

ANNUAL REPORT

2019



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① INTRODUCTION



ABOUT THIS PUBLICATION

GRI 102-49, 102-53

We present our 2019 Annual Report, with detailed information for our key stakeholders, written based on global best practices in corporate sustainability management and reporting:

- Global Reporting Initiative (GRI) - Standards 2016 – not including the disclosures on the material theme Water, which already follow the revision published at the end of 2018 -, essential compliance option; GRI 102-54; GRI 102-54
- Principles of the United Nations (UN) Global Compact;
- Sustainable Development Goals (SDGs);
- Integrated Reporting (IR) framework; and
- Rules and guidelines for the preparation of the Management Report of the General Accounting Office (TCU);
- Guidelines of the Electric Sector Accounting Manual, section Manual for Preparation of the Annual Social and Environmental Responsibility Report.

Reliability of information

GRI-102-32, 102-50, 102-56

This document was approved by the Board of Executive Officers and the Board of Directors. The sustainability information contained in the Chesf 2019 Annual Report concerning the year ended December 31, 2019, and defined by the materiality developed by Eletrobras with the participation of all its companies, was part of the limited scope of assurance in the 2019 Annual Report of the holding company. Click. [Click here](#) to see Eletrobras' letter of assurance.

Integrated communication

For the first time, Annual Reports of Eletrobras companies follow the same visual and editorial pattern, in addition to the same reporting practices and materiality matrix. This way, we guarantee a communication method that is coherent and transversal, offering stakeholders an overview integrated into our business. Learn more about the process of defining materiality and the themes added by Chesf to the original matrix on [page 6](#).

To calculate disclosures, whenever necessary and in order to preserve comparability, we will make the disclaimers on what is or is not included.

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Useful tools for reading

In addition to the linear fluency of this publication, at the end of the report you will find two possibilities for reading, guided by:

GRI Content Index (page 117)

A content index that describes each GRI disclosure, indicating the reasons for omission, where applicable, additional information and listing the page on which it is reported.

Learn more on the [GRI website](#).

SDG Map (page 135)

A map indicating the SDGs related to the topics covered throughout the report and the contents of which support the scope of the SDGs. The relationship is established by indicating the respective pages.

Learn more about the SDGs on the [United Nations Brazil website](#).

Stakeholder groups and themes of interest


GRI 102-40, 102-42

We communicate with our stakeholders constantly throughout the year through channels that can range from meetings, visits, telephone contacts and e-mails to communication newsletters, contact through the supplier service center and customer satisfaction surveys. This dialogue is guided by [Eletrobras Communication and Engagement Policy with Stakeholders](#), which provides speed, precision, commitment and transparency, among other principles.

The identification and selection of stakeholders is made in a careful manner, based on the guidelines of this same document and according to the mapping and prioritization by the strategic planning of Eletrobras companies.

Our stakeholders

- workforce/families;
- investors/shareholders/market analysts;
- communities;
- society;
- press / opinion makers;
- partners/sponsors/suppliers;
- governments/lawmakers/regulatory bodies;
- customers/consumers/distributors.

More information can be obtained in the [Communication section of our website](#). 

Materiality

For the 2019 Annual Report, we adopted the materiality developed by Eletrobras, with the participation of all its companies, including Chesf. This matrix was submitted for the approval of our Board of Executive Officers and our Board of Directors to ensure the relevance of all topics to our specific business and the broad coverage of all issues that have a real impact on our activities, or that may influence stakeholders' decisions. Legal and Regulatory Compliance was added to the original matrix, with two related disclosures.

The process for defining materiality is described below.

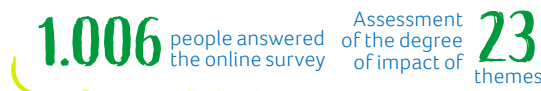
Definition of materiality

GRI 102-21, 102-32, 102-46

Stage 1 – Assessment of stakeholder perception:

assessment of stakeholder perception: verify the opinion and perception of stakeholder impact through online research made available on all Eletrobras company websites and through in-depth interviews with several relevant stakeholders: Ministry of Economy (Sest), Ministry of Mines and Energy, Brazilian Business Council for Sustainable Development (CEBDS), Global Compact, DJSI

(Dow Jones Sustainability Index), business partners, suppliers, NGOs, academia, among others. The use of two different formats of listening and analyzing makes it possible to understand the issues that impact the sustainability of companies' businesses.



Stage 2 – Prioritization and definition of the previous materiality matrix:

materiality workshop, held on November 6, with the participation of all the Eletrobras companies' sustainability coordinators and representatives of the Sustainability Management Executive Committee. Those present had the task of building the Materiality Matrix of the Eletrobras companies, considering the topics with potential impact to stakeholders and the perception of the same themes according to the companies' strategy, using online research and interviews as a basis.

Subsequently, a calibration process of the non-prioritized themes was carried out in order to adjust possible distortions in the previous analysis, which was done by counterbalancing

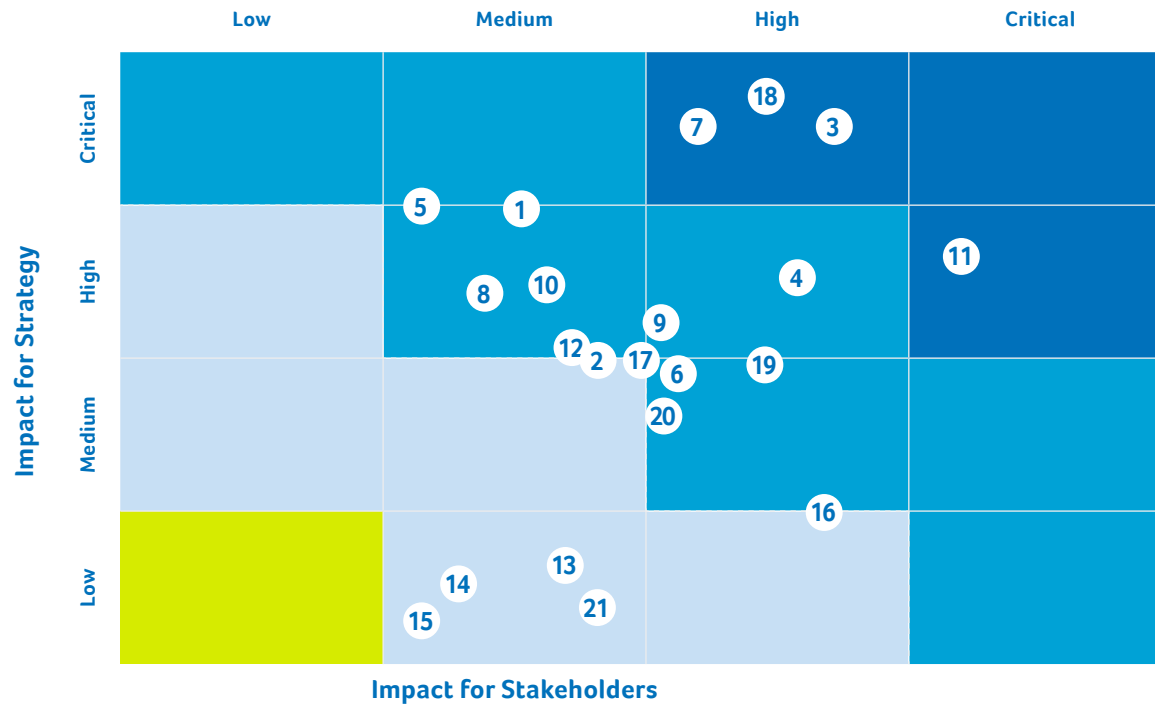
the results of the online survey, interviews, RepRisk (tool for analyzing media and exposure to reputational risk) and materiality benchmarking of other market players representing the external scenario. The topics considered of high relevance in the calibration were analyzed for their adherence to the strategy based on the SWOT Matrix technique and were inserted in the Materiality Matrix of Eletrobras companies.

Stage 3 – Validation with the Leadership:

in alignment with the Global Reporting Initiative (GRI) and International Integrated Reporting Council (IIRC) methodology, the Eletrobras Materiality Matrix was submitted for validation by the holding company's Board of Directors and all subsidiaries. In addition to the topics previously proposed at the workshop, the holding company's Board of Directors decided to include Corporate Governance as a material theme for Eletrobras companies. It was up to each subsidiary to add other material themes to their respective reports, according to specific demands. Therefore, Chesf's Board of Directors decided to include the Legal and Regulatory Compliance theme, added by the Board of Executive Officers.

Eletrobras 2020 materiality matrix

GRI 102-47



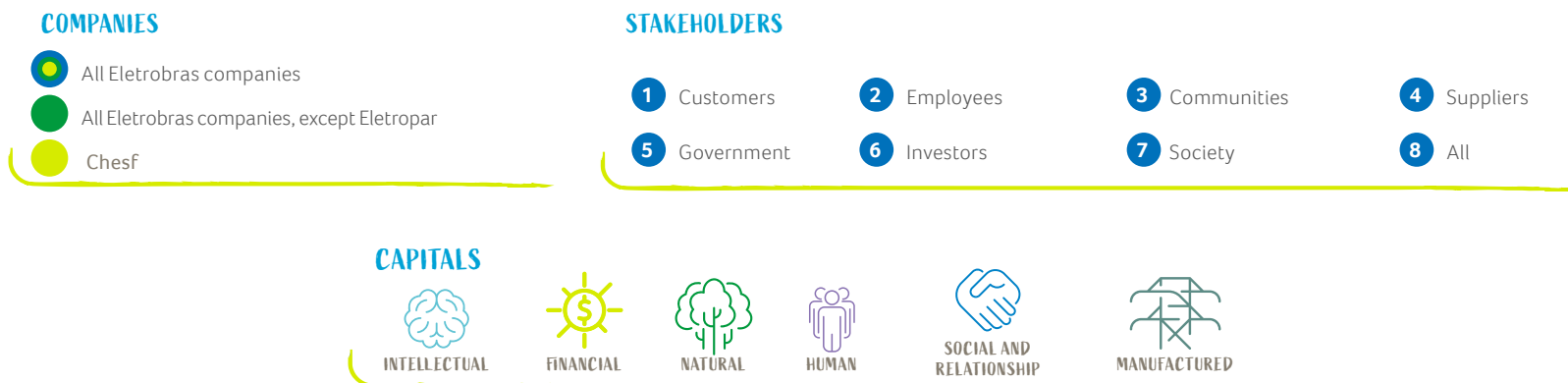
Below follow the list of material themes, highlighted in blue.












13 Material Themes

- ① Research and Development + Innovation
- ② Relationship with suppliers
- ③ Water
- ④ Social and environmental aspects in decision-making
- ⑤ Cybersecurity and digital transformation
- ⑥ Human rights
- ⑦ Risk and crisis management
- ⑧ People management and development
- ⑨ Climate changes
- ⑩ Energy transition
- ⑪ Corruption and ethics management
- ⑫ Corporate governance
- ⑬ Relationship with communities
- ⑭ Biodiversity
- ⑮ Waste
- ⑯ Legal and regulatory compliance
- ⑰ Energy supply
- ⑱ Financial result
- ⑲ Energy efficiency
- ⑳ Health, safety and well-being
- ㉑ Communication and transparency

Material themes and their limits

The table below is the result of the materiality determination process reported on [page 6](#). The limits determine where or in which audiences the impacts occur, and capital is based on the concept proposed by the framework of the IIRC (International Integrated Reporting Council) for the grouping of the different types of input or resources used by Eletrobras companies to generate value.



Material Theme ¹ GRI 102-44, 102-47	Companies	Stakeholders	Specific GRI disclosures	Capitals	SDG
Research and Development + Innovation	●	1 4 5 6 7	EU8		
Water	●	3 5 7	303-1 a 303-5		
Socio-environmental aspects in decision-making ²	●	3 4 5 6 7	102-29 e 102-31	It is not associated with capital, but with the corporate governance of the company, which permeates and guides the activities of value generation	
Digital transformation	●	1 2 4	There are no specific disclosures for this topic	 	
Cybersecurity	●	8	418-1	 	

























Material Theme ¹ GRI 102-44, 102-47	Companies	Stakeholders	Specific GRI disclosures	Capitals	SDG
Risk and crisis management ²		8	102-15, 102-30, EU21		
People Development Management		2 6	401-1, 404-1 a 404-3 e EU14		
Human rights		3 4 5 7	405-1, 405-2, 406-1, 407-1, 408-1, 409-1, 410-1, 411-1, 412-2 e 412-3		
Climate change		1 3 4 5 6 7	201-2, 305-1 a 305-7		
Energy transition		5 6 7	EU10		
Corruption and ethics management ²		8	102-17, 102-25, 205-1 a 205-3 e 415-1		
Corporate governance ²		8	102-19, 102-20 e 102-21 a 102-39	It is not associated with capital, but with the corporate governance of the Company, which permeates and guides the value generation activities	
Energy supply		5 6 7	EU6, EU11, EU12 e EU30	One of the activities through which the company transforms inputs into values	
Financial result		2 4 5 6	201-1		
Regulatory compliance		5 6 7	307-1, 419-1	It is not associated with capital, but with the corporate governance of the Company, which permeates and guides the value generation activities	

Notes: 1. For each material theme it is mandatory, according to the Global Reporting Initiative methodology, to report the management form disclosures 103-1, 103-2 and 103-3.

2. Topics to which general standard disclosures (which must be reported in the composition of the profile, corporate governance and organizational strategy) have been added are not mandatory for GRI reports in the “Essential” option. The objective is to present comprehensive information on Chesf’s performance on these topics that are not covered by specific disclosures..

Other GRI Disclosures

We also chose to report disclosures associated with topics that were not mentioned in the process of determining materiality to maintain the history and comparability between cycles.

Theme	Specific GRI disclosures	Capitals	SDG
 PURCHASING PRACTICES	204-1	 FINANCIAL  MANUFACTURED  SOCIAL AND RELATIONSHIP CAPITAL	 8 DECENT WORK AND ECONOMIC GROWTH  9 INDUSTRY, INNOVATION AND INFRASTRUCTURE  12 RESPONSIBLE CONSUMPTION AND PRODUCTION
 BIODIVERSITY	304-2 e 304-3	 NATURAL	 14 LIFE BELOW WATER  15 LIFE ON LAND
 EMPLOYMENT	401-2 e 401-3	 HUMAN	 3 GOOD HEALTH AND WELL-BEING  5 GENDER EQUALITY  8 DECENT WORK AND ECONOMIC GROWTH
 OCCUPATIONAL HEALTH AND SAFETY	403-1, 403-3 e 403-4, EU16	 HUMAN	 3 GOOD HEALTH AND WELL-BEING  8 DECENT WORK AND ECONOMIC GROWTH
 COMMUNITIES	413-1 e 413-2, EU20, EU22	 SOCIAL AND RELATIONSHIP CAPITAL	 1 NO POVERTY  2 ZERO HUNGER

HIGHLIGHTS

Management

- ↳ Preparation of Strategic Planning 2020-2035 – [page 33](#);
- ↳ ERP Standard Implementation Program (ProERP) - SAP implementation in Eletrobras companies – [pages 38 and 39](#); and
- ↳ Implementation of the Northeast unit of the Shared Services Center (CSC) – [pages 40](#).



Financial capital

Set of resources available to be used in the production of goods or the provision of services. It is obtained through financing, such as debts, shares or grants, or generated through investments.

- ↳ Structuring the **ORÇAMENTO BASE ZERO (OBZ)** tool – [page 68](#);
- ↳ **TARIFF REVIEW PROJECT** – [page 45](#);
- ↳ **SIGNIFICANT REDUCTION** in the Personnel, Materials, Services and Other (PMSO) account – [page 68](#);
- ↳ **105% GROWTH IN GENERATION** of operating cash (Ebitda) in relation to 2018 – [page 70](#);
- ↳ Acquisition and incorporation of others companies that will allow the increase of **R\$ 120 MILLION** in annual revenues – [page 16](#); and
- ↳ **RENEWAL OF TAX BENEFITS** with Sudene, which enables the expansion of investment capacity in regional infrastructure – [page 16](#).



Manufactured capital

Physical manufactured objects available for use in the provision of services, including buildings, equipment and infrastructure.

- ↳ **BEST OPERATIONAL INDICATORS** in recent times – [page 73](#);
- ↳ Completion de **22 TRANSMISSION PROJECTS** – [page 75](#);
- ↳ **COMPLETION OF THE FUSION OF THE OPERATIONAL CENTERS** of Teresina (PI) and Fortaleza (CE) – [page 75](#); and
- ↳ **REMOTE ASSISTANCE DEPLOYMENT** [page 74](#).



Intellectual capital

Set of knowledge-based organizational intangible assets, including intellectual property, such as patents, copyrights, software, rights and licenses; and “organizational capital” such as tacit knowledge, systems, procedures and protocols.

- ➔ Implementation of the Work Clearance Management (WCM) module of **SAP FOR THE FIRST TIME** in the sector and among Eletrobras companies – [page 38](#); and
- ➔ Inauguration of **SOBRADINHO'S FLOATING SOLAR POWER PLANT** [pages 85 and 86](#).



Social and Relationship Capital

It covers shared standards as well as common values and behaviors; relationship with key stakeholders; the trust and commitment that an organization develops and seeks to build and protect with external stakeholders; the intangible assets associated with an organization’s brand and reputation; and the social license to operate.

- ➔ **LAGOS DO SÃO FRANCISCO PROJECT** [page 91](#);
- ➔ **LAGO DE SOBRADINHO PROJECT** [page 92](#); and
- ➔ **LIVING AND LEARNING (VIVENDO E APRENDENDO) PROGRAM** [page 106](#).



Sobradinho's floating solar platform. Credit: André Schuler.



Natural capital

All renewable and non-renewable environmental resources, as well as environmental processes, that provide goods or services that support an organization’s past, present and future prosperity, which includes water, land, minerals and forests, and biodiversity and ecosystem quality.

- ↳ **IMPLEMENTATION OF REFORESTING AND RECOVERY ACTIONS** in: Caetés Ecological Station, located in the city of Paulista, part of the Metropolitan Region of Recife (PE); Saltinho Biological Reserve, located in the city of Tamandaré (PE), with the Atlantic Forest Biome; Saltinho Biological Reserve (Rebio) and Legal Reserve of the Assentamento Laranjeiras Project, Rebio’s buffer zone; and the State Botanical Park of Ceará, in Caucaia – [page 100](#);
- ↳ Maintenance of **12 THOUSAND UNITS OF CACTI (MELOCACTUS ZEHNTNERI)** in growth phase and another **2 THOUSAND** in germination in the Xingó Forest Nursery (AL), maintained by Chesf – [page 100](#);
- ↳ Donation of **76,500 SEEDLINGS** from the Xingó Forest Nursery to various institutions for planting on the banks of rivers and streams in the basin of Rio São Francisco – [page 100](#);
- ↳ Growing an additional **157,9 THOUSAND UNITS OF SEEDS FROM THE CAATINGA GERMPASM**, in the nursery, destined for the recovery of the areas – [page 100](#); and
- ↳ Visit of **THOUSANDS OF PEOPLE FROM 11 SCHOOLS, 3 UNIVERSITIES AND 3 PROJECTS** to Xingó Forest Nursery – [page 100](#).



Human capital

The skills, abilities and experience of people and their motivations for innovation, including their compliance with and support for governance structure, risk management and ethical values; the ability to understand, develop and implement the organization’s strategy; the loyalty and motivation to improve processes, goods and services, including the ability to lead, manage and collaborate.

- ↳ **PARTICIPATION OF CHESF MANAGERS** in a specific MBA in the electricity sector developed jointly with Fundação Getúlio Vargas (FGV) – [page 106](#); and
- ↳ **RECERTIFICATION OF THE OCCUPATIONAL HEALTH AND SAFETY (OHS) MANAGEMENT SYSTEM** of the Xingó Hydroelectric Power Plant under the international standard OHSAS 18.001:2007 – [page 109](#).

MESSAGE FROM THE ADMINISTRATION

GRI 102-14

Chesf has been reinventing itself over the last years and 2019 will be registered as a year of positive results in all areas of the Company. Today, the company is more well-developed and undergoing a process of transformation. The implementation of our plan to adapt and modernize the Company has been promoting significant advances, which allow us to reap the fruits of the consolidation of this work, although we still have many challenges and obstacles to overcome.

In an articulated manner, according to Eletrobras' guidelines and with the full commitment of its staff, Chesf's governance has established guidelines with the objective of enabling the Company to follow a new path, marked by technological transformation, improvement of the economic-financial situation and modernization of its management systems.

We identified the need to find innovative solutions, with high potential for economic sustainability, respecting regulatory compliance and achieving benefits for society. We direct our efforts to the improvement of the efficiency levels of the various areas of the Company, in an integrated manner, seeking economically

consistent results in all segments in which we operate - energy generation, transmission and trading.

In this sense, we have developed projects aimed at the implementation of new methods to generate energy, and one of the milestones is represented by the inauguration of the floating solar power plant of Sobradinho - the first of its kind in Brazil - with a high potential for replicating the methodology to be developed in other lakes.

For another year, we embraced the challenge of repositioning the organizational structure, making quali-quantitative adjustments in the staff, with the conscious adoption of actions aimed at minimizing the impact on our intellectual capital. To this end, new operational requirements were applied in the plants, substations and operation centers, increasing to 70% the number of remotely assisted installations, guaranteeing the reliability of the electrical system. We completed the integration of the Teresina and Fortaleza Operation Centers, with new technological resources that allowed efficiency gains for the development of operational activities.



Fábio Lopes Alves – CEO of Chesf.

We have made progress with the implementation of Enterprise Resource Planning - ERP systems, in a single instance in Eletrobras companies, centralizing processes and allowing faster access to reliable information. The commitment and engagement of the teams made it possible to





Wilson Ferreira Junior, CEO of Eletrobras. Eletrobras holding company collection / Cláudio Ribeiro.

implement, in 2019, the modules of Supply, Finance, People Management and monitoring and control of services provided in Operation and Maintenance (WCM - Work Clearance Management). It is worth mentioning that the use of WCM is considered a pioneer in the country. We employ a computerized solution for communication and collaboration in the cloud, with significant increases in productivity, mobility and business integration.

We implemented the Northeast Unit of the Shared Services Center (CSC), under the coordination of Eletrobras, to meet the existing demands with greater productivity, while adopting more efficient practices and using state-of-the-art technologies. In this sense, we launched the CSC Portal, a direct channel with the client and the use of activity robotization. In addition, the “Infrastructure and Human Resources Sharing Contract” was signed with the holding company, enabling effective cooperation among Eletrobras companies.

With the entry into commercial operation of the 18th turbine of the Belo Monte Power Plant, we concluded yet another venture, with participation in a Special-Purpose Entity - SPE. In addition, we acquired a stake in two SPEs (Extremoz Transmissora do Nordeste - ETN and Transmissora Delmiro Gouveia - TDG), thus increasing our transmission system.

We also concluded the Pindaí Wind Complex, a generation undertaking that required a great effort from the Company to achieve it and added 110MW of clean energy installed capacity to the Brazilian Energy Matrix, coming from wind power generation.

We identified the need to find innovative solutions, with high potential for economic sustainability, respecting regulatory compliance and achieving benefits for society.

In fiscal year 2019, we continued the expansion of our transmission network with the entry into commercial operation of 22 new projects, incorporating 2,644 MVA of installed transformation capacity and 331 km of transmission lines to the Basic Network of the National Electric Sector, adding with the incorporation of these projects R\$ 65 million of annual revenues, in addition to significantly reducing our stock of works in arrears in relation to the dates established in the concession contracts.

The modernization of the existing facilities and the strict compliance with the asset maintenance plans made it possible to obtain excellent operating indicators, especially those related to the availability of generation and transmission, reaching all the established goals and obtaining the best results in our history.

We closed the year with one of our lowest debt ratios. We grew 105% in operating cash generation (Ebitda) when compared to 2018. We acquired and merged other companies, which will allow us to increase our annual revenues by R\$ 120 million. We completed the renewal of tax benefits with Sudene, which reverts to the region, through the expansion of investment capacity in regional infrastructure. With this, in the last years, Chesf has been providing good remuneration to its shareholders in the form of dividends.

The successive positive results presented in recent years and the trend towards sustainable profits in the coming periods have made it possible to recognize deferred tax assets and liabilities, which contributed significantly to the good financial performance for the year.

We took an important step towards total cost exemption with Nair Alves de Souza Hospital (HNAS), located in the city of Paulo Afonso (BA), which will be progressively and fully transferred to the Government by the fourth quarter of 2020, whose activity does not correspond to the Company's business scope.

The scenarios and perspectives of the National Electric Sector show us that we must be prepared for the economic and technological change that is underway in the electricity sector. We must be aware of the novelties in energy production, digital transformation and modern management practices in order to acquire the necessary competence to remain in a sector that is proving to be highly competitive.

Consequently, we will continue to seek capital investments with the aim of achieving positive financial results, considering cost reduction and process optimization, without neglecting our commitments related to sustainability, including the Sustainable Development Goals (SDGs) and the Global Compact Principles.

In conclusion, we give special thanks to all the Chesf family. The commitment and dedication of our employees have been crucial to overcoming challenges and achieving better results. Let's keep fighting and conquering!

Enjoy your reading!

Fábio Lopes Alves

CEO of Chesf

Wilson Ferreira Junior

Chairman of the Board of Directors

COVID-19 PANDEMIC

Since January 2020, Eletrobras companies have been monitoring the evolution and possible impacts caused by the coronavirus pandemic and following the recommendations of the Ministry of Health and the governments of the states and cities where its operations are located. We prioritize the preservation of employees and collaborators, avoiding the propagation of the disease, and the maintenance of the generation and transmission of electricity in the country. To coordinate and monitor all actions related to the pandemic, on March 17, 2020, the Eletrobras Companies' Crisis Monitoring and Management Committee was created, formed by the holding company's Board of Executive Officers, the CEOs of its subsidiaries and the Director-General of Cepel.

Due to the need to preserve its essential activities, the company has taken several steps wherever possible:

- ↳ **ANTICIPATED VACATIONS;**
- ↳ **APPROVED COMPENSATORY TIME OFF;**
- ↳ **AUTHORIZED REMOTE WORK;**
- ↳ **RESTRICTED DOMESTIC TRAVEL;**
- ↳ **PROHIBITED FACE-TO-FACE MEETINGS WITH LARGE NUMBERS OF PEOPLE;**
- ↳ **SUSPENDED INTERNATIONAL TRAVEL AND QUARANTINED EMPLOYEES WHO SHOWED SYMPTOMS; AND**
- ↳ **REQUESTED THAT ITS SERVICE PROVIDERS ALSO OBSERVE ALL THE GUIDELINES OF THE MINISTRY OF HEALTH.**



With regard to the operation of the electro-energetic system, Eletrobras companies have been adopting all measures to maintain its normal operations, given the strategic sector in which it is inserted, and mainly because it is the largest Brazilian electric power company, with more than 50 thousand MW of installed power, accounting for 30% of the country's generation and 45% of transmission lines with a voltage equal to or above 230kV. Among the measures, a contingency action plan was created with the objective of mapping, monitoring and guiding employees on the actions required in generation and transmission operations.

The financial impacts of the pandemic, which will affect nations and various sectors worldwide, may also affect the results of Eletrobras companies, mainly due to the possible stagnation of the Gross Domestic Product (GDP) and the consequent reduction in electricity consumption in the industrial and commercial sectors. Notwithstanding the creation of the COVID Account, regulated by Aneel through Normative Resolution 885, there is a risk of an increase in the incidence of default on distribution companies and

bilateral contracts in the free contracting environment with a potential increase in contract renegotiation requests. However, there is a high degree of uncertainty regarding the possible reduction of electricity consumption in the country, as well as its duration.

News from European countries indicates a reduction in the flattening stage of the Covid-19 pandemic, as in some Asian countries. In Brazil, where the expanded social distance is still a reality, about 70% of the workforce of Eletrobras companies started to work remotely. Our employees have spent efforts to maintain corporate activities, support the continued operation of generation and transmission assets and the operation of our management and governance structures, maintaining the resources necessary for our managers to continue making decisions in favor of the sustainability of our companies.

Eletrobras companies have already begun testing part of their workforce and have strengthened preventive measures to avoid the propagation and contamination by the coronavirus.

Simultaneously, under the guidance of the Crisis Committee, the company works on the elaboration of a protocol for the gradual resumption of on-site work in all its units, safeguarding the health and safety of its workforce, with social and environmental responsibility, transparency and prudence, preparing everyone for the new normal that lies ahead.

In addition, conscious of its important social role, Eletrobras companies have negotiated alternative measures with their supply chain in order to preserve jobs and maintain the health and safety of outsourced employees. They have also established corporate guidelines for donations and support to surrounding communities and society in general.

At this unusual time for everyone, Eletrobras companies have demonstrated high resilience, a high degree of commitment and a clear purpose of all managers and employees to generate and transmit the energy that Brazil needs to fight the pandemic, preserve lives and maintain economic activities.



Xingó Hydroelectric Power Plant – Rio São Francisco. Credit: Severino Silva.

INDUSTRY CONTEXT

Macroeconomic indicators

The Brazilian Gross Domestic Product (GDP) grew 1.1% when compared to 2018 - a performance that demonstrates the slow recovery of the economy, associated, in parts, with low household consumption. Inflation, as measured by the variation in the IPCA*, reached 4.31% per year, against 3.75% in 2018. This is above the level established by the National Monetary Council (CMN) under the inflation targeting system - 4.25% per year. According to IBGE, the IPCA was under pressure in 2019, mainly due to increased prices of meat and fuel, followed by health plans.

Sectoral indicators

O National electricity consumption in 2019 was 482,266 GWh, 1.5% higher than in 2018. The Northeast region participated in this consumption with 17.3% - or 83,586 GWh -, surpassing the northeastern consumption by 3.8% in 2018. In order to meet the demand of the Northeast submarket (Northeast Region, except the State of Maranhão), which corresponds to 11,042 average MW, hydraulic generation contributed 22.2%, wind generation 47.5%, thermal with 17.7% and the exchange with the North and Southeast submarkets with 9.6%. The other sources (SHP, biomass and solar) represented 3.0%.

Among the consumption classes, Residential (+3.8%) and Commercial (+3.9%) expanded, emphasizing the good performance in the commerce and services sector in the Northeast (+6.7%), North (+4.6%) and Center-West (+4.4%) regions. Industrial consumption has not yet managed to recover and suffered a 1.4% retraction compared to 2018.

*Índice Nacional de Preços ao Consumidor Amplo.

Regulatory overview

For many years, Chesf has not faced major competition in bids for power generation and transmission auctions. However, this has changed over the years, and today we live in a highly competitive scenario, in which we compete with very qualified companies. In addition, significant changes in legislation are expected that may impact our economic sustainability if we are not well structured.

Therefore, Chesf has been preparing for improvements in the performance of indicators, which serve as a diagnosis of our level of structure and preparation. The year 2019 was one of study and preparation of the adjustments that must be made to meet the existing regulatory frameworks and those to come.

In 2020, Chesf will face the challenge of adapting its remote assistance systems, in accordance with Normative Resolution 864/2019 of the Brazilian Electricity Regulatory Agency (Aneel) and Submodules 2.7, 10.14, 13.2, 15.6 and 15.12 of the Network Procedures, in parallel with the requirements regulated by the General Law of Personal Data Protection (No. 13,709/2018).

Important changes are also expected in the coming years as a consequence of the new regulatory framework being proposed by the Ministry of Mines and Energy from the unfolding of Public Consultation 33, which institutes the marketing based on an hourly rate, regulates the dispatch by price, provides the pricing of sources for their benefits and brings numerous other innovations.

Expectations for 2020

We have good expectations for 2020, both in operational and financial terms:

- the possibility of distributing energy no longer at a weekly price, but at an hourly rate;
- tariff revision - it should have occurred in 2019, but was postponed -, with inspection starting in March;
- release for participation in auctions so that Chesf has new possibilities of physical growth;
- continuous improvement in asset management;
- implementation of the new remote assistance requirements, approved on December 10, 2019; and
- evolution of the sector's regulations so that it is possible to remunerate the security of energy supply.



Boa Esperança Substation in Piauí. Credit: Sudene Drone.

② CORPORATE PROFILE



Companhia Hidro Elétrica do São Francisco



CHESF

GRI 102-2, 102-4, 102-5, 102-6, 102-7, EU1

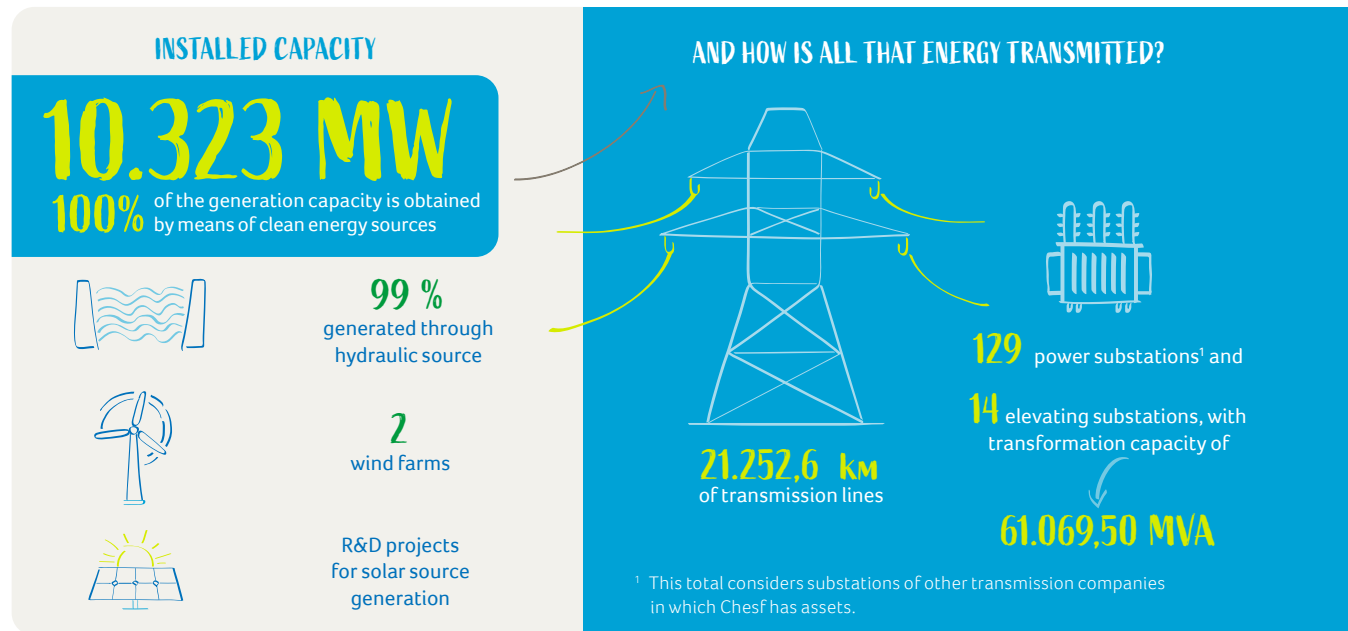
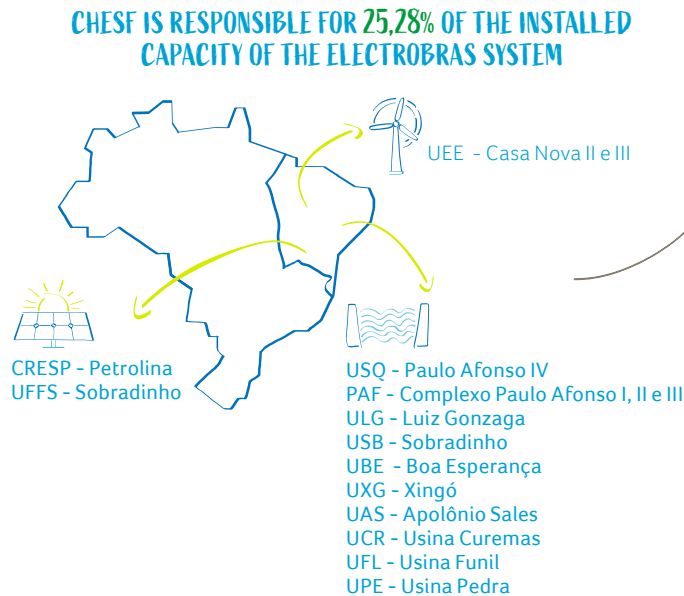
With 72 years of history, we are one of the largest generation and transmission companies in the country, with 12 hydroelectric plants and 10 reservoirs with a total storage capacity of 57.4 billion cubic meters of water, more than 21,000 kilometers of transmission lines and two wind power plants. Our installed capacity totals 10,323.43 MW and we operate 129 power substations (considering in this total the substations of other transmission companies in which Chesf has assets), totaling 49,726.17 MVA of transformation capacity.

Our system also includes 14 power plant elevating substations which, together with the power substations, have a transformation capacity of 61,069.50 MVA. We also hold stakes in generation and transmission ventures through Special-Purpose Entities (SPEs) and are investing in solar generation, a source in which we have 3.62 MWp deployed in mini and microgeneration.

All our energy generation is concentrated in the Northeast, but it is distributed to the North,

Northeast, Center-West and Southeast regions, which receive the resource through an alternating current transmission system that operates in 500, 230, 138 and 69 kV voltages and supplies the National Interconnected System (SIN).

Founded in 1948, Chesf (São Francisco Hydroelectric Company) is a publicly held corporation and a mixed economy subsidiary of Eletrobras. The Company is headquartered in Recife, Pernambuco.



HOW WE CREATE VALUE

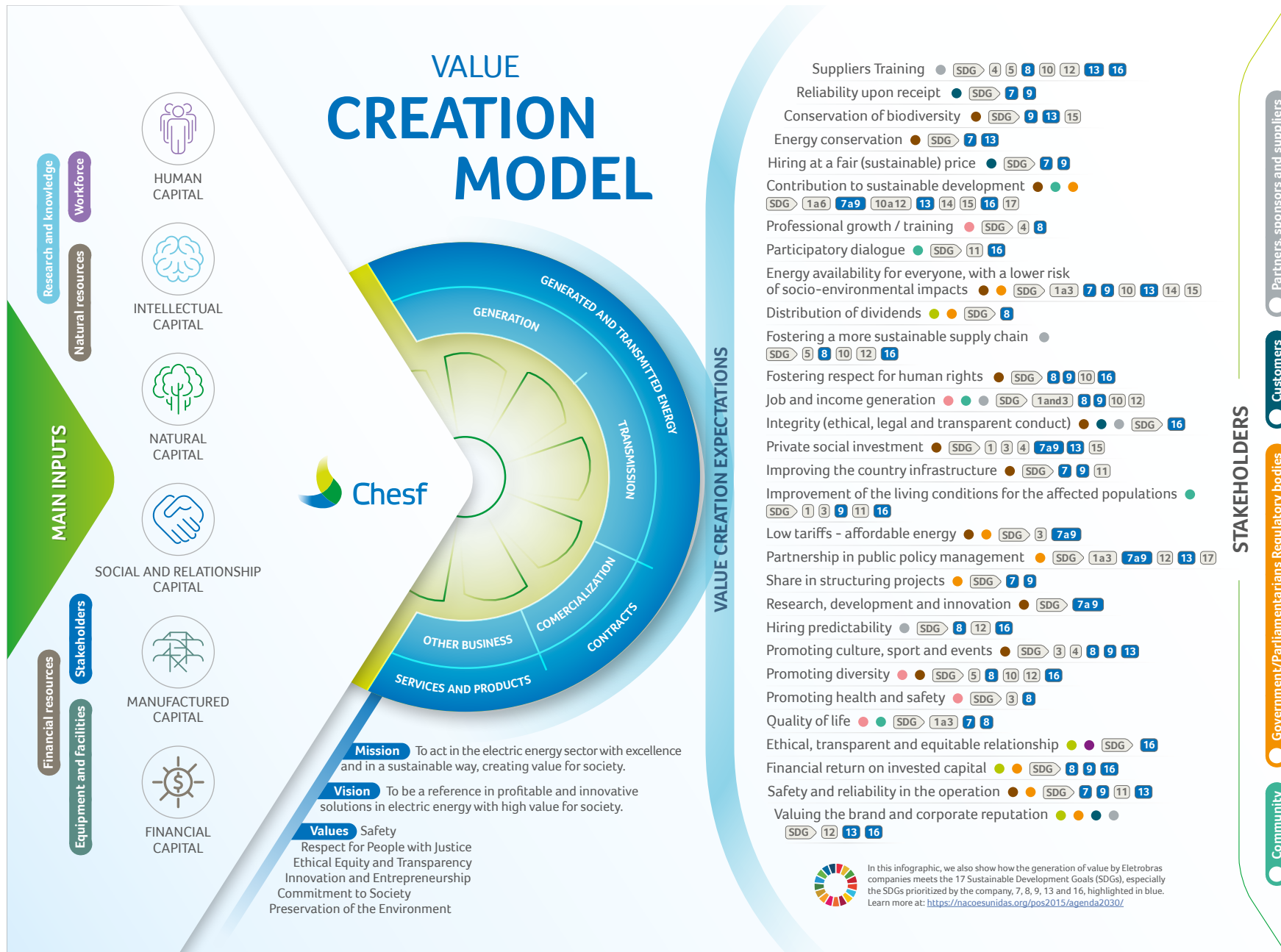
By providing electrical energy – an essential resource for the functioning of all productive sectors, people’s relations and socio-economic development – Chesf creates value for society. However, we seek to go beyond and reverberate the return we get from business to our stakeholders and society as a whole. We do this by identifying the resources, assets and capital that interact with our activity and understanding the impacts – both positive and negative – of transforming this whole into electrical energy, seeking to promote responsible and sustainable management that deals with these impacts in order to prevent or minimize them, creating value at the end.

The Chesf creates value for society. However, we seek to go beyond and reverberate the return we get from business to our stakeholders and society as a whole.



Pênsil Bridge of the Paulo Afonso Hydroelectric Complex, Bahia. Credit: André Schuler.

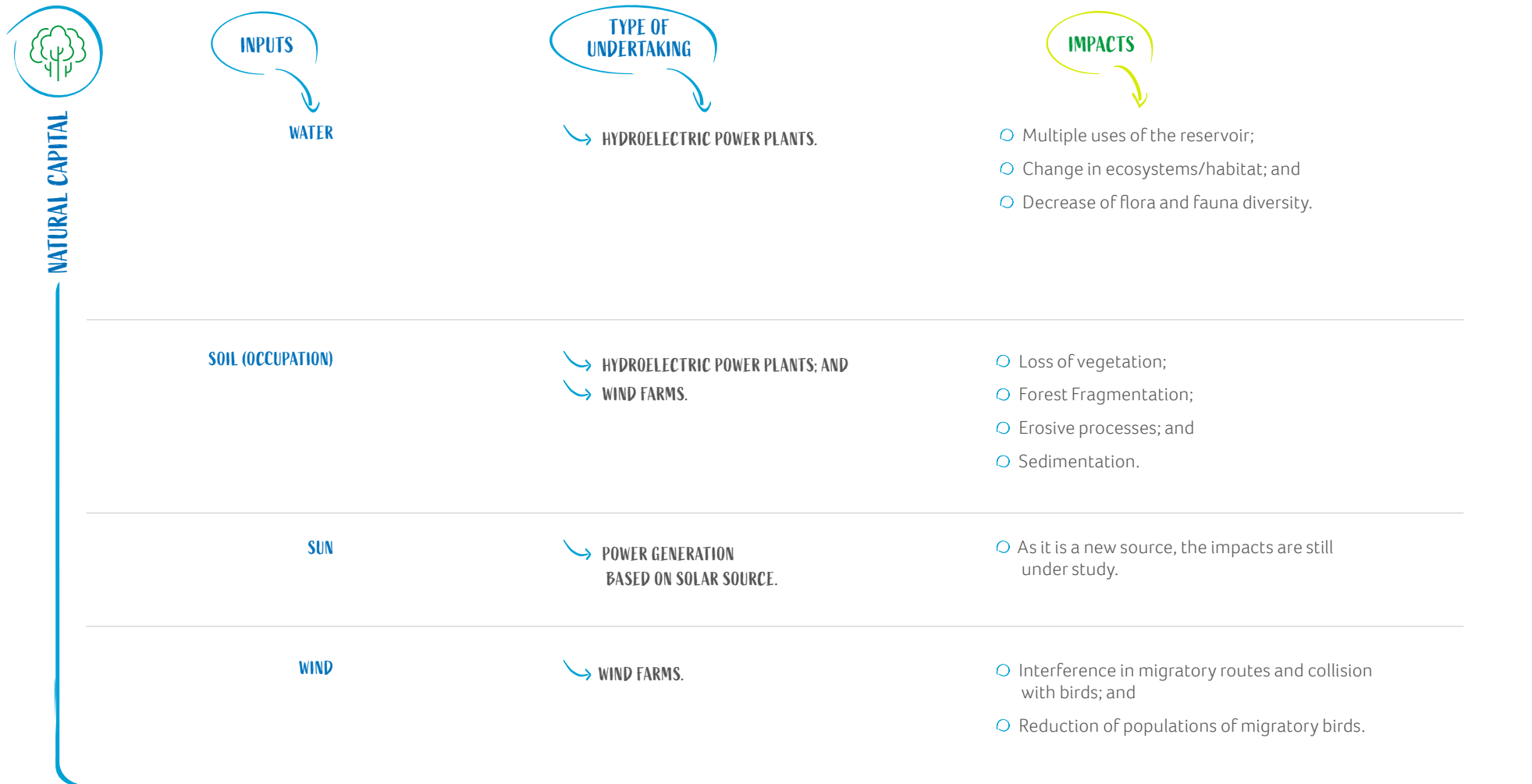
This is the basis of the model presented below, a summary of how our activities interact with the external environment (sectoral, political and macroeconomic context) in order to give consistent returns to stakeholders and society. The way this report has been organized is consistent with this representation, providing greater connectivity between different parts of the business and financial and non-financial (intangible assets) results, clearly and openly showing how our activity transforms resources, assets and capital into value.



In this infographic, we also show how the generation of value by Eletrobras companies meets the 17 Sustainable Development Goals (SDGs), especially the SDGs prioritized by the company, 7, 8, 9, 13 and 16, highlighted in blue. Learn more at: <https://nacoesunidas.org/pos2015/agenda2030/>

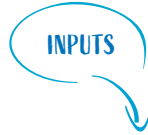
Our impacts

The business model of Eletrobras companies as well as the impacts of the activities that are part of it were thought out together for the entire system.



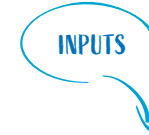


SOCIAL AND RELATIONSHIP CAPITAL



SPONSORSHIPS, SOCIAL NETWORKS AND ADVERTISING CAMPAIGNS

- Conflict reduction; and
- Organization Image.



CORPORATE REPORTS



Transparency; Communication; and Accountability.

MEDIA, CODE OF ETHICAL CONDUCT AND INTEGRITY, CORPORATE POLICIES AND VOLUNTEERING

- Improving business reputation;
- Improvement in institutional relations;
- Improvement in organizational culture;
- Business alignment;
- Business Integrity;
- Positive brand perception; and
- Reduction of lawsuits.

INSTITUTIONAL LINKS

- Increase in market value; and
- Credibility.

RELATIONSHIP PROCESSES AND CHANNELS WITH DIFFERENT STAKEHOLDERS AND OMBUDSMAN

- Transparency; and
- Access to information.

REPUTATION SURVEY

- Brand value.

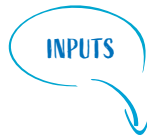
SOCIAL AND ENVIRONMENTAL PROGRAMS

- Greater contribution to public policies;
- Conflict reduction;
- Impact mitigation; and
- Social transformation.





FINANCIAL CAPITAL



EQUITY - CASH REVENUE

EQUITY - CAPITALIZATION REVENUE

THIRD PARTIES - LOANS / FINANCING

RETURN ON INVESTMENT

SHARES AND DEBENTURES



○ Investment capacity.

○ Liquidity.

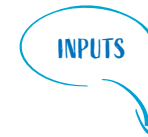
○ Market expansion.

○ Viabilization of projects.

○ Direct impact on other capitals.



HUMAN CAPITAL



OWN EMPLOYEES

CONTRACTORS

TRAINING PROCESSES, PROGRAMS AND PROCEDURES, CAPACITY BUILDING AND MOTIVATIONAL

KNOWLEDGE MANAGEMENT



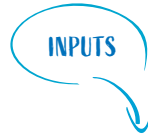
○ Job and income generation.

○ Development of Intellectual Capital.





INTELLECTUAL CAPITAL



R&D + I

- Patent registrations;
- Sustainability and profitability;
- Increased efficiency of the production process; and
- Technological innovation.

CYBERSECURITY

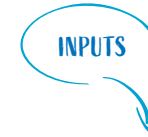
- Business Integrity; and
- Security of company and customer data.

PATENTS, INTELLECTUAL PROPERTY; COPYRIGHT

- Guarantee of the invention monopoly;
- Protection against undue exploitation;
- Improvement and new products and services; and
- Preserving an organization's intelligence.



MANUFACTURED CAPITAL



GENERATION = HYDROELECTRIC PLANTS, THERMOELECTRIC PLANTS, WIND GENERATORS, PHOTOVOLTAIC GENERATORS

- Income generation;
- Job creation; and
- Availability of energy.

TRANSMISSION LINES AND SUBSTATIONS

ADMINISTRATIVE BUILDINGS AND FACILITIES AND IT STRUCTURE

- Technological know-how; and
- Generation of administrative waste.



ACKNOWLEDGMENTS

- ↳ **Certification at Level 1** (level of excellence), in the 4th Cycle of the Governance Index Certification of the Secretariat of Coordination and Governance of State Enterprises (Sest) of the Ministry of Economy (see more on page 55);
- ↳ **Eloy Chaves Medal**, an award granted by the Brazilian Association of Electric Energy Concessionaires (ABCE) to electricity companies throughout Brazil that stand out in the prevention of occupational accidents. Two medals - silver and bronze - were received in the category energy transmission companies, referring to the years 2017 and 2018 respectively;
- ↳ **Recommendation for maintaining the validity of the certification for the Messias Substation in the ABNT NBR ISO 50001:2011 Standard** – Requirements for Energy Management, after an audit carried out in October 2019. The standard, created in July 2011, has the purpose of enabling organizations, through systems and processes, to continuously improve their energy performance (energy efficiency, use and consumption). Its implementation contributes to reducing the cost of energy and greenhouse gas emissions;
- ↳ **Accreditation of the Chesf Metrology Laboratory (MetroChesf)** according to standard ISO IEC 17025 Inmetro in the electrical quantities in terms of voltage, current, resistance, power and energy, in order to provide the calibration/certification of the service standards used in the maintenance of the protection, measuring and automation systems;
- ↳ **Maintenance of ISO 9001:2015** certification in all processes of the ten bodies and their facilities that make up the Organizational System of Operation;
- ↳ **Maintenance of certifications according to standard ABNT NBR ISO 9001:2015**, of the Quality Management Systems of the electromechanical maintenance divisions of Sobradinho, Xingó, Paulo Afonso I, Paulo Afonso II, Paulo Afonso III and Luiz Gonzaga plants;
- ↳ **Certification in the ABNT NBR ISO 9001:2015 standard**, of the Quality Management System, in all bodies related to substation maintenance;
- ↳ **Maintenance of ISO 14001:2015** certification for the Substation Maintenance segment of Paulo Afonso's Regional Operation Department, but with an expanded scope to include the maintenance of transmission lines and Operation & Maintenance of remotely assisted SEs;
- ↳ **Citizen Company (Empresa Cidadã) Certificate** – 17th Edition, conferred by the Diploma of Accounting Merit issued on December 11, 2019, by the Regional Accounting Council of the State of Rio de Janeiro (CRCRJ) to the accountant José Henrique Mendes for the accounting information of the Socio-environmental Report, base year 2018;
- ↳ **Certificate of Municipal Inspection Service (SIM) of Casa Nova (BA)**, granted to Casa de Queijo Nia Leite de Cabra, at Sítio Terra Seca, one of the structures provided by Chesf's Social Responsibility project "Lago de Sobradinho". This is the first SIM Seal issued in the municipality that allows the labeling of home-made products and their commercialization, an important achievement for family production in the region; and
- ↳ **Chesf's award as the company with the largest team of participants in the Eco Run Sunset race**, held in Reserva do Paiva, municipality of Cabo de Santo Agostinho, Pernambuco.

③ STRATEGY AND PROSPECTS



MISSION AND VISION

GRI 102-16 | SDG 7, SDG 8, SDG 9



MISSION

To act in the electric energy sector with excellence and in a sustainable way, creating value for society.



VISION

To act in the electric energy sector with excellence and in a sustainable way, creating value for society.

LONG-TERM STRATEGIC PLANNING

GRI 102-15, 102-26, 102-29, 102-31

Chesf's Strategic Planning is a dynamic process that involves the constant assessment of scenarios, internal and external factors that influence the business performance and the consequent adaptation of strategic objectives, aiming to improve management and achieve the goals and results proposed, considering a long-term perspective.

Chesf's planning and management system consists of a set of management practices aimed at obtaining results, based on the establishment, execution and monitoring of goals, initiatives and actions that drive the fulfillment of the institutional mission and the achievement of prospects, based on the strategic objectives of the Company, aligned with the strategic guidelines of the holding company, and guided by the values of the Organization.

Chesf's Strategic Planning, together with the Eletrobras Business and Management Master Plan (PDNG) and the Chesf Business and Management Plan (PNG Chesf), constitute action-oriented instruments, the result of a

collaborative work arising from the integration of efforts of the Board of Directors, strategic leaders and key stakeholders. In its preparation, the perspectives of public authorities, sector agents and various stakeholders are taken into consideration.

In view of the changes that have occurred in Chesf's internal and external environments in recent years and the need to develop strategic content aimed at growth over the next 15 years, Chesf is carrying out a repositioning of the Company in line with Eletrobras' strategic guidelines to achieve the following objectives:

- to formulate Chesf's long-term strategic planning that will guide the Organization's growth in the next 15 years, using scenario building and internal diagnosis;
- to propose and implement governance and strategy management methodology; and
- to implement the continuous monitoring process of the strategy's scope.

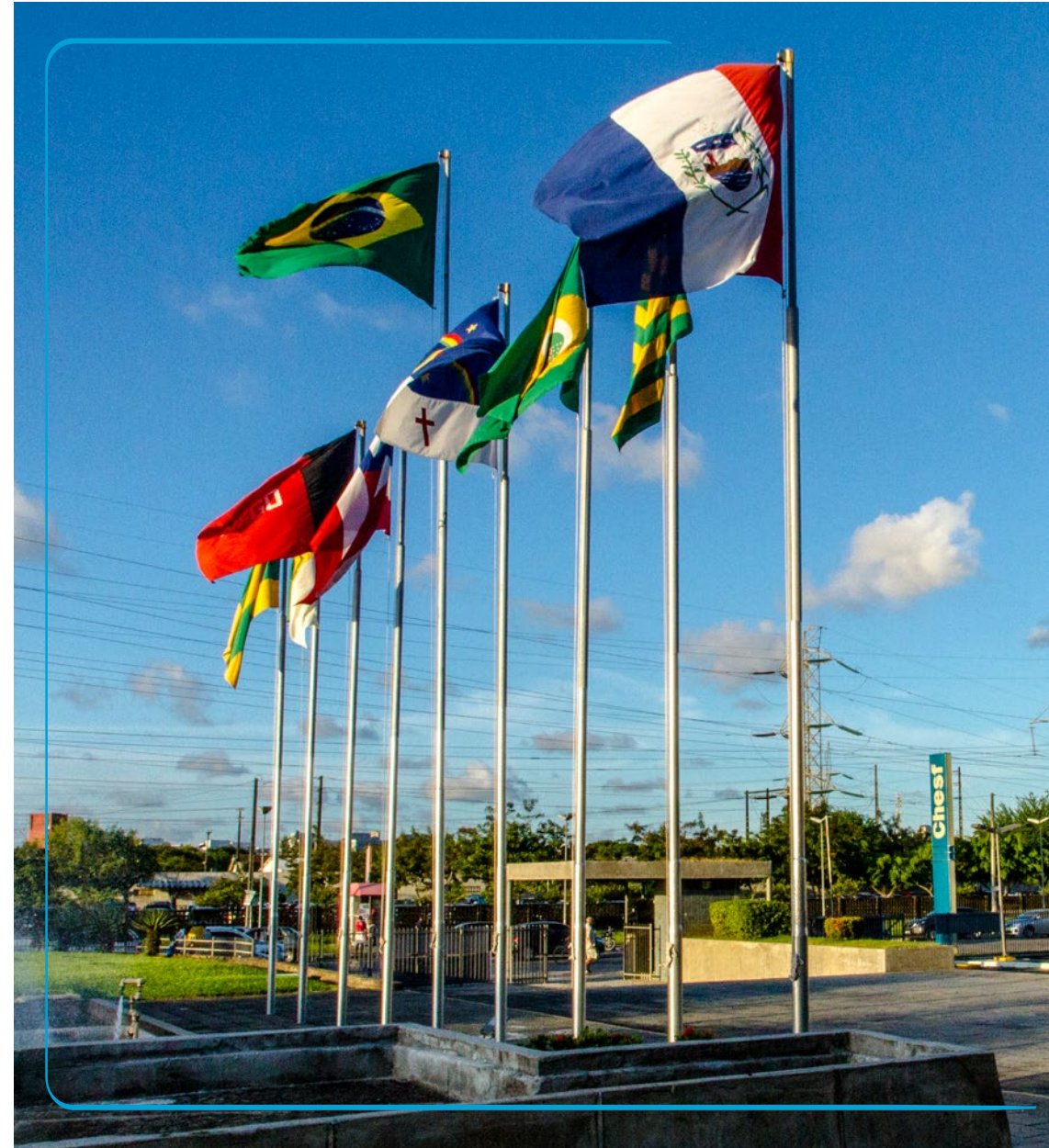


As a result of the Strategic Planning review work, foreseen in the Company's regulatory instruments, a process of updating the organizational identity and strategic objectives of Chesf was developed and, consequently, the construction of its Strategic Map, which meets the challenges of the current scenario of the domestic electricity sector.

In May 2019, Chesf's Chief Executive Officer, Fabio Lopes de Alves, informed the Board of Directors of the beginning of the Long-Term Strategic Planning process, with the objective of discussing the Company's future. On that occasion, the Chief Executive Officer clarified that the methodology used to prepare the Strategic Planning complies with the Parent Company's requirements.

Chesf's Strategic Planning is integrated to the implementation, monitoring and evaluation of the strategy, being an important element of the organizational governance, as it is used to define rules, create structures and direct the Organization, interacting directly with other subsystems, such as performance management, project portfolio management and collaboration and outsourcing models.

On the following page we present the Chesf Strategic Map for the 2020-2035 cycle.



Detail of the Headquarters entrance, in Recife. Credit: André Schuler.



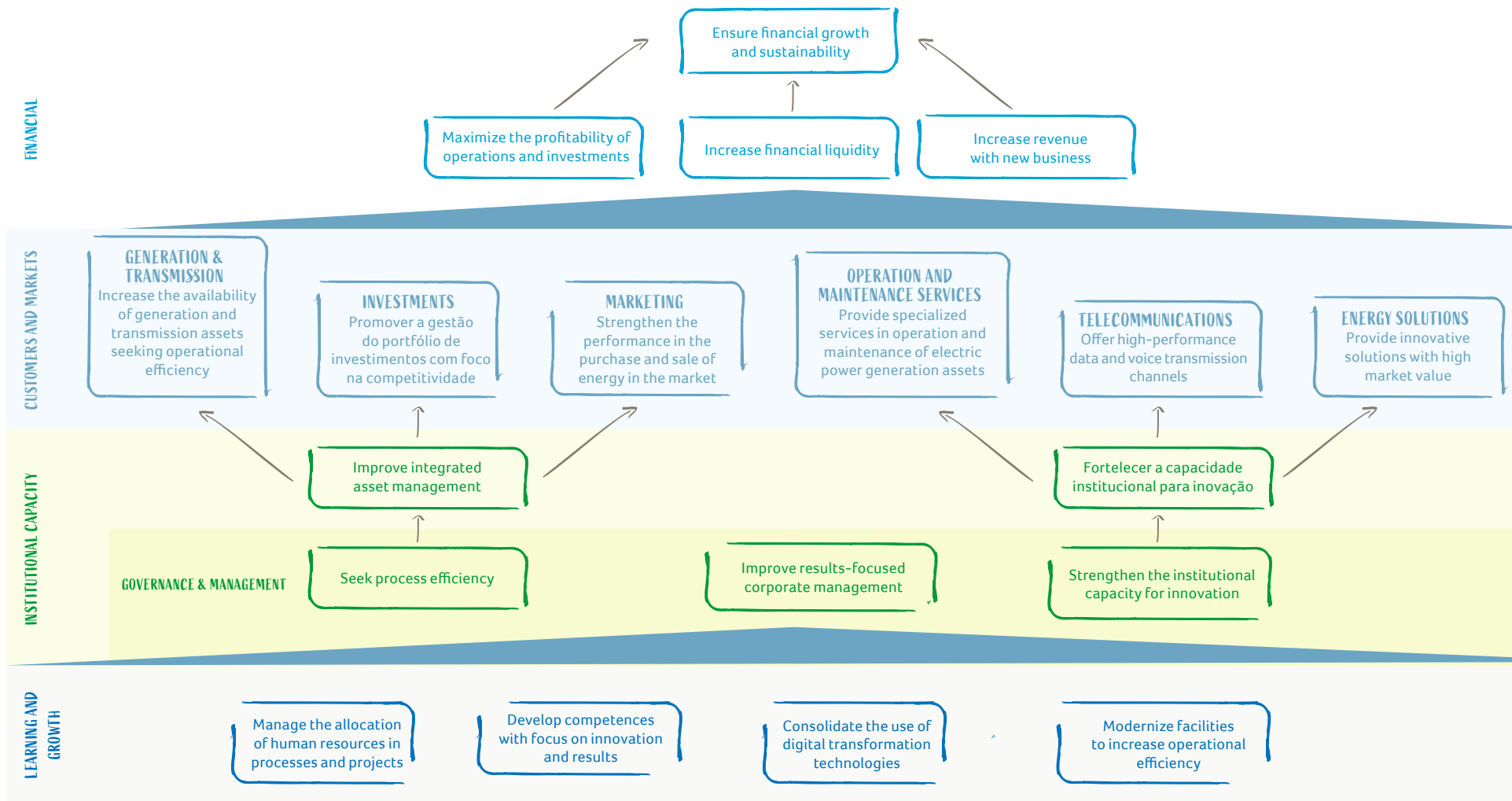
Strategic map - Chesf 2020-2035

MISSION To act in the electric energy sector with excellence and in a sustainable way, creating value for society.

VISION To be a reference in profitable and innovative solutions in electric energy and with high value for society.

VALUES

- Safety
- Respect for People with Justice and Fairness
- Ethics and Transparency
- Innovation and Entrepreneurship
- Commitment to Society
- Preservation of the Environment



PNG 2019-2023 - Monitoring

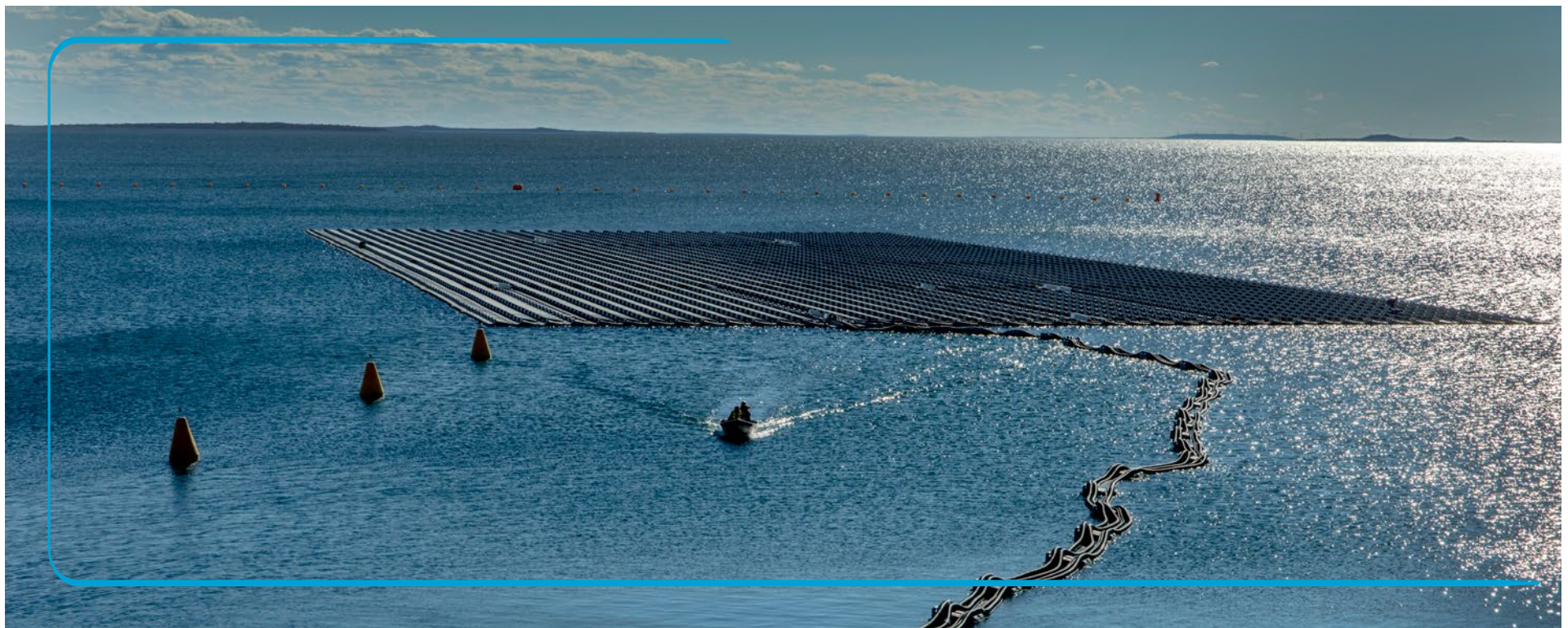
GRI 102-31

The PNG of the cycle started in 2019 was based entirely on the holding company's Business and Management Master Plan (PDNG). Every month, the Board of Executive Officers is gathered to evaluate the fulfillment of the objectives contained in the PNG and the indicators of the Business Performance Goals Contract (CDME), signed between Eletrobras and

its subsidiaries. In this way, it is possible to determine deviations between goals and results, take action on occurrences and improve business performance, presenting these results to the Board of Directors.

All of our strategic objectives are broken down into strategies, measures and indicators,

allowing the involvement and participation of all organizational levels in business planning. To register and support this process, we implemented Planest, a strategic management software that brings more agility and reliability to the information consolidation process.



Energized Floating Solar Power Plant, in full operation - Sobradinho (BA). Credit: André Schuler.

Monitoring of Business and Management Plan

VALUING PEOPLE

ACTION

Consensual Employment Termination Agreement.

RESULT

660 IN TWO YEARS Goal. In 2019, they adhered to the **652 EMPLOYEES PLAN**.

ACTION

Dimensioning of the Quanti-qualitative Framework.

RESULT

Staff dimensioned by macro-process.

ACTION

Managerial Succession Plan.

RESULT

Structured leadership development trail.

FINANCIAL DISCIPLINE

ACTION

Sale of seven administrative properties.

RESULT

8% CONCLUDED – sale of two properties worth **RS 1.5 MILLION**.

OPERATIONAL EXCELLENCE

ACTION

Improvements to the transmission system.

RESULT: 100% (254 EVENTOS)

ACTION

Improvements to the generation system.

RESULT: 100% (40 EVENTOS)

ACTION

Regulatory strategy for generation and transmission.

RESULT: 100%

ACTION

Implementation of the SAP-ERP system, in Single Instance, in Eletrobras companies.

RESULT: 100%

ACTION

Deploy cloud communication, collaboration and productivity solution.

GOAL: 78.4% → OUTCOME: 73.35%

ACTION

Advanced analytical data processing based on Business Intelligence (BI) platforms.

GOAL: 61.47% → OUTCOME: 61.83%



OPERATIONAL EXCELLENCE

ACTION

Itaparica Exemption Project

RESULT: 100% of shares planned for 2019

ACTION

Expansion of contracted transmission

GOAL: 100% → OUTCOME: 88%¹

ACTION

Overcoming the largest number of corporate ventures implemented in the last four years

GOAL: 100% → OUTCOME: 92%²

ACTION

R&D 0372-9990/2015 - Exploration of solar energy in lakes of hydroelectric power plants - 1MWp plant

RESULT: 100%

ACTION

R&D 0048-0117/2017 - Petrolina solar platform - contracting of performing institutions

RESULT: 70%

ACTION

R&D 0048-1619/2016 - Heliothermal generation central tower - new public call

RESULT: 50%

ACTION

R&D CSP Project - Heilotherm parabolic cylinders - partnership formation process

RESULT: 50%

ACTION

R&D Wind Turbine Project: improvements in the energy conversion process - contracting of performing institutions

RESULT: 100%

ACTION

Reduction in Costs of Materials, Services and Other Expenditures using the Zero-based budgeting (ZBB) methodology

GOAL: 67.61% → OUTCOME: 69.55%

SUSTAINABLE ACTION

ACTION

Reaching the portfolio global average in the Corporate Sustainability Index by 2023.

GOAL: 65% → OUTCOME: 100%

Notes: 1.Poor performance of the contractor.

2.Delay in the construction of the transmission line, project of Casa Nova A, started in November 2019.



Business indicators

Indicator	Frequency	2019 Goal	Accomplished in 2019	2020 Goal
ISE B3 Global	Annual	65	65	67.6
Net Debt/Ebitda ratio	Monthly	0.97	0.00	0.72
Accident frequency rate	Monthly	2.73	1.93	2.59
Corrective measures for significant deficiencies and material weaknesses	Annual	100%	82%	100%
Investment in R&D+I/ROL Parent Company	Quarterly	1%	1.2%	1%
Generation + Commercialization Global Indicator	Monthly	0.95	1.03	0.95
Generation Availability	Monthly	1.00	1.12	1.00
Availability of transmission lines	Monthly	99.85%	99.97%	99.85%
G&T expansion indicator ¹	Monthly	100%	55.30%	100%

¹ The Generation & Transmission Expansion indicator protocol will be changed in 2020, as it currently only considers the expansion measured by the increase of line kilometers to the system. The new protocol will also consider the expansion by increasing the capacity of transformation in MVA.

PNG 2020-2024

GRI 102-26, 102-31

The Business and Management Plan (PNG) is an important management instrument that guides the Company's strategies, plans and actions in the short and medium term. It is developed from Eletrobras' Business and Management Master Plan (PDNG), which has a five-year perspective and establishes strategic guidelines for the actions and projects to be developed by the companies, aiming at reaching the Group's strategic objectives. For the 2020-2024 cycle, common methodology and premises were defined for all the companies due to the need to standardize the criteria used.

Among the guidelines, plans and business strategies that guide the path for Chesf's sustainable growth, we highlight the following: the perspective of expansion of the Company, considering the continuity of investments in opportunities related to new forms of renewable energy generation, especially solar and wind sources; the search for operational excellence throughout the value chain; the modernization of Chesf's facilities, including improvements in the Transmission and Generation area, with a focus on increasing the profitability of these assets; The elimination of pending works and the resumption of efficient participation in auctions; the emphasis on regulatory, land, judicial and environmental issues; the optimization of operating costs, focusing on the reduction of personnel costs and cultural transformation; the sustainable performance; and the improvement of corporate governance and business integrity.



MANAGEMENT

Information technology management

Digital transformation

GRI 103-1, 103-2, 103-3 | SDG 9

The necessary workforce reductions and the current technological scenario demand that Eletrobras and its companies go through a digital transformation. One of the major advances in this direction, in 2019, was the finalization of ProERP, the SAP ERP Deployment Program (integrated business management system) in single instance for Eletrobras companies. Go Live, the event of joint operation of the platform, took place in January.

We made an important contribution to ERP: the pioneering implementation of the Work Clearance Management (WCM) module to enable the management of all stages of the operational assets' useful life in an integrated system, with adequate monitoring and treatment of data throughout this cycle. The platform complements the traditional Plants Maintenance (PM) module, for maintenance planning. The WCM was customized for Eletrobras and allowed the integration of important steps, such as Intervention Request (SI), Preliminary Risk Analysis (APR), maneuvering routes, records and analysis of occurrences and disturbances, hydrological measurements, among others.

Integrated asset life cycle management, which includes the technical, procurement and financial areas, facilitates important decisions, thus allowing the optimization of the Company's management and performance improvement.

Other gains arising from the implementation of SAP are:

- for the operation of the Shared Services Center (CSC);
- greater agility in making business decisions through access to reliable, real-time information;
- Improvement of control in the physical and financial monitoring of enterprises;
- ensuring the transparency and traceability of corporate information;
- mitigation of problems and material weaknesses found in SOx audits; and
- access to information, consolidation and comparison of results of Eletrobras companies in a timely and reliable manner.

The digital transformation is strategic for Eletrobras and its companies, because it translates into automation, optimization and operational safety, among other advantages. Chesf is structuring an area dedicated to the subject, linked to the Superintendence of Information Technology, and has already made a diagnosis of its current stage of digitalization.



The management of the theme is being developed through the Eletrobras Digital program, a type of hub (convergence point of ideas) among all the companies in our system. Some of our commitments to make it possible are:

- creating specific digital transformation departments in Eletrobras companies;
- including digital transformation in PDNG 2020- 2024 as a guideline for the Governance, Management and Critical Capabilities Dimension; and
- assignment of strategic objectives to this guideline.

The digital transformation areas will be responsible for defining the digital strategy of Eletrobras companies (related to Governance); adopting agile practices (associated with management and development of critical capabilities) and evaluating and adhering to technologies that enable a better return on investment (related to the development of these critical capabilities).

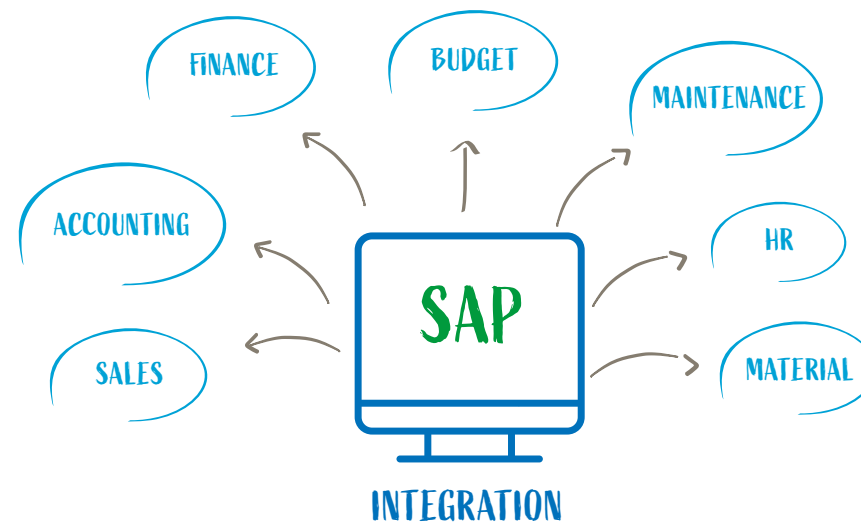
An average annual budget of R\$ 8.5 million will be allocated to Chesf's digital transformation. In addition to the SAP system, resources have already been allocated to the development, implementation and management of automated solutions for advanced analytical data

processing; the development, implementation and management of artificial intelligence, machine learning, deep learning, robotic process automation, cloud computing and Internet of Things, among other technologies; and the prospecting of innovations with potential to leverage business results. These investments are based on the Strategic Objective OE18 - Consolidate the use of digital transformation technologies.

Additionally, the diverse IT demands of Eletrobras companies have been met with the joint purchase of integrated solutions - energy trading, legal, cloud (Office 365 - online storage), corporate mobility for travel and expenses, digital certificates (e-CPF) and management of digital and electronic signature of documents in automated flow.

Automation

Together with SAP, Gabi, a robotic automation software was deployed to process up to ten invoices every two minutes. This facilitates the entry of Miro de Serviços into the platform. Miro is an SAP code that allows for automated confirmation of payment obligations, facilitating financial management. To illustrate Gabi, an avatar was created.



Shared Service Center (CSC)

GRI 102-10

Eletrobras companies transactional and business support activities in finance, accounting, human resources, procurement, information technology, legal, logistics, and infrastructure processes, and general services are now centralized by the Shared Services Center, whose implementation was completed in 2019. The new structure standardizes support processes, improving control over internal compliance levels; and increases transparency and visibility of operations, through the availability of data on business evolution and operational performance. That same year, Chesf consolidated the implementation of the Northeast CSC unit, transferring the management of a large part of the procurement processes to this structure. The purchasing and contracting agreements underwent improvements aimed at always protecting the administration, adhering to the best market practices and complying with the recommendations of regulatory agencies.

Cybersecurity

GRI 103-1, 103-2, 103-3 | SDG 7, SDG 9, SDG 11, SDG 13

The main objective of cybersecurity management is to avoid negative impacts by acting preventively, correcting vulnerabilities and monitoring the environment. Security teams monitor endpoints (corporate network protection approach) - tools that are always kept up-to-date - and act in case of malware (malicious code or program) alerts and other threats that cannot be directly addressed by them. There is an outsourced team that acts as the Security Operations Center (SOC), gathering all the event records of the tools, monitoring the environment, sending periodic reports to monitor the indicators and acting in case of incidents.

Cybersecurity management is permeated by the Information Security Policy and several regulatory instructions, all published, updated and audited to verify their compliance and execution on the subject. The processes follow the main security frameworks, Federal Government regulations and the Code of Ethical Conduct and Conduct of Eletrobras companies. We can highlight the standards of the Brazilian Association of Technical Standards (ABNT) ISO GUIA 73:2009 - Risk Management; ISO/IEC 27001:2006 - Information Technology - Safety Techniques - Information Security Management

Systems; ISO/ IEC 27002:2005 - Information Technology - Safety Techniques - Code of Practice for Information Security Management; Decree No. 3. 505/2000, which institutes the Information Security Policy in the organs and entities of the Federal Public Administration; the Normative Instruction IN 01/2008 GSI, which disciplines the information security management and communications in the Federal Public Administration and makes other provisions; and the Complementary Standard No. 03/IN01/DSIC/GSIPR - Guidelines for the Preparation of Information Security Policy and Communications in the organs and entities of the Federal Public Administration.

The topic of cybersecurity is handled by two areas at Chesf: the Superintendence of Information Technology and the Superintendence of Telecommunications, Protection and Automation. As a power generation company, the operational area has specifics on the subject that demand specialized knowledge to deal with the assets of telecommunication, protection and automation of the electrical system. For this reason, the areas have been separated.



Strategic planning and indicators related to cybersecurity are closely monitored. Planning is carried out for a three-year perspective and reviewed annually when new priorities are set according to needs. Audits are also conducted in the environment to validate the processes in order to assess the level of maturity, pointing out control failures and improvements. The results of the follow-up are presented to the Board of Executive Officers and the Board of Directors. It is worth noting that, in 2019, no adjustment needs were reported.

The average annual budget applied is R\$ 2.75 million. As technological resources, all necessary for full management and monitoring are used, such as firewall, anti-spam, antivirus, password safe, proxy, among others.

In 2019, our main actions in relation to cybersecurity were:

- developing and formalizing an appropriate information security framework, including the clear definition of roles and responsibilities;
- developing policies and procedures for managing vulnerabilities, including remediation;
- developing, implementing and exercising the incident response (IR) plan;
- including the topic of information security as part of corporate risk assessment;
- developing a classification program for sensitive information and adopting appropriate tools;
- developing a privacy policy;
- implementing firewalls (technological protection barrier) in substations and power plants; and
- implementing layer 7 firewalls for operation centers.

To receive and handle complaints and claims, we have the IT Service Center.



Command center at the Xingó plant in Sergipe. Credit: André Schuler.



Quality management

In 2019, we renewed the ISO 9001 Certification for the Operation Quality Management System (SGO) and Substation Maintenance Management System (SGMS) of the Operations Board, after external audits carried out by Fundação Carlos Alberto Vanzolini. With this, we have consolidated more than a decade of history of these systems in the Company and strengthened the culture of quality management.

The certification was based on the 2015 version of the standard, which incorporated elements of governance, strategic management and day-to-day risk management of the Operation and Maintenance areas, adding value and maturity level to the management.

Throughout 2020, we intend to go beyond the premises of ISO 9001, implementing a process focused on asset management, avoiding the application of penalties and entering the process of tariff review with greater conditions to minimize losses.

Supplier management

GRI 102-9 | SDG 8

Our supplier contracting process is oriented by Law 13,303/2016 (“Lei das Estatais”) and by Eletrobras’ Bidding and Contracts Regulations. The entire process follows the requirements of public call and evaluation of legal qualification criteria, technical qualification and economic-financial qualification. In addition, all contracts have labor clauses and legal conditions related to the guarantee of human rights and compliance with environmental legislation. The document Principles and Commitments of Business Conduct in Chesf’s Relationship with Suppliers, endorsed by suppliers at the time of the bidding, also establishes commitments in this regard, in addition to wages, training and occupational health and safety.

Of the total number of Chesf suppliers, 13 were identified as being at risk of child labor and 42 as being at risk of youth exposure to hazardous work. These are suppliers that work in open field activities, such as those that clean transmission lines. Hazardous work is considered to be work performed in energized facilities, work at height, surveillance and underwater services. In

relation to compulsory or slave labor, the risk was identified in 33 companies, contracted for the maintenance/suppression services of vegetation in transmission line rights-of-way and works and services in transmission lines. GRI 408-1, 409-1

However, the risks do not necessarily manifest themselves, since the contracts that require the exclusive dedication of labor are monitored as to the payment of labor and social security obligations, according to the items below the Code of Conduct:

- not to use work in conditions analogous to slavery, forced, degrading or involuntary work of prisoners;
- not to use child labor, except in the condition of apprentice, from the age of 14;
- to reject any form of abuse and sexual exploitation of children and adolescents and any action or promotional material that encourages it, including advertising;



- to ensure decent conditions for workers, including those of subcontractors, relating to the workplace, transport, accommodation, food and hygiene;
- not to admit discrimination on grounds of skin color/race, marital status, physical and cognitive condition, age, religion, creed, sex, social class and any other form;
- to eliminate all forms of threat, coercion and physical, verbal and psychological violence, emphasizing the prohibition of bullying and sexual harassment; and
- to accept the engagement of workers in unions and associations, as well as the right to collective bargaining. GRI 407-1

In addition, we consider the following to be supplier commitments:

- to know the contents of the booklet “Principles and Standards of Business Conduct in Chesf’s Relationship with Suppliers”, available on the [Chesf portal](#) and attached to contracts;
- not to employ minors under the age of 18 in night, dangerous or unhealthy work, nor under the age of 16 in any activity, except as apprentices from the age of 14;
- not to have employees performing degrading or forced labor; and
- to respect environmental legislation.

Chesf reserves the right to carry out audits at the premises of the contractor or at the places where the services are performed in order to verify compliance with the legislation and its ethical practices.

Regarding corruption, 72 suppliers with contracts signed in 2019 (29% of the total) were submitted to the due diligence process, as they fit into the critical category under the aspect of integrity, 3 of which were classified with high integrity risk and 1 with very high risk. For these companies, integrity opinions were issued based on background check procedures, and action plans were defined for monitoring, including awareness actions on the issue of integrity, possible audit work, among other actions. GRI 205-1

Supplier profile

GRI 204-1

Suppliers contracted	245
Amount (R\$ million)	R\$ 540.63
Total suppliers (estimated)	594
Purchases from local suppliers (R\$ million)	R\$ 180.44
Percentage of purchases from local suppliers	32.56%



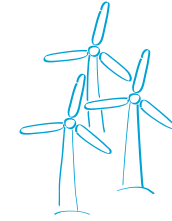
Legal and regulatory compliance management

GRI 103-1, 103-2, 103-3 | SDG 7, SDG 16

The energy sector in Brazil is regulated by the Brazilian Electricity Regulatory Agency (Aneel). Regulatory management at Chesf consists of integrating the regulatory processes with the various areas of the Company, promoting articulation with the regulatory agencies, especially Aneel, and strengthening the regulatory culture internally, in accordance with the guidelines of our Board of Executive Officers. It also involves the application of the Integrated Asset Management principles, focusing on maximizing the value of assets and minimizing losses, considering the rules defined for the electricity sector.

One year after the creation of the Superintendence of Regulation, linked to the Operations Board, which now has a structure of three departments, expanding its competencies in Asset Management, Transmission Contract Management and Regulatory Aspects, the results achieved ratify the need to invest in these processes in a more integrated manner and aligned with Chesf's strategic objectives. The strengthening of the Regulation structure, with an integrated view of all processes involving regulatory aspects and its performance in the management of transmission contracts and asset management (both generation and transmission), brought solid and significant results for the Company, among which are worth highlighting in 2019:

- the reduction of fines to the lowest annual historical amount ever received by Chesf: R\$ 690 thousand. This fact is due to the administrative appeals presented by the Company and, mainly, to preventive actions and agreements made with the regulatory agency through Improvement or Result Plans, which represented savings of around R\$ 15.6 million when compared to the previous year;
- an increase of more than R\$ 12 million in the generation revenue of Chesf's shareholder plants, resulting from the Company's claim for the change in the Unavailability Adjustment calculation, as explained in Aneel's Technical Note;



The strengthening of the Regulation structure, with an integrated view of all processes involving regulatory aspects and its performance in the management of transmission contracts and asset management (both generation and transmission), brought solid and significant results for the Company.



- an increase in the number of transmission contracts resulting from the large number of authorizations for new accesses to the National Interconnected System (SIN), totaling, at the end of 2019, 1,364 contracts in force with other agents connected to its facilities, whether with transmission companies, generation companies, distribution companies or consumers and service provision contracts with the National System Operator of the 23 transmission concessions in force;
- the coordination, by the Asset Management area, of the Transmission Tariff Review process for the largest Chesf concession contract (Basic Network), which involves an Annual Allowed Revenue (RAP) of the order of R\$ 187 million, over 1,400 revenue items and 5,000 associated physical assets. Such work, started in 2019 and still in progress, aims to prepare the Company for the inspection stage by Aneel, in order to avoid possible disallowances and fines, respecting all regulatory requirements for the presentation of technical reports, in addition to identifying ways to improve the processes involved for the implementation by the areas responsible for the next revision cycles;

- survey and prioritization of regulatory requirements and best practices in Asset Management for implementation at ProERP/SAP, in order to allow greater integration and integrity in the information on the life cycle of assets, considering the aspects of new venture projects, operation, maintenance and asset divestiture; and
- the study and preparation of the adjustments that must be made to meet existing and upcoming regulatory frameworks, participating in Working Groups with Eletrobras companies.

In 2020, we will face the challenge of adapting our remote assistance systems, in accordance with Aneel's Normative Resolution 864/2019 and several Network Procedures Submodules, along with the requirements regulated by the General Law of Personal Data Protection (No. 13,709/2018).

Important changes are also expected in the coming years as a consequence of the new regulatory framework being proposed by the Ministry of Mines and Energy from the unfolding of Public Consultation 33, which institutes the marketing based on an hourly rate, regulates the dispatch by price, creates the pricing of sources for their benefits and brings several other innovations.

Environmental and socio-economic compliance management

There is also regulatory management related to environmental and socioeconomic compliance of our enterprises and facilities. In this sense, our main objective is to avoid negative impacts, but when this is not possible, mitigating measures are established, which occurs during the licensing process.

We conduct diagnostic studies and evaluation of the potential impacts at the time of implementation of the undertakings, which are followed up until the energization phase, considering all relevant aspects, in order to minimize the risks of delays and penalties imposed by environmental agencies or those involved in the licensing process. The assessments are consolidated monthly in the form of reports and action plans, and the results are presented to the Engineering Department at monitoring meetings. For units in operation, the environmental area monitors the environmental and socioeconomic regularity of the generation and transmission units and issues periodic reports on the licensing status.

In order to contribute to the management of environmental and socioeconomic compliance of both the undertakings under implementation and the units in operation, we rely on the Environmental Licensing System (Sislic), a computerized tool that allows you to register and share information and documents related to legal compliance.

Our performance in this sense is guided by the Environmental Policy and the Social Responsibility Policy of Eletrobras companies. The management is the responsibility of the Superintendence of Expansion Planning and Environment, through the Departments of Environment for Expansion and Exploration. To this end, we have organizational units dedicated to meeting environmental and socioeconomic demands, with a multidisciplinary team and specific budget, in addition to several consulting firms to meet legal requirements. The management of social responsibility actions may also

represent impacts on legal and regulatory compliance. Therefore, some of them are carried out by the Superintendence of Institutional Relations, through the Department of Public Relations, Social Responsibility and Sponsorship. It is worth noting that Chesf's investment in structuring social projects has as its main objective to enhance the positive impacts on the communities in which the projects are implemented, also with the purpose of maintaining legal compliance.

Regarding the awareness initiatives, the main ones were the May 18 Campaign - Sexual Violence Against Children and Adolescents (Lecture by Giovani Santoro - Pedophilia on the Internet); and the 16 days Campaign of Activism for ending violence against women.

Complaints are received and dealt with by the Ombudsman channel or the Citizen Information Service (SIC) - see [page 66](#). Additionally, we have an environmental channel for exclusive demands.

We highlight that in 2019, we participated in Working Groups with Eletrobras companies to analyze changes in current legislation. The Environmental Policy was also updated, including the review of its objectives, principles, and guidelines, and was ratified by our Board of Executive Officers. Also this year, we began reviewing and improving Sislic.

The legal conformity assessment has been able to point out deviations in order to enable the definition of countermeasures and the planning of solutions. However, our environmental area perceives the need to improve the way we periodically communicate the compliance status of our developments to the other areas of the Company, in addition to allowing more structured access to the information compiled through the Environmental Licensing System (Sislic).

Risk, crisis and opportunity management

GRI 102-11, 102-15, 102-30, 103-1, 103-3 | SDG 1, SDG 2, SDG 3, [SDG 7](#), [SDG 9](#), SDG 10, [SDG 13](#), SDG 14, SDG 15

Our corporate risk management methodology follows the guidelines of Eletrobras' Risk Management Policy. In 2019, we updated the Risk Matrix that takes into account economic, social and environmental aspects and demonstrates the main risks to which we are exposed. For the automation of risk management, the Risk Manager module (GRC/RM) was started under the coordination of Eletrobras. The implementation will take place in 2020.

We have a Risk Committee, which monitors the prioritized risk mitigation treatments and the results obtained through periodic assessments with the owners of these risks. The list of prioritized risks is approved by the Board of Directors and includes, in addition to those defined by the Eletrobras holding company for monitoring in all companies (business risks), other specific events of Chesf. In 2019, the list of risks prioritized by us included 12 corporate and 4 own risks, the most relevant being dam safety.

As of 2020, the Audit and Statutory Risks Committee (CAE) – [see page 57](#) –, which operates in the holding company with comprehensive monitoring of risk management in all the companies of the group, will also begin to approve the risk matrix, in addition to continuing to support the Boards of Directors of Eletrobras companies on the topic of risk management.

Regarding internal controls, we participate annually in the SOx Certification process to ensure compliance with the requirements of the U.S. Sarbanes-Oxley Act. The certification involves the annual review stages of the documentation related to the business and governance processes previously defined in the scope, and the tests of the effectiveness of the internal controls performed both by the management under the responsibility of Chesf's Internal Audit as well as the independent auditors. All companies in the group are required to meet the requirements of the SOx law in order for Eletrobras to maintain the trading of its shares on the New York Stock Exchange (Nyse).

Crisis management

Eletrobras is preparing a Crisis Management Manual that presents the communication strategy of companies to efficiently reach their stakeholders in times of crisis. The document provides for the establishment of the Crisis Management Committee and the definition of the roles and responsibilities of its members, the list of basic procedures for each type of emergency and the communication strategy with the different stakeholders directly or indirectly affected.



Main risks

GRI 102-15

The prioritization is based on the risk appetite defined by the Company's senior management and considers topics related to sustainability in the analysis to determine the exposure to identified risks. The main risks are presented below.

Risks	Risk management and mitigation
Legal risks	<ul style="list-style-type: none"> ○ Ensuring the monitoring of process updates and provision values to mitigate the risk of failure in process monitoring activities; and ○ Quarterly analysis of the risk probability and estimated value of the processes under the responsibility of contracted law firms, to mitigate the risk of deficiencies in monitoring the performance of outsourced firms.
Marketing risks	<ul style="list-style-type: none"> ○ Controls implemented to mitigate the probability and impact associated with the risks of market price changes and negative short-term market exposures. Controls implemented to mitigate the probability and impact associated with the risks of market price fluctuations and negative short-term market exposures.
Risks related to the SPEs (Special-Purpose Entities)	<ul style="list-style-type: none"> ○ Ensuring that information or payments are prepared and managed in accordance with current accounting standards to mitigate the risk associated with relevant facts in SPEs that are not timely identified; and ○ Actions to raise the awareness of private partners on the issue of integrity to mitigate the risk associated with non-compliance with anti-fraud and corruption control mechanisms.
Regulatory risks	<ul style="list-style-type: none"> ○ Monitoring the Regulatory Agenda of Aneel and the Ministry of Mines and Energy and working with the associations (Abrate and Abrace) to discuss regulatory issues related to the Generation and Transmission Segment in order to mitigate the risk of regulatory changes by Aneel that impact the Company's business.
People management risks	<ul style="list-style-type: none"> ○ Development of actions to explicitly incorporate critical knowledge into the business environment to mitigate the risk of failures in management practices and knowledge retention; and ○ Keeping the structure of the job, career and salary plan updated in order to mitigate the risk of personnel management being inconsistent with the best market practices or not in compliance with current legislation.
Risks related to the management of works	<ul style="list-style-type: none"> ○ Reviewing new business prospecting studies considering environmental criteria to mitigate the risk of failure in prospecting studies for conducting ventures.

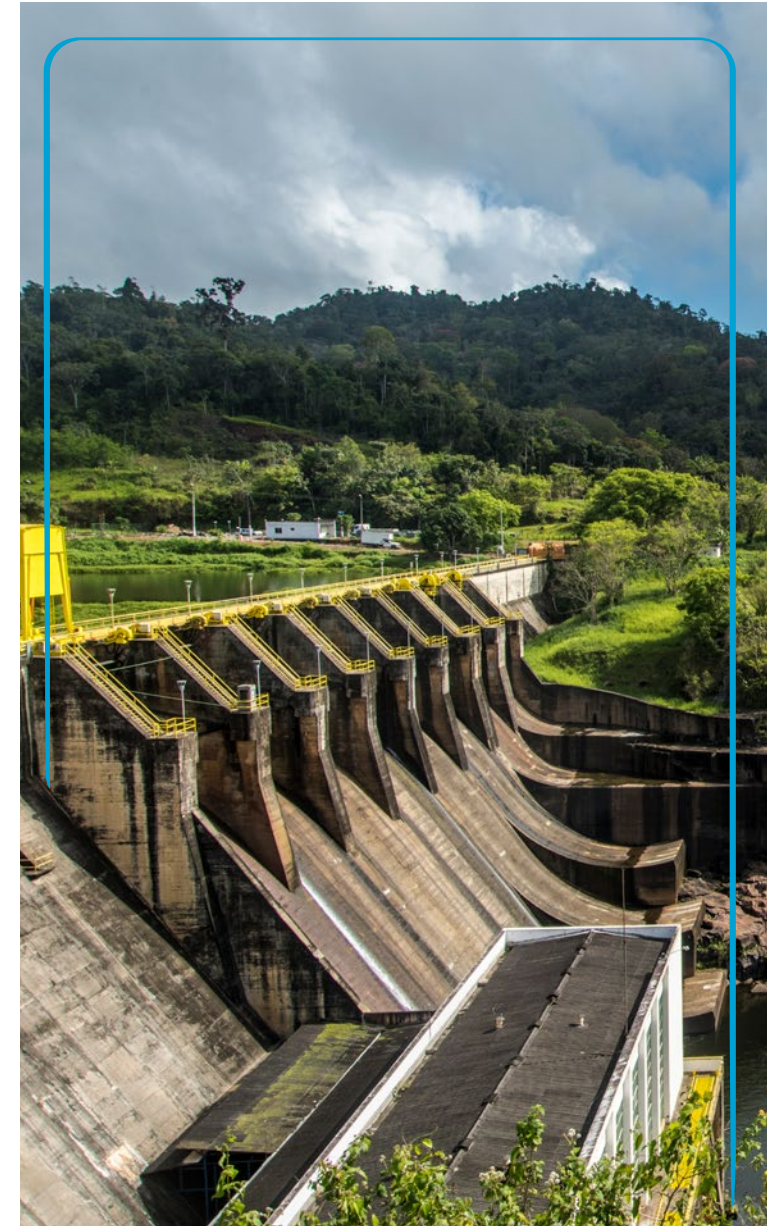


Contingency

GRI EU21

Our contingency measures are planned and our operations are constantly monitored so that, in the event of any occurrence, the Contingency Plans are applied immediately. These plans are made available in the facility's command center and their effectiveness must be evidenced through reading tests and field tests, when applicable, with updating by those responsible and disclosure to the facility's employees and management hierarchy.

In compliance with Law 12,334/2010, relating to the National Dam Safety Policy, Chesf prepared the Emergency Action Plan (PAE) for all of its dams, which brings together measures to protect the populations, properties and the environment located downstream from the dams. The document also brings the procedures to be adopted by the Company in emergency situations, characterized when there is a risk of rupture of the dam's structures or even in case of a hypothetical rupture. In addition to Chesf's internal actions, the PAE defines the external agents to be notified and provides relevant information to the civil protection and defense authorities to assist them in the preparation of the respective municipal contingency plans and management of the external emergency.



Funil Hydroelectric Power Plant. Credit: André Schuler/Chesf.



COMMITMENTS TO SUSTAINABILITY

GRI 102-16, 102-26, 103-1, 103-2, 103-3 | SDG 7, ODS 8, SDG 9, SDG 13, SDG 16

Chesf establishes guidelines for its actions regarding the promotion of sustainable development, seeking to balance business opportunities with social, economic-financial and environmental responsibility. Among these guidelines are the prioritization of clean and renewable energy production, the rational use of resources, acting as an agent that induces energy efficiency, being committed to ethics and transparency, respecting human rights, adding value for stakeholders and ensuring adequate working conditions and well-being for employees.

We are signatories of important commitments such as the Global Compact, the Women's Empowerment Principles (UN Women), the Gender and Race Pro-Equity Program (Special Secretariat of Policies for Women), the Declaration of Corporate Commitment to Confront Sexual Violence against Children and Adolescents (Special Secretariat of Human Rights), the Eletrobras' Declaration of Commitment to Climate Change. In 2019, we also endorsed the Brazilian Business Commitment to Biodiversity, launched by the Brazilian Business Council for Sustainable Development (CEBDS).

That same year, we once again published our [Annual and Sustainability Report](#), produced according to the guidelines of the Integrated Report and GRI standards. We also actively participated in the production of the holding company's Annual Report and in the collection of responses to the Dow Jones Sustainability Index (DJSI) and Corporate Sustainability Index (ISE B3) questionnaires.

The main areas of focus for the Sustainability Committee in 2019 were:

- definition of projects/initiatives in the PNG 2020-2024 according to
- the new PDNG "Sustainability" guideline;
- definition and monitoring of Chesf's business indicators/goals;
- monitoring the goals and actions of the 2030 Agenda - Sustainable Development Goals; and
- restructuring of the Technical Commission for Waste, Effluent and Emission Management.

Voluntary commitments made by Chesf | GRI 102-12

Initiative	Date of adoption	Sustainability dimension	Stakeholders involved in the development and governance of these initiatives
Global Compact	2009	The three dimensions	All stakeholders
Declaration of Corporate Commitment to Confronting Sexual Violence against Children and Adolescents	2014	Social	All stakeholders
Women's Empowerment Principles (UN Women)	2011	Social	Workforce
Gender and Race Pro-Equity Program	2007	Social	Workforce
Eletrobras' Declaration of Commitment on Climate Change	2012	Environmental	All stakeholders
Brazilian Business Commitment to Biodiversity	2019	Environmental	All stakeholders



Maintenance on transmission lines. Credit: Eduardo Vilaça.

Organizations in which we participate

GRI 102-13

- Brazilian Association of Photovoltaic Solar Energy (Absolar).

Participation in the governance board

- Brazilian Association of Large Power Transmission Companies (Abrate). Participation in the General Assembly and Board of Directors;
- Brazilian Association of Power Generating Companies (Abrage). Participation in the General Assembly and Fiscal Council;
- Brazilian Association of Ombudsmen (ABO); Brazilian Committee of Dams;
- Rio São Francisco Basin Committee (CBHSF). Participation as representative of the hydroelectricity segment;
- Brazilian National Electric Power Generation and Transmission Committee (Cigré);
- National Council of Water Resources (CNRH). Participation as a Board Member for the Hydroelectric Generation companies; and
- Coge Foundation.

Participation in projects or committees

- Brazilian Association of Large Power Transmission Companies (Abrate);
- General Assembly and Fiscal Council;
- American Chamber of Commerce (Amcham);
- Brazilian Committee of Dams;
- Rio São Francisco Basin Committee (CBHSF);
- Brazilian National Electric Power Generation and Transmission Committee (Cigré);
- Sponsorship Committee of the Federal Government's Social Communication Department (Secom/PR);
- Public Ethics Committee of the Brazilian Executive Secretariat of Public Ethics;
- National Council of Water Resources (CNRH).
- National Forum on Ethics Management in State-owned Companies, maintained through the Technical and Financial Cooperation Agreement, currently agreed by 20 participating companies; and
- Coge Foundation.

Financial Contribution

- Brazilian Wind Energy Association (ABEEólica);
- Brazilian Association of Large Power Transmission Companies (Abrate);
- General Assembly and Fiscal Council;
- Brazilian Association of Electrical Energy Sector Accountants (Abracone);
- Association of Utilities Telecom & Technology for Energy Companies in Latin America (UTCAL);
- Brazilian Association of Ombudsmen (ABO);
- Brazilian Committee of the National Energy Integration Commission (CIER - Bracier);
- Brazilian Committee of Dams;
- Brazilian National Electric Power Generation and Transmission Committee (Cigré);
- National Forum on Ethics Management in State-owned Companies, maintained through the Technical and Financial Cooperation Agreement, currently agreed by 20 participating companies; and
- Coge Foundation; and *Memória da Eletricidade*.

PNG Sustainability Guideline Projects

Topic	Projects/Initiatives
2030 AGENDA	Social responsibility project Lagos do São Francisco.
VALUE GENERATION FOR ALL STAKEHOLDERS	<ul style="list-style-type: none"> ○ Periodic Dam Safety Review – RPSB; and ○ Implementation of Emergency Action Plans (PAE) - Phase 1.
GREEN BOND	Follow-up of the Eletrobras Project that establishes guidelines for the application and structuring of green financing mechanisms within the Eletrobras System conducted by the Green Financing Committee - initiative.
SUPPLIER MANAGEMENT	Integrated Supplier Management.
CLIMATE CHANGE	<ul style="list-style-type: none"> ○ Structuring Water, Energy and Fuel Consumption Management - initiative; and ○ Implementation of the Conta Zero Program Projects.
HUMAN RIGHTS	Human Rights and Citizenship Program.
BIODIVERSITY	Volunteering in reforestation.

④ CORPORATE GOVERNANCE AND ETHICS



CORPORATE GOVERNANCE

GRI 103-1, 103-2 | SDG 16

Chesf is a [publicly-held, mixed-capital corporation](#), governed by Law No. 6,404 of December 15, 1976. We act in strict accordance with the legislation in force and with the regulatory acts issued by the Brazilian Electricity Regulatory Agency (Aneel). The requirements and duties of the governance bodies are established in our Bylaws and in the respective Internal Regulations of the collegiate bodies.

Our corporate governance acts perennially and sustainably, with ethics, transparency, equity, accountability to society and corporate responsibility. This is done in accordance with policies developed jointly with Eletrobras, all in accordance with Law No. 13,303, Decree No. 8,945, and the Rules of the B3 (Brasil, Bolsa, Balcão) Program in State Governance.


We follow the best practices of corporate governance, among which we highlight:

- Board of Directors composed of 28.5% of independent members;
- Permanent Fiscal Council, with competences and performance defined in Internal Regulations and compliant to legal requirements;
- members of Eletrobras' Board of Executive Officers participating in the Board of Directors;
- adoption of a single Code of Ethical Conduct and Conduct by all Eletrobras companies;
- different channels of communication for receiving complaints and/or denouncements;
- Directors and Fiscal Council members subject to the evaluation of the requirements and prohibitions set forth in Law No. 13,303/2016 and Decree No. 8,945/2016;
- committees to support the Board of Directors, the Audit and Statutory Risks Committee and the People Management and Eligibility Committee; and
- annual evaluation of the members of the Board of Directors, Board of Executive Officers and the Fiscal Council.

Certification at IG-Sest Level 1 and participation in the ISE


GRI 103-3

Chesf was certified, in 2019, at Level I in the Governance Index of the Secretariat for Coordination and Governance of State Enterprises (Sest), of the Ministry of Economy. A total of 49 sets of requirements on the best corporate governance practices of 61 companies were evaluated. The overall average was 8.48 and Chesf scored 9.87. The Evaluation Committee included members of the Ministry of Economy, Fundação Dom Cabral (FDC), Institute of Applied Economic Research (IPEA), Brazilian Institute of Corporate Governance (IBGC), Fundação Getúlio Vargas (FGV) and Universidade de Brasília (UNB). In addition, we contributed to the grade that resulted, once again, in Eletrobras' participation in the B3 Corporate Sustainability Index portfolio.

Click for more details about:
Corporate governance, principles and values,
Organizational Structure and Board and Councils 

Annual Public Policy and Corporate Governance Charter

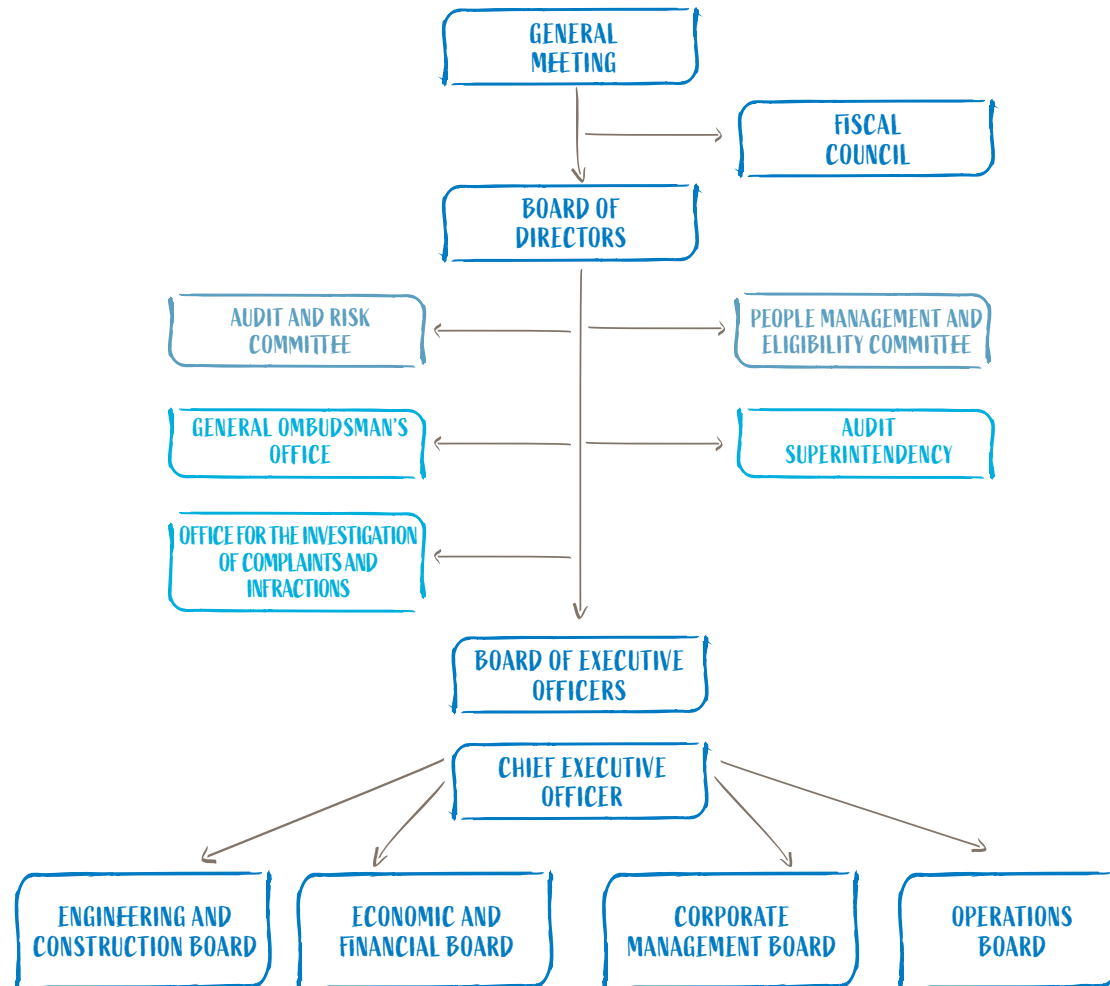
In accordance with Article 8, Items I, III and VIII of Law No. 13,303 of June 30, 2016; Article 13, Items I, III and VIII of Decree No. 8,945 of December 27, 2016; and Articles 16 and 18 of the Rules of the B3 (*Brasil, Bolsa, Balcão*), Eletrobras and Chesf draw up their Annual Public Policy and Corporate Governance Charter.

To access the document, visit our website 

Corporate governance structure

GRI 102-18, 102-22

Our organizational model is in accordance with the rules of the General Assembly, and the administration is the responsibility of the Board of Directors and the Board of Executive Officers and supervised by a permanent Fiscal Council, in addition to collective bodies of deliberative functions, with attributions provided by law and the Bylaws.



As the highest body of our administrative structure, the Board of Directors monitors our activities through monthly meetings in which the strategic themes proposed and the Company's guidelines are discussed and resolved. It is up to the body, among other duties, to approve Chesf's compliance with corporate policies for conducting business, whether economic, environmental or social. In 2019, 24 Board meetings were held on strategic issues, considered critical for corporate management, related to financial aspects, planning and execution of ventures, monitoring of legal litigation, non-conformities identified in internal audit work in the scope of certification under the Sarbanes-Oxley Act, aspects involving integrity, ethics and complaints, among others, as required.

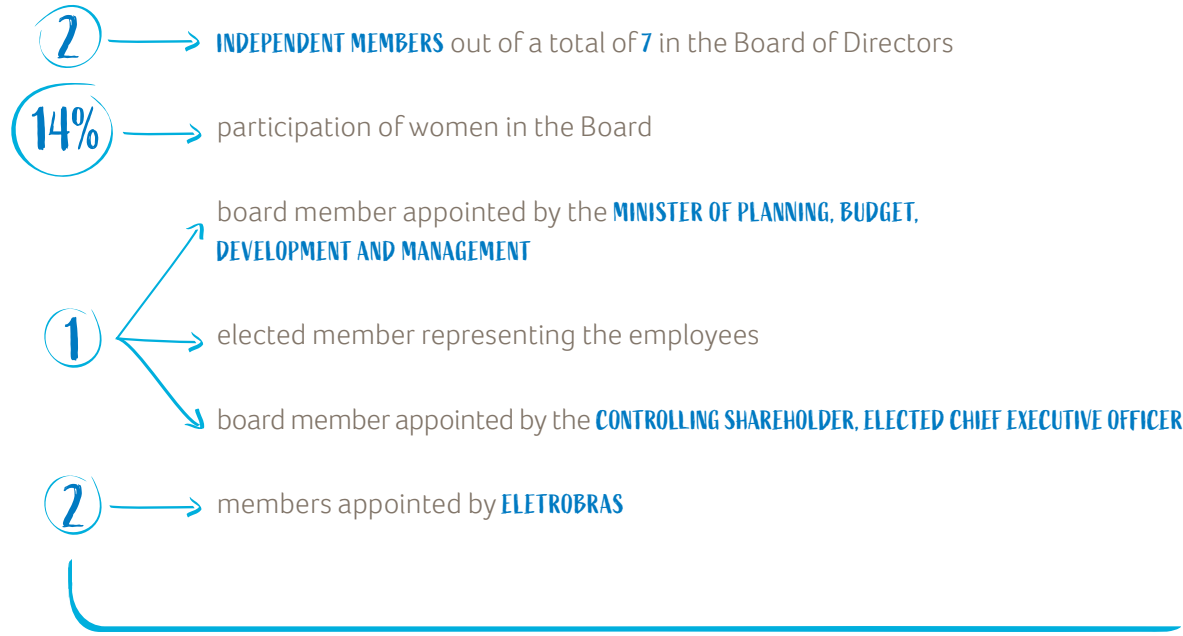
Connected to the body are the People Management and Eligibility and Audit and Statutory Risks Committees (CAE), established in 2018 by Eletrobras. The former aims to analyze and issue recommendations on risks and strategies to be adopted by the companies of the Eletrobras System in relation to people management and the eligibility of members of the administration and tax advisors. The second is responsible for analyzing and making recommendations on internal audit work, accounting and independent auditing, supervision, risks to be assumed by the Company, internal controls, and risk management and financial management, as provided for in the Internal Regulations.


The Board of Executive Officers is composed of the Chief Executive Officer and four officers, and is responsible for ensuring the regular functioning of Chesf within the guidelines set by the General Assembly and the Board of Directors. The group meets ordinarily once a week and extraordinarily upon convocation by the Chief Executive Officer. In 2019, the Board of Executive Officers held 62 meetings.



Diversity of the Board of Directors

GRI 405-1



Get to know the Positions, the Staff and our complete Organizational Structure on our website 

Creation of the Office for the Investigation of Complaints and Infractions (ACA)

The ACA, hierarchically subordinated to the Chesf Board of Directors, was created in 2019 to meet the demands received from the Eletrobras Complaints Investigation Coordination (Caid), or directly from the Integrity System Committee (CSI), both of which are based at the Eletrobras holding company. The agency is responsible for the internal phase and treatment of complaints and violations of the Integrity Program, rules, contracts and manuals and/or legislation involving Chesf employees. The results of the investigations carried out by the ACA are compiled into reports sent to the CAID in order to be considered for deliberation at CSI meetings.



Advisory committees

GRI 102-18, 102-22

Risk Committee

Composed by a multidisciplinary team with representatives from all boards, it is responsible for defining and monitoring internal and external risks that may affect the proper conduct of our business. In 2019, six meetings were held.

Business Planning Committee

It evaluates and updates our Strategic Planning, proposing follow-up indicators aligned with the best market practices. In 2019, this committee was expanded to incorporate the Chesf 2020-2035 Long-Term Strategic Planning actions and met 25 times during the year.

Corporate Sustainability Committee

Responsible for consolidating management improvement proposals and monitoring results of action plans in accordance with our sustainability policy. Ten ordinary meetings were held in 2019.

Chesf Program Management Committee Research & Development + Innovation

It is responsible for the preparation and management of our research program and for establishing the relationship with external entities and reviewing, annually, the activities that refer to the program. The committee met three times in 2019.

Internal audit

The Internal Audit of Chesf is linked to the Board of Directors and is subject to the normative guidance and technical supervision of the Central Body and the sectorial bodies of the Internal Control System of the Federal Executive Branch (SFC), in their respective areas of jurisdiction, and aims to act independently and objectively in the evaluation (assurance)

and consulting, in order to add value and improve the operations of the organization. It helps the organization to achieve its objectives by applying a systematic and disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

The Internal Audit structure consists of an Audit Superintendence with two departments: The Internal Audit Department and the Control Organs Service Department

The planning of Internal Audit activities is embodied in the Annual Internal Audit Plan (Paint). Paint/2019 was prepared in accordance with the regulatory and statutory instruments in effect at the end of 2018. Thus, Paint/2019 was submitted to prior analysis by the Comptroller General of Brazil (CGU) and, subsequently, to examination by the Audit Committee and approval by the Board of Directors.

In fiscal year 2019, the Internal Audit concluded 24 Audit Reports, in which 149 recommendations were recorded. All the reports were sent to the Company's management for the development of actions in compliance with the recommendations issued, and made available to the Board of Directors and Fiscal Council. The management of the Company and the members of the Board follow up the recommendations issued by Internal Audit. Furthermore, the reports issued by Internal Audit may be requested at any time by the CGU.



Leadership selection and development

GRI 102-24, 102-27, 102-28

The selection process for the members of the Board of Directors respects the guidelines set forth in the Chesf Bylaws, and the election is the responsibility of Eletrobras, the controlling shareholder and holder of 100% of the common shares, entitled to vote. The exception is the member representing the employees, chosen by direct vote of their peers among the active employees and in an election organized by Chesf together with the representative union entities.

The managers and Fiscal Council members participate in specific training on corporate and capital market legislation, disclosure of information, internal control, code of conduct, Law No. 12,846/2013 and other topics related to Chesf's activities. In 2019, a lecture on Disclosure and Use of Relevant Information was also held by the Corporate University of Eletrobras companies, in which the Board of Executive Officers and members of the Board of Directors participated.

The administrators and Fiscal Council members are evaluated annually by a consulting firm hired by Eletrobras through an online questionnaire for self-assessment and evaluation of the board, a face-to-face interview to verify aspects defined based on the guidelines established by Eletrobras, including competencies, and the evaluation of results and attributions.

A results report is generated presenting the recommendations for development according to the opportunities for improvement identified and the executives evaluated participate in feedback meetings. The assessment for the 2019 cycle will be conducted in 2020.

Leadership Remuneration

GRI 102-35, 102-36, 102-37

According to the Minutes of the 70th Annual Shareholders' Assembly of Chesf, the monthly fees of the members of the Supervisory and Management Boards shall be fixed at 10% of the average monthly fees and 13th salary received by the Board of Executive Officers, pursuant to Law No. 9,292, of July 12, 1996, which only includes the amounts paid as fees, excluding the other items.

The same amount of fixed compensation is defined for the Executive Officers, except for the Chief Executive Officer, whose compensation is 5% higher. The Executive Officers are entitled to private retirement payments, and the plans are offered by financial institutions or banks, with specific conditions and rules for early redemption. The amounts follow limits established by the Secretariat of Coordination and Governance of State Enterprises (Sest).

The globally defined value for senior management is effective from April of the current year to March of the following year. The values approved in the minutes of the Ordinary General Assembly (AGO) are submitted to the Ministry of Planning, Development and Management, which, through Secretariat of Coordination and Governance of State Enterprises (Sest) issues a technical note validating or reviewing and redefining the values to be implemented.

Remuneration based on performance indicators or target plan is called Annual Variable Remuneration of Directors (AVR), in accordance with the guidelines established by the holding company and in accordance with Sest's guidelines, and represents an important tool to encourage productivity, management focused on results and management's commitment to good organizational performance and the goals established for the Company.

Summary of annual amounts paid to Chesf governance bodies

Remuneration (R\$)	2017	2018	2019
Board of Directors	239,611.32	269,801.17	311,745.04
Fiscal Council	155,194.94	162,265.32	165,600.19
Board of Executive Officers	3,846,771.16	3,674,545.04	3,195,234.67



Apolônio Sales Hydroelectric Power Plant. Credit: Andre Schuler/Chesf.



BUSINESS ETHICS AND INTEGRITY

Values

GRI 102-16 | SDG 16

- ↳ Safety;
- ↳ Respect for people with fairness and equity;
- ↳ Ethics and transparency;
- ↳ Innovation and entrepreneurship;
- ↳ Commitment to society; and
- ↳ Preservation of the environment.

Commitment to business integrity

SDG 16

We operate in accordance with the Eletrobras Company Integrity Program, applicable to all our employees. The integrity areas of Eletrobras companies form the Compliance Steering Committee (CDC), which meets regularly by videoconference to continuously improve our integrity practices and procedures.

We also maintain the Ethics Committee of Chesf, an autonomous and deliberative body, created with the function of guiding and advising the management and the internal public in the treatment of ethical issues related to people, assets and the image of the Company. The Committee also addresses questionable conduct, from an ethical point of view, brought to its attention.



The integrity areas of Eletrobras companies form the Compliance Steering Committee (CDC), which meets regularly by videoconference to continuously improve our integrity practices and procedures.

In 2021, we plan to implement a specific module to SAP for compliance management, the Business Integrity Screening (GRC-BIS), which will enable automated monitoring of controls related to the Integrity Program.

Main documents guiding ethics and integrity at Chesf:

- ↳ Code of Ethical Conduct and Integrity;
- ↳ Anti-corruption policy of Eletrobras companies;
- ↳ Conflict of Interest Management Policy of Eletrobras companies; and
- ↳ Regulation of the Eletrobras Companies Integrity Program (represents a tactical unfolding of the strategic guidelines of the Anticorruption and Conflict of Interest Management Policies).

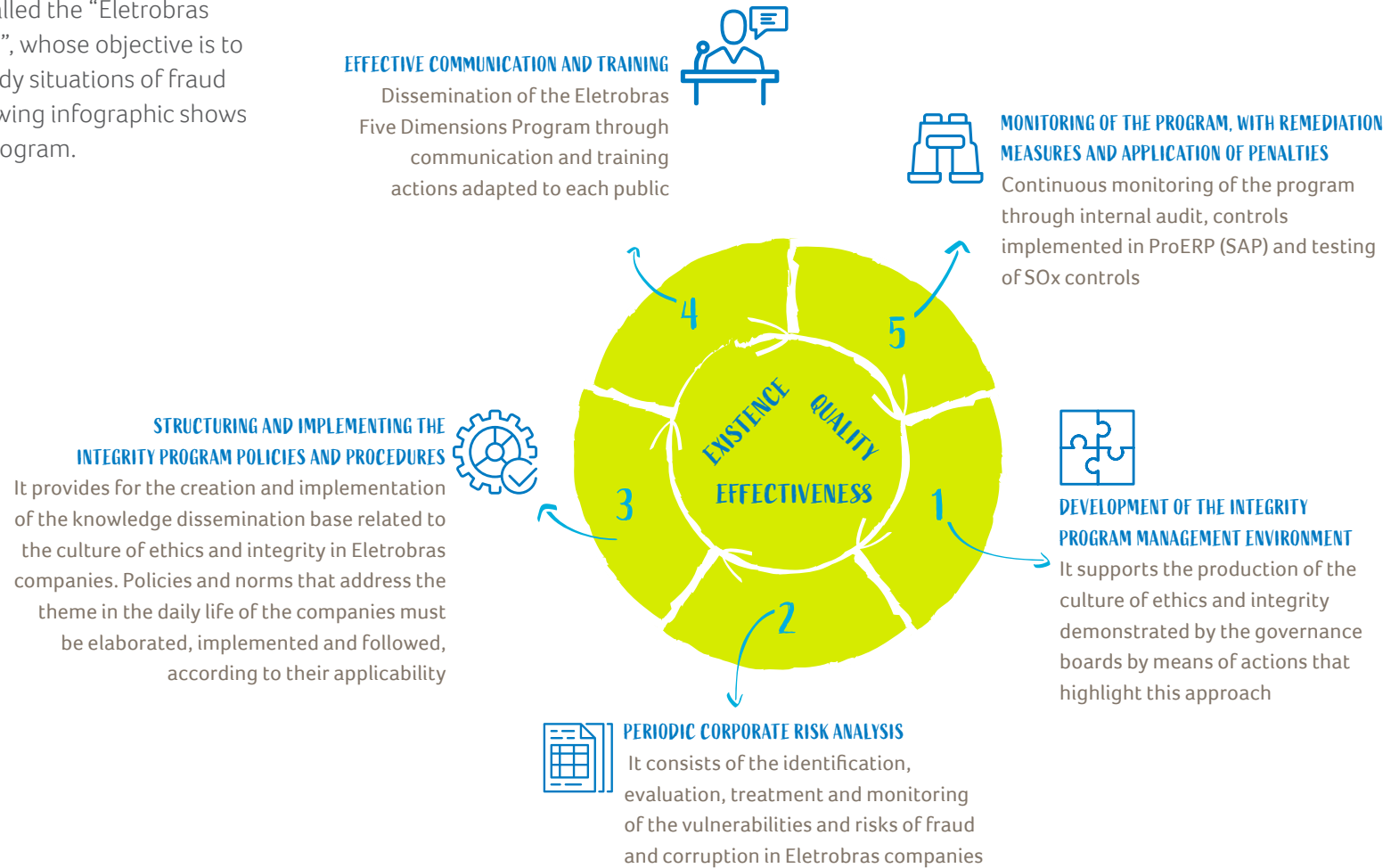


Integrity program

GRI 103-1, 103-2, 103-3 | SDG 16

We have adopted the Eletrobras Companies Integrity Program, also called the “Eletrobras Five Dimensions Program”, whose objective is to prevent, detect and remedy situations of fraud and corruption. The following infographic shows the composition of the Program.

The five dimensions of the Eletrobras Company Integrity Program



By following this initiative, we make a mandatory commitment to ethics and integrity in our internal and external relations, acting in accordance with applicable law, including Decree 8,420/2015; the U.S. Foreign Corrupt Practices Act; the Conflict of Interest Act and the State Law. The area responsible for integrity management is the Compliance and Risk Management Advisory Services directly linked to the Chief Executive Officer.

Like all Eletrobras companies, we are subject to the Consequences Policy, which is unfolded in the Regulations for the Management and Handling of Denunciations and Infractions. In a complementary manner, several formal documents of Chesf have started to provide criteria of corporate integrity, such as the Sponsorship Policies, Supply Logistics and Representatives' Nominations, besides the Bidding and Contracts Regulations.

For the analysis of management effectiveness, we execute controls related to the SOx Certification (Sarbanes-Oxley Act), which are tested annually by internal and external audits. It is worth mentioning that, in the 2019 cycle, there were no reports of deficiencies related to the Integrity Program. We can also mention the integrity audits carried out by control agencies, such as the Office of the Comptroller General of Brazil, in a process carried out in 2019, 88% of the recommendations recorded by the agency in previous work in 2016 were considered to have been complied with and the rest is covered

by action plans. Additionally, the following indicators are monitored quarterly:

- employees trained in anti-corruption policies and procedures;
- supplier due diligence;
- critical suppliers trained in fighting corruption; and
- business partners trained in fighting corruption.

In 2020, we plan to focus on strengthening supplier awareness actions on integrity. In addition, our goal is to maintain the dissemination of the Company's compliance culture, expanding awareness actions to partners of private companies that are partners of the Special-Purpose Entities, which must be implemented in a joint and integrated manner by Eletrobras companies, under the coordination of the holding company.

2019 was marked by numerous actions in favor of corruption management and ethics, starting with the beginning of the online training "Integrity and Ethical Culture", promoted by Universidade Corporativa das empresas Eletrobras (Unise) and made available to all employees. We also updated the Risk of Fraud and Corruption Matrix, jointly with the Eletrobras

companies' integrity areas, standardizing the risk factors related to the topic and coordinating the form of treatment.

Also in 2019, we consolidated the process of evaluating the integrity of third parties, which involves:

- supplier evaluation with automation of the due diligence form application, improvement of the background check tool and improvements in integrity reports;
- evaluation of sponsorships, donations, agreements and social actions;
- evaluation of governance members (board directors and members) with the improvement of the background check tool and with a broader scope of the opinion issued by the integrity area; and
- integrity assessment in divestment processes.

No corruption cases were identified at Chesf in 2019. GRI 205-3

[Click for more information on the Eletrobras Companies Integrity Program](#)



Conflicts of interest

GRI 102-25

In 2019, the Board of Directors approved Chesf’s commitment to the Conflict of Interest Management [Policy of Eletrobras companies](#), version 1.0, which establishes guidelines for the issue, one of the fundamental pillars of corporate integrity. In addition, the Company has an Ethics Committee and a Compliance area in its structure, capable of assessing cases of conflict of interest.

Communication and anti-corruption training

GRI 205-2

	Corporate governance bodies	Employees at managerial level	Employees in higher-level positions	Employees in a position of no higher level
Total (members / employees / business partners)	14	212	934	2,047
Total to which the anti-corruption policies and procedures adopted by Eletrobras were communicated	14	212	934	2,047
Percentage to which the anti-corruption policies and procedures adopted by Eletrobras were communicated	100%	100%	100%	100%
Total that underwent the anti-corruption training	14	207	14	1,780
Percentage that underwent the anti-corruption training	100%	98%	100%	87%



Transmission towers downstream of Sobradinho Hydroelectric Power Plant (BA). Credit: André Schuler.



Reporting Channel and Integrity Management

GRI 102-17, 102-29, 102-33, 102-34, 102-44

Channel that can be used by anyone to report violations or suspected violations of Eletrobras' various companies' codes of ethical conduct and integrity, the Integrity Program and anti-corruption laws. We ensure the anonymity and confidentiality of reports, as well as no retaliation against the whistleblower. The channel is available in Portuguese, English and Spanish, every day, 24 hours a day and the whistleblower can follow the progress of his or her report by means of individual protocols and passwords, which makes the process transparent and ensures that all contacts received are responded and verified. Of the 69 complaints received in 2019, 100% were processed that same year. Of these, 43 were resolved, the equivalent of 62.32%. Fifteen complaints were considered unfounded (21.74%).

We also count on the Ombudsman's Office, a body linked to the Board of Directors that can also receive complaints in person. Our Ombudsman channel is a management tool that guides, transmits information and contributes to the continuous improvement of processes, always in accordance with ethics and current legislation. Through it, we act in an exempt manner, normally when the other access channels have already been activated, leading the proceedings to a satisfactory solution. GRI 102-29

The management of the Citizen Information Service (SIC) is also an Ombudsman's task. Through the SIC, demands for information of private or collective interest are received and the proper management of this system guarantees the Company's compliance with the Access to Information Law, No. 12,527/2011, in force since 2012.

In 2019, 721 demands were received by the Ombudsman's Office, of which 628 (87%) through the Ombudsman's Office System and 93 (13%) addressed to the Citizen Information Service (SIC). One hundred percent of the information requests received by the SIC were answered. The average response time was 12.3 days, lower than that established by the Law of Access to Information - 20 days, which can be extended for another 10 days if there is express justification.

All the search engines for guidelines are available on the [Chesf portal](#), for all its audiences.

Ways to contact us

Ombudsman



E-mail address:
www.eletobras.com/Ouvidoria



E-mail:
ouvidoria@chesf.gov.br



Phone numbers:
55 81 3229-2929
55 81 3229-3815
55 81 3229-4888



Face-to-face, upon scheduling
Correspondence for:
Rua Delmiro Gouveia, 333
Edf. André Falcão - Block D - Room 307 -
San Martin - Recife - PE
50.761-901

Reporting Channel



E-mail address:
canaldedenuncias.com.br/eletobras/



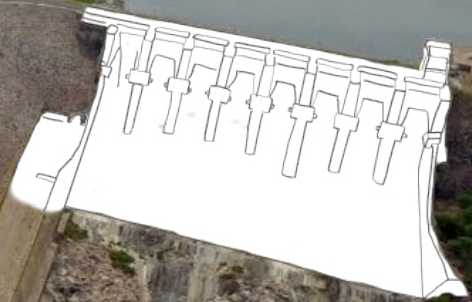
Phone numbers:
0800 377 8037



⑤ CAPITAL PERFORMANCE



Chest



FINANCIAL CAPITAL

GRI 103-1, 103-2, 103-3

The management of economic and financial performance aims to support business decisions, aiming to improve management and achieve the goals and results proposed for the short, medium and long term, in order to ensure the growth and sustainability of Chesf. To this end, we identify and monitor our impacts through monthly monitoring of planned x performed results, based on the Business and Management Plan (PNG) and the Business Performance and Goals Contract (CMDE).

The results are presented monthly to the Board of Executive Officers, the Board of Directors of Chesf and the Comptroller's Department of the holding company. The evaluation of the effectiveness of economic and financial management is conducted by Internal Audit, External Audit and consulting.

The periodic monitoring of the CMDE indicators throughout 2019 signals that we have achieved our main goals:

INDICATOR	GOAL	2019 OUTCOME
Personnel, Materials, Services and Other Expenses (PMSO) / Regulatory PMSO	1.10	1.1
Net Debt / Adjusted EBITDA	0.97	0.0
Adjusted Net Income / Shareholders' Equity	10.64	24.61

The control of economic and financial performance is guided by the guidelines issued by the Accounting Pronouncements Committee (CPC) and the International Financial Reporting Standards (IFRS), established by the International Accounting Standards Board (IASB). We also have internal procedures.

The area responsible for the management of economic-financial performance is the Superintendence of Economic-Financial Planning and Control, subordinated to the Economic-Financial Board, which has three dedicated departments: Economic-Financial Planning; Economic-Financial Studies; and Economic-Financial Control.

In the financial area, resources are allocated in:

- hiring of consultants - in 2019, R\$ 755,000 were allocated to the Zero-based budgeting (ZBB) Project, which aims at the efficiency of operating expenses and consequent optimization of business results;
- training and capacity building and participation in events and congresses which, in 2019, totaled R\$ 50 thousand. A relevant project within this category is the Capital Discipline, which aims to implement a model to support decision making regarding investment prioritization and capital allocation, as well as efficient and profitable portfolio management; and
- implementation of technology, focusing, in 2019, on the SAP project. Besides using management information systems, we also apply Business Intelligence and Business Analytics to support data and information analysis.



Throughout 2019, adjustments were identified as a result of the implementation of an information system, changes in the organizational structure and changes in processes. Action plans were created for litigation management, with the dedication of a professional to remedy the problems identified by the internal audit; asset management, with compliance with internal audit recommendations through the implementation of the Asset Management Structuring Project; corporate business and equity management, with the implementation of routines that allow for periodic evaluations of the ventures carried out in partnerships; and the remediation of the gaps identified during the audit of internal controls for Sarbanes-Oxley certification.

Budget management

As a state-owned company, Chesf needs to include its investment budget in the Annual Budget Law (LOA), approved annually by the National Congress. In addition, its Global Expenditure Program (PDG - sources and uses) is approved through presidential decree each year. The total amount of Chesf's Investment Budget approved in LOA 2019 - Law No. 13,808, dated January 15, 2009, was R\$ 1,602,668,160.

Financial results

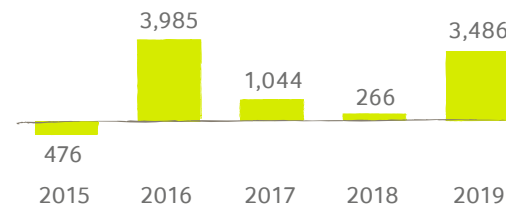
GRI 102-7 | [SDG 7](#), [SDG 8](#), [SDG 9](#), [SDG 16](#)

In 2019, we recorded a profit of R\$ 3.49 billion, an increase of R\$ 3.22 billion in relation to 2018 (R\$ 265.9 million). This increase is mainly due to the provision for deferred income tax in the amount of R\$ 2.07 billion and the deferred social contribution in the amount of R\$ 475.0 million, in addition to increases in some revenue lines.

Our gross operating revenue of R\$ 6,187.0 million showed a positive variation of 7% (R\$ 5.78 billion in 2018), mainly due to the growth in revenues from the supply, operation and maintenance of plants (R\$ 369.4 million); and short-term electricity (R\$ 386.0 million). From 2015 to 2019, the Compound Annual Growth Rate (CAGR) was 6.7%.

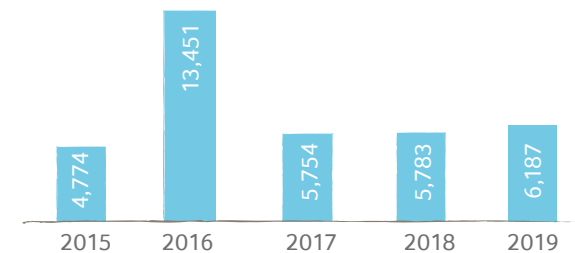
Net Profit/Loss

In R\$ million



Gross Operating Revenue (CAGR + 6.7%)

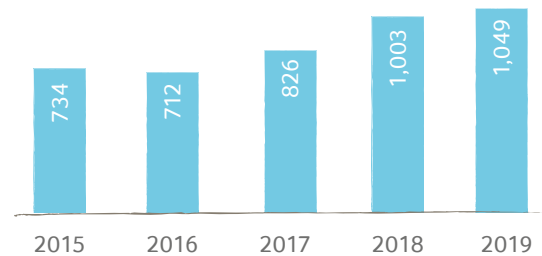
In R\$ million



Taxes and regulatory charges on sales increased 4.6% in relation to 2018, totaling R\$ 1.05 billion, of which R\$ 703.5 million correspond to taxes and social contributions and R\$ 345.6 million to regulatory charges. The Compound Annual Growth Rate (CAGR) between 2015 and 2019 was 9.3%.

Taxes and Regulatory Charges (CAGR + 9.3%)

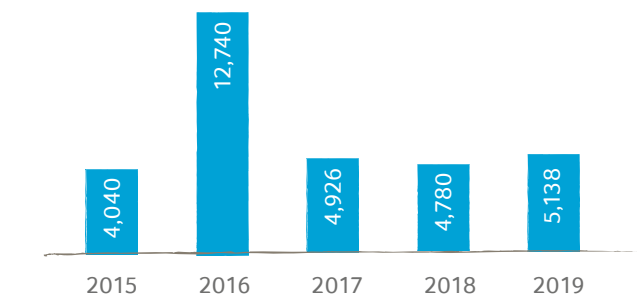
In R\$ million



The net operating revenue (ROL), which takes into account the deductions of taxes and sectoral charges, increased 7.0% in relation to 2018, from R\$ 4.78 billion to R\$ 5.14 billion. The indicators responsible for this growth are the same ones that affected the Gross Operating Revenue and the Compound Annual Growth Rate (CAGR) was 6.2%.

Net Operating Revenue (CAGR + 6.2%)

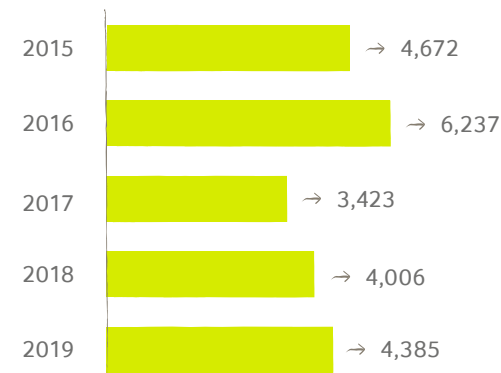
In R\$ million



The operating costs and expenses and the result of the electric power service and the operating margin make up the following charts. The operating cash generation, expressed by Ebitda, was R\$ 1.48 billion in 2019, compared to the amount of R\$ 720.1 million in 2018. The Ebitda margin (Ebitda/Net Operating Revenue ratio) was 28.8% in 2019 against 15.1% obtained in 2018 - an increase of 13.7 percentage points.

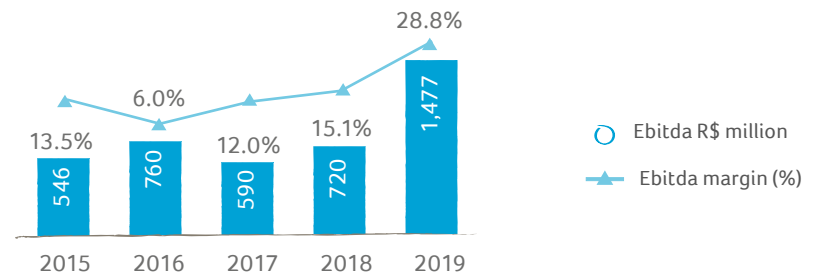
Operating Costs and Expenses (CAGR + 1.6%)

In R\$ million



Ebitda

In R\$ million



The financial result for the year was R\$ 578.9 million, compared with a negative result of R\$ 42.0 million recorded in 2018, representing a positive variation of R\$ 620.9 million due mainly to the positive difference between the Financial Income and the Financial Expenditure of R\$ 485.0 million.

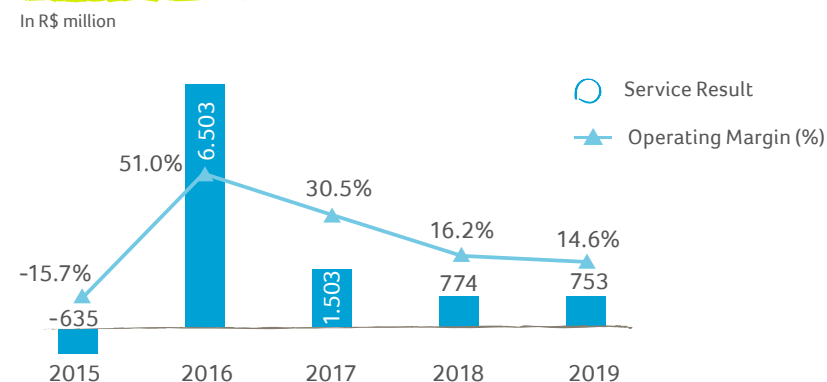
Financial income/expenditure	(million)		
	2019	2018	2017
Result of financial increases	61.0	28.7	32.0
Monetary variations and moratorium increases - energy sold	133.8	154.2	58.7
Other active monetary variations	44.5	11.3	9.3
Financial Revenue - RBSE FV	1,251.0	6.0	0.0
Debt charges on loans and financing	(96.0)	(207.4)	(280.2)
Monetary variations on loans and financing	(1.2)	(11.5)	(4.8)
Financial Expenditure - RBSE FV	(776.0)	0.0	0.0
Other Financial income/expenditure	(47.9)	(23.2)	(65.2)
(=) Net financial result	578.9	(42.0)	(250.2)

Electric Power Service Result and Operating Margin

The result of the service (Ebit) was positive in R\$ 752.6 million, but represented R\$ 21.6 million less than the amount of R\$ 774.2 million obtained in 2018. The operating margin of the service increased from 16.2% in 2018 to 14.6% in 2019, a variation of -1.6 percentage points.

More information on Chesf's economic-financial performance is available in the 2019 Management Report 

Service and Electric Power Result

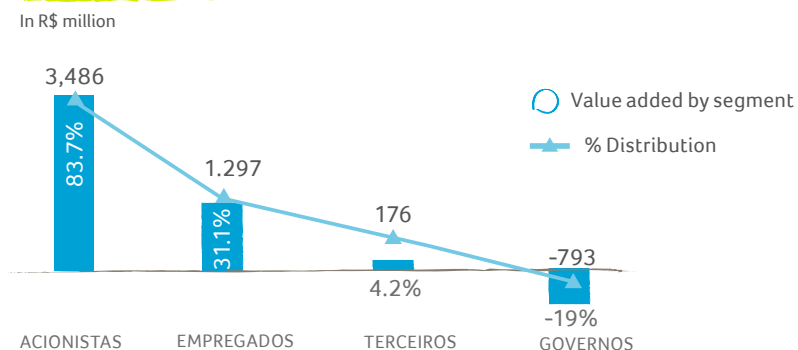


Value Added

GRI 201-1 | SDG 8

The economic value generated by Chesf in 2019 was R\$ 4.17 billion against R\$ 3.30 billion in 2018, adding value to the following segments of society: salaries, charges and benefits to employees (31.1%); taxes, fees and contributions to federal, state and municipal governments (-19%); third parties (4.2%); and profit to shareholders (83.7%).

Value Added Distribution



Disposal of assets

As part of our strategic planning and following our Disposal Policy, we are proceeding with the transfer of domain or ownership of our movable and immovable assets currently not linked to the business, to third parties, permanently or temporarily and with or without charges, aiming to reduce our operating costs and increase our revenue. As a result, two immovable properties were sold in 2019, totaling R\$ 1.5 million. In addition to the disposals of properties not necessary for our activities, we sell unserviceable movable assets annually - we held two auctions in the year, totaling R\$ 2.1 million.

Also within the purpose of disposal and aiming to meet one of the main guidelines issued by the Board of Executive Officers, in accordance with our Divestiture Plan, we are gradually withdrawing, since January 1st, 2020, our participation in the management of Hospital Nair Alves de Souza, approximately 25% of the cost of the entity each quarter until 2021, when we no longer intend to be associated with it.



Chesf Operation Center, in Recife (PE). Credit: André Schuler.

MANUFACTURED CAPITAL

Operational performance

GRI 103-1, 103-2, 103-3

With the unfavorable water situation remaining in the basin of Rio São Francisco and the low levels of rainfall during the humid period, the main reservoir in the Northeastern region, Sobradinho, decreased from 48.65% in April to 29.34% of its useful volume on December 31.

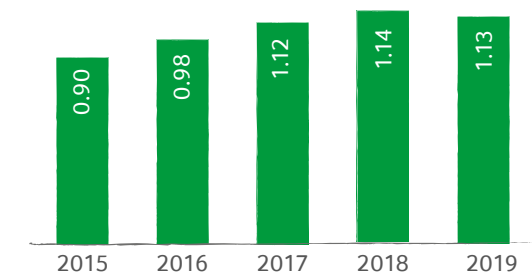
This, however, did not affect Chesf's operating performance indicators, which in some cases reached their best levels in recent years. We generated 20,734 GWh in 2019 compared to 15,132 GWh in 2018, an increase of 37%. This result is due to the application of ANA Resolution No. 2,081/2017, according to which a minimum average daily flow of 800 m³/s was established for the humid period at the Xingó Plant.

The availability of generating units, an indicator also evaluated by the Brazilian Electricity Regulatory Agency (Aneel) in the tariff adjustment processes, achieved their best result ever in 2019 (1.13). This result is due to the process initiated in 2016 to recover Chesf's economic-financial balance. In 2017, improvements were observed, but the plants of the Paulo Afonso complex were still underperforming. However, in 2018, the

indicator again showed positive results for all assets and in 2019 the target was met and exceeded. According to the readjustment process established by Aneel, when the company exceeds the target established in the generation concession contract, an additional revenue is applied. For this reason, there is an expectation of revenue incorporation in 2020.

Generation Operational Availability

Percentage (%)



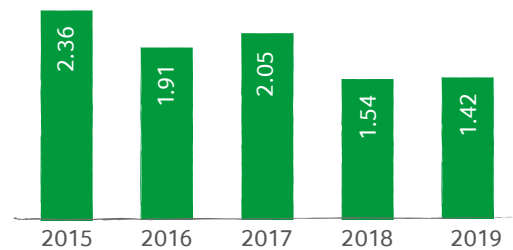
Xingó Hydroelectric Power Plant visitor center, Sergipe. Credit: André Schuler.



Positive results were also registered in the Variable Portion (IPV) and Availability of Transmission Lines Indicators, in which we obtained the best performance in the last seven years - 1.42% and 99.94%, respectively - due to the strict compliance with the maintenance plan, the replacement of assets, the improvement in the remote assistance technology, the use of drones for inspections and the engagement of the teams to compensate for the negative consequences of the shutdown plans. It is worth mentioning that the IPV also presented the best performance among Eletrobras companies. Technical losses in the consolidated basic transmission network were 3.28%. GRI EU12

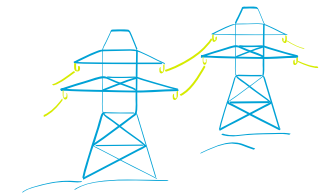
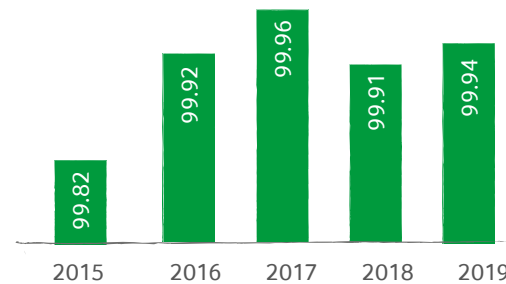
Variable Percentage - PV

Percentage (%)



Operational Availability of Transmission Lines

Percentage (%)



Positive results were registered in the Unavailability Variable Portion (PVI) and Availability of Transmission Lines indicators, in which we obtained the best performance in the last seven years - 1.42% and 99.9%, respectively.

12 remotely assisted facilities were incorporated to the Operation Centers and new supervision points were included for the Network Procedure 2.7, which deals with minimum requirements to be met by the agents regarding the information to be made available to the National System Operator.

Additional investments were made in the area of automation, such as modernization of the operational measurement of the Itabaianinha Substation and replacement of 54 servers of the Open Energy Management System (Sage). These efforts resulted in increased monitoring of the system, reaching the mark of 248,641 supervision points. Other operational advances are reported on [page 77 e 81](#).



Good performance and efficient management have made it possible to reduce our defaults and to comply again with our obligations to subcontractors, making it possible to resume the growth of the physical system. Thus, ventures that were in arrears began to be finalized and put into operation.

As a result of this effort, of the 25 projects in this situation, 22 were concluded in 2019, entering into the asset management of the Operations Board. We also continued the modernization plan, replacing end-of-life equipment to improve operating results, which brought more monitoring and automation resources and improved the safety and reliability of the system. As current regulation² provides for increased revenues through the replacement of depreciated assets, the intention is to continue with the modernization plan in 2020. For those assets that cannot yet be replaced, we will maintain a differentiated maintenance plan.

Net energy generation

GRI EU2

Total Net Energy Generated (MWh)	20,658,150
Net energy generated by hydroelectric power plant (MWh)	20,475,111
Net energy generated by wind farm (MWh)	183,039
Net energy generated from renewable and low greenhouse gas (GHG) emission sources (MWh)	20,658,150
Percentage of net energy generated from renewable and low GHG emissions sources (%)	100%

² In 2018, Aneel reassessed the way it remunerates the plants, implementing an additional revenue for asset modernization, called Generation Asset Management Improvement Cost (GAG). The year 2019 was the first year in which Chesf received this revenue in full.

Integration of operational centers

In October, we integrated the tasks of the Teresina (PI) and Fortaleza (CE) Operation Centers to obtain greater operational efficiency. Thus, the center of the capital of Ceará started to operate 33 facilities within the city and in the states of Paraíba, Rio Grande do Norte, Piauí and Maranhão.

In order to make integration possible, the agencies linked to the Operations Board acted to provide the necessary technical and operational conditions, especially related to team training and the development of new technological solutions. The unit from Ceará has the appropriate infrastructure and technological resources of hardware and software to execute the operation in a cohesive manner.



Energy supply management

GRI 103-1, 103-2, 103-3 | SDG 3, [SDG 7](#), [SDG 8](#), [SDG 9](#), SDG 11, SDG 12, [SDG 13](#), [SDG 16](#)

The energy supply management is subordinated to the Generation Quality Policy and our commitments are based on the identification of risks and opportunities, the identification of improvements, the performance of internal audits and sector and critical analysis meetings, the handling of complaints, the consideration of suggestions from customers and employees and the elaboration of a budget follow-up report.

The responsible area is the Operations Board, which has an organizational structure that also includes superintendencies, regional operation departments and their respective maintenance and operation executive divisions, composed of engineers, technicians and other necessary professionals. The Operations Board has budgetary availability for human resources and investments in the generation and transmission segments, as well as computerized resources for asset management and operation.

Evaluation of effectiveness involves planning and daily meetings of this board with the Regional Superintendencies and Departments of Operation. In these meetings, we evaluate occurrences, critical points, relevant facts, indicators related to the operation and maintenance of the system, regulatory aspects, improvements in the generation and transmission segments, among other issues. There are also meetings to evaluate results, sector meetings, operation forums and forums for maintenance of transmission lines and substation. The meetings aim to achieve the goals agreed upon in the Chesf 2019-2013 Business and Management Plan (PNG), in the Business Performance Goals Contract (CDME) and in the Strategic Planning.

In 2019, we executed a series of operational projects, among which we highlight the improvements in electromechanical systems of the plants and in civil structures and signaling of dams and plants; the modernization and improvement of protection systems and equipment, automation systems and

equipment and telecommunications systems and equipment; the technical reserve of electromechanical equipment for plants; and the regulatory strategy of generation and transmission. We also implemented firewall in 12 installations to meet the Cyber Security Program and expanded the operation and maintenance support systems in the areas of Automatic Voltage Regulation, Supervision of Protection Systems, Power Quality and Oscillography. Together with Inmetro, we maintained the accreditation of the Chesf Metrology Laboratory - MetroChesf, the implementation of pluviometry in six hydrological stations and the operationalization of hydrometric measurements in seven hydrological stations, in compliance with Resolution ANA/Aneel 03/2010.

Despite the achievements, during the course of 2019, some difficulties were experienced during the implementation process of the new management system (SAP), and improvement actions were necessary to achieve the objectives set for the operation and maintenance of assets.



Generation system

GRI 102-2, 102-6, 102-10, 103-2, 103-3

In 2019, we invested R\$ 26.4 million in hydroelectric power plants under concession and on a quota basis to maintain operational levels of continuity and availability to meet demand. The basic project for implementing the digital systems and modernizing the generating units at the Sobradinho Hydroelectric Power Plant (HPP) was updated and sent to the responsible area to start the bidding process for the executive project and the execution of the works, whose contract was signed in April 2020. Another basic project that continued was the implementation of the digital systems and modernization of the generating units of the Paulo Afonso IV HPP, which was sent to the contracting area in March 2020.

The modernization services of the PA-IV HPP overhead cranes and of the Apolônio Sales HPP gantry cranes were concluded. Several adaptation and maintenance services were also performed in the Generation System in operation, aiming at the elimination of technical, legal and environmental pending issues, as well as the replacement of equipment and components due to obsolescence or end of useful life.

In October 2018, after the MME 420/2018 Ordinance extinguish the concession of the Camaçari Thermal Power Plant (BA), we launched the Chesf Public Call No. 001/2018 to start the registration of companies interested in business in society using the remaining assets of this Thermal Power Plant. Although we did not achieve our goal in this process, which was to partner in a Specific-Purpose Entity, in 2019 we received a proposal from one of the companies that participated in the final stage of the negotiation of the Public Call for the leasing of the assets and facilities of the Camaçari Thermal Power Plant. We then signed a 15-year lease agreement.

After the diligence in the wind farm of Casa Nova I-A (27 MW) to raise the necessary costs for the conclusion and energization, we signed a contract with supplier to finalize the implementation and put it into operation, which should occur in June 2020. We have also begun contracting the services necessary for the conclusion of the Casa Nova I-B Wind Farm (27 MW), whose process should be similar to that of Casa Nova I-A, with a contract expected to be signed in the first half of 2020. There were also significant advances in support actions and field activities aimed at finalizing the implementation of the 11 wind farms of the Special-Purpose Entities linked to the Pindaí wind complexes. Seven wind farms were delivered and the others are expected to be completed in January 2020.

In 2019, we finalized the development of photovoltaic power station projects: Bom Nome Photovoltaic Power Plant (29.7 MWp) and Lapa Solar Photovoltaic Power Plant (100 MWp), located in the municipalities of São José do Belmonte (PE) and Bom Jesus da Lapa (BA), respectively. The future implementation of these projects depends on the success of the sale of energy in future auctions in the Regulated Contracting Environment or the direct sale in the Free Contracting Environment.

As part of the Conta Zero Program ([see page 79](#)), we are installing solar panels in our substations in Northeastern states for our own power generation, replacing part of the supply from the distribution companies. In 2019, we started the implementation of 2.3 MWp in substations in Alagoas, Ceará, Paraíba, Piauí and Rio Grande do Norte, with completion expected in 2020. In some cases, through association with storage systems, the reliability and operational safety of these facilities may be increased.

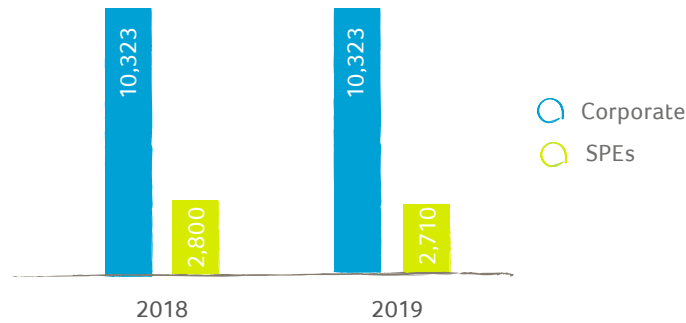


Activities related to new hydroelectric projects were temporarily paralyzed in 2019, due to the low attractiveness of the hydroelectric plants studied by Chesf in Submédio and Baixo São Francisco, as well as in Rio Parnaíba and its affluents. Our focus is on studies of new wind and solar (photovoltaic) enterprises. In 2019 we continued with the studies for the development of three new wind projects which, according to the data already surveyed, total 748 MW of installed capacity, expected to be completed by 2023.

We are also studying measurements in 17 solarimetric stations installed in the semi-arid northeast, aiming to develop our own solar generation projects with photovoltaic or heliothermal technologies. These measurements will enable the development of six new projects that, according to the data collected so far, total 535 MWp of installed power, expected to be completed by 2023.

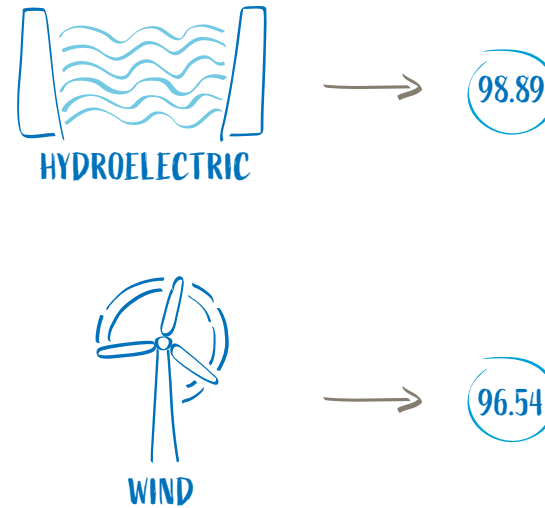
Evolution of installed capacity | GRI EU1

(In MW)



AVERAGE AVAILABILITY FACTOR BY ENERGY SOURCE IN 2019 (%)

GRI EU30



Energy efficiency program

GRI 103-2, 103-3

The following highlights our advances in energy efficiency in 2019:

↳ ISO 50001

Following the strategic actions within the Energy Management System, a new external audit was performed at the Messias Substation, which attested to compliance with the requirements established by the ISO 50001 standard - management of the use of electric energy from auxiliary services - in the energy transformation process.

↳ CONTA ZERO PROGRAM (PCZ)

The basic projects were concluded, tendered and contracted, the orders for the beginning of the services were given and the works of four of the six projects that make up the portfolio of actions within the PCZ were started:

- Photovoltaic Mini Generation (MFV), Messias 700kW
OIS CTNI 80.2019.0170.00 (SE MSI)
- Photovoltaic Mini Generation (MFV), São João do Piauí 100kW
OIS CTNI 80.2019.0020.00 (SE SJI)
- Photovoltaic Mini Generation (MFV), Campina Grande II - 50kW
OIS CTNI 80.2018.1190.00 (SE CGD)
- Photovoltaic Mini Generation (MFV), Santa Rita II - 50kW
OIS CTNI 80.2018.1190.00 (SE SRD).

For the Natal III 500kW and Sobral III 900kW Photovoltaic Mini Generations, the inverters and photovoltaic modules were purchased and delivered in 2019. The basic projects of the mentioned distributed generation plants were also concluded and the bidding processes of the services related to the implementation were initiated:

↳ P RESEARCH & DEVELOPMENT + INNOVATION - STORAGE A TMSI

SUBSTATION: preliminary studies were completed and served as the basis for the Public R&D+I 02/2019 Call entitled “Photovoltaic Mini Generation with Battery Power Storage as an Autonomous Source of Supply for Substation Services”. The pioneering research aims to integrate with other projects developed in the Messias Substation and expand Chesf’s references in Energy Management and Energy Efficiency associated with Distributed Generation and the National System Operator (ONS) Network Procedures; and

↳ R&D+I - USE OF SOLAR ENERGY IN LAKES OF HYDROELECTRIC

POWER PLANTS: the Sobradinho Photovoltaic Mini Generation was connected and entered into research operation, stage 1MW, whose scientific studies and monitoring will point out and quantify the main gains in energy efficiency with the complementation of the supply power of auxiliary services of the Sobradinho hydroelectric power plant.



Dam Safety

GRI 103-2, 103-3

After the events in Mariana and Brumadinho (MG), 2019 was a time of uncertainty regarding the rupture of dams. Although the facilities built for hydroelectric power generation are completely different from those of mining, Chesf was also urged by its stakeholders to take a position on the matter. Therefore, in 2019, we developed the regulations for the management of emergency action plans.

In addition, as required by the National Dam Safety Policy, the Emergency Action Plan for Dam Safety was concluded and sent to the regulatory agency (Aneel), which is still in the approval phase.

In 2020, safety inspections (audits), adjustments to warning systems and the establishment of escape routes in each municipality where we have hydroelectric generation projects will begin. We also plan to offer a special course on the subject for all employees.



Floodgates of the Paulo Afonso Complex. Photo: André Schuler.

Transmission system

GRI 102-2, 102-6, 103-2, 103-3, EU4

In 2019, the great challenge of the Engineering and Construction Board in energy transmission was to put the projects in arrears into operation. We invested more than R\$ 300 million in the transmission system, with 42 expansion and reinforcement projects in progress, resulting in the conclusion of 22 projects. We delivered 331 km of transmission lines, 4 new substations, 2 substations with new yards and 17 new transformers with reinforcements in the facilities, which represents an increase in transformation capacity of 2,644 MVA.

Only three projects were not completed: the 230 kV Pau Ferro / Santa Rita II Transmission Line, due to land expropriation difficulties; and the Itabaiana and Fortaleza Substations, due to poor performance by the contractor. Completion is scheduled for 2020, along with 15 other new projects. The main works are in Ceará. Access the [Financial Statements](#) and see, on pages 19 and 20, the list of projects completed in 2019.

In 2019, we also made progress on the remote assistance project. Thus, all the new substations went into operation already with the requirements to be managed remotely, from an operating center. This project contributes to the challenge of managing our 143 substations and more than 20,000

kilometers of transmission lines in an optimized, efficient and effective manner, in order to overcome the significant distances and access difficulties in the Chesf network.

Currently, 70% of our facilities are remotely assisted and the remaining 30% have local assistance due to their strategic importance, such as substations serving a capital city or which are part of a strategic corridor. These units are managed remotely or through one of seven regional offices (Paulo Afonso, Sobradinho, Teresina, Fortaleza, Natal, Salvador and Recife). In 2020, we should improve remote assistance with the development of an autonomous substation re-establishment project.

Also in 2019, the maintenance of transmission lines gained a new ally, the laser scan, equipment for georeferenced mapping that is assembled in a helicopter to scan the land. Thus, important detections, such as heavy undergrowth, become more agile and safer. In addition, the equipment is also used to identify the best layout in project development.

TRANSMISSION AVAILABILITY INDEX (%)

GRI EU6



Special-Purpose Entities (SPEs)

WE INTEGRATE SPEs THAT ADD

15,848.98 MW

of installed power

2,750.19 MW

are equivalent to our share in those entities.

CONCERNING TRANSMISSION, THE SPEs TOTAL

3,590.00 KILOMETERS

of transmission lines,
of which

1,195.60 KILOMETERS

are equivalent to our share.

We invested R\$ 324.5 million in joint ventures during 2019, of which R\$ 198.4 million were invested in SPEs for hydraulic generation and R\$ 126.1 million in wind power generation. There were significant advances in support actions and field activities aimed at finalizing the implementation of the 11 wind farms of the SPEs linked to the Pindaí wind complexes. Seven wind farms were delivered and the conclusion of the others is expected by 2020.

The Belo Monte Hydroelectric Power Plant (HPP) went 100% operational, totaling 11,223.1 MW of installed capacity. Chesf's equity participation in this venture is 15%. Sinop Hydroelectric Power Plant also went 100% operational in 2019, totaling 401.8 MW of installed capacity. Chesf's share participation in this venture is 24.5%. In March 2019, we also concluded our divestment in the SPEs of the Sento Sé Complex, which was sold under the Eletrobras Auction 01/2018.

There was no commercial operation of transmission projects through Chesf's partnerships in 2019. We incorporated SPE Extremoz Transmissora do Nordeste (ETN) on November 1st, 2019. Regarding Transmissora Delmiro Gouveia S/A, we acquired the private portion of the project in October 2019 for R\$ 34 million and now hold 100% of its capital. The incorporation of this asset should be concluded in 2020.

Energy trading

GRI 102-6

In 2019, we sold 48,901 GWh, distributed among 26 Brazilian states plus the Federal District. Of this amount, 44,704 GWh (91.4%) were sold on a quota basis. The remaining 4,197 GWh (8.6%) was allocated to the Free Contracting Environment (free industrial consumers, industrial consumers served under Law 13,182 and suppliers) and the Regulated Contracting Environment (distributors). Energy purchases totaled 1,695 GWh, as part of the Company's supply strategy.



INTELLECTUAL CAPITAL

R&D and Innovation

GRI 103-1, 103-2, 103-3, EU8 | SDG 7, SDG 8, SDG 9

The main objectives of R&D + Innovation management are to identify new business possibilities, encourage improvement in internal processes, motivate the integration of new technologies, develop competencies with a focus on innovation and identify and mitigate possible bottlenecks in project development.

Within the management process, there are specific indicators, which are monitored by the operational area and presented to managers at both first (managerial) and second (operational) level meetings in order to improve the management process and feed it back.

To support the management, we have internal regulations and technological tools that include stages of demand or idea conception, project formulation, receipt of proposals, contract management, purchases, payments and financial execution. Our tools also facilitate the processing and management of the measured results, seeking their intellectual and industrial protection as well as the market study of the technology.

The research, development and innovation management process is standardized by the Brazilian Electricity Regulatory Agency (Aneel) and, as a support, there is a partnership with the Superintendence of Internal Audit so that the accountability is carried out from an independent external audit, whose results are reported to the Agency. It was from these findings that we improved the research management, identifying as an opportunity for business growth the development of the strategic project for the implementation of the Chesf Development and Innovation Center. In addition to the Aneel regulations, we also rely on Eletrobras' R&D+I Policy.

Our main commitment is to comply with Law No. 9,991/2000, which determines the minimum investment of resources in research, development, and innovation projects of 1% of Net Operating Revenue (ROL). We reinforce this practice by inserting in the business planning and in the Chesf 2020-2035 Strategic Map a stage of development of research and innovation projects.

The main objectives of R&D + Innovation management are to identify new business possibilities, encourage improvement in internal processes, motivate the integration of new technologies, develop competencies with a focus on innovation and identify and mitigate possible bottlenecks in project development.

The Research, Development and Innovation Advisory Board (AEP) acts directly in the management of the entire process and relies on the R&D management team and the R&D+I committee, which is composed of two representatives from each of the Company's Board of Executive Officers and the members of each of the projects under development. The main infrastructure and technological resources available are the Petrolina Solar Energy Reference Center (Cresp) and the Chesf Development and Innovation Center.



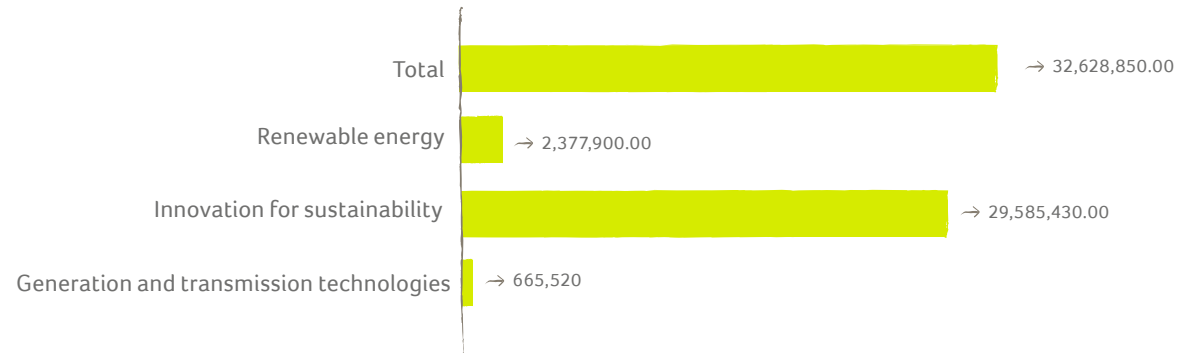
The year 2019 was one of many achievements. We invested mainly in alternative sources of power generation, in power system planning and in innovation management. The main projects undertaken were:

- ↳ noise monitoring in hydroelectric power plant;
- ↳ non-destructive techniques (RAA - Alkali-Agregado Reaction);
- ↳ R&D from the idea to the market, responsible for the development of the Intelligent Innovation Management System (Sigi), which will be used for the management of our entire process of developing innovation projects within the Chesf Development and Innovation Center;
- ↳ solar energy in lakes of hydroelectric power plants;
- ↳ Petrolina solar platform (PE);
- ↳ new concept of wind turbine; and
- ↳ location study of large solar power plants.

During the execution of the projects, points of improvement were identified in the process of implementation specific to each one, which were duly implemented and resolved.

Total investment in R&D + I by category

(R\$ million)



Floating Solar Plant of Sobradinho (BA). Credit : Túlio Trajano.



Energy transition

GRI 103-1, 103-2, 103-3 | SDG 1, SDG 2, SDG 3, [SDG 7](#), [SDG 8](#), [SDG 9](#), SDG 11, SDG 12, [SDG 13](#), SDG 14, SDG 15

R&D and Innovation and the improvement of the Brazilian energy matrix go hand in hand. The country already has a predominantly clean generation, so improvement efforts should be directed to alternative sources, such as solar and wind power, still under development.

Although the wind energy source is intermittent and low inertia, today we have more wind-generated energy than hydroelectricity. In addition, power generation by hydroelectric plants is a consequence of the flows defined by the National Water Agency (ANA), which may vary depending on rainfall and multiple uses. Thus, as the electricity sector expands with other alternative sources, such as wind and solar - which also has a still underused potential - it is possible to meet consumption in a differentiated manner.

Thus, in times of climate change and water stress, the energy transition involves not only the preservation of natural resources, but also the safety and reliability of the generation system.

Although Chesf has already been the concessionaire of two thermal power plants, in 2018 the concession of its last thermal plant (Camaçari Thermal Power Plant) was extinguished ([see page 77](#)). Therefore, Chesf started to hold concession only for renewable energy generation plants. We do not rule out the possibility of studying the implementation of new thermal power plants, however, in the short and medium term, the planning of new projects for the expansion of the generating facilities focuses on the studies and implementation of wind and photovoltaic projects.

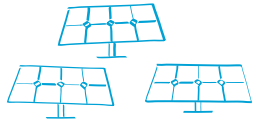
In the strategic management of our sources of energy generation and new projects, we see a way to add value to our business through the effective implementation of measures to reduce impacts, contributing to the fight against climate change and visualizing new business opportunities in the carbon market.

The initiatives to promote the energy transition are consistent with the guidelines of Eletrobras companies' Environmental Policy, which determines the duty to "Prioritize the use of renewable sources in the expansion of electricity supply, contributing to the transition to a low carbon economy".

There is no specific area responsible for managing matters related to this change, as it runs through several departments and superintendencies, under the coordination of the Engineering and Construction Board and the Operations Board. Therefore, the teams are multidisciplinary and belong to different departments and superintendencies, but with common interfaces.

The year 2019 was one of many achievements in favor of the energy transition. Some of these projects are detailed on [pages 86 and 87](#). We also highlight the maintenance of the ISO 50001 Certification in the Messias Substation, to establish Electricity Consumption Base Lines and Energy Performance Indicators (IDE), which help to monitor energy consumption, seeking reduction; and the implementation of the Floating Photovoltaic Mini Generation Project, in the reservoir of the Sobradinho Hydroelectric Power Plant, with initial installed capacity of 1 MWp and expected expansion to 2.5 MWp. This project, with features unprecedented in the country, is part of a Research & Development + Innovation initiative approved by Aneel entitled "Exploration of solar energy in lakes of hydroelectric power plants".





In 2019, the 1 MWp floating photovoltaic plant was inaugurated, installed in the Sobradinho reservoir (2.5 MWp), whose operation is integrated with that of the hydroelectric power plant, meeting the demands of auxiliary services.

Petrolina Solar Energy Reference Center

A complex where research on photovoltaic and heliothermic technology, integration of solar and wind sources, and energy storage are developed. The 2.5 MWp Cresp Basic Plant is in operation and is part of the Chesf Conta Zero program. The 0.5 MWp Technological Plant will be composed of several photovoltaic technologies (state of the art) and fixation, tracking and concentration systems. The contracting process was concluded in 2019 and will start in March 2020.

In 2019, the 1 MWp floating photovoltaic plant was inaugurated, installed in the Sobradinho reservoir (2.5 MWp), whose operation is integrated to the HPP's, meeting the demands of auxiliary services. The technical studies to evaluate the floating technology were initiated. As of 2020, the second stage of this project will be executed - unprecedented in the country - which will total 2.5MWp when fully completed.

Thermosolar concentrating plants will also be installed at Cresp, one with the Central Tower technology, currently in the Public Call phase, and a thermosolar concentrating plant with a parabolic trough, whose Public Call should be published by June 2020.



Petrolina Solar Energy Reference Center (CRESP), in Pernambuco. Credit: Drone.



Wind Generation

Chesf studies research lines aimed at improving the conversion process, as well as its integration with the electricity system and with other clean sources of generation, such as photovoltaics and energy storage. In 2018, a Public Call was made for innovative projects that develop technologies and studies involving hybrid plants in several lines.

As a result of this work, in 2019 Chesf started the process of contracting three R&D+I projects:

- development of a new concept of a low-cost wind turbine with 3 MW generation capacity (contracted project);
- optimization of Renewable Energy Systems with High-Performance Storage (project under contract); and
- hybrid system (wind and solar) with energy storage that will total installed capacity of more than 4 MW (project under contract).



Casa Nova Wind Complex, in Bahia. Photo: Túlio Trajano.

SOCIAL AND RELATIONSHIP CAPITAL

GRI 102-21

Customer satisfaction

GRI 102-21

Ensuring satisfaction and quality service is a basic premise of our work. Therefore, every two years we conduct an Integrated Customer Satisfaction Survey. In 2018, we carried out the most recent edition, referring to the biennium 2018/2019, contemplating Generation clients (free/potentially free consumers, traders and distribution companies) and Transmission clients (users of the connected transmission services: distributors, free/potentially free consumers and generation companies). The methodology used was the “Customer Window”, a method that allows measuring the degree of satisfaction based on the customer’s perceptions of value attributes and relating them to the degree of importance given by them. The global satisfaction index was 88.45%, higher than the integrated global satisfaction target of Eletrobras companies of 85.31%. For more information on the latest edition of the survey, see page 35 of [Chesf 2018 Annual Report](#).

Commitment to social networks

In 2019, Chesf increased its presence on social networks with the [#ChesfianosLigados](#) campaign. Today, the Company engages more than 20 thousand people through these channels, including customers and society as a whole.

Internal public communication and engagement

GRI 102-21, 102-43

We provide internal social networks - Teams and Yammer - to promote a closer relationship between and with employees. According to an internal survey, however, the channels most used by this public nowadays are the ChesfHoje e-mail, followed by ChesfOnline (blog), Mural Chesf and the intranet.

One of the most important communication actions with our employees in 2019 was the launch of the “Nossa Segurança é pra você e com você” (Our Safety is for you and with you) seal, to unify all of the Company’s safety campaigns, including prevention of disconnection due

to human error; in transmission lines and substations; corporate (property); information; dams; work and traffic. The communication actions related to these themes were developed with the same identity, reinforcing safety as a corporate value at Chesf.

We also renewed the billboards of the Paulo Afonso and Xingó plants that contain information on dam safety in order to include the seal.

Supplier dialogue and engagement

GRI 102-21

Every year, Chesf holds a Meeting with Suppliers, with the purpose of divulging important information about the business relationship, and updating and reinforcing its values. In 2019, under the theme “*A Chesf do Amanhã, Hoje*” (The Chesf of Tomorrow, Today), the new paradigms of efficiency and competitiveness that guide the processes of Chesf were disclosed.



Investor Relations

GRI 102-43

Chesf's online portal has a specific channel for communication with [investors](#), with information targeted both in a legal manner, as well as through announcements and notices. The Company also makes available the e-mail rp@chesf.gov.br, for direct contact with its Public Relations area.

Relationship with the press

GRI 102-43

Chesf contacts the press on a weekly basis on topics such as rivers, reservoirs, water management, among others. The subject of water is delicate in the Northeast Region and we manage ten reservoirs, which demands attention to the content disseminated to the public. The inauguration of the Sobradinho Floating Solar Platform was emphasized by the press in 2019 (see page 85).

We also make and receive weekly contacts with interested parties for internal and external events, and we constantly meet the demands of visiting the plants and reservoirs.

Relationship with government agencies

GRI 102-43

Every year, on Chesf's anniversary, we hold an event that brings together authorities from Eletrobras, other companies and the Ministry of Mines and Energy. Eventually, our president or officers are invited to participate in actions at the Municipal Chamber, State Assembly or National Congress, such as lectures on water resources, the Sobradinho plant, among other topics. We also promote inauguration events, such as the Floating Solar Power Plant of Sobradinho, in 2019, which was attended by the President of the Republic and Ministers of State.

The subject of water is delicate in the Northeast Region and we manage ten reservoirs, which demands attention to the content disseminated to the public.



Piece by artist Oliveira, installed at Memorial da Chesf in the city of Paulo Afonso, Bahia. Credit: André Schuler.



Community engagement

GRI 102-21, 102-43, 413-1, 413-2 | SDG 1, SDG 2, SDG 3, SDG 11, [SDG 16](#)

The negative impacts caused by the ventures on local communities are established during the implementation of the ventures and generally include soil degradation, vegetation suppression, real estate relocation, machinery movement, sound and particulate emissions, increased traffic of cars and people in the area, among others. Most are mitigated already during this phase through a series of Programs, established by Environmental Licensing or by voluntary initiative.

The degree to which communities are affected is evaluated through the Environmental Communication and Education Programs, promoted by Chesf in response to environmental licensing. The interaction with the population is facilitated and the public can express their perceptions about the presence of the ventures in their surroundings.

We have developed a series of initiatives to reduce social inequality, social and educational campaigns, improve the quality of life of people in the surrounding communities, health and food security actions, as well as citizen training and the generation of jobs and income. Our actions are guided by [Eletrobras' Corporate](#)

[Social Responsibility Policy](#) and Chesf's Guidance Manual on Social Projects.

Our commitments are voluntary and are guided by the 2030 Agenda, the 17 Sustainable Development Goals (UN), the Guiding Principles for Companies and Human Rights, and the National Human Rights Program (PNDH 3), acting in an integrated manner with Eletrobras - learn more about our sustainability commitments on [page 50](#).

Of Chesf's operations, 15 (2.4%) have implemented actions to engage with the community

Media Program and other channels

An initiative with which we seek to assure society of appropriate information about the ventures and their impacts on the environment. The channel is used to establish a harmonious relationship between the development and the various groups impacted by the operation: residents of the surrounding communities, public institutions and workers directly involved in the implementation works.

Chesf also provides the channels "[Fale Conosco Ambiental](#)", "[Disque Queimadas/Meio Ambiente](#)" (0800-979-3090) and the [Ombudsman's Office](#) for the entire society, in order to guarantee access to the Company for all, as well as to use them as an instrument for monitoring local impacts.

Videos for the community

GRI 102-43

In 2019, a campaign focused on themes of interest to Chesf and the communities was carried out. The format was differentiated as we approved, together with the Special Office of Social Communication (Secom - government agency), the so-called "brand content", which provides editorial space in the media (duly signaled) to raise awareness among the population. We have created videos about the Company itself and others with public utility content to disclose the risks of kites near substations and transmission lines.



Environmental projects

GRI 413-1

230 kV Socorro/Penedo Transmission Line Environmental Education Program: environmental education actions to raise awareness and mobilize the population's participation in the implementation, monitoring and evaluation of socio-environmental projects, acting to transform the space where they live. The communities that are at a distance of 1 km from the project were involved, and they are considered to be the most vulnerable in socio-environmental terms. We have been working with the community of Patioba and Terra Dura since the beginning of the program in 2017. The initiative has already resulted in the expansion of the communication channel between Chesf and the community. We count on the partnership of community associations and municipal government, also including health, education, environment and agriculture departments.

Socio-environmental Action Plan (PAS): a project conducted in the Paulo Afonso I, II, III, IV and Apolônio Sales HPPs - Paulo Afonso Complex and Xingó HPP. The area of operation is delimited by the level of influence of the projects - the actions of Paulo Afonso cover five municipalities in three states (Bahia, Pernambuco and Alagoas), and those of Xingó cover six municipalities in three states (Alagoas, Sergipe and Bahia). The PAS follows a participatory methodology, through which the social actors identified their needs and defined their priorities to preserve their environmental heritage and elected their representatives by direct and universal vote, who were assigned the role of contributing to the sustainability of the project. The project "Programa Eco no Ar: Integrando e Divulgando o PAS" (Integrating and Disclosing the PAS) was created for its dissemination, a program broadcasted by Rádio Comunitária Alternativa FM 98.5 and App Radio Net.

Social projects

GRI 413-1

São Francisco Lakes Project: executed by the Brazilian Agricultural Research Corporation (Embrapa Semiárido) in the municipalities of Pariconha, Olho D'Água dos Casados, Delmiro Gouveia and Piranhas (AL), Paulo Afonso, Rodelas e Glória (BA), Petrolândia and Jatobá (PE), and Canindé do São Francisco, Poço Redondo and Nossa Senhora da Glória (SE). The project's objective is to promote research, development and technology transfer actions and the training of technicians, students, producers and fishermen, in order to strengthen the infrastructure of farming activities, ensuring a level of productivity that allows the improvement of producers' income and the reproducibility of the productive units of the communities of the municipalities located around the dams of the Paulo Afonso Complex and the hydroelectric power plants of Itaparica (Luiz Gonzaga) and Xingó.



Sobradinho Lake Project: carried out by Embrapa Semiárido in the municipalities of Sobradinho, Casa Nova, Sento Sé, Remanso and Pilão Arcado, located in the surroundings of the Sobradinho Power Plant, has brought about a significant improvement in the quality of life of the communities benefited from the implementation of technological learning and training fields. This project promotes the transfer of knowledge and technology for living with drought to agricultural producers and fishermen who live around the Sobradinho Dam (BA).

Chesf Corporate Volunteer Program

Our employees participate in volunteer activities in a program coordinated by the Department of Public Relations, Social Responsibility and Sponsorship, with the participation of the Corporate Volunteering Center, whose objective is to promote discussion on the subject, engage all areas of the Company, develop regulatory instruments and support the implementation of the program. In 2019, the following actions were promoted:

- ↳ collection and distribution of basic food baskets for needy communities and for the NGO Lar Rejane Marques, which shelters children with disabilities, victims of domestic violence and abandonment in Recife;
- ↳ participation in the Banho do Bem Campaign, with collection of personal hygiene items for the NGO Projeto Missão Solidária (Prosol), which provides baths for homeless people in the city of Recife (PE);
- ↳ collection of personal hygiene products for the elderly of Abrigo Cristo Redentor;
- ↳ participation in the Eletrobras Companies Volunteer Subcommittee for the elaboration of the Voluntary Work Guide for Eletrobras companies;
- ↳ support to social initiatives in partnership with the NGOs ADOBEM, Hospitalhaços, Casa Vovó Bibia and Movimento Pró-Criança with the *Clarear* Project;
- ↳ partnership with the Solidary Project for Energy Education of the NGO Comitê da Cidadania dos Chesfianos de Recife; and
- ↳ Children's Day and Solidary Christmas for children in the surroundings of Chesf headquarters in Recife.

Culture

GRI 413-1

In 2019, we invested R\$ 1 million in sponsorship projects aimed at the promotion of culture and technical-scientific production and dissemination, which contributed to the preservation of the intangible heritage of the Brazilian Northeast and the exchange of experiences in the area of electric energy.

We have participated in the Sponsorship Program of Eletrobras companies to the 2019 Electric Sector Events, contributing to the selection of projects of great relevance in the national and international scenario and providing financial resources in projects aligned with our objectives, such as the XXV National Seminar of Electric Power Production and Transmission (Belo Horizonte/MG), the XIII Symposium of Electric Systems Automation (Recife/PE), the XXIII Brazilian Symposium of Water Resources, among others.

Among the main cultural actions carried out in 2019 are the projects Vozes em Movimento, Musical Formation for Children and Adolescents, Criança Cidadã Orchestra and the Restoration and Requalification Project of Museu de Arte Sacra de Pernambuco. In the cultural segment, more than 95% of the funds provided by Chesf went to projects authorized by the Ministry of Culture to raise funds through the Rouanet Law's Tax Incentive mechanism. Thus, the Company democratizes access to cultural mechanisms and ensures transparency in the concession process.

Investment in communities

SDG 8

Company involvement with social action	2017	2018	2019
Resources invested in education (R\$ thousand)	162.40	39.60	0.00
Resources invested in health and sanitation (R\$ thousand)	35,049.18	39,162.41	43,663.52
Resources invested in culture (R\$ thousand)	1,185.00	775.00	0.00
Resources invested in sports (R\$ thousand)	0.00	0.00	0.00
Other resources invested in social actions (R\$ thousand)	0.00	0.00	1,600.00
Employees who carry out voluntary work in the community outside the Company/total employees (%)	1.58	1.15	1.05
Quantity of monthly hours donated (released from normal working hours) by the Company for voluntary work of employees	300.00	100.75	81.33
Involvement of the Company in cultural and sports projects, etc. (Rouanet Law)	2017	2018	2019
Amount of resources allocated to projects (R\$ thousand)	906.09	555.00	1,192.55
Amount of resources allocated to the largest project (R\$ thousand)	273.99	190.00	300.00



Piece by artist Wilson Costa, 1998, portraying the entrepreneur Delmiro Gouveia, his pioneer plant, Angiquinho, and the waterfall of Paulo Afonso. Credit: André Schuler.



NATURAL CAPITAL

GRI 102-29

Our environmental management process covers risk and impact assessment as well as mitigation before and during operations. Since 2018, this activity has been structured in two departments: Environment for Exploration, which works on the environmental regularization of the facilities in operation, and Environment for Expansion, which is mainly responsible for the environmental management of the implementation of projects.

The control of the processes, in any of the departments, is performed through the Environmental Licensing System (Sislic). For the environmental regularization of the implementation of new ventures, we adopt indicators of time and management with the interested parties, and we establish countermeasures for the identified deviations.

We increasingly search for preventive actions with the implementation of a corporate risk management process, following the principles and guidelines established in the Risk Management Policy of Eletrobras companies, which identifies

possible environmental impacts in the corporate risk matrix. The objective is to establish a more integrated management process for those that may affect organizational objectives, reinforcing the responsibility of the business areas in defining and implementing mitigation actions.

Today, the most significant negative impact of hydroelectric plants is on the displacement and reproduction of rheophilic ichthyofauna² and on the flooding of areas for reservoir formation. Another important aspect of hydroelectric dams is the change in the water regime of rivers, which impacts the aquatic fauna. In the transmission projects, we have adopted a tower elevation procedure and carried out selective replanting and rescue programs for the surrounding fauna and flora.

Together with Universidade Federal de Pernambuco, the photovoltaic plant R&D projects have been submitted to research to see what impact the plant has on fish life and aquatic vegetation and the plant's relationship with the lake's physical dynamics.

² Freshwater fish that migrate to breed.

Environmental management system

Chesf's Environmental Management System is based on formal instruments, such as Eletrobras' Environmental Policy, a set of guidelines and rules for environmentally responsible actions. The Environmental Committee of Eletrobras companies has as function xxxx. There is also the Corporate Sustainability Management Indicator System (IGS System) - Environmental Module, of automated and online collection of indicators. It is expected, for 2020, that a consultant will be hired to improve the environmental management.



Water

GRI 103-1, 103-2, 103-3, 303-1, 303-2 | SDG 6, SDG 12, SDG 14, SDG 15

We use water in the operation of power plants and for administrative consumption. The water used in the hydroelectric power plants is returned to the water bodies with similar quality to its collection. However, those that operate using the reservoir volume change the amount of water downstream from the dam, respecting minimum flow restrictions in times of low affluence and maximum flow, performing flood control in order to protect the valley downstream from natural flooding. In 2019, 112.91 billion cubic meters of water were used for hydroelectric generation.

All Chesf's hydroelectric projects are granted for the use of water resources in order to take advantage of hydroelectric potential. In the case of the São Francisco Hydrographic Basin Plants, the grants were requested within the deadline established in Joint ANA/Aneel Resolution 1,305/2015.

Chesf pays a Compensation for the Use of Water Resources (CFURH) in its hydroelectric plants in accordance with Law 7,990/1989. The resources of this compensation are managed by the Brazilian Electricity Regulatory Agency (Aneel)

and benefit states, municipalities and the Union. In 2019, we paid R\$ 104,233,000, an amount calculated based on energy generation in the year.

We monitor water quality and quantity conditions periodically in all basins where we have hydroelectric plants, obtaining data on storage, flow, nutrient concentration and biological parameters. In normal situations, water quality analyses follow a quarterly schedule. In cases of water crisis, this schedule may become fortnightly and, in some specific actions, daily. We also monitor our reservoirs, seeking

compliance with legal environmental parameters, and we raise awareness among the populations around the basins through the Education and Social Communication Programs (see pages 90 and 91).

Our water management aims to comply with the goals proposed in Chesf's Business Plan and Management, maximizing the positive impacts in relation to the financial and business sustainability aspects. We monitor the indicators through information that is shared by the various operational areas, which is compiled and monitored by the management area, which in turn presents them to the



Sobradinho Hydroelectric Power Plant, in Bahia. Credit: Severino Silva/Chesf.

Chesf Sustainability Committee, that meets monthly to carry out effectiveness evaluations, analyze possible deviations and propose action plans for remediation.

In order to regulate water management internally, we have established the following normative references for:

- ↳ RN-03/2020 GE and IN-GE.03.002, for the management of information on water, electricity and fuel consumption at Chesf; and
- ↳ GE-06, for formalizing the responsibility of filling in the systems of corporate sustainability management indicators - IGS Environmental Module and IGS-Relat.

We had a commitment to reduce the water consumption of the supply network in administrative activities by 0.3% in 2019. To this end, we carried out periodic maintenance in the water supply facilities, leading us to comply with a 23.3% reduction. In addition, the maintenance made it possible to identify improvement points, such as the standardization of the process and the redefinition of the management team.

The area responsible for water management is the Superintendence of Regional and Operational Management (SGR). Through its civil maintenance areas, Chesf provides various resources for the modernization of equipment and materials, as well as employees and technologies from various areas to act in the Sustainability Committee, in Working Groups and the Management Area of the issue.

We also actively participate in the Rio São Francisco Basin Committee (CBHSF) as an effective member, involving ourselves in plenary meetings and in meetings of the Technical Chambers and the Sectorial Chambers of Submédio and Baixo São Francisco. We are also following the initial definitions of the Rio Parnaíba Basin Committee.

Water withdrawal by source | GRI 303-3, 303-5 (m³)

	2017	2018	2019
Administrative activities	198,497.00	194,856.80	134,202.20
Superficial	3,150.00	3,146.80	-
Underground	21,891.00	30,784.00	34,506.20
Supply network	173,456.00	160,926.00	99,696.00
Total water withdrawn	198,497.00	194,856.80	134,202.20

Note: Water consumption data are measured directly at Chesf's operating area facilities and are compiled and sent to the management body, which gathers them and generates the elements of control and monitoring of the uses of this resource.



Climate change

GRI 103-1, 103-2, 103-3, 201-2, 305-1, 305-2, 305-3, 305-5 | SDG 1, SDG 2, SDG 3, [SDG 7](#), [SDG 8](#), [SDG 9](#), SDG 11, SDG 12, [SDG 13](#), SDG 14, SDG 15

Sustainable Development Goal 13 (Action Against Global Climate Change) has been identified by Eletrobras as one of the most relevant goals for all its companies. Climate change interferes with rainfall regimes, water availability, the incidence of winds, the formation of storms, hurricanes and tornadoes, among other events that can impact operations. For this reason, we manage our greenhouse gas (GHG) emissions with a focus on reduction and actively contribute to the transition of the Brazilian energy matrix to an increasingly clean and low carbon model.

Our Environmental Policy has specific guidelines for climate change management, which were revised in 2019. The document comprises the Declaration of Commitment on [Climate Change](#), which can be accessed on the Climate Strategy page. Our actions are also aligned with international agreements to which Brazil is a signatory, such as the Paris Agreement (COP 21, 2015).

In the strategic management of Greenhouse Gas (GHG) emissions, we see a way to create value to our business, through the effective implementation of emission reduction measures, contributing to the fight against climate change and visualizing new business opportunities. For this reason, all sources of direct and indirect emissions are mapped and monitored through the Sustainability Management Indicators System (IGS) and, since 2009, we have published the result annually in the Greenhouse Gas Emissions Inventory of Eletrobras companies.

The information is accounted for using the IPCC methodology (2006) and the GHG Protocol guidelines. In addition, the GHG Emissions Inventory subsidizes us to respond to a number of environmental reports demanded by the market, such as the Carbon Disclosure Project, ISE (B3) and the Dow

Jones Sustainability Index. Based on this diagnosis, we have established strategies, plans and targets for the reduction and management of greenhouse gas emissions.

We evaluate the effectiveness of our measures through absolute and relative GHG emission reduction targets, considering:

- ↳ GHG emissions from fossil fuel use in the land vehicle fleet (tCO₂);
- ↳ GHG emissions from energy consumption (tCO₂); and
- ↳ GHG emission intensity (tCO₂/ROL) defined based on Eletrobras' Business and Management Master Plan (PDNG 2019-2023).

We follow our performance quarterly to ratify or redirect management. These evaluations are consolidated in the form of a report and action plan and the results are periodically reported to the Chesf Sustainability Committee.

As a result, in 2019 there was a 7.3% reduction in Chesf's total emissions compared to 2018, as shown in the table below.

Emissions (tCO ₂ eq)	2017	2018	2019
Scope 1 (Direct GHG emissions)	10,797	23,031	20,645
Scope 2 (Indirect Emissions of GHG and Energy)	231,713	150,539	140,447
Scope 3 (Other indirect GHG emissions)	1,200	1,661	1,268
Total Emissions	243,710	175,231	162,360

Scope 1

	Fixed Emissions			Subtotal Fixed	Moveable Emissions			Subtotal Moveable Emissions	Other		Subtotal Fugitive Emissions	Subtotal Scope 1
	(TPP)	Generators	Other		Highways	Waterways	Airline		SF6	Treatment Plants		
CO ₂ (t _{CO₂})	0.00	195.37	0.27	195.63	2,982.75	0.93	157.88	3,141.56	n.a.	n.a.	n.a.	3,337.20
CH ₄ (t _{CO_{2e}})	0.00	0.22	0.00	0.22	10.09	0.01	0.03	10.13	n.a.	10,113,60	10,113.60	10,123.93
N ₂ O (t _{CO_{2e}})	0.00	0.52	0.00	0.52	49.96	0.03	1.32	51.30	n.a.	n.a.	n.a.	51.80
SF ₆ (t _{CO_{2e}})	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7,132.07	n.a.	7,132.07	7,132.07
HFCs and PFCs (t _{CO_{2e}})	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.d.
SUBTOTAL (t_{CO_{2e}})	0.00	196.11	0.27	196.38	3,042.80	0.97	159.22	3,203.00	7,132.07	10,113,60	17,245.67	20,645.00

Scope 2**Scope 3**

	Electricity consumption	Losses in transmission	Subtotal Scope 2	Air travel	Subtotal Scope 3	TOTAL
CO ₂ (t CO ₂)	560,98	139.885,94	140.446,92	1.255,62	1.255,62	145.039,70
CH ₄ (t CO ₂ e)	n.a.	n.a.	n.a.	0,19	0,19	10.124,11
N ₂ O (t CO ₂ e)	n.a.	n.a.	n.a.	11,82	11,82	63,60
SF ₆ (t CO ₂ e)	n.a.	n.a.	n.a.	n.a.	n.a.	7.132,07
HFCs e PFCs (t CO ₂ e)	n.a.	n.a.	n.a.	n.a.	n.a.	n.d.
SUBTOTAL (t CO₂e)	560,98	139.885,94	140.446,92	1.267,60	1.267,60	162.359,60

n.a. - not applicable



The area responsible for managing climate change issues is the Superintendence for Expansion Planning and Environment, which has two units dedicated to meeting environmental demands: the Department of Environment for Expansion and the Department of Environment for Exploration. Both departments have a multidisciplinary team and a specific budget for the environmental adequacy of the projects. However, in 2019, no financial resources were allocated to manage the issue. For the development of technological resources, we transferred an annual associative

contribution to the Eletrobras Electric Energy Research Center (Cepel). In 2019, Cepel developed the following computer programs to support member companies:

- **Greenhouse Gas Emissions from Hydroelectric Reservoirs (Balcar):** developed by Cepel with the objective of producing references in quantitative evaluation of Greenhouse Gases emissions in hydroelectric reservoirs; and
- **Mudclima:** also developed by Cepel in order to address three dimensions related to climate change: research for the use of climate information in the construction of flow scenarios for reservoirs; strategies and actions for social and environmental adaptation to climate change, one based on ecosystems and another in communities; and the development of adaptation strategies and actions aimed at the business of electricity companies.



Parque Belvedere. Credit: André Schuler/Chesf.

Biodiversity

GRI 304-2, 304-3 | SDG 14, SDG 15

To avoid or minimize the impacts of transmission networks in Permanent Preservation Areas (PPAs), we have adopted the tower lifting procedure and carried out programs for fauna and flora rescue and selective replanting around the undertakings.

We also carry out monitoring, control, verification and mitigation actions of impacts on biodiversity during the implementation and operation phases of our facilities. We have developed Ichthyofauna Monitoring programs, operated a fish farming station at the Paulo Afonso Hydroelectric Power Plant, and carried out fish farming with several species native to the basin, as a means of mitigating and compensating for the impacts of operating hydroelectric projects.

The identification of possible impacts on the area of influence of our power plants and transmission lines may result in changes and adjustments in the projects, such as changes in the layout of the lines. Adjustments are made to preserve and/or mitigate business interference in areas of high biodiversity value.

In 2019, three reforestation and recovery actions stood out:

- ↳ We reforested 2.5 hectares in the Caetés Ecological Station, located in the city of Paulista, part of the Metropolitan Region of Recife (PE), which occupies an area of approximately 157 hectares. We produced about one thousand seedlings of native species of the Atlantic Forest biome; planted 526 seedlings in degraded areas; maintained the forest nursery; installed and operated a compost plant; and donated seedlings to students of the Training Course for People's Environmental Agents, developed in the Conservation Unit;
- ↳ we restored 15 hectares in the Saltinho Biological Reserve, located in the municipality of Tamandaré (PE), which occupies an area of approximately 562.57 hectares, with the Atlantic Forest Biome. The initiative is still under execution in areas comprised by the Saltinho Biological Reserve (Rebio) and the Legal Reserve of the Assentamento Laranjeiras Project, Rebio's buffer zone. In 2019, we planted 27,573 seedlings in almost 32 hectares of non-continuous areas in these reserves; and
- ↳ we planted, maintained and monitored 400 Carnaúbas at Parque Estadual Botânico do Ceará, in Caucaia. We replaced 54 Carnaúbas from the 200 planted in 2018 and planted another 200 units in 2019, which are still being monitored, for eventual replacements.

In addition, Chesf ensures the operation of Xingó Forest Nursery, which in 2019 reached the production of 93,457 seedlings of native species of caatinga. One of the main actions of the nursery is the research aimed at the large-scale replantation of *Melocactus zehntneri*, a protected species considered to be in extinction. Throughout the year, 12,000 units were taken care of and maintained in the growing phase and a further 2,000 in germination. It takes, on average, three years to obtain a seedling with a diameter of ten centimeters. 76,473 seedlings were donated to several institutions for planting on the banks of rivers and streams in the Rio São Francisco basin. Another 157,856 units of seeds from the caatinga germplasm were also produced, destined to the recovery of the areas. Also in 2019, 1,069 people from 11 schools, 3 universities and 3 projects visited the nursery.

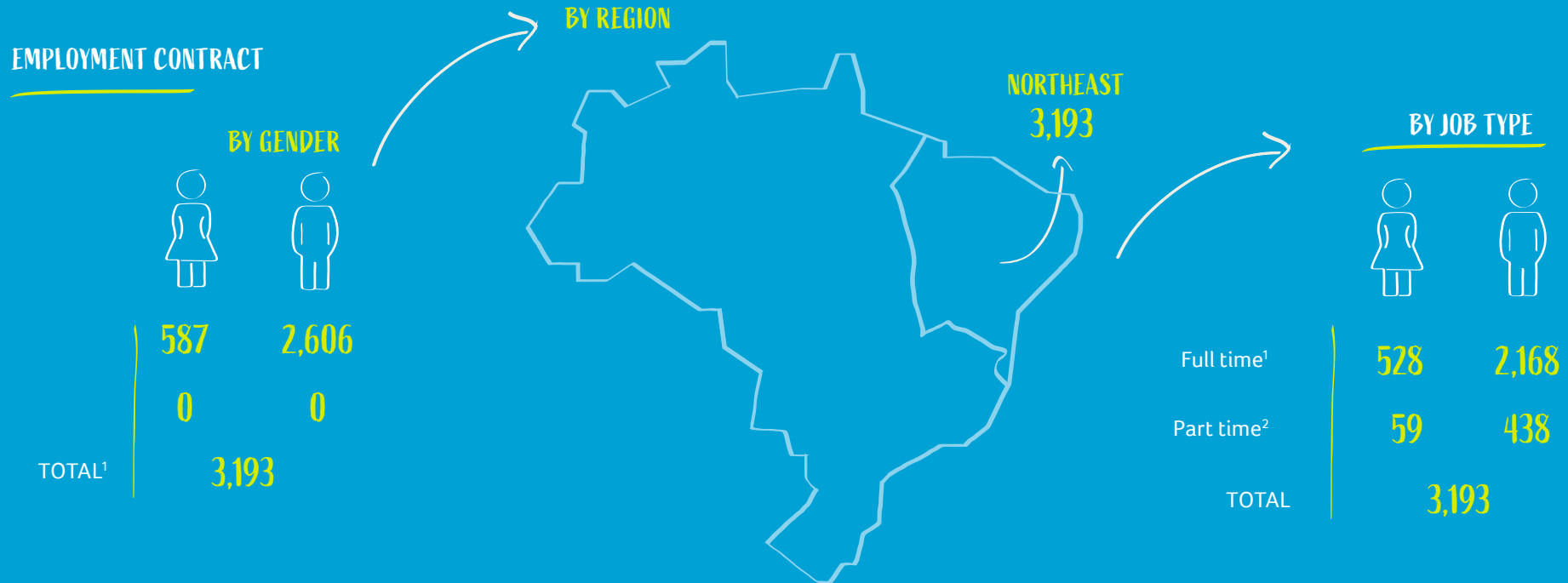


HUMAN CAPITAL

Employee profile, turnover and retention

GRI 102-7, 102-8, 401-1, 405-1 | SDG 5, SDG 8, SDG 10

In 2019, Chesf had a workforce of 3,193 employees, composed of 3,186 from its own staff and 7 requested from public administration bodies or companies. Of the total, there were 587 women and 2,606 men. In the same period, the turnover rate³ was 8.67%. There was one admission (by judicial determination) and 652 dismissals.



Note: 1. It considers the permanent staff, which includes those with the following employment contracts: own employees, requested, reintegrated into the Company and commissioned positions. It does not include assigned employees, employees on leave without salaries and those reintegrated to Government Agencies.

2. All Chesf employees are contracted for an indefinite period, i.e., without a defined term for completion. Chesf calculates the turnover rate by the following formula: $[(\text{admitted} + \text{dismissed}) / 2] / \text{average permanent staff} \times 100$.

Notes: 1. Full time: workload of 7h30 or 8h, according to Chesf schedule.



2. Part time: workload from 4h to 6h.

3. Chesf calculates its turnover by using the following formula: $[(\text{hired} + \text{dismissed}) / 2] / \text{average effective staff} \times 100$.



TURNOVER



GRI 401-1

BY GENDER	 		BY REGION		BY AGE GROUP	
	Northeast	Up to 30 years old	30 to 50 years old	Over 50 years old		
Total admissions	0	1	1	0	0	1
Admission fee	0%	0.04%	0.03%	0%	0%	0.07%
Total dismissals	16	494	652	3	47	602
Turnover rate	26.60%	18.64%	20.10%	3.75%	2.61%	44.20%

Note: The turnover rate was calculated according to the following formula, which is standard for Eletrobras companies: (dismissed employees [by gender or region or age group] / number of employees [by gender or region or age group]) x 100. It differs from the turnover rate calculated specifically by Chesf, presented on [page 101](#).

EMPLOYEE DIVERSITY

GRI 405-1

BY GENDER	 		BY AGE GROUP			BY MINORITY GROUPS	
	Up to 30 years old	30 to 50 years old	Over 50 years old	Black, mixed-race, asian and indigenous	People with Disabilities		
Leadership ¹	20.28%	79.72%	0%	81.60%	18.40%	38.68%	1.89%
Employees ²	18.25%	81.75%	2.68%	54.14%	43.17%	55.55%	4.70%

Notes: 1. It considers the employees in management positions in Chesf's staff (employees, requested, reintegrated in the Company, commissioned positions, assistants and advisors) on the base date of December 31st, 2019. It does not include the CEO and the Officers, Locality Leaders, Coordinators/Supervisors or other positions outside the formal structure of the Company.

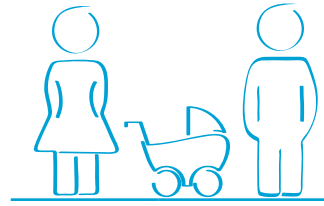
2. It considers the permanent staff, which includes those with the following employment contracts: own employees, requested, reintegrated into the Company and commissioned positions. It does not include assigned employees, employees on leave without salaries and those reintegrated to Government Agencies.



Parental Leave, Return and Retention in 2019

GRI 401-3

PARENTAL LEAVE



Total employees on parental leave	7	89
Total employees who returned to work after parental leave	6	89
Total employees who returned to work after the end of parental leave and were still employed after 12 months of return (considers leaves taken in 2018)	21	89
Total employees who returned from parental in the pre-report cycle	21	91
Total employees who did not return to work after the end of parental leave in 2019	0	0
Total employees who were expected to return to work after parental leave in 2019 (considering leave taken in 2018)	6	89

NON-RETENTION RATE²



RETENTION RATE³



Note: 1. It considers the permanent staff, which includes those with the following employment contracts: own employees, requested, reintegrated into the Company and commissioned positions. It does not include assigned employees, employees on leave without salaries and those reintegrated to Government Agencies.

2. Calculated using the formula: (total number of employees who did not return to work after parental leave / total number of employees who were to return to work after parental leave) x 100

3. Calculated using the formula: (total number of employees retained 12 months after returning to work after parental leave / total number of employees who returned from parental leave in the year prior to the report) x 100



Consensual Employment Termination Agreement

GRI 404-2

Two editions of the Consensual Employment Termination Agreement (PDC) were held in 2019, aimed at voluntary dismissal of eligible employees. In total, 626 were effectively dismissed by December. Expenses with PDC include financial incentives and a health plan for a maximum period of 36 months from the date of dismissal.

Diversity

ODS 5

As a mixed-capital company, we hire our employees through a competitive examination, as required by the Federal Constitution, and therefore we have no interference with the diversity profile of the staff. However, we reinforce that we do not tolerate prejudices of any nature and that we integrate everyone in the same way, regardless of gender identity, race, ethnicity, age, sexual orientation, social origin, physical or mental capacity.

We seek to promote an organizational culture of equal opportunities for all, a commitment that is expressed in our [Code of Ethical Conduct and Integrity](#) and [Social Responsibility Policy](#). To maintain it, we implement actions to promote diversity through the Gender and Race Committees. More information on our work in this area is available on [page 113](#).

People and professional development management

GRI 103-1, 103-2, 103-3 | SDG 1, SDG 2, SDG 3, SDG 4, [SDG 8](#), [SDG 9](#), SDG 10, SDG 12

Due to the mixed economy nature and because they are subject to the Ministry of Mines and Energy, the employees of Eletrobras companies are defined by the Federal Government. Therefore, we need to comply with the parameters officially established for staff management. Our way of managing has as its main objective to meet the guidelines of strategic planning, following a premise of excellence in people and organizational culture through the following strategies:

- performance promotion and continuous assessment, guiding career development, focusing on results and skills;
- development and implementation of model, networks and programs for employee development and knowledge management; and
- development of stimulating management methods capable of motivating and engaging people.



The bases for this action are in the Eletrobras Companies' People Management Policy, whose objective is "to guide the standardization of practices and thus strengthen a culture based on safe and appropriate conditions for the development, productivity, recognition and retention of people, contributing to the achievement of business results. The document was last revised in 2018 and approved by the Board of Executive Officers and the Eletrobras Board of Directors.

The document contains principles and guidelines that are deployed in business strategy. Its text aims to attract, develop, recognize and retain talent; lead and manage with a focus on corporate sustainability; promote safety and well-being to employees in the Company's internal and external environments; promote sustainable labor relations; respect diversity, promoting equity, equal opportunities and inclusion; preserve corporate ethics and integrity; and integrate and standardize people management practices.

There are four main guidelines: people management planning; career, remuneration and benefits; people development; occupational safety, health and quality of life; and health insurance and supplementary pension plans.

The Superintendence of People Management is responsible for the formation of policies and the planning, execution and monitoring of actions, as well as the coordination of their incorporation by the various Eletrobras companies. The employees have a direct channel with the area, the institutional e-mail address. The following channels are also available, to deal with specific topics:

Proj-Cipa

E-mail to contact the Internal Committee for Prevention of Accident at Work (Cipa).

Proj-Occupational Health

Mailbox of responsibility of the occupational health technical team (occupational physicians and nurses) designed to assist Eletrobras employees with general health and quality of life demands and information in the work environment, including occupational medical examinations, general guidance and questions about occupational health and health programs.

Proj-Ergonomics

E-mail to contact the Eletrobras Ergonomics Committee, which establishes parameters that allow the adaptation of the working conditions to the psycho-physiological characteristics of the workers in order to provide maximum comfort, safety and efficient performance.

Proj-Conflict of Interest

E-mail for inquiries and requests for authorization to engage in private activity that may constitute a conflict of interest.



Training and education

GRI 404-2, EU14

Continuous development is essential for us to be an increasingly innovative and efficient company. Our Corporate Education Plan (PEC) provides for training and capacity building that can contribute to the development of competencies related to the Company's business guidelines, considering Strategic Planning as the main guideline.

To this end, corporate education indicators are monitored every quarter, in accordance with the targets set by the PEC at the beginning of the year. Monthly meetings of the Educational Council are held, formed by a representative of each Board of Executive Officers and conducted by the Superintendence of People Management.

Throughout the year, the trainings are evaluated. Employees also undergo annual performance assessment, the results of which are taken into account in the preparation of Individual Development Plans (PDI).

In order to guide the integrated and cooperative actions of the parties that deal with people development management, seven main documents were created: Normative Reference (RN) Corporate Education at Chesf, which defines all the commitments assumed; Normative Instruction (IN) Corporate Education at Chesf; RN Educational Actions Abroad; IN Educational

Actions of NR-10; IN Foreign Language Program; IN Educational Actions of Teacher Employees; and IN Long Duration Educational Actions.

One of the highlights of the PEC is [the Living and Learning \(Vivendo e Aprendendo\) Program](#), developed by Chesf to elevate the education of employees with a focus on Elementary and High School Courses. We carry out and coordinate the initiative in partnership with Sesi, and classes are held at our premises, during working hours.

We also invest in the participation of employees in graduate courses (lato sensu and stricto sensu) for the development of professional skills that are compatible with the activities performed - or that may be performed - and that are of interest to the organization. The long-term educational actions are all funded by Chesf, according to the PEC budget forecast. We also make available the benefit "Education Aid - Higher Education", granted to all employees who do not have a college degree and do not have their employment contract suspended.

The reimbursement of monthly expenses respects the value of the ceiling established in the Collective Bargaining Agreement (ACT).

The area responsible for managing the development of people is the Department of Corporate Education and Knowledge Management, which, in 2019, had investments of around R\$ 3,615 thousand. The employees dedicated 1,632 hours to long-term courses (graduations, specializations, master's and doctorate degrees); 4,511 hours to congresses, seminars and symposiums, and 113,880 hours to other educational actions. The number of training hours per employee was 31.45 hours, corresponding to 1.64% of the working hours. A total of 537 educational actions were computed, contemplating 120,023 hours and serving 3,051 employees (79.95% of the staff).

For the year of 2019, it is worth highlighting the offer to managers of a specific MBA for the electricity sector, developed by Fundação Getúlio Vargas (FGV). The objective was to align managers with different backgrounds and with the Company's strategies. Training sessions on ethics were also held, among them:



- ↳ Code of Ethical Conduct and Integrity;
- ↳ Non-violent Communication;
- ↳ Tarde Rosa (Pink afternoon);
- ↳ Compliance Immersion Course;
- ↳ Ethical Intelligence – 2030 Agenda;
- ↳ Management and Determination of Public Ethics;
- ↳ Promotion of Respect for Diversity in the Work Environment.

Technical training courses are also conducted, with support from the National Service of Industrial Training (Senai), on basic and complementary themes regarding recycling, work in confined space and work at height. There are also training courses on thermography, telecommunications, metrology and protection of power systems.

Training hours in 2019

GRI 404-1

Total hours of training	120,023
Average hours of training for management positions	41.00
Average hours of training for higher-level positions	40.76
Average hours of training for positions of no higher level	35.79
Average hours of training for men	38.68
Average hours of training for women	32.76
Average hours of total training	37.59

Retirement preparation program

GRI 401-2

We encourage our employees to plan their retirement considering economic, social and health aspects. Through the Retirement Preparation Program (PPA), options regarding entrepreneurship and volunteer work are presented.

Under the theme “Plan your Present, Prepare your Future” (Planeje o seu Presente, Prepare o seu Futuro), several actions were carried out in 2019, including lectures on “Retirement, Economic and Financial Aspects”, “Financial and Social Security Education” and “Health and Quality of Life”.

The Program allows employees to reflect and create strategies for their personal and financial projects, focusing on viable goals consistent with their talents and competencies. With the 2019 Consensual Employment Termination Agreement (PDC), the Psychology team also worked on two extra editions of the program, with the participation of 207 employees. Lectures were held at the headquarters, with transmission by videoconference to the regional ones.



Opportunities for young professionals

GRI EU14

We maintain the Young Apprentice Program, which aims to contribute to the personal and professional development of the student through the theoretical confrontation of the knowledge acquired at Senai with the practice experienced in the work environment of Chesf. This action has a significant social impact for young people, facilitating their insertion in the labor market. We ended 2019 with 70 apprentices, filling all vacancies at the headquarters and the regional offices. In 2019, we resumed the Internship Program. Recruitment and hiring were conducted by Centro de Integração Empresa Escola (CIEE) - 60 vacancies were offered to students from university training courses. The presence of trainees at Chesf creates and maintains a spirit of renewal, providing an efficient channel for monitoring technological and conceptual advances. It also contributes to business results through the productive energy and high labor capacity of these students.

Remuneration and benefits

GRI 103-2, 103-3

The remuneration at Chesf is based on a salary table, with values distributed according to the positions and their corresponding levels of complexity, according to the Career and Remuneration Plan, unified within the Eletrobras companies. The plan also provides for vertical and horizontal salary progression mechanisms such as recognition and merit, based on criteria for evaluating employee performance according to aspects related to skills and results.

Employees also rely on the Level Advancement System or promotion by seniority, which corresponds to the advancement of half a level (step) in the salary table if the employee remains in the same step for 24 months. An additional amount is also ensured per period of service, in the form of an annual salary, equivalent to 1% of the sum of the salary benefits.

Managers, Advisors and Secretaries also receive bonuses for exercising their functions, and some employees earn legal items such as dangerousness, insalubrity, overtime, among others. With regard to the variable portion of the compensation, criteria are established for

Profit Sharing for the year, which establish the integration between capital and labor and have the objective of encouraging productivity, pursuant to article 7, XI of the Federal Constitution, Law No. 10,101 of December 19, 2000, based on rules agreed with the union entities, in alignment with the guidelines of the Secretariat of Coordination and Governance of State Enterprises (Sest) and other legal provisions in force. To reduce the gap between the highest salary paid and the average salary of other employees, we have already achieved the goal set by the holding company for its other companies (ten times by 2020). The Company does not differentiate remuneration by gender.



Benefits

GRI 401-2

Our employees are provided with a set of benefits focused on quality of life and well-being. They are set out in regulations and collective bargaining agreements and are guaranteed to both full-time and part-time employees. Among the main ones are the Employer Assistance Plan, covering medical-hospital, dental and other health services; Educational Assistance; Educational Assistance for Higher Education; Meal/food voucher; Group Life Insurance; Private Pension, through the Chesf Assistance and Social Security Foundation (Fachesf); among others.

Occupational health and safety

GRI 403-1, 403-3, 403-4, EU16 | SDG 3, SDG 8

Our actions and programs related to occupational health and safety are based on the promotion of quality of life and the prevention of occupational accidents and diseases. We also maintain measures to control hazards and risks that affect our activities.

We provide all employees with access to the Incident and Non-Conformity Recording System (CIN), an action of great relevance for the prevention of occupational accidents, occupational diseases and dismissals due to human error, since it allows everyone to become a true “health and safety agent”, recording incidents and deviations that may lead to the occurrence of damage to employees and to the electrical system operated by Chesf.

It is worth mentioning that Chesf has the Occupational Health and Safety Assessment Services (OHSAS 18.001:2007) certification, which has contributed to the management of the accident prevention system and strengthened the internal safety culture.

Chesf is divided into seven regional committees, in addition to the headquarters, and has decentralized Internal Committees for Accident for the Prevention of Accidents at Work (Cipas), according to what is defined in Regulatory Standard No. 5 (NR-05) of the Ministry of Economy. According to this NR, Cipas are parity commissions constituted by representatives elected by the employees and representatives appointed by the employer in equal number. The main attributions of the commissions are to identify process and work environment risks and elaborate the risk map; develop preventive actions for the solution of safety and health problems; participate in the implementation and quality control of the necessary prevention measures, as well as evaluate the priorities of action in the workplace; carry out periodic inspections and safety checks in working environments and conditions, seek situations of risk to the safety and health of workers; disseminate information regarding occupational safety and health; collaborate in the development and implementation of the Occupational Health Medical Control (PCMSO) and Environmental Risk Prevention (PPRA) Programs and other initiatives, among others. In Chesf, 100% of the employees are represented by Cipas, which totalizes, in the whole company, 21 committees. GRI 403-1



GRI EU16

There are also regulations to determine the mandatory occupational safety training (NR-10, NR-35, NR-18, among others) and the guidelines for the acquisition, use, safekeeping and conservation of Personal Protective Equipment (PPE) and Collective Protective Equipment (CPE). Other documents deal with interventions in the electro-energetic system, risk analysis, among others. We also regulate issues such as additional hardship and dangerousness, defining the workers who are entitled to receive this bonus and the conditions of activities and work environments where these activities are carried out.

We train our employees in many different formats, in person or not, during working hours and with approval criteria defined by current legislation. For some activities, such as work at height, the workload is higher than the regulatory standard. We use internal instructors as well as specialized companies in these activities.



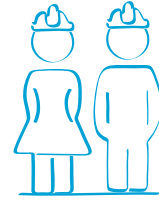
We make the same requirements of occupational health and safety management to the service providers, whether in relation to the use of equipment or training. Before the

start of the contractual activities, we hold safety integration meetings. Throughout the work, we carry out periodic inspections and audits.

The National Collective Agreement (ACT) addresses 6 health and safety topics out of a total of 42 topics (14.29% of the total). Chesf's specific ACT also addresses six topics out of 20 on the subject, making up 30% of the total. GRI 403-4

HEALTH AND SAFETY INDICATORS BY GENDER (EMPLOYEES)

GRI 403-2

			
Injury rate (%)	3	0	2,44
Occupational disease rate	0.16	0.70	0.26
Days lost rate	72.27	56.74	70.58
Absenteeism rate (%)	1.36	3.41	1.74
Deaths (un)	0	0	0



Occupational health and safety initiatives

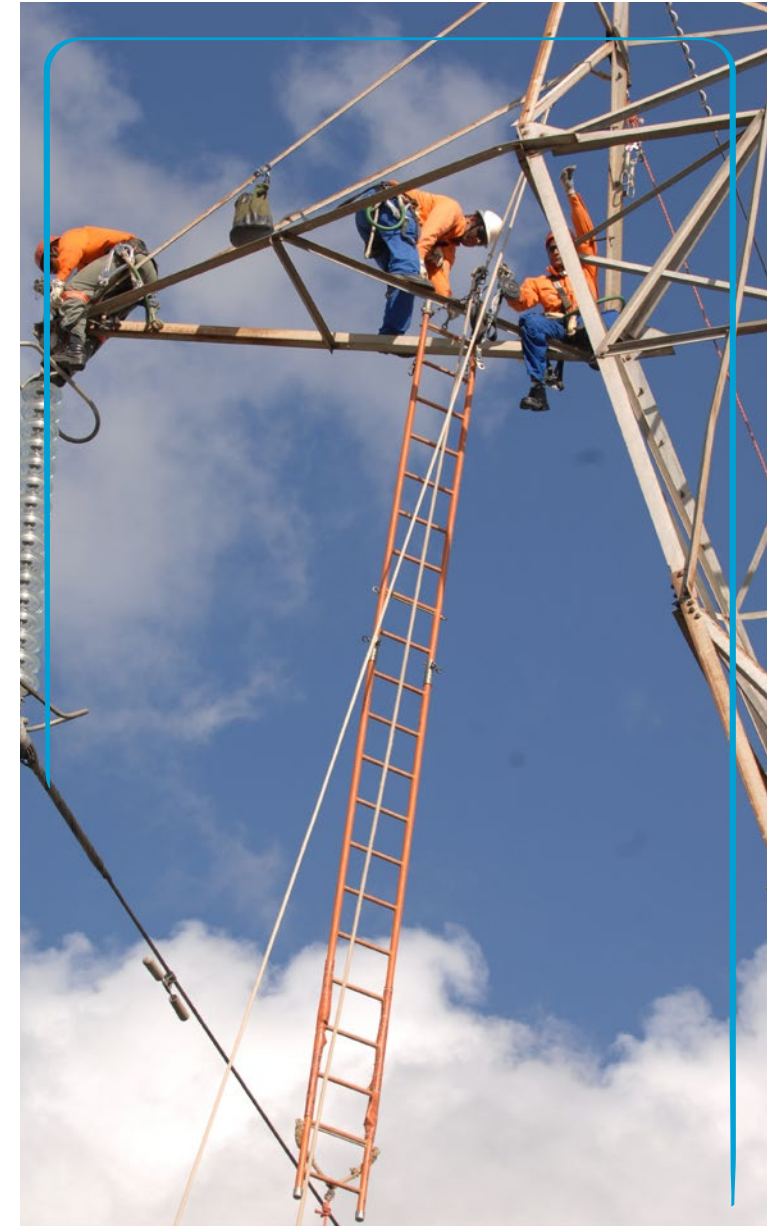
GRI 403-1, 403-3, 403-4, EU 16

Throughout 2019, Chesf's Occupational Health and Safety (OHS) areas implemented and continued specific actions and programs for risk prevention and control, health promotion and quality of life and well-being, while working to improve the efficiency of existing initiatives.

- Recertification of the Occupational Health and Safety (OHS) Management System in the international standard OHSAS 18.001:2007, concerning the activities at the Xingó Hydroelectric Power Plant (UXG), maintained for the eighth year in a row;
- Installation of an innovative pilot system to reduce noise levels within the acceptable range of standards, at the Paulo Afonso IV Power Plant, with the completion of R&D, including knowledge and qualification training for Chesf professionals during the realization of the projects, which involved all of the Company's offices;
- Implementation of the EH&S (Environment, Health & Safety) module of SAP, with the objective of optimizing the interconnection of occupational health and safety processes, enabling better risk and information management and integration of OHS processes in all Eletrobras companies. For 2020, the launch of new transactions in the EH&S module is planned, which will bring better management of Personal Protective Equipment (PPE) supply, as well as in the treatment of information that will be made available to e-Social;
- completion of safety inspections, focusing on height protection equipment for substation and transmission line maintenance teams, as part of the PREVINA-SE Project, carried out at the Recife Regional Operation Department;
- assistance in the operation and development of the actions of the Internal Committees for Prevention of Accident at Work (Cipas), in the inspections, audits and monitoring of the documents of the Cipa Management System (SGC) and in the holding of the Internal Week for for the Prevention of Accident at Work (Sipat);
- focus on the Project for the Prevention of Dismissals due to Human Error (DEH), besides the prevention of work accidents, in the training of professionals involved in the Headquarters and Regional offices, as well as in the corporate communication actions on the subject;
- Labor safety audits in our own teams and those of contracted companies, and documentation analysis;
- Conducting campaigns in the area of health and quality of life, such as White January, Prevention at Carnaval, Green April, Prevention at São João, Pink October, Blue November and the World AIDS Day;



- The second edition of the Art and Expression (*Arte e Expressão*) Project was held at the headquarters and in Paulo Afonso, Salvador and Sobradinho. The event included a discussion with Art and Mental Health professionals, and an exhibition of art and handicraft pieces produced by the employees, as well as theater presentations and workshops to improve emotional well-being and care for self-esteem. Talks and workshops on mental health at work, stress and anxiety prevention, emotional management and sleep hygiene were also held in Sobradinho, Teresina and Fortaleza. The Mental Health Events reached the participation of 150 employees throughout Chesf;
- celebration of five years of the Maternity Support Room, a quiet, comfortable and suitable place for the collection and storage of breast milk, ensuring ideal space for mothers to collect and store their breast milk. Since its inauguration, 25 employees have already made use of this resource during the period of return from maternity leave;
- continuity of the activities of the Health Promotion Center (CPS) in Recife and Sobradinho and the resumption of the operation of the Salvador CPS;
- Chesf's participation in the Circuit Races in Recife and Salvador, in the Night Run and Eco Run Sunset races, in which the Company received the award for the largest participating team. Still in the fight against sedentarism, the regional of Fortaleza held the 2nd Healthy Circuit (*Circuito Saudável*) in the promotion of physical activities, with a race in the internal area of Chesf;
- Vaccination Campaign against influenza, serving 1,836 employees;
- the resumption of labor gymnastics for the headquarters public; and
- The Organic Trade Fair (*Feira de Orgânicos*) is held fortnightly at the headquarters for the fourth consecutive year.



Workers during line maintenance. Credit: Severino Silva/Chesf.

Human rights

GRI 103-1, 103-2, 103-3 | SDG 5, SDG 8, SDG 9, SDG 10, SDG 16

The principles and guidelines that guide human rights management can be found in [Eletrobras' Social Responsibility Policy](#), the [Code of Ethical Conduct and Integrity](#), the [Logistics Policy of Eletrobras companies' supplies](#), in the [Eletrobras Companies' Sustainability Policy](#) and in the [Eletrobras Suppliers' Guide of Conduct](#).

The objectives of human rights management at Chesf are to prevent, mitigate or remedy the negative impacts and enhance the positive impacts on our work plans. To this end, we monitor the implementation of Chesf's Business Plan and Management actions - PNG 2019-2023, by using the following indicators:

- stimulating 100% of level 1 suppliers (critical) to adopt the practice of valuing and promoting diversity;
- dealing with 100% of human rights complaints by 2020; and
- obtaining a percentage of women occupying management positions at least equal to the percentage of women in the Company.

Additionally, we also monitor the Human Rights and Exercise of Citizenship Program, through PDNG 2020-2024, aiming to train 100% of our workforce and 100% of employees of outsourced companies in Human Rights and Diversity, in addition to influencing Relationship Publics on practices of Diversity and non violation of Human Rights.

The impacts of diversity management and gender equality are identified and monitored through Chesf's Pro-Gender and Race Equity Plan, 2018 - 2020 Edition, being a biannual instrument. The Ombudsman channel and the Ethics Commission also play an important role in identifying negative impacts.

We work with Eletrobras' Human Rights Working Group (WG), which carries out actions to encourage suppliers to answer the due diligence questionnaire in order to identify possible human rights violations, improve the relationship structure with suppliers, and define actions aimed at this public. It is worth noting that this WG is still being implemented, as is the Chesf Human Rights and Exercise of Citizenship Program.

To reinforce our commitment to this issue, we are signatories of the United Nations (UN) Global Compact, the Women's Empowerment Principles (UN Women), the Declaration of Corporate Commitment to Confront Sexual Violence against Children and Adolescents and the Network to Confront Sexual Violence against Children and Adolescents in Pernambuco. Since 2007, we have also joined the Federal Government's Pro-Gender and Race Equity Program, participating in five editions and being awarded in four. Additionally, Eletrobras and its companies established in 2017 the Priority Goals of the 2030 Agenda related to the Sustainable Development Goals (SDGs).

The management of human rights actions is the responsibility of the Superintendence of Institutional Relations, through the Department of Public Relations, Social Responsibility and Sponsorship. Non-discrimination issues are the responsibility of the Ethics Committee, which has a secretariat directly linked to the Chief Executive Officer. The management of diversity and equal opportunities is the responsibility of the Gender and Race Committee, which reports to Chesf's Corporate Management Board.



The committee has one employee per Board of Executive Officers and one employee per Regional Office, in addition to a coordinator, a vice-coordinator and a representative of the Superintendence of People Management to:

- promote gender and race equity;
- seek a corporate culture based on respect for people with justice and equity, focusing on issues related to women, black people and the LGBTQ+ public and;
- be a channel for listening and proposing improvements in gender and race issues;
- contribute to the promotion of gender and race in the Permanent Gender Committee of the Ministry of Mines and Energy and Eletrobras companies; and
- coordinate the actions of the Pro-Gender and Race Equity Plan at Chesf.

In 2019, the Ethics Committee received 18 claims on ethical deviation, which generated 11 preliminary lawsuits, all of which had conduct agreements signed and 7 were considered unfounded or redirected.

In that same year, several actions were taken to promote awareness regarding the

implementation of Human Rights at Chesf, with special emphasis on the following:

- May 18th Campaign - Sexual Violence Against Children and Adolescents, in which we support the state initiative, producing posters for distribution by the Network in Pernambuco. Internally, we promoted a lecture on pedophilia and cybercrimes, given by Giovanni Santoro, Head of Social Communication of the Federal Police in Pernambuco. The event was held at the Company's headquarters in Recife and was transmitted by videoconference to Paulo Afonso, Fortaleza, Pituáçu, Sobradinho and Teresina;
- The Lilac August Campaign, which has been defending the rights of women in violent situations since 2017. Besides carrying out an electronic campaign in ChesfNet and lectures on the 13 Years of the Maria da Penha Law, the Gender and Race Committee promoted specific actions:
 - in Salvador (BA), a Round-table discussion was held with consultant and lawyer Andréa Marques, coordinator of the Working Group to Combat Violence against Women;
 - in Teresina (PI), the guest Verônica Vasconcelos, from the Women's Center of

the Piauí Public Defender's Office, provided a moment of deep reflection when addressing Violence against Women based on the movie "Acorda Raimundo". At the end of the event, folders and shirts of the White Ribbon (Laço Branco) Campaign were distributed, which aims to involve and mobilize men towards an end to violence against women;

- Campaign "16 days of Activism for the end of violence against Women", for which, besides the internal dissemination, we carried out a Poetry Afternoon with the artistic intervention of the Dance Company "Perna de Palco" on the theme "Dor-Amor-Cura-Ruptura", an adaptation of the book "Milk and Honey", by Rupi Kaur. Following the performance, a chat was held with Andrea Corradini on "Non-violent Communication and Violence against Women: We Need to Talk About It";
- Awareness Campaign in the Women's Month (March) with the theme "Recognition and Empowerment of Women in the Workspace", for which we held an electronic campaign and discussion on the theme;



Sculpture of Corbiniano Lins (from Pernambuco), at Chesf's Headquarters, illuminated during Pink October. Credit: André Schuler

- Popcorn & Knowledge (Pipoca & Conhecimento) event, with the showing of the movie “Big Eyes”, to promote reflection on women’s causes;
- Workshop on Human Rights and Diversity, with the objective of deepening the knowledge on the subject of the members of the Gender and Race Committee. The workshop was held at the head office and regional offices and was promoted by Promundo in partnership with Eletrobras, which offered the Tool Book: Promotion of Diversity in Companies;
- lecture on human rights given to suppliers during a meeting held at the head office (see page Xx);
- Pink October Campaign;
- Blue November campaign;
- lectures and educational actions that addressed the issues of the Code of Ethical Conduct and Integrity; and
- lecture on “Ethical Intelligence and Human Sustainability”, given by Professor Regina Migliori.

Indigenous and traditional peoples’ rights

GRI 102-43, 103-1, 103-2, 103-3, 413-1

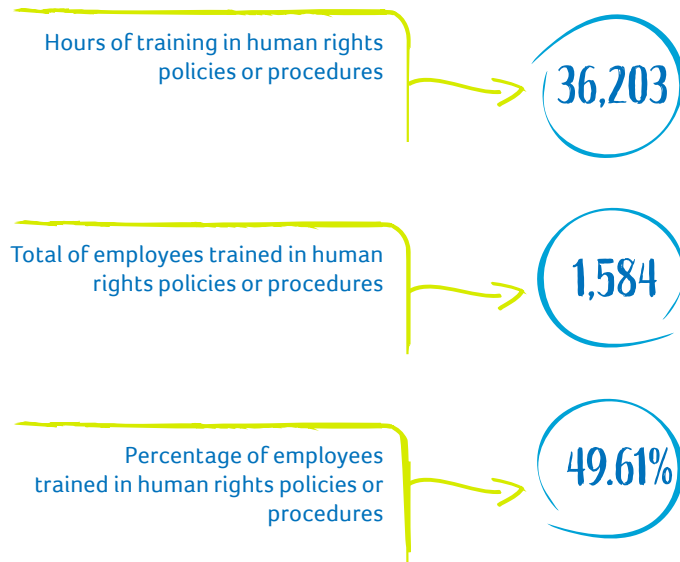
The indigenous issue is discussed in the Environment Committee of Eletrobras companies, through a permanent working group created in 2019 from a commission existing since 2012. The Commission prepared the guidelines for relations with these peoples, which were included in version 4.0 of the [Environmental Policy of Eletrobras companies](#).

Human rights indicators

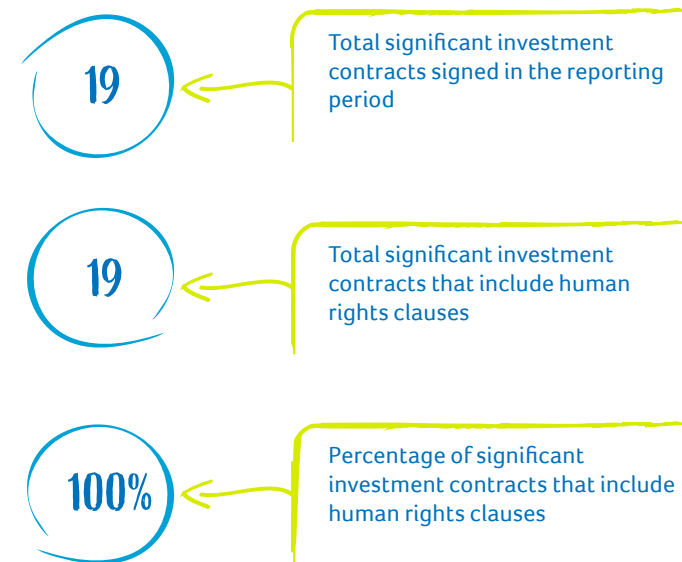
Base salary and remuneration for men and women | GRI 405-2

Job category	Base Salary	Remuneration	Ratio of base salary (women to men)	Ratio of remuneration (women to men)
Management level - women	21,038.91	22,919.47	1.00	0.93
Management level - men	21,045.79	24,578.48		
Higher-level position - women	9,978.08	12,538.11	0.91	0.83
Higher-level position - men	11,000.03	15,036.88		
Position of no higher level - women	5,335.41	7,975.71	1.07	1.01
Position of no higher level - men	4,998.67	7,881.70		

TRAINING OF EMPLOYEES ON HUMAN RIGHTS POLICIES AND PROCEDURES | GRI 412-2



INVESTMENT CONTRACTS THAT INCLUDE HUMAN RIGHTS CLAUSES | GRI 412-3



Note: It refers to contracts approved by the board of directors whose assets will be held by Chesf after the end of the contract period





⑥ GRI CONTENT INDEX

GRI CONTENT INDEX

GRI 102-54, 102-55

Disclosure	Remarks	Report page	Omission
GRI 101: 2016 BASIS			
GRI 102: 2016 GENERAL DISCLOSURES			
ORGANIZATIONAL PROFILE			
GRI 102-1	Name of organization	Cover	
GRI 102-2	Activities, brands, products and services	22, 77, 81	
GRI 102-3	Location of the organization's headquarters	Rua Delmiro Gouveia, 333. San Martin, Recife (PE)	
GRI 102-4	Location of organization's operations	22	
GRI 102-5	Nature of ownership and legal form of the organization	22	
GRI 102-6	Markets served	22, 77, 81, 82	
GRI 102-7	Size of organization	Chesf conducts 636 operations, considering the concession contracts (generation) and the transmission functions (transmission). 69, 22, 101	
GRI 102-8	Information about employees (own and third parties)	101	
GRI 102-9	Supply chain	42	
GRI 102-10	Main changes regarding size, structure or shareholding	40, 77	
GRI 102-11	Precautionary Principle	47	



Disclosure		Remarks	Report page	Omission
GRI 102-12	External Initiatives		51	
GRI 102-13	Affiliation to Associations		52	
STRATEGY				
GRI 102-14	Message from the CEO		14	
GRI 102-15	Description of main impacts, risks and opportunities		31, 47, 48	
ETHICS AND INTEGRITY				
GRI 102-16	Values, principles, standards and norms of conduct	Members of governance bodies, employees and business partners receive training on Chesf's values, principles, standards and norms of conduct. The documents on these premises must be read and signed regularly by all these audiences, already have a relationship with the Company or are initiating it. One of the attributions of the Risk Management and Compliance Department is to ensure the compliance and continuous improvement of the Integrity Program (Compliance) with respect to the applicable laws and policies of Eletrobras companies.	31, 50, 62	
GRI 102-17	Mechanisms for advice and concerns about ethics		66	
GOVERNANCE				
GRI 102-18	Governance structure		56,59	
GRI 102-19	Delegation of authority	The General Shareholders' Assembly assigns powers to the Board of Directors, Board of Executive Officers, Officers and Fiscal Council through the Company's Bylaws. The Board of Directors delegates powers to the Board of Executive Officers and to the Officers by means of resolutions recorded in meeting minutes. The Board of Executive Officers, in turn, delegates authority to the managers and employees by means of decisions recorded in minutes of meetings and internal regulations. The delegation of authority covers economic, social and environmental topics.		

Disclosure		Remarks	Report page	Omission
GRI 102-20	Executive-level responsibility for economic, environmental and social issues	Chesf has executive level positions and functions to deal with economic, environmental and social issues and these report to the Board of Directors, which is the Company's highest corporate governance body.		
GRI 102-21	Stakeholder consultation on economic, environmental and social issues	Chesf provides a series of communication channels with its stakeholders, which are described throughout the report. These channels can also generate questions to the Board of Directors, which receives periodic reports from strategic areas. The minutes of the General Shareholders' Assembly and the meetings of the Board of Directors, registered with the Pernambuco Board of Trade and the Securities and Exchange Commission (CVM), are available at the corporate portal.	6, 88, 90	
GRI 102-22	Composition of the highest governance body and its committees	The term of office of the members of the Board of Directors is two years, starting from the Ordinary General Assembly that elected them, with a maximum of three consecutive reappointments being allowed. Among the seven members of the Board, one is the Parent Company's Chairman; one is the Parent Company's Chief Financial and Investor Relations Officer; one is a Chesf employee; one is the Chief Executive Officer; one is a lawyer and was appointed by the Ministry of Economy; one is a statistician and was appointed by Eletrobras as an independent member; and one is an engineer and was appointed by Eletrobras as an independent member. All members of the body deal with the Company's strategic matters taking into consideration economic, environmental and social impacts.	56, 59	
GRI 102-23	Chairman of the highest governance body	The Chairmanship of the Board of Directors cannot be held by the Chief Executive Officer of Chesf, but by an executive appointed by Eletrobras among its appointees, as provided for in the Company's Bylaws and the Internal Regulations of the Board of Directors.		
GRI 102-24	Appointment and selection to the highest governance body		60	

Disclosure	Remarks	Report page	Omission
GRI 102-25	Conflicts of interest	65	
GRI 102-26	Role of the highest governance body in defining purpose, values and strategy	31, 37, 50	
GRI 102-27	Knowledge and development of the highest governance body	60	
GRI 102-28	Performance assessment of the highest governance body	60	
GRI 102-29	Identification and management of economic, environmental and social impacts	31, 66, 94	
GRI 102-30	Effectiveness of risk management processes	47	
GRI 102-31	Assessment of economic, environmental and social issues	31, 34, 37	
GRI 102-32	Role of the highest governance body in sustainability reporting	4, 6	
GRI 102-33	Communication of critical concerns	66	
GRI 102-34	Nature and total number of critical concerns	66	
GRI 102-35	Remuneration policies	60	
GRI 102-36	Process for determining remuneration	60	
GRI 102-37	Involvement of stakeholders in remuneration processes	60	
GRI 102-38	Proportion of total annual remuneration	The proportion of the highest paid individual's annual compensation for the average annual compensation of other employees is 6.12.	
GRI 102-39	Percentage increase in total annual remuneration	The proportion of the annual variation of the best paid individual in relation to the variation of other employees is 7.6%.	

Disclosure	Remarks	Report page	Omission
STAKEHOLDER ENGAGEMENT			
GRI 102-40	List of stakeholder groups engaged by the organization	5	
GRI 102-41	Collective bargaining agreements	100% of Chesf employees are covered by collective bargaining agreements	
GRI 102-42	Basis for identification and selection of stakeholders to engage with	5	
GRI 102-43	Approach adopted for stakeholder engagement	88, 89, 90, 115	
GRI 102-44	Main topics and concerns raised with stakeholders	8, 9, 66	
REPORTING PRACTICES			
GRI 102-45	Entities included in the consolidated financial statements	<p>Special-Purpose Entities are included in the consolidated financial statements of Chesf and represent the Company's permanent holdings in subsidiaries, joint ventures and affiliates, as detailed below:</p> <p>DO BRASIL S.A.; NORTE ENERGIA S.A.; ACAUÃ ENERGIA S.A.; ANGICAL 2 ENERGIA S.A.; ARAPAPÁ ENERGIA S.A.; CAITITU 2 ; ENERGIA S.A.; CAITITU 3 ENERGIA S.A.; CARCARÁ ENERGIA S.A.; CORRUPIÃO 3 ENERGIA S.A</p> <p>TEIÚ 2 ENERGIA S.A.; COQUEIRINHO 2 ENERGIA S.A.; PAPAGAIO ENERGIA S.A.; TAMANDUÁ MIRIM 2 ENERGIA S.A.; COMPANHIA ENERGÉTICA SINOP S.A.; INTERLIGAÇÃO ELÉTRICA GARANHUNS S.A.; INTERLIGAÇÃO ELÉTRICA DO MADEIRA S.A.; MANAUS CONSTRUTORA LTDA.; SISTEMA DE TRANSMISSÃO NORDESTE S.A.; and TRANSMISSORA DELMIRO GOUVEIA S.A.</p> <p>On September 27, 2018, the public session of the auction for the sale of the equity stakes of Eletrobras and its subsidiaries in Special-Purpose Entities (SPEs) took place. In fiscal year 2019, the transfer of the SPEs of the Sento Sé II Wind Complex and the Sento Sé III Wind Complex was concluded. The SPE Vamcruz I Participações S.A. included by proxy in the aforementioned auction did not receive a bid. The Company classified the investments in this SPE as Non-current Assets Held for Sale.</p>	

Disclosure	Remarks	Report page	Omission
GRI 102-46	Definition of report content and boundaries of each material theme	6	
GRI 102-47	List of material themes	7, 8, 9	
GRI 102-48	Reformulation of information	There was no reformulation of information in the 2019 Annual Report.	
GRI 102-49	Changes in reporting	Themes that are new in the 2019 materiality matrix: socio-environmental aspects in decision making; digital transformation; cybersecurity; risk and crisis management; corruption and ethics management; corporate governance and financial results. The other themes and sub-themes are parallel in the current matrix, except for: energy efficiency; infrastructure (generation and transmission); operational safety; environmental impacts; occupational health and safety; management of suppliers and their sub-themes and participation in results. This does not mean, however, that these topics are not addressed throughout the 2019 report.	4
GRI 102-50	Period covered by the report	4	
GRI 102-51	Date of previous report	The previous report was published in 2019 for the year of 2018.	
GRI 102-52	Reporting cycle	Annual	
GRI 102-53	Contact details for the report	4, 140	
GRI 102-54	“Agreed” option chosen by the organization	This report was prepared according to the GRI Standards: Core option.	4, 118
GRI 102-55	GRI Standards Content Summary	118	
GRI 102-56	External check	4	



Disclosure	Remarks	Report page	Omission	
FORM OF MANAGEMENT (disclosures 103-1, 103-2 and 103-3 apply to all material themes and their respective specific disclosures)				
GRI 103: 2016 FORMS OF MANAGEMENT				
GRI 103-1	Explanation of material themes and their boundaries	Research and Development + Innovation	83	
		Water	95	
		Socio-environmental aspects in decision making	50	
		Digital transformation	38	
		Cybersecurity	40	
		Risk and crisis management	47	
		People Development Management	104	
		Human rights	113, 115	
		Climate change	97	
		Energy transition	85	
		Corruption and ethics management	63	
		Corporate governance	55	
		Energy supply	73, 76	
		Financial result	68	
Regulatory compliance	44, 46			
GRI 103-2	Management approach and its components	Research and Development + Innovation	83	
		Water	95	
		Socio-environmental aspects in decision making	50	
		Digital transformation	38	
		Cybersecurity	40	
		Risk and crisis management	47	
		People Development Management	104, 108	



Disclosure	Remarks	Report page	Omission	
GRI 103-2	Management approach and its components	Human rights	113, 115	
		Climate change	97	
		Energy transition	85	
		Corruption and ethics management	63	
		Corporate governance	55	
		Energy supply	73, 76, 77, 79, 80, 81	
		Financial result	68	
		Regulatory compliance	44, 46	
GRI 103-3	Management approach assessment	Research and Development + Innovation	83	
		Water	95	
		Socio-environmental aspects in decision making	50	
		Digital transformation	38	
		Cybersecurity	40	
		Risk and crisis management	47	
		People Development Management	104, 108	
		Human rights	113, 115	
		Climate change	97	
		Energy transition	85	
		Corruption and ethics management	63	
		Corporate governance	55	
		Energy supply	73, 76, 77, 79, 80, 81	
		Financial result	68	
Legal and regulatory compliance	44, 46			

Disclosure		Remarks	Report page	Omission
ECONOMIC THEMES				
GRI 201: 2016 ECONOMIC PERFORMANCE				
GRI 201-1	Direct economic value generated and distributed		71	
GRI 201-2	Financial implications and risks due to climate change	Chesf does not currently calculate the financial implications resulting from climate change.	97	
GRI 205: 2016 ANTI-CORRUPTION				
GRI 205-1	Operations assessed for risks related to corruption		43	
GRI 205-2	Communication and training in anti-corruption policies and procedures		65	
GRI 205-3	Confirmed cases of corruption and measures taken		64	
ENVIRONMENTAL THEMES				
GRI 303: 2018 WATER AND EFFLUENTS				
GRI 303-1	Interactions with water as a shared resource	The only goal pursued by Chesf regarding the use of this resource is related to the administrative consumption of water from the supply network. There are no specific goals related to water stress. In 2019, 59,559,840 cubic meters of water were turbined from water stress areas, only 0.05% of the total water turbined by the Company's plants.	95	
GRI 303-2	Management of water discharge impacts		95	

Disclosure	Remarks	Report page	Omission	
GRI 303-3	Water withdrawal	Partially answered. Does not present the information regarding freshwater or other water.	96	
GRI 303-4	Water discharge	The only water discharge carried out by Chesf is from domestic sewage, of which 100% of the effluent is directed to conventional treatment systems (septic tanks or systems offered by local concessionaires) and does not pose any risk to water bodies.		
GRI 303-5	Water consumption		96	
GRI 305: 2016 EMISSIONS				
GRI 305-1	Direct Greenhouse Gas (GHG) Emissions - SCOPE 1		97	
GRI 305-2	Indirect Greenhouse Gas (GHG) Emissions - SCOPE 2		97	
GRI 305-3	Other Indirect Greenhouse Gas (GHG) Emissions - SCOPE 3		97	
GRI 305-4	Greenhouse Gas (GHG) Emission Intensity	Por energia líquida produzida (tCO ₂ /MWh) = 0,008 Por receita operacional líquida (tCO ₂ /mil ROL) = 0,032		
GRI 305-5	Reduction of Greenhouse Gas (GHG) emissions		97	
GRI 305-7	Emissions of NO _x , SO _x and other significant air emissions	Chesf does not emit NO _x , SO _x or other atmospheric emissions		

Disclosure		Remarks	Report page	Omission
GRI 307: 2016 ENVIRONMENTAL COMPLIANCE				
GRI 307-1	Non-compliance with environmental laws and/or regulations	In 2019, Chesf received a fine of R\$ 74,725 for non-compliance with environmental laws and regulations.		
SOCIAL THEMES				
GRI 401: 2016 EMPLOYMENT				
GRI 401-1	New hires and turnover rate by age group, gender and region		101, 102	
GRI 404: 2016 TRAINING AND EDUCATION				
GRI 404-1	Average number of hours of training, by job category and gender		107	
GRI 404-2	Skills management and continuous learning programs		104, 106	
GRI 404-3	Percentage of employees receiving performance and career development reviews	There was no performance assessments carried out for Chesf employees in 2019.		
GRI 405: DIVERSIDADE E IGUALDADE DE OPORTUNIDADES 2016				
GRI 405-1	Diversity and equal opportunities		58, 101, 102	
GRI 405-2	Mathematical ratio of salary and remuneration between women and men, broken down by functional category and relevant operating units		116	
GRI 406: 2016 NON-DISCRIMINATION				
GRI 406-1	Incidents of discrimination and corrective actions taken	No cases of discrimination were identified at Chesf in 2019.		

Disclosure		Remarks	Report page	Omission
GRI 407: 2016 FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING				
GRI 407-1	Freedom of association and collective bargaining	There is no formal study indicating suppliers whose right to exercise freedom of association and collective bargaining may be under violation or significant risk of violation. Our hiring practices seek to ensure that this right is respected.	43	
GRI 408: 2016 CHILD LABOR				
GRI 408-1	Operations and suppliers at significant risk of incidents related to child labor		42	
GRI 409: 2016 FORCED OR COMPULSORY LABOR				
GRI 409-1	Operations and suppliers at significant risk of incidents related to forced or compulsory labor		42	
GRI 410: 2016 SAFE PRACTICES				
GRI 410-1	Security personnel trained in human rights policies or procedures	Chesf's 34 security guards are outsourced. These security guards did not participate in the training on human rights policies or procedures in 2019.		
GRI 411: 2016 RIGHTS OF INDIGENOUS PEOPLES				
GRI 411-1	Incidents of violations involving the rights of indigenous peoples	No cases of human rights violations were reported by Chesf in 2019.		
GRI 412: 2016 HUMAN RIGHTS ASSESSMENT				
GRI 412-2	Training of employees in human rights policies and procedures		116	
GRI 412-3	Significant investments and contracts that include human rights clauses or have undergone human rights assessments		116	

Disclosure		Remarks	Report page	Omission
GRI 415: 2016 PUBLIC POLICIES				
GRI 415-1	Political contributions	In compliance with the legislation, Eletrobras companies do not support or contribute to political parties or political campaigns of candidates. This guideline is ratified in the Eletrobras companies' Code of Ethical Conduct.		
GRI 418: 2016 CUSTOMER PRIVACY				
GRI 418-1	Proven complaints related to breaches of privacy and loss of customer data	No substantiated complaints regarding violations of customer privacy were registered in 2019.		
GRI 419: 2016 SOCIO-ECONOMIC COMPLIANCE				
GRI 419-1	Non-compliance with laws and regulations in the social and economic area	Chesf did not receive fines or non-monetary sanctions for non-compliance with laws and regulations in the social and economic area in 2019.		
SECTOR SUPPLEMENT				
ORGANIZATIONAL PROFILE				
EU1	Installed capacity, broken down by primary energy source and regulatory system		22, 78	
EU2	Net energy production, broken down by primary energy source and regulatory system		75	
EU4	Length of overhead and underground transmission and distribution lines, broken down by regulatory system		81	
AVAILABILITY AND RELIABILITY				
EU6	Availability and reliability of electrical power		81	

Disclosure		Remarks	Report page	Omission
RESEARCH AND DEVELOPMENT				
EU8	Activities and expenses related to research and development aimed at the reliability of electricity supply and the promotion of sustainable development		83	
AVAILABILITY AND RELIABILITY				
EU10	Planned capacity against projected long-term energy demand, broken down by energy source and regulatory system	The planning of the Brazilian electricity sector is done by the Energy Research Company (EPE), linked to the Ministry of Mines and Energy.		
SYSTEM EFFICIENCY				
EU11	Average efficiency of thermal power plant generation, broken down by energy source and regulatory system	Does not apply to Chesf		
EU12	Losses in energy transmission and distribution as a percentage of total energy		74	
EMPLOYMENT				
EU14	Availability of skilled labor		106, 108	
DISASTER / EMERGENCY PLANNING AND RESPONSE				
EU21	Contingency planning, disaster/ emergency management plan and training programs, and recovery/ restoration plans		49	
ACCESS				
EU30	Average availability factor of the plant, broken down by energy source and regulatory system		78	

Disclosure	Remarks	Report page	Omission
EXTRA GRI DISCLOSURES - ASSOCIATED WITH THEMES THAT WERE NOT POINTED OUT IN THE PROCESS OF DETERMINING MATERIALITY, BUT THAT ELECTROBRAS DECIDED TO REPORT IN ORDER TO MAINTAIN THE HISTORY AND COMPARABILITY BETWEEN CYCLES			
ECONOMIC THEMES			
GRI 204: 2016 PURCHASING PRACTICES			
GRI 204-1	Proportion of spending on locally-based suppliers in operating units	43	
ENVIRONMENTAL THEMES			
GRI 304: 2016 BIODIVERSITY			
GRI 304-2	Description of significant impacts on biodiversity by activities, products and services in protected areas and areas of high biodiversity value outside protected areas	100	
GRI 304-3	Protected or restored habitats	100	
SOCIAL THEMES			
GRI 401: 2016 EMPLOYMENT			
GRI 401-2	Benefits that are not offered to temporary or part-time employees	107, 109	
GRI 401-3	Return to work and retention after parental leave	103	
GRI 403: 2016 OCCUPATIONAL HEALTH AND SAFETY			
GRI 403-1	Percentage of the workforce represented in formal health and safety committees, composed of employees from different hierarchical levels, which help to monitor and guide occupational health and safety programs.	109, 111	

Disclosure	Remarks	Report page	Omission
GRI 403-2	Types and rates of injuries, occupational diseases, lost days, absenteeism, and number of work-related deaths by region and gender.	110	
GRI 403-3	Employees with a high incidence or high risk of diseases related to their occupation.	109, 111	
GRI 403-4	Topics relating to health and safety covered by formal agreements with trade unions.	109, 110, 111	
GRI 413: 2016 LOCAL COMMUNITIES			
GRI 413-1	Percentage of operations with local community engagement programs, impact assessment and local development.	90, 91, 93, 115	
GRI 413-2	Operations with actual and potential negative impacts on local communities (location and what actual and potential impacts).	90	
SECTOR SUPPLEMENT			
EMPLOYMENT			
EU16	Health and safety policies and standards for employees and subcontractors/third parties	109, 110, 111	

Disclosure		Remarks	Report page	Omission
LOCAL COMMUNITIES				
EU20	(DMA) Management of processes for displacement and relocation of communities	<p>In recent years, Chesf has not implemented any venture that demands involuntary displacement of populations, nor is there any prospect that this will occur according to the ventures foreseen in its business plan. However, it is an integral part of Chesf’s approach, from prospecting new businesses to conducting environmental studies, identifying and characterizing social, economic and cultural populations located within the area of direct and indirect influence of the ventures. For a situation where the need for involuntary displacement of people is identified, Chesf has the organizational and technical structure necessary to meet the relevant legal requirements. In this case, besides identifying and registering the people and residences impacted by the venture, the appropriate compensation must be negotiated within the licensing process, in a participative approach, involving Chesf’s environmental, legal and land areas.</p>		
EU22	Number of people physically or economically displaced and compensation offered, broken down by type of project	<p>There was no displacement of people in 2019. The electric power transmission ventures implemented by Chesf restricted property rights through the constitution of administrative easement of conduit, but did not harm the economic activity performed on the properties, so there was also no economic displacement of people.</p>		



⑦ SDG MAP



SDG MAP

The map below shows the Annual Report page that describes our main contributions to the achievement of the Sustainable Development Goals. The SDG tags were positioned next to the contents mentioned throughout the report and appear in a different color in the case of prioritized goals.

Priority SDGs for the Eletrobras System



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 Value Added Distribution, [page 71](#)
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Other SDGs



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ANNEXES



ANNEXES

For information on bid and contract management; breakdown of contracting expenses by purpose and specification of the types of services contracted for administrative operation; most relevant contracting and its association with the strategic objectives and justifications for such contracting; and direct contracting, including participation in the contracting processes, main types and justifications for accomplishment, main challenges and future actions, see the “Supplier Management” section on [page 42](#) of this report and [the Financial Statements](#).

CREDITS

GRI 102-53

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Visão Sustentável

This report is available for download at: www.chesf.gov.br
> sustainability > overview

Chapter Opening Photos

André Schuller

Page 2 - Casa Nova Wind Complex, in Bahia

Page 3 – Head office, in Recife (PE)

Page 21 - Chesf Operation Center, in Recife (PE)

Page 116 - Xingó Seedbed, in Piranhas (AL).

Page 135 - Rio São Francisco stretch downstream of the Sobradinho Hydroelectric Power Plant (BA)

Page 141 – Barragem Leste, main course of Rio São Francisco (Algorão)

Tatiana Learth

Page 30 - Floating Solar Power Plant of the Sobradinho Reservoir, in Bahia, before its inauguration.

Drone

Page 54 - Xingó Hydroelectric Power Plant, Sergipe

Acervo Chesf

Page 131 - Fish farming station in the reservoir.



MINISTÉRIO DE
MINAS E ENERGIA

