

Eletrobras

SASB Report **2023**

Eletrobras

Eletrobras

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CHAPTER 1

Presentation



CGT Eletrosul Headquarters

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The SASB Report

Greetings and welcome to Eletrobras' SASB Report 2023.

This report reaffirms our commitment to sustainability and transparency, disclosing to stakeholders how our strategy and management have created value.

The content considers environmental, social and governance (ESG) factors and the information is presented in accordance with the Sustainability Accounting Standards Board (SASB) Guidelines, in an exclusive and complementary manner to the Eletrobras 2023 Annual Report.

This document includes responses to the SASB sector indicators for power generation and transmission concessionaires. For this sector, the guidelines identify sustainability topics based on a set of 26 relevant questions organized into five dimensions:

- Environment;
- Social capital;
- Human capital;
- Business model and innovation;
- Leadership and governance.



Transmission Line Inspection -
Photo: Eduardo Vilaça

About Eletrobras

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We are Eletrobras (Centrais Elétricas Brasileiras S/A), Brazil's leading electricity generation and transmission company, which also operates in the trading sector and contributes to the energy efficiency of the entire National Interconnected System (SIN).

We are present across the country through the generation and transmission operations of the companies Eletrobras CGT Eletrosul, Chesf, Eletronorte and Furnas. We also control a holding company, Eletrobras Eletropar, which operates in the financial sector.

We also control six Special Purpose Companies (SPEs) and have a stake in 63 others, through which we operate in transmission and generation projects.

We currently have 44.6 gigawatts (GW) of installed capacity, accounting for 22% of national capacity. We also operate 73,800 kilometers of transmission lines, representing 37% of the National Interconnected System (SIN).

Of the total energy generated by the company, 96.5% comes from sources with low greenhouse gas emissions, making the national energy matrix one of the cleanest in the world.



Transmission line maintenance - Furnas Collection

Geographic distribution

Generation

100 plants in operation, of which:
- 47 hydroelectric;
- 43 wind;
- 9 thermoelectric;
- 1 solar.

44,654.5 MW of installed capacity, of which:
- 67% corporate ventures and shared ownership*;
- 33% in SPEs.

146,946.6 GWh generated, of which:
- 95% hydro;
- 1.5% wind;
- <1% solar;
- 3.5% thermoelectric.

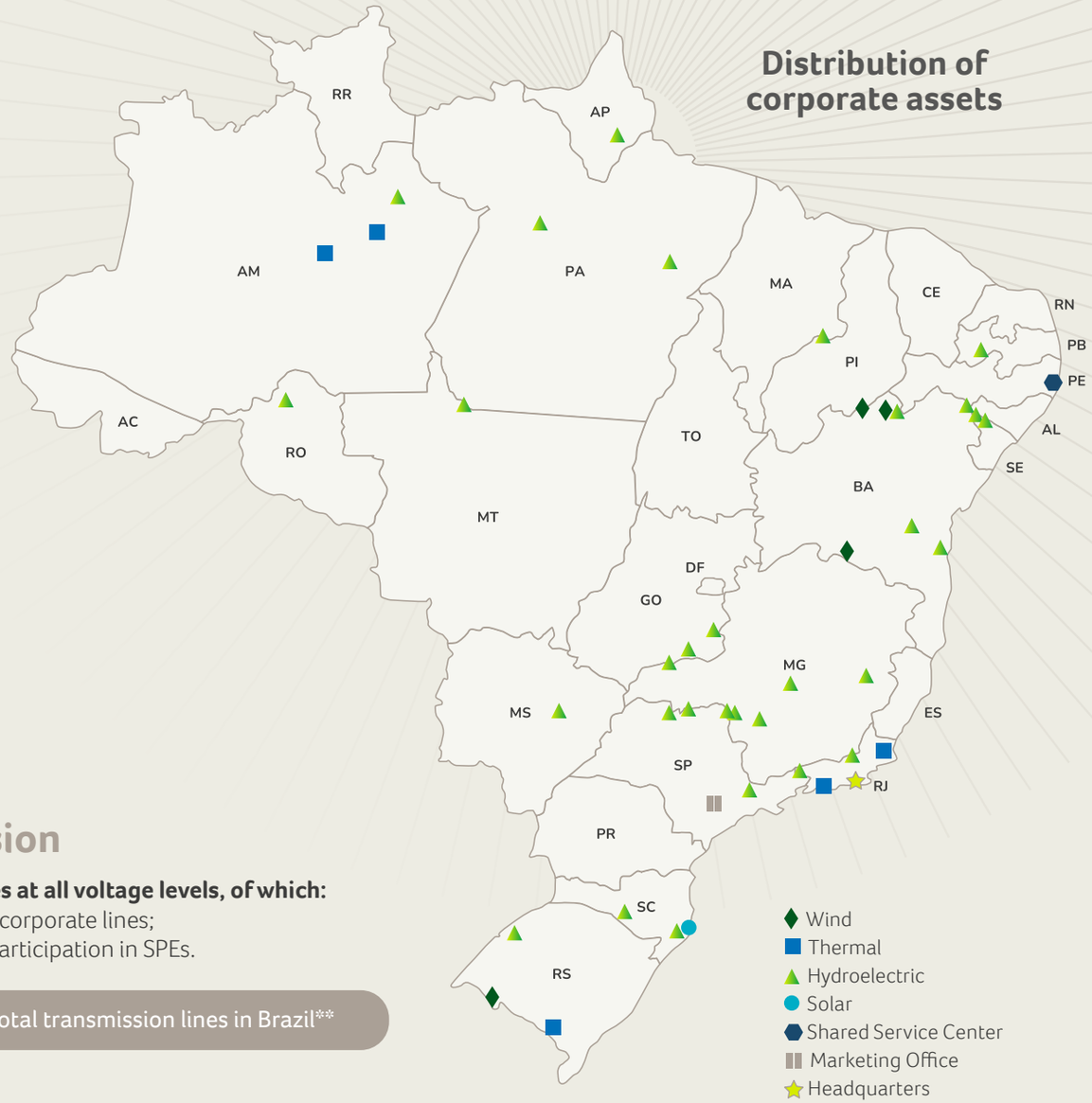
44,654.5 MW
of installed capacity

22%
of Brazil's total 199,325 MW

Transmission

73,788 km of lines at all voltage levels, of which:
- 66,539 km of corporate lines;
- 7,249 km of participation in SPEs.

37% of the total transmission lines in Brazil**



** Serra da Mesa HPP, Manso HPP and Governador Jayme Canet Junior HPP (formerly Mauá HPP).*
*** Compared to data from the National Interconnected System (SIN) in November 2023.*

CHAPTER 2

Risk management



Cable retraction on a transmission line tower - Photo: Marcelo Camargo Constante

Risk management

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We permanently monitor our actions in the business environments in which we operate, in order to implement risk management processes effectively, protecting the interests of the stakeholders involved.

Currently, our risk management model draws guidance from the ISO 31000 standard and the COSO 2013 and COSO ERM frameworks. This model aims to align risk management with organizational strategies, initiatives and structures, in addition to meeting sectoral and regulatory and supervisory bodies' requirements.

The risk management process's main goal is to avoid or mitigate the materialization of events that could negatively impact our strategic objectives.

We have a Risk Management Policy, applicable to any and all risks to which the company may be exposed. The policy establishes the roles and responsibilities of each manager in the process, incorporating a risk perspective into strategic decision-making, in accordance with applicable regulations and best practices.

For more information on Eletrobras' risk management, see the 2023 Annual Report.

In order to achieve the Policy's objectives, the risk management process is divided into the following steps:

- Risk identification
- Risk assessment
- Risk management
- Risk monitoring
- Risk communication

The Executive Board and the Board of Directors, through the Audit and Risk Committee, are responsible for evaluating the effectiveness of the entire risk management process.

Risk Matrix

In 2023, our corporate risk matrix was updated and validated by the Executive Board and the Board of Directors. The new matrix is structured around the Business, Financial and ESG pillars.

The ESG pillar identifies Environmental, Social and Governance risks, including topics such as climate change, human rights diversity, taxes, health and safety, information security and fraud.

All the risks included in our matrix are addressed through the implementation of action plans prepared based on technical recommendations from the Risk Management and Internal Controls areas, in partnership with business managers, always taking into account the risk appetite defined by the Board of Directors.

This corporate risk management process is directly related to the strategic guidelines of sustainable growth, profitability and value creation, as it allows the preventive identification of threats to business objectives and risk-based decision making.

Network resilience

IF-EU- 550a.1: Number of incidents of non-compliance with standards or regulations on physical and cyber security

Consistent with our digital transformation, the availability of systems and the integrity and confidentiality of information are critical factors for business success. We are constantly seeking to minimize and prevent events that could compromise the digital security of our operations, avoiding material damage, data loss, financial losses, service interruptions, unauthorized disclosures and reputational damage, among other possible impacts.

Information Security is a priority in our risk matrix, monitored through periodic reports to the Board of Directors. We continually invest in improving the management of this theme, acting on the basis of the Information Security Policy and complementary regulations.

Our approach to cybersecurity follows the guidelines of the NIST Cybersecurity Framework, developed by the National Institute of Standards and Technology (NIST) in the United States.

Every year, an independent auditor validates the information security indicators, issuing a report on the company's level of maturity. In 2023, we scored 3.1 (4 being the maximum level) in the latest assessment, higher than the global market average of 2.10.

The care taken with this theme is also reflected in our professional staff. Apart from general and mandatory training for the entire team, carried out via the Eletrobras Companies Corporate University (Unise), we organize events such as workshops and seminars. In 2023, we started specific training on digital security in business processes, such as People Management and Supplier Management. We are also developing a platform specialized in training, campaigns and simulations, with a focus on Information Security and privacy.

On our website, we provide a Privacy Portal, explaining to our stakeholders how we handle personal data and how data subjects can make requests. The Portal also features Eletrobras' Data Protection Officer (DPO).

Over the course of the year, we started 26 projects to be developed over the next two years designed to make the company's information more secure and to mitigate possible cyber attacks. These include:

- Contracting insurance against cyber attacks;
- Deployment of a solution against information leakage (DLP);
- Implementation of the Security Operations Center Industrial (SOC OT);
- Review of the SAP GRC (Governance, Risk Management and Compliance) risk matrix and consequent Segregation of Duties (SoD) risks;
- Monitoring supplier risks;
- Definition of process for drawing up the Business Continuity Plan;
- Improving the asset inventory;
- Setting up a general awareness program for employees.

It is important to note that there were no records of breaches of customer privacy data in 2023.

Occupational health and safety

IF-EU-320a.1: Total recordable injury rate, fatality rate, and near miss frequency rate

We consider occupational health and safety (OHS) to be a priority and non-negotiable issue, and we act based on the principles of excellence, social responsibility, respect for people and sustainability.

The Occupational Health and Safety Policy, guides our actions in this direction, laying down principles, guidelines and responsibilities for promoting safety in this field at Eletrobras.

We currently have an operational Occupational Health and Safety Management System (OHSMS) at Eletrobras Chesf's 11 hydroelectric plants, where it was installed in 2020, based on ISO 45001. In 2023, by centralizing strategic activities, the implementation of the system in the other Eletrobras companies became a priority for our management.

As a result of all the occupational health and safety (OHS) actions implemented by Eletrobras, in 2023 we had an accident frequency rate for our own staff of 3.39, 8.4% lower than the previous year.

The lost-time accident frequency rate was 2.09 (24.4% lower than in 2022) and the severity rate was 54 (16.6 times lower than in 2022). No fatalities were recorded in 2023.

Based on the Risk Management Programs (PGR, in Portuguese), risk analyses and occurrences recorded in 2023, the main hazards are associated with vehicles and mobile equipment, electricity and working at heights.

By analyzing this data, we have implemented measures to minimize these risks, including the creation of Commitments for Life, the systematization of risk assessment and OSH tools, comprehensive health programs and recognition programs, as well as the creation and unification of safety processes.

Even though the data does not reflect incidents involving outsourced professionals, we are sad to report that three fatalities occurred among this group. The actions resulting from the incident investigation processes have become part of our culture and planning project, to make our daily lives safer and healthier.

We have been working diligently throughout 2023 to advance our health and safety management systems so that we can have more precise control of information relating to third parties.

Health and Safety are non-negotiable values in our business, and the objectives of all our processes converge towards zero accidents.

CHAPTER 3

Operation



Ivaiporã - Salto Santiago transmission line - Photo: Danilo Deni Alves

We are found all over the country and are responsible for 22% of Brazil's installed generating capacity, or 44.6 GW, 96.5% of which comes from sources with low GHG emissions (hydro, wind and solar).

By doing so, we contribute to making the national energy matrix one of the cleanest and most renewable in the world. We also account for around 37% of all transmission lines in the country.

Affordability, efficiency and energy demand

IF-EU-240a.4: Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory.

IF-EU-420a.3: Customer electricity savings from efficiency measures, by market

The National Program for the Universalization of Access to and Use of Electricity, known as Luz para Todos (LPT), is designed to provide access to electricity for the Brazilian rural population that does not yet have this service. Through it, the government seeks to promote social and economic development in low-income communities, with the aim of reducing poverty and increasing family income.

Access to electricity also facilitates integration with health, education, water supply and sanitation services, as well as federal government social programs. These actions improve families' quality of life and encourage people to stay in the countryside.

Since it was implemented in 2004, over 3.7 million consumer units have been served, benefiting more than 17.4 million people in all regions of the country.

During this period, resources for the LPT totaled R$32.36 billion, of which R$23.83 billion (73.6%) came from sector resources: the Energy Development Account (CDE) and the Global Reversion Reserve (RGR). R$20.40 billion in CDE and RGR resources were released (85.6% of available resources), of which R$1.42 billion in 2023, originating from CDE resources.

During LPT's implementation, a portion of the population living in remote regions of the country was identified that could hardly be served by the conventional grid. With this in mind, in 2020 the Federal Government set up the National Program for the Universalization of Access to and Use of Electricity in the Legal Amazon, or Mais Luz para a Amazônia (MLA), which serves riverside, indigenous and quilombola communities with electricity generated from renewable sources.

In 2023, the Federal Government announced the relaunch of the program, aiming to speed up the service to the still unserved population, estimated at more than 500,000 families. With the relaunch of Luz Para Todos, the Mais Luz para a Amazônia (More Light for the

Amazon) program, aimed at serving remote areas using renewable sources, was integrated into LPT, contributing to the decarbonization of the electricity sector.

The contracts for serving the population in conventional rural areas have a deadline for the application of resources until 2026, while for remote regions of the Legal Amazon, the deadline extends to 2028.

The Program continues to be coordinated by the Ministry of Mines and Energy (MME). Eletrobras is responsible for its operation until the transfer to Brazilian Company of Holdings in Nuclear Energy and Binacional S.A. (ENBPar) is completed. Due to the need for more time to consolidate ENBPar's structure, the transition period has been extended until June 17, 2024.

Apart from this initiative, Eletrobras also operated the National Electricity Conservation Program (Procel), which aims to promote the efficient use of electricity in the country. On June 15, 2023, as provided for in Eletrobras' capitalization process, the activities related to Procel management were transferred to ENBPar.

Operational metrics and indicators

IF-EU-000.A: Number of residential, commercial, and industrial customers served

At the close of 2023, we had 271 consumer customers, 128 retail customers and 83 distributor customers, representing an increase of 502% and reductions of 1.6% and 9.6% respectively compared to the previous year.

IF-EU-000.B: Total electricity delivered to: personal, residential and other customers, and to wholesale consumers

Eletrobras companies sold a total of 131 TWh of energy in 2023, taking into account corporate projects and quota contracts. Excluding quota contracts, the amount would have been 85 TWh.

Energy from sales of pass-through contracts, which have no economic impact, was not taken into account. SPEs consolidated by Eletrobras were considered in the calculations. The other SPEs were not considered.

As for the amount of energy sold to the Distributor type customer, 80 TWh, 86% comes from hydroelectric sources, 10% from gas, 2% from coal and 2% from wind power.

With regard to the other customers, from a commercial point of view, it is not possible to identify how much they are served by each type of energy source, since they are served by the portfolio of plants of the Eletrobras Companies, which includes hydroelectric, gas-fired thermoelectric and wind power plants.

ELECTRICITY DELIVERED TO CUSTOMERS (TWH)

Customer	2022	2023
Distributor	89	79.8
Free Consumer	19	22.2
Generator	7	1.9
Trader	22	27.1
Total	**137**	**131.0**

More on our operating results in the 2023 Annual Report.

IF-EU-000.C - Length of transmission and distribution lines

We ended 2023 with 73,800 kilometers of transmission lines (TLs). Considering only lines with a voltage level equal to or greater than 230 kV, we are responsible for 69,200 kilometers, which represents 37.5% of Brazil's transmission lines at these voltages.

In total, the Annual Permitted Revenue (RAP) of the corporate Transmission Lines was R$17,663 million.

Taking into account all the transmission lines that came into or went out of operation during the year, we had a reduction of 103 km in our network, caused mainly by corporate renegotiations at SPEs, line sections and sales to other companies.

At the same time, we have 201.98 kilometers of transmission lines under construction and another 302.8 kilometers won at auction by the end of 2023, with construction scheduled for the next few years.

We also have a transformation capacity of 309,000 MVA in our substations. Substations that will add around 8,500 MVA to the network are being implemented.

EVOLUTION OF TRANSMISSION LINES*

	2021	2022	2023
Eletrobras transmission lines (km)	66,556	66,942	66,539
SPEs transmission lines (km)	7,532	6,949	7,249
Eletrobras transformation capacity (MVA)	254,306	276,299	278,531
SPEs transformation capacity (MVA)	18,586	21,498	30,874

** Reported data includes all subsidiaries and SPEs. For shared ownership ventures, the calculations considered our percentage stake in the company.*

IF-EU-000.D: Total electricity generated, percentage by major energy source, percentage in regulated markets

Over the year, we generated 146,946.6 GWh of energy, 96.5% of which from renewable sources. This amount is expected to increase in the coming years, as, with the sale of the Candiota plant, the company's only coal-fired project, our matrix will become even cleaner. Furthermore, as part of our decarbonization plan, we continue to carry out studies on the sale of gas-fired power plants.

IF-EU-000.E: Total wholesale electricity purchased

Eletrobras companies bought a total of 14,308,219.79 MWh of energy in 2023. This amount does not include pass-through contracts, which have no economic impact.

Of this total, 29% corresponds to purchases from traders, 65% to purchases from predominantly hydroelectric generators, 5% from predominantly wind generators and 1% from predominantly solar generators.

INSTALLED CAPACITY* (MW)

	2023
Solar	0.9
Wind	714.8
Hydro	42,293.5
Natural Gas	1,295.2
Uranium	-
Coal	350.0
Oil	-
Total	**44,654.5**

NET GENERATION BY SOURCE* (GWh)

	2021	2022	2023
Solar	1.0	1.1	1.1
Wind	2,365.2	2,196.9	2,191.9
Hydro	154,090.0	155,655.2	139,649.6
Natural Gas	6,677.6	3,668.3	3,466,5
Uranium	13,461.7	7,155.2	-
Coal	2,215.6	1,591.5	1,637.5
Oil	0.4	-	-
Total	**178,811,7**	**170,268,2**	**146,946,6**

** Reported data includes all subsidiaries and SPEs. For shared ownership ventures, the calculations considered our percentage stake in the company.*

Network resilience

IF-EU-550a.2: (1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days

SAIDI is the only indicator applicable to the transmission segment. The SAIFI and CAIDI indicators do not make sense from the Brazilian transmission regulation point of view, given that they have specific features related to energy distribution.

As such, from the point of view of Brazilian energy transmission regulation, we don't have the data and parameters to calculate these indicators, given that the consumer concept doesn't exist in transmission; the consumer would be the entire National Interconnected System.

The Eletrobras System has maintained high performance in the transmission segment in recent years, given the stabilization seen in the number of disturbances that caused power cuts in 2023.

The Eletrobras System Robustness Index assesses the basic grid's ability to withstand contingencies without interrupting power supply to consumers, taking into account only disturbances originating in the Eletrobras companies' transmission grid.

There has also been a reduction in technical losses over the last few years, due to the dispatch policy of the National System Operator (ONS) and the evolution of the network topology, in accordance with the planning of the Ministry of Mines and Energy (MME) and the Energy Research Company (EPE).

Energy efficiency and demand

IF-EU-420a.1: Percentage of electric utility revenues from rate structures that are decoupled and contain a lost revenue adjustment mechanism

The indicator is aimed at the distribution segment and is therefore not applicable to Eletrobras' activities.

TRANSMISSION PERFORMANCE (RELIABILITY)

	2021	2022	2023
System Average Interruption Duration Index (SAIDI) (hours)	5.77%	3.46%	3.71%
Interruptions per 100km/TL	1.46%	1.16%	1.28%
Systemic Robustness*	96.61%	97.23%	97.93%
Transmission Losses**	0.81%	0.53%	0.50%
Average Service Availability Index (ASAI)	99.93%	99.96%	99.96%

** System Robustness against any load disconnections.*
*** The result of an agreement to a new calculation methodology approved by the Operation Committee (COP).*

CHAPTER 4

Planet

Tocantins river

Environmental management

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We are committed to the future of the planet and recognize that human activities have led the environment to a critical situation, with loss of biodiversity, a water crisis and climate change that can already be perceived by the population. That's why we strive to understand and mitigate the environmental impacts of our operations, and act on global agendas for the preservation of the planet.

Our environmental work is carried out on two fronts. First, we aim to reduce the environmental impacts of our operations based on the principles of prevention and precaution, promoting actions to protect and restore ecosystems and water resources in the regions where we operate, as well as reducing the consumption of resources such as water and energy and the emission of Greenhouse Gases (GHG).

Focusing on the company's business model, we have a mostly clean electricity matrix, contributing to a low-carbon economy.

On the second front, we seek to use our extensive geographical distribution to promote environmental education for our team and the population, acting as an agent of transformation and mobilization in promoting sustainable development.

Aiming for greater efficiency in environmental processes, in 2023 we created a department in the Vice-Presidency (VP) of Operations and Safety dedicated exclusively to the environmental licensing process for operating projects, working with the relevant government agencies to meet legal and sustainability requirements.

An environmental assets unit was created in the VP of Expansion Engineering, with a focus on environmental licensing and management of the physical, biotic and socio-environmental environments. The Sustainability Department, connected to the Governance, Risks, Compliance and Sustainability VP, is tasked with advancing the strategic environmental agenda on key issues such as climate, biodiversity and water.

Click here to access Eletrobras Companies' Environmental Policy

Pillars of the Environmental Management System

Eletrobras Companies' Environmental Policy: It contains principles, guidelines and responsibilities to govern the handling of environmental issues, in line with sustainability and the relevant legal and regulatory frameworks, as well as the agreements to which Brazil is a signatory.

Eletrobras Companies' Environmental Committee: Led by managers from the companies' environmental departments, it is the place to discuss practices and guidelines for socio-environmental issues.

Corporate Sustainability Management Indicator System (IGS System): Monitors the environmental indicators of all companies. It is a strategic tool, with hundreds of indicators and variables, covering topics such as water, energy and biodiversity.

Greenhouse gas emissions and energy planning

At Eletrobras, we believe that we have a crucial role to play in the transition to a new development model based on a low-carbon economy, creating new business opportunities and building, together with the government and civil society, the foundations for the planet's environmental, economic and social sustainability.

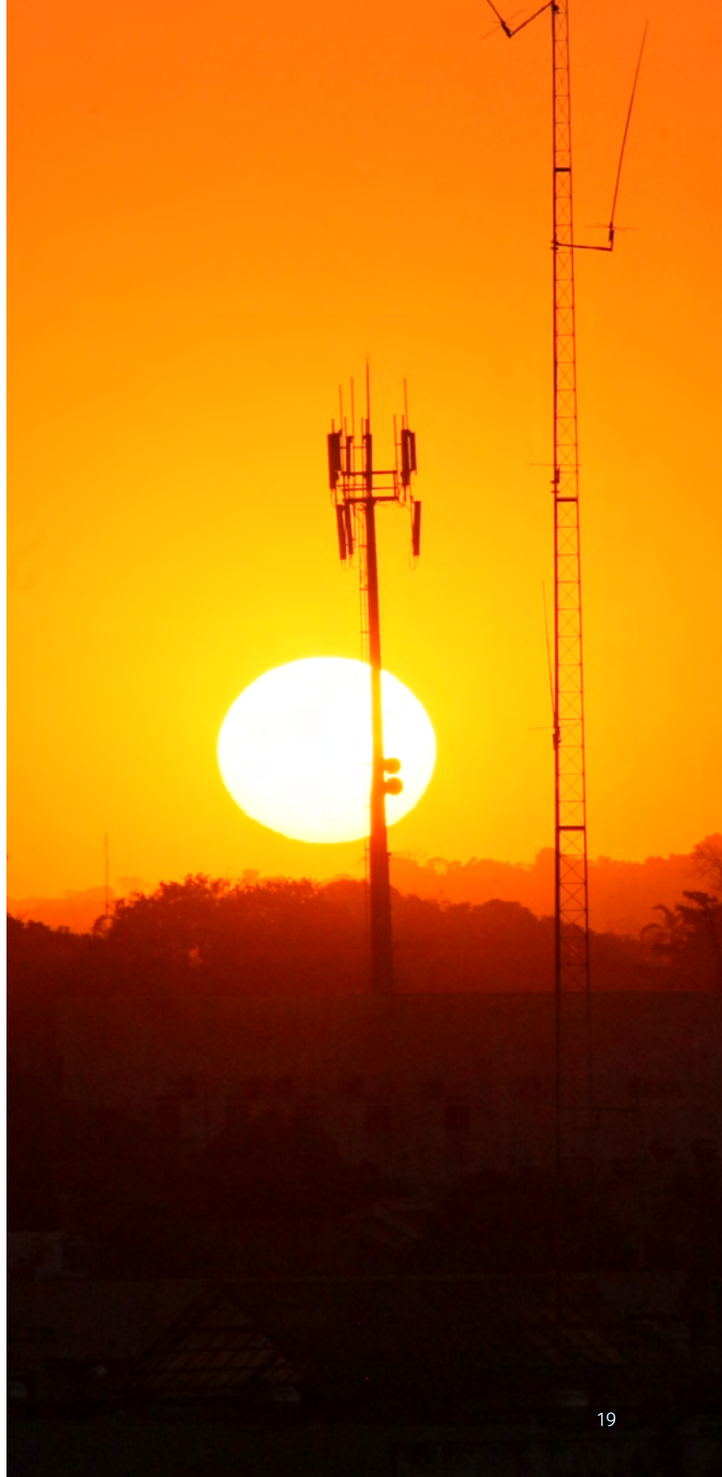
To that end, we seek to reduce greenhouse gas emissions in our operations through continuous innovation in products and services.

Our actions are consistent with the international agreements to which Brazil is a signatory, such as the Paris Agreement. Furthermore, since 2012, we have had the Eletrobras Companies Environmental Policy, which has specific guidelines for climate change.

IF-EU-110a.1: Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations

Until the end of 2023, there were no rules or regulations limiting GHG emissions or laying down guidelines for the publication of these results. Monitoring and publishing emissions is a best practice adopted by Eletrobras and is in line with our strategy of contributing to reducing climate change impacts.

GHG EMISSIONS IN 2023	
Carbon dioxide - CO_2 (tCO_2e)	5.570.004
Methane - CH_4 (tCO_2e)	6.959
Nitrous oxide - N_2O (tCO_2e)	9.958
Hydrofluorocarbons - HFCs (tCO_2e)	4.229
Perfluorocarbons - PFCs (tCO_2e)	0
Sulfur hexafluoride - SF_6 (tCO_2e)	74.259
Nitrogen trifluoride - NF_3 (tCO_2e)	0



IF-EU-110a.2: Greenhouse gas (GHG) emissions associated with power deliveries

For the second year, we published Eletrobras' Greenhouse Gas (GHG) Emissions Inventory in the Public Emissions Register of the Brazilian GHG Protocol Program, receiving the Gold Seal. Emissions are calculated from the data reported in our management system, the IGS.

The inventory follows the methodology of the Intergovernmental Panel on Climate Change (IPCC) and the guidelines of the Greenhouse Gas Protocol - GHG Protocol (WRI, 2004), internationally recognized standards for accounting and reporting GHG emissions.

The 2023 inventory still contains emissions from the Candiota plant, which was sold in 2023 with the aim of further cleaning up our matrix, and whose operational control is being passed on at the beginning of 2024. The effects of this sale on our emissions will only be reflected in the next Inventory.

In 2023, we emitted a total of 5,665,409 tCO_2e, 0.45% higher than the previous year. Despite the low variation in relation to the total emitted and the slight increase in Scope 1 (1.04%) and Scope 3 (0.65%) emissions, Scope 2 emissions were 7.89% lower than in 2022.

EMISSIONS

Scope	2021	2022	2023	Change 2022-2023 (%)
Scope 1 (tCO_2e)	5,942,678	3,958,097	3,999,341	1.04%
Scope 2 (tCO_2e)	948,208	313,886	289,121	-7.89%
Scope 3 (tCO_2e)	1,380,914	1,368,077	1,376,948	0.65%
Total (tCO_2e)	**8,271,800**	**5,640,060**	**5,665,409**	**0.45%**

GHG EMISSIONS INTENSITY

Scopes 1, 2 and 3	2021	2022	2023
Per unit of net electricity produced (tCO2/MWh)	0.089	0.052	0.056
Per unit of net operating revenue (tCO2/ROL)	0.239	0.166	0.152

Scope 1 and 2 ex-losses	2021	2022	2023
Per unit of net electricity produced (tCO2/MWh)	0.064	0.036	0.039
Per unit of net operating revenue (tCO2/ROL)	0.172	0.116	0.108



Funil Power Plant - Photo: Eletrobras Collection

IF-EU-110a.3: Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets

One of the goals set out in the Strategic Plan, and to which we have publicly committed ourselves, is to follow the net zero trajectory consistently until 2030.

A net zero company is one that manages to reduce its Greenhouse Gas (GHG) emissions in such a way as to balance the amounts emitted and absorbed from the atmosphere. Therefore, its total contribution in terms of emissions is zero.

This commitment follows the guidelines of the Science Based Targets Initiative (SBTi), which defines scientific parameters for the net zero trajectory of companies, in line with the planet's needs.

Eletrobras' decarbonization journey is based on divesting from thermoelectric generation, expanding generation from renewable sources, reducing Scope 2 emissions with its own renewable energy certificates and offsetting residual emissions with carbon credits.

Our goal is to ensure our business is resilient by developing action plans for hydroelectric assets identified as critical from the point of view of changes in flow regimes and by expanding risk studies and climate trends to other types of business.

For more information on Eletrobras' climate strategy and emissions, see the 2023 Annual Report.

Air quality

IF-EU-120a.1: Air emissions of the following pollutants: NO_x (excluding N_2O), SO_x, particulate matter, (Pb*) and (Hg**); percentage of each in or near areas of dense population

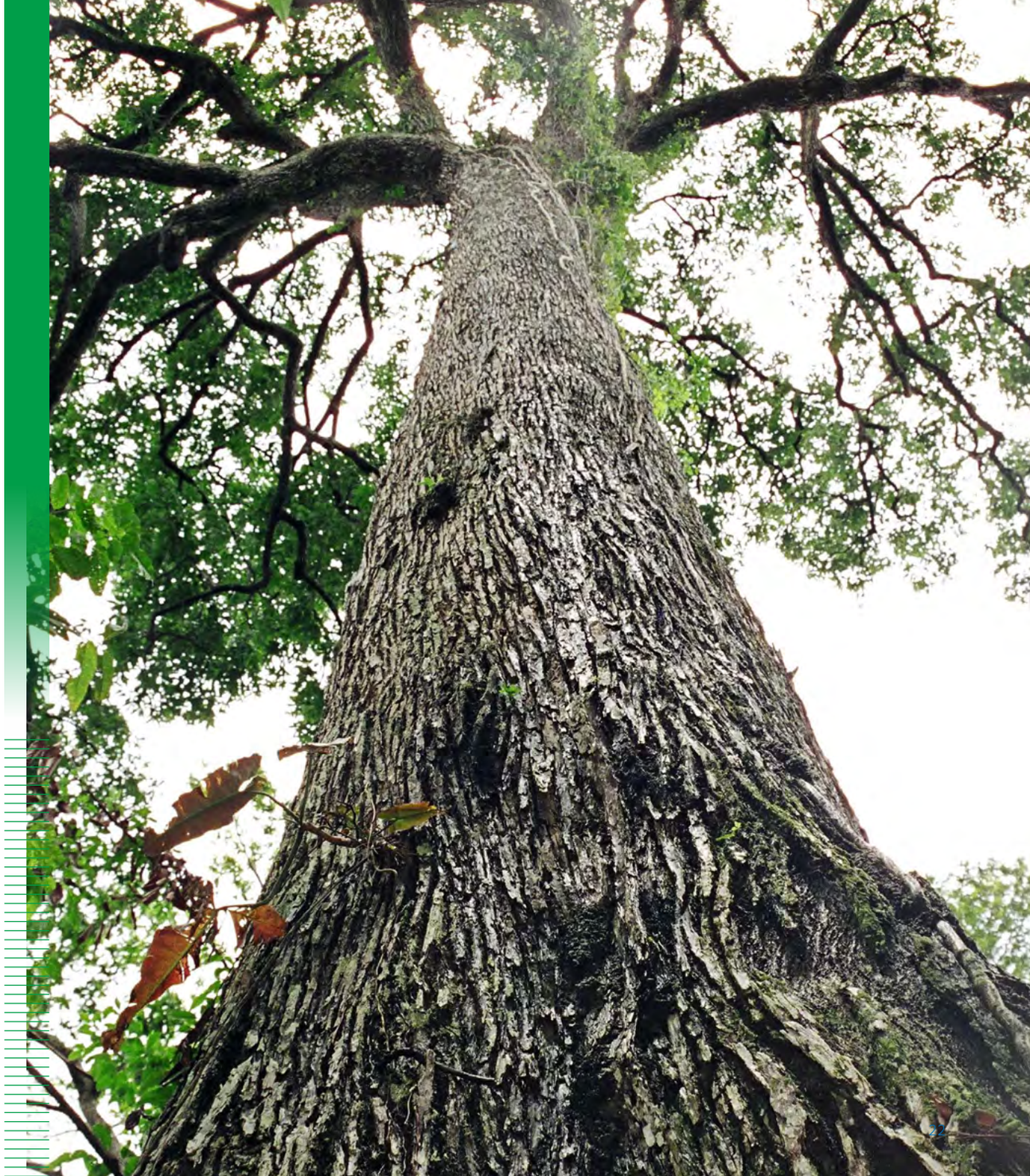
In 2023 we recorded a 31.67% reduction in SO_x emissions and a 40.2% drop in particulate matter (PM) emissions compared to the previous year. NO_x emissions, on the other hand, increased by 15.97% over the same period.

NOX, SOX AND PARTICULATE EMISSIONS **

Emissions	2021	2022	2023
NO_x (t/year)	12.825	22.457	19.365
SO_x (t/year)	13.023	9.874	14.451
Particulate matter - MP (t/year)	764	442	739

** The Santa Cruz TPP did not produce commercial energy in 2023. Atmospheric emissions data was not included in the 2023 report.*
*** CO_2 emissions are 100% covered by emission reporting regulations. Other emissions are not covered by regulations or emission limiting programs.*

For more information on Eletrobras Companies' emissions, see the 2023 Indicators Booklet.



Water and effluent management

We operate in the energy generation, transmission and trading sector, and our main source is hydroelectric power. Water is therefore an indispensable natural resource for carrying out our activities.

Efficient and integrated water management is included in the guidelines of the Environmental Policy and Water Resources Policy, which govern the sustainable and rational use of water resources, considering their multiple uses in supplying the electricity market.

This document is based on the provisions of Law nº 9.433/1997, which creates the National Water Resources Policy and is based on the concept that water is a public good, a limited natural resource with economic value.

Our objective in water management is to guarantee its quality and availability, in order to mitigate any negative impacts that may be caused by our operations on the population living in the area of direct influence of the projects.

IF-EU-140a.1: Total water withdrawn and total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

Eletrobras companies monitor the volume of water collected and disposed of in their operations, including in water stressed areas (non-consumptive use).

In total, we consumed 11.4 thousand m³ of water in 2023, and discharged 625.1 million m³ into the environment.

VOLUME OF WATER WITHDRAWN, DISCHARGED AND CONSUMED*

	2022	2023
Total water withdrawn (m³)	679.580.287,42	625.173.877,08
Total water discharged (m³)	679.568.149,13	625.162.463,86
Total water consumed (m³)	11.768,58	11.413,22
Water withdrawn from water-stressed regions (%)	< 1%	< 1%

** Data does not include Eletropar and SPEs.*



Tucuruí HPP - Eletrobras Collection

WATER CONSUMPTION (THOUSANDS OF M³)*	2022	2023
Administrative activities	**1,215.04**	**1,196.44**
Surface water	581.45	593.67
Groundwater	296.30	345.63
Utility water	275.15	257.15
No water meter available (estimated consumption)	**62.14**	**210.03**
Thermal power	**61,950.20**	**34,563.18**
Surface water	61,686.25	34,166.65
Groundwater	263.94	396.53
Wind generation	**0.18**	**0.54**
Groundwater	0.18	0.54
Hydropower	**679,514,292.87**	**625,135,385.32**
Surface water	679,514,292.87	625,135,385.32
Transmission system	**307.58**	**0.00**
Surface water	307.58	0.00
Other uses	**2,521.57**	**2,523.48**
Water withdrawal for use in fish farms	2,521.57	2,521.57
Water withdrawal from rainfall	-	1.91
Total water withdrawal	**679,580,287.42**	**625,173,877.08**
Total water discharged**	**679,568,149.13**	**625,162,463.86**
Total water consumed**	**11,768.58**	**11,413.22**
Turbine water from power plants in water-stressed areas***	**3,001,899.74**	**2,476,478.83**

** The data does not include Eletropar and SPEs. The values for water caught, discarded and consumed do not consider rainwater catchment. Although the GRI protocol uses Megaliters (ML) as the unit of measure, we have reported in thousands of m³ for consistency with the water volumes reported in previous years.*
*** Regarding water disposal, we account for the volume of turbined water flow through hydropower dams, the volume returned to rivers and oceans from the hydropower dams and the water volume used in aquaculture and protected areas, in addition to 80% of the volume of water captured for administrative activities, following the consumption coefficient stipulated by the National Water and Sanitation Agency (ANA).*
**** Plants located on rivers classified as being under water stress are the Curemas SHPP, the Pedra HPP and the Batalha HPP. With the exception of turbine water, there is no water withdrawal for other uses in water stress zones.*

IF-EU-140a.2: Number of incidents of non-compliance associated with water quantity, quality permits, standards, and regulations

Complying with current legislation, we manage water quality through quarterly inspections of the facilities and equipment at our projects.

The water resources consumed and the effluents discharged undergo laboratory analysis, in accordance with resolutions 357/2005 and 430/2011 of the National Environment Council (CONAMA), which establish the conditions and standards for discharging effluents.

Water quality in the projects' areas of influence is assessed by monitoring physical, chemical and biological parameters established in the respective environmental licensing processes, in line with current environmental legislation.

In 2023, no incidents of non-compliance with regulations and standards associated with the quantity or quality of water discharged were identified.

IF-EU-140a.3: Discussion of water management risks and description of strategies and practices to mitigate those risks

Eletrobras' main source of energy generation is hydroelectric and, therefore, the most material risk for the company is hydrological, which consists of maintaining a systemic production level below the plants' physical guarantee. To this end, we try to avoid it by renegotiating the hydrological risk and hedging energy (a protection mechanism).

Dam safety risk management and monitoring is carried out locally at the subsidiaries through Periodic Safety Reviews (RPS), in accordance with current legislation. Monitoring to ascertain the compliance of facilities can include observations made by users of water resources (self-monitoring), in compliance with the legal requirements of environmental licenses and under the terms of grants.

Find out more about water and effluent management at Eletrobras Companies in the 2023 Annual Report and 2023 Indicators Booklet.

Our hydroelectric plants are located in all Brazilian regions, especially in the São Francisco, Tocantins, Paraná, Paraíba do Sul and Grande river basins, where the operations with the largest installed capacity are situated. There is no consumption of water in the operation of these plants, since the entire volume used for generation is returned downstream of the dams, at a similar quality to when it was captured.

Eletrobras Chesf's Curemas Small Hydroelectric Plant and Pedra HPP and Furnas' Batalha HPP are located on rivers that are under water stress. In 2023, the total volume of water turbined by the operations of the subsidiaries on rivers in this condition, according to the methodology of the National Water and Basic Sanitation Agency (ANA), was 2,476,478.83 thousand m^3.

In thermoelectric plants, the water used is collected directly from water bodies, treated and used in cooling processes, steam generation, ash wetting and cleaning of the industrial floor and equipment.

The water used in the thermoelectric generation process is returned to the water body of origin, complying with the standards defined in current environmental legislation, and we monitor its quality and temperature.

Internally, we have the Eletrobras Companies Water Resources Working Group (GTRH), which includes technicians from the engineering departments of the holding company and its subsidiaries. The GTRH deals with technical issues, such as hydrological studies on the status of flows and water stress indicators at our power plant sites, as well as regulatory issues relating to water resource management.

We have also participated in several initiatives aimed at developing water management in the country:

- National Water and Sanitation Agency (ANA);
- River Basin Committees (CBHs);
- Water Resources Councils;
- Technical chambers of the National Water Resources Council (CNRH);
- Water resources working groups;
- Technical forums related to the topic.

Coal combustion waste management

IF-EU-150a.1: Amount of coal combustion residuals (CCR), percentage recycled

All the ash generated in Candiota TPP's operation is quantified by weighing it on a road scale at the plant.

A Waste Transportation Manifest (MTR) is issued for each load of recycled ash destined for the cement industry for sale. As for the ash destined for recovery in the mined area, the load is quantified in the environmental agencies' systems, where a Waste Movement Declaration (DMR) is issued.

Ash from thermoelectric production totaled 1,143,752.86 tons in 2023. Out of this total, 28.1% - the equivalent of 321,394.55 tons - was destined for recycling. The remaining 822,358.31 tons (71.9%) were reused for recovering mined areas.

IF-EU-150a.2: Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment

In 2023, we had two coal combustion residual impoundments (CCR), both classified with low risk potential and satisfactory structural integrity assessment.

Recycled ash is destined for the cement industry and is generally stored in silos pending reuse in the production process. The ash used to recompose the mined area is disposed of and placed on the surface.

For more information on the divestment of coal assets, see the 2023 Annual Report.

Divestment from coal-fired power stations

We are already leaders in Latin American renewable energy and, based on our goal of being net zero by 2030, we have set annual targets for reducing emissions and decarbonizing our portfolio.

Our strategy is mainly based on divesting from thermoelectric plants, eliminating GHG emissions from our generation operations.

The first step in this portfolio decarbonization process took place in September 2023, with the sale announcement of the Candiota Thermoelectric Power Plant, our only generation asset whose energy source is coal. The plant, located in Candiota (RS), owned by Eletrobras CGT Eletrosul, with an installed capacity of 350 MW, represents around a third of all our emissions.

CHAPTER 5

Annexes



Gov. Jayme Canet Junior HPP - Photo: Disclosure

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IF-EU-110a.4 (1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage of compliance with the RPS target per market	No information available. The Brazilian market does not yet have specific regulations governing the obligations of energy generating companies with regard to renewable portfolio standards (RPS).	GRI 305-3
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Credits

A Eletrobras – Centrais Elétricas Brasileiras S.A. provides several channels for communication with stakeholders.

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If you have any questions about our Integrity (Compliance) Program or its related policies or guidelines, please write to dcci@eletrobras.com

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If you have any questions about technical terms used in this report, please refer to the Eletrobras Power Sector Glossary.

SUSTAINABILITY CHANNEL

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This Annual Report is the result of the effort of the Eletrobras companies team. We thank everyone for their participation and commitment.

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Eletrobras