric park, which are considered in scope 1.

The value of consumed fuels energy content was calculated on the basis of the conversion factors set out by the BEN - National Energy Balance report (base year 2013).

For the calculation of the GHG emissions intensity were considered the scopes 1 and 2 (direct and indirect emissions related to purchase of energy), as defined by the Carbon Disclosure Project (CDP) and other GHG emission reporting.

GHG emissions from hydroelectric reservoirs belonging to Eletrobras companies were not considered because there is, so far, no international scientific consensus methodology that allows to estimate these emissions and calculate the emissions balance (or net emissions) of water bodies.

In addition to the GHG emissions, the emissions of sulphur oxides (SOx) and nitrogen oxides (NOx) are also estimated, according to indirect calculation methodology (Source: European Environmental Agency. Air pollutant emission inventory guidebook: Technical guidance to prepare national emission inventories /2009), which is based on the information on consumption of fossil fuels by the thermoelectric powerplants of Eletrobras companies.

This inventory was verified by independent third party and all the information and memories, in addition to identification of data sources, are archived. The independent auditor assurance letter was issued in May 20, 2016 by KPMG Risk Advisory Services Ltd. The KPMG Risk Advisory Services Ltd is a simple Brazilian society, a limited liability company, and member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative – ("KPMG International"), a Swiss entity.

## SOx and NOx Emissions

GRI G4-EN21

SOx and NOx emissions in own TPP in 2015 were 37,118.50 tons and 19,675.90 tons respectively.

At coal-fired thermal power plants, the continuous monitoring is done by extraction method with analysis by non-dispersive infra-red absorption for SOx and NOx. In the monitoring by isokinetic sampling, the following methods are used: For SOx, the Cetesb L9.228 method; for NOx, the Cetesb L9.229 method.

The Monitoring of Air Emissions from Candiota Thermoelectric complex is carried out by independent systems, operating continuously to verify the atmospheric emission in each flue of the Complex: Flue 1 (Boilers I and II - Phase A); Flue 2 (Boiler III - Phase B); Flue 3 (Boiler IV - Phase B) and Flue 4 (Boiler V - Candiota TPP, Phase C).

The flues are built in reinforced concrete and are 150 meters high in Phases A and B and 200 meters in Phase C. Each system performs the measurement of sulfur dioxide concentrations (SO<sub>2</sub>), nitrogen oxides (NOx), carbon monoxide (CO) and particulate matter (PM).

The percentage of oxygen (O<sub>2</sub>) in air emissions, pressure values, temperature and flow of flue gases are also measured to correct the concentration of pollutants in milligrams per normal cubic meter (mg / Nm<sup>3</sup>), at 6% oxygen, according to process characteristics and environmental licensing settings. The variables are measured every second, generating an average at the end of each hour. This hourly average is transmitted to a Supervisory Center for Environmental Monitoring at Eletrobras CGTEE, which relays the data to the environmental licensing agency, IBAMA.

Monthly reports containing the validated data from air emissions monitoring, failure identification and conclusions on monitoring are sent in physical medium to IBAMA, with the signature of the area responsible.

Isokinetic samplings are held monthly in each flue, subject to operational availability of each Generating Unit, in order to validate the continuous monitoring.

Eletrobras CGTEE maintains, by contract with a specialized company, maintenance and periodic calibrations in continuous monitoring instruments. This monitoring meets the requirements of environmental enforcement agencies and CONAMA Resolution No. 436 of December 22, 2011.

## Biodiversity

Considering that environmental issues are directly associated with the nature of Eletrobras companies, the management and minimization of impacts on biodiversity are a strategic guideline that must be incorporated into our projects from planning to operations.

In view of the Environmental Policy of Eletrobras' principles and guidelines, the companies develop biodiversity recovery and protection initiatives, aimed at rational use of energy resources while maintaining a balance with the environment, engineering aspects and environmental aspects, always serving the principles of sustainability.

Since 2012, the Environmental Policy of Eletrobras has specific guidelines for Biodiversity, to improve the management and include the issue in the decision-making processes of all Eletrobras companies.

Guided by the compliance to public policies and international agreements to which Brazil is a signatory, Eletrobras companies seek to maintain a systematic and continuous improvement in management practices, with the help of the IGS system, a tool that allows monitoring the environmental performance of companies regarding biodiversity issues. Since 2012, the IGS system has specific indicators and variables for the management of biodiversity, for example, to support protected areas, recovery of degraded areas, flora and fauna monitoring programs, among others.

Considering the importance of the development of initiatives representing a difference in the management of social and environmental issues and which may bring benefits to the region where the project was implemented, Eletrobras develops, since 2011, the project "Best Practices". The update of this project in 2015 showed an increase in voluntary activities by companies to protect biodiversity, which can be considered an important indicator of the commitment of the companies in promoting environmentally sustainable development. This result is in line with the goal of Eletrobras of increasing investment in biodiversity protection by 2019.

The analysis of biodiversity-related risk is considered critical to improving the management and performance of Eletrobras companies. In line with this perception, the biodiversity-related risks were identified in the company's Risk Matrix and reported to the management. Furthermore, in 2015 Eletrobras began to participate in the pilot project developed by the Institute for Sustainability Leadership (CISL), from the University of Cambridge. The "Natural Capital Protocol" project aims to identify the premises / business impacts in relation to biodiversity and biodiversity in relation to business as well as the opportunities arising from this interaction, aiming to improve management. Participation in this project is in line with the activities carried out under the Biodiversity Technical Chamber (CTBio) of the Brazilian Business Council for Sustainable Development (CEBDS), where Eletrobras holds the vice presidency, and the Environmental Committee of the Eletrobras Companies (SCMA).

Still in 2015, the SCMA has defined that the "Study on exposure to risks related to biodiversity and strategies for the management of biodiversity and performance improvement within Eletrobras companies" will be developed by the Biodiversity Working Group and Aquatic Resources of this Committee.

## Waste

The IGS system also assists in the management and monitoring of waste generated by the activities of Eletrobras companies. Since verifications are carried out constantly, it is possible to detect inconsistencies such that one resulting in the need to review the data presented for the year 2014. The corrected value of the total waste in 2014 was 1,444,294.96 tons.

In 2015, the companies disposed of 1,430,168.34 tons of waste, mostly to industrial landfills and to reuse. Much of the waste comes from ash generated by the operation of coal-fired thermal power plants located in Candiota (RS).

At the Eletrobras companies, treatment of solid waste complies with the laws in effect. Hazardous waste is collected, sorted, and stored at its source, according to its main characteristic (oily waste and solvent-contaminated waste, etc.) and then shipped to companies that specialize in transportation, treatment, and disposal of this type of waste. In the storage and final disposal of biomedical waste, all Eletrobras companies comply with ANVISA standards

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As for the ashes, part is destined to landfills and some is generally reused by the cement industry, according to the demand from the construction industry.

## Cases

- Reverse Logistics and Manufacturing of Outdated Energy meters Project: developed by Eletrobras Distribuição Alagoas, started in 2014, this project is an example of environmental initiative that generates revenue for the company. The project objective is the environmentally proper disposal of energy meters, both outdated meters (meters with over ten years of use), and also meters of vegetative growth. Unlike other contracts with its suppliers, this contract was intended to sell scrap materials to the recycler who won the auction, which took place in June 2014. A total of 59,330 meters were transferred to the recycler, totaling 5 lots. For each lot delivered, according to contract term, the recycler issued a certificate of disposal, reporting the total of each component in the respective lot (plastic, glass, iron, etc) and the final disposal of these materials. A total amount of R\$61,109.90 (R\$1.03 unit price) was generated in revenue.

- In 2015, the auctioning of industrial waste by Eletrobras Eletronuclear aiming reuse/reprocessing/recycling generated revenue of R\$221,145.00 for the company.
- Eletrobras Eletronorte sold its used insulating and lubricant oil, as well as batteries and scrap metal generating revenue and minimizing environmental impacts. In 2015 the value reached R\$774,150.00.
- Eletrobras Furnas sold its oil and ferrous scrap amounting to R\$1,836,900.00.

## Spills

The Eletrobras companies have local contingency plans and conduct drills that enable the companies to prevent accidents related to spills and other types of incidents that could require the evacuation of the workplace.

Furthermore, the companies have built tanking dikes and use materials such as sawdust, absorbent mats, and containment berms. The companies also conduct environmental audits to inspect the effectiveness of the containment methods used in the prevention of this type of accident.

In case of accidents, processes are immediately reviewed and errors are assimilated as lessons learned to avoid recurrence.

# Ibase Table

# Summary of GRI G4 Disclosures

GRI Indicator		Page / Direct Answer	External assurance
<b>1. STRATEGY AND ANALYSIS</b>			
<b>G4-1</b>	Statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization	Message from the president	
<b>G4-2</b>	Description of key impacts, risks, and opportunities	Risk management	
<b>2. ORGANIZATIONAL PROFILE</b>			
<b>G4-3</b>	Name of the organization	Eletrobras	
<b>G4-4</b>	Primary brands, products, and services	About Eletrobras	
<b>G4-5</b>	Location of the organization's headquarters	Headquartered in Brasília (DF) and its main office is located in Rio de Janeiro (RJ)	
<b>G4-6</b>	Number of countries where the organization operates	Eletrobras companies	
<b>G4-7</b>	Nature of ownership and legal form	Mixed capital traded corporation	
<b>G4-8</b>	Markets served	Business performance	
<b>G4-9</b>	Scale of the organization	Financial performance, Business performance, Employees	
<b>G4-10</b>	Total number of employees	Employees	
<b>G4-11</b>	Percentage of total employees covered by collective bargaining agreements	All employees of the Eletrobras companies are covered by collective bargaining agreements.	
<b>G4-12</b>	Describe the organization's supply chain	Suppliers	
<b>G4-13</b>	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	De-verticalization of Amazonas Energia	
<b>COMMITMENTS TO EXTERNAL INITIATIVES</b>			
<b>G4-14</b>	Report whether and how the precautionary approach or principle is addressed by the organization	Precautionary principle	
<b>G4-15</b>	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	Message from the President and Institutional relations	
<b>G4-16</b>	List memberships of associations (such as industry associations) and national or international advocacy: organizations in which the organization, holds a position on the governance body, participates in projects or committees, provides substantive funding beyond routine membership dues	Institutional relations	
<b>3. IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES</b>			
<b>G4-17</b>	List all entities included in the organization's consolidated financial statements	Page 9	
<b>G4-18</b>	Explain the process for defining the report content and the Aspect Boundaries	Pages 9 and 10	
<b>G4-19</b>	List all the material Aspects identified in the process for defining report content	Page 11	

<b>G4-20</b>	For each material Aspect, report the Aspect Boundary within the organization	Page 11	
<b>G4-21</b>	For each material Aspect, report the Aspect Boundary outside the organization	Pages 10 and 11	
<b>G4-22</b>	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements	Pages 27, 29 and 156	
<b>G4-23</b>	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	There were no significant changes from previous reporting periods in the scope and aspect boundaries	
<b>4. STAKEHOLDER ENGAGEMENT</b>			
<b>G4-24</b>	List of stakeholder groups engaged by the organization	Pages 10 and 11	
<b>G4-25</b>	Report the basis for identification and selection of stakeholders with whom to engage	Page 11	
<b>G4-26</b>	Report the organization's approach to stakeholder engagement, including frequency of engagement	Page 11	
<b>G4-27</b>	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	Page 11	
<b>5. REPORT PROFILE</b>			
<b>G4-28</b>	Reporting period	About this report	
<b>G4-29</b>	Date of most recent previous report	2014	
<b>G4-30</b>	Reporting cycle	Annual	
<b>G4-31</b>	Contact point for questions regarding the report or its contents	sustentabilidade@eletrobras.com	
<b>G4-32</b>	Report the 'in accordance' option the organization has chosen, GRI Content Index and External Assurance Report	About this report	
<b>G4-33</b>	Report the organization's policy and current practice with regard to seeking external assurance for the report	Summary of GRI G4 Disclosures / Audit Opinion	
<b>6. GOVERNANCE</b>			
<b>GOVERNANCE STRUCTURE AND COMPOSITION</b>			
<b>G4-34</b>	Report the governance structure of the organization, including committees	Governance structure	
<b>G4-35</b>	Report the process for delegating authority for economic, environmental and social topics from the Board of Directors to senior executives and other employees	Governance structure	
<b>G4-36</b>	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the Board of Directors.	Governance structure and Supporting agencies	
<b>G4-37</b>	Report processes for consultation between stakeholders and the Board of Directors on economic, environmental and social topics	Communication mechanisms	
<b>G4-38</b>	Report the composition of the Board of Directors	Governance structure and Board of Directors	
<b>G4-39</b>	Report whether a Board of Directors member is also an executive officer (and, if so, which one?)	Governance structure	
<b>G4-40</b>	Report the nomination and selection processes for the Board of Directors and its committees	Governance structure	

<b>G4-41</b>	Report processes for the Board to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders	Conflict of interest	
<b>G4-42</b>	Report the Board's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	Governance structure	
<b>G4-43</b>	Report the measures taken to develop and enhance the Board's collective knowledge of economic, environmental and social topics	Corporate governance > principles	
<b>G4-44</b>	Report the processes for evaluation of the Board of Directors' performance and governance	Performance evaluation	
<b>G4-45</b>	Report the Board of Directors' role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Report whether stakeholder consultation and materiality are taken to Board.	About this report and Risk management	
<b>G4-46</b>	Report the Board of Directors' role in reviewing the effectiveness of the organization's risk management processes	Risk management	
<b>G4-47</b>	Report the frequency of the Board's review of impacts, risks, and opportunities.	Risk management	
<b>G4-48</b>	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	About this report	
<b>G4-49</b>	Report the process for communicating critical concerns to the Board	Governance structure	
<b>G4-50</b>	Report the nature and total number of critical concerns that were communicated to the Board and the mechanism(s) used to address and resolve them.	Communication mechanisms and Compliance	
<b>G4-51</b>	Report the remuneration policies for the Board of Directors and senior executives	Compensation and benefits	
<b>G4-52</b>	Report the process for determining remuneration Board of Directors and senior executives	Compensation and benefits	
<b>G4-53</b>	Report how stakeholders' views are sought and taken into account regarding remuneration	Compensation and benefits	
<b>G4-54</b>	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country	The ratio between the average compensation and the highest-paid individual is 4.62. All employees considered work full time.	
<b>G4-55</b>	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country	The ratio between the percentage increase in median compensation is 0.85 of the increase of the highest paid individual. All employees considered work full time.	
<b>7. ETHICS AND INTEGRITY</b>			
<b>G4-56</b>	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	Mission, vision and values / Conduct and ethical principles	
<b>G4-57</b>	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines	Conduct and ethical principles / Communication mechanisms	

<b>G4-58</b>	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines	Conduct and ethical principles / Communication mechanisms	
<b>Economic Performance</b>			
<b>Aspect</b>	Economic performance		
<b>EC1</b>	Report the direct economic value generated and distributed	Distribution of added value (DVA)	
<b>EC2</b>	Financial implications and other risks and opportunities for the organization's activities due to climate change	Climate Change	
<b>EC3</b>	Coverage of the organization's defined benefit plan obligations	Compensation and benefits	
<b>ENVIRONMENTAL</b>	<b>Global Compact</b>		
<b>Aspect</b>	Energy		
<b>EN3</b>	Energy consumption within the organization	Energy	
<b>EN4</b>	Energy consumption outside of the organization	Energy	
<b>EN6</b>	Reduction of energy consumption	Energy efficiency / Energy	
<b>EN7</b>	Reductions in energy requirements of products and services	Energy efficiency / Energy	
<b>Aspect</b>	Emissions		
<b>EN8</b>	Total water withdrawal by source	Water	
<b>EN9</b>	Report the total number of water sources significantly affected by withdrawal by type	The company does not significantly affect water sources by withdrawal	
<b>EN10</b>	Percentage and total volume of water recycled and reused	Water	
<b>EN15</b>	Direct greenhouse gas (GHG) emissions	Climate Change	
<b>EN16</b>	Energy indirect greenhouse gas (GHG) emissions	Climate Change	

<b>EN17</b>	Other indirect greenhouse gas (GHG) emissions	Climate Change	
<b>EN21</b>	NOX, SOX, and other significant air emissions	Climate Change	
<b>Social: Labor practices and decent work</b>			
<b>Aspect</b>	Employment.		
<b>LA2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Benefits	
<b>LA3</b>	Return to work and retention rates after parental leave, by gender	All employees of the Eletrobras companies, that had the end of their maternity and paternity leave in 2015, have returned to work, with the exception of one Chesf employee, who resigned during his paternity leave.	
<b>Aspect</b>	Occupational health and safety		
<b>LA5</b>	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	100% of the employees of the Eletrobras companies are represented by health and safety committees	
<b>LA8</b>	Health and safety topics covered in formal agreements with trade unions	Health and safety	
<b>Aspect</b>	Diversity and Equal Opportunity		
<b>LA12</b>	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Employee profile	
<b>Aspect</b>	Equal Remuneration for Women and Men		
<b>LA13</b>	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Compensation and benefits	
<b>Aspect</b>	Supplier Assessment for Labor Practices		
<b>Social: HUMAN RIGHTS</b>			
<b>Aspect</b>	Non-discrimination		
<b>HR3</b>	Total number of incidents of discrimination and corrective actions taken	In 2015, 3 cases of discrimination were received by Furnas Ethics Committee and Itaipu's Ombudsman's Office. Both cases were resolved in the same year with those responsible.	
<b>Social: Society</b>			
<b>Aspect</b>	Local communities		

<b>SO1</b>	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Community engagement	
<b>Aspect</b>	Anti-corruption		
<b>SO3</b>	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Compliance	
<b>SO4</b>	Communication and training on anti-corruption policies and procedures	Compliance	
<b>SO5</b>	Confirmed incidents of corruption and actions taken	A total of ten complaints of corruption were received. Of these, four were analyzed and the complaint was considered unfounded; three cases of corruption were subject to corrective measures (warning, dismissal without cause and 5 days suspension); one is being investigated by the holding; one is in disciplinary proceedings and one is being investigated by the court.	
<b>Aspect</b>	Compliance		
<b>SO8</b>	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	The total significant fines (above 1% of NOI) was R\$396,504,796.05. No non-monetary sanctions were verified.	
<b>Social: Product Responsibility</b>			
<b>Aspect</b>	Product and Service Labeling		
<b>PR5</b>	Results of surveys measuring customer satisfaction	Clients	
<b>Aspect</b>	Compliance		
<b>PR9</b>	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	No significant fines were verified (above 1% of NOI).	
<b>Sector Supplement</b>		<b>Page / Direct Answer</b>	<b>External assurance</b>
<b>Aspect</b>	Organizational Profile		
<b>EU1</b>	Installed capacity, broken down by primary energy source and by regulatory regime	Generation	
<b>EU2</b>	Net energy output broken down by primary energy source and by regulatory regime	Net energy output	
<b>EU3</b>	Number of residential, industrial, institutional and commercial customer accounts	Residential: 3,470,864; Institutional (government and public services): 288,361; Commercial: 52,021; Industrial: 11,857; Other categories (rural, private consumption, etc.): 234,441; Total: 4,057,544. Celg-D consumers were not	

		added.	
<b>EU4</b>	Length of above and underground transmission and distribution lines by regulatory regime	Transmission, Distribution	
<b>Aspect</b>	Availability and Reliability		
<b>DMA (former EU6)</b>	Management approach to ensure short and long-term electricity availability and reliability	Business performance (Transmission service quality)	
<b>EU10</b>	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	Planned capacity vs. projected electricity demand	
<b>Aspect</b>	Demand-Side Management		
<b>DMA (former EU7)</b>	Demand-side management programs including residential, commercial, institutional and industrial programs	Government and public policy	
<b>DMA (former EU8)</b>	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	Research and Development	
<b>Aspect</b>	System Efficiency		
<b>EU11</b>	Average generation efficiency of thermal plants by energy source and by regulatory regime	Generation efficiency of thermal plants	
<b>EU12</b>	Transmission and distribution losses as a percentage of total energy	Transmission losses / Distribution losses	
<b>Aspect</b>	Disaster/Emergency Planning and Response		
<b>DMA (former EU21)</b>	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	Measures to prevent and reduce damages	
<b>Aspect</b>	Customer Health and Safety		
<b>EU22</b>	Number of people physically or economically displaced and compensation, broken down by type of project	Community engagement	
<b>Aspect</b>	Access		
<b>DMA (former EU23)</b>	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	Government and public policy	
<b>EU26</b>	Percentage of population unserved in licensed distribution or service areas	The percentage of population unserved based on the ratio between the total population and the unserved population is 1.93%	
<b>EU27</b>	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	Residential disconnections	
<b>EU28</b>	Power outage frequency in the year (FEC)	Quality in services	
<b>EU29</b>	Average power outage duration in the year (DEC)	Quality in services	

**EU30**

Average plant availability factor by energy source

Average plant availability by plant



# Assurance Report



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## Limited assurance report issued by independent auditors

To the Board of Directors, Shareholders and Stakeholders  
Centrais Elétricas Brasileiras S.A - Eletrobras  
Rio de Janeiro - RJ

### Introduction

We have been engaged by Centrais Elétricas Brasileiras S.A – Eletrobras (“Eletrobras” or “Company”) to apply limited assurance procedures on the sustainability information disclosed in Eletrobras’ Annual and Sustainability Report 2015, related to the year ended December 31<sup>st</sup>, 2015.

### Responsibilities of Eletrobras’ Management

The Management of Eletrobras is responsible for adequately preparing and presenting the sustainability information in the Annual and Sustainability Report 2015 in accordance with the *Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (GRI-G4)* and the “*Electric Utilities Sector Supplement - RG Version 3.0/EUSS Final Version*”, as well as the internal controls determined necessary to ensure this information is free from material misstatement, resulting from fraud or error.

### Independent auditors’ responsibility

Our responsibility is to express a conclusion about the information in the Annual and Sustainability Report 2015 based on a limited assurance engagement conducted in accordance with Technical Communication (TC) 07/2012, which was prepared based on NBC TO 3000 (Assurance Engagements Other Than Audits and Reviews), both issued by the Brazilian Federal Accounting Council - CFC and equivalent to international standard ISAE 3000, issued by the International Federation of Accountants and applicable to Non-Financial Historical Information. These standards require compliance with ethical requirements, including independence ones, and the engagement is also conducted to provide limited assurance that the information disclosed in the Eletrobras’ Annual and Sustainability Report 2015, taken as a whole, is free from material misstatement.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) consists mainly of questions and interviews with the Management of Eletrobras and other professionals of the Company involved in the preparation of the information disclosed in the Annual and Sustainability Report 2015 and use of analytical procedures to obtain evidence that enables us to reach a limited assurance conclusion about the sustainability information taken as a whole. A limited assurance engagement also requires additional procedures when the independent auditor acknowledges issues which may lead them to believe that the information disclosed in the Annual and Sustainability Report 2015 taken as a whole could present material misstatement.

The selected procedures were based on our understanding of the issues related to the compilation, materiality and presentation of the information disclosed in the Annual and Sustainability Report 2015, on other engagement circumstances and also on our considerations regarding areas and processes associated with material sustainability information disclosed where relevant misstatement could exist. The procedures consisted of:

- (a) Engagement planning: considering the material aspects for Eletrobras' activities, the relevance of the information disclosed, the amount of quantitative and qualitative information and the operational systems and internal controls that served as a basis for preparation of the information in the Eletrobras' Annual and Sustainability Report 2015. This analysis defined the indicators to be checked in details;
- (b) Understanding and analysis of disclosed information related to material aspects management;
- (c) Analysis of preparation processes of the Annual and Sustainability Report 2015 and its structure and content, based on the *Principles for Defining Report Content and Quality of the Global Reporting Initiative - GRI (GRI-G4)*;
- (d) Evaluation of non financial indicators selected:
  - Understanding of the calculation methodology and procedures for the compilation of indicators through interviews with management responsible for data preparation;
  - Application of analytical procedures regarding data and interviews for qualitative information and their correlation with indicators disclosed in the Annual and Sustainability Report 2015;
  - Analysis of evidence supporting the disclosed information;
  - Visits to Eletrobras' operations and offices for application of these procedures, and items (b) and (c);
- (e) Analysis of whether the performance indicators omission and justification are reasonable to be accepted associated to aspects and topics defined as material in the materiality analysis of the Company;
- (f) comparison of financial indicators with the financial statements and/or accounting records.

We believe that the information, evidence and results we have obtained are sufficient and appropriate to provide a basis for our limited assurance conclusion.

#### **Scope and limitations**

The procedures applied to a limited assurance engagement are substantially less extensive than those applied to a reasonable assurance engagement. Therefore, we cannot provide reasonable assurance that we are aware of all the issues that would have been identified in a reasonable assurance engagement, which aims to issue an opinion. If we had conducted a reasonable assurance engagement, we may have identified other issues and possible misstatements within the information presented in the Annual and Sustainability Report 2015.

Nonfinancial data is subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate or estimate these data. Qualitative interpretation of the data's materiality, relevance and accuracy are subject to individual

assumptions and judgments. Additionally, we have not examined data related to prior periods, to evaluate the adequacy of policies, practices and sustainability performance, nor future projections.

**Conclusion**

Based on the procedures carried out, described earlier in this report, we have not identified any relevant information that leads us to believe that the information in Eletrobras' Annual and Sustainability Report 2015 is not fairly stated in all material aspects in accordance with the *Global Reporting Initiative - GRI (GRI- G4)* and the *“Electric Utilities Sector Supplement - RG Version 3.0/EUSS Final Version”*, as well as its source records and files.

São Paulo, XXX , 2016

KPMG Assessores Ltda.  
XXXXX

Eduardo V. Cipullo  
XXXXX

KPMG Financial Risk & Actuarial Services Ltda.

Ricardo Algis Zibas

# Corporate Information

Eletrobras – Centrais Elétricas Brasileiras S.A. - offers many communication channels to its audiences.

### **Headquarters**

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**Facebook** – [www.facebook.com/Eletrobras](http://www.facebook.com/Eletrobras)

**YouTube** – [www.youtube.com/user/SistemaEletrobras](http://www.youtube.com/user/SistemaEletrobras)

**Twitter** – @Eletrobras

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### **Ombudsman's Office**

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Phone: (21) 2514-4526

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### **Reporting Hotline**

[www.eletrobras.com/canaldenuncia/](http://www.eletrobras.com/canaldenuncia/)

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### **Branches**

Eletrobras maintains multinational offices:

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Share and Custody Department

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**Comments, suggestions, and information about this report**  
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# Credits

This Annual and Sustainability Report is a result of the efforts of the Eletrobras team. We thank you all for your participation and commitment.

## **Executive coordination**

Planning, Strategic Management, and Sustainability Superintendence  
Press Office and Press Relations

## **Editing and general coordination**

Executive Sustainability Committee of the Eletrobras Companies

## **Coordination, translation and collection of GRI indicators and texts**

RICCA RI

## **Photo credit**

Acervo Eletrobras