# Sustainability **Report** 2022

norteENERGIA
USINA HIDRELÉTRICA BELO MONTE

# Message from the **President**

GRI 2-22

We ended another year of hard work and great achievements in running Belo Monte, the largest 100% Brazilian hydroelectric plant. It is responsible for providing renewable energy to millions of Brazilians, and also for acting as an important agent for decarbonizing the energy matrix and sustainable regional development in the Amazon region.

Net energy generation in 2022 broke a record, reaching 36,767.325 MWh, 15.6% higher than production in 2021. This is due to the high availability of generating units and the high affluence from January to April and the availability of generation of the Belo Monte power plant, which, throughout the year, met more than 6.1% of the demand in the national energy market, reaching 12.7% in January, the period of greatest generation.

Regarding business performance, Norte Energia totaled R$5.57 billion in net revenues, which represented a 15% increase compared to 2021. For us, these results reflect our commitment to results-oriented management, which also prioritizes the Company's socio-economic and environmental role in Volta Grande do Xingu.

During the year, we strengthened several aspects of the ESG agenda and sustainability practices in our management and recorded significant advances, such as the publication of our Human Rights Policy and our first Greenhouse Gas Inventory. With this report, we won the Gold Seal of the Brazilian Greenhouse Gases Program (GHG) Protocol.

In addition, in 2022, we participated in the 27th United Nations Climate Conference as a member of the delegation of the Brazilian Business Council for Sustainable Development. These highlights demonstrate our commitment to sustainability.

Among our objectives, we continue to comply with the environmental licensing conditions to operate Belo Monte and to promote initiatives and projects aimed at education and professional qualification, the generation of jobs and income, the preservation of the Amazon focusing on the Xingu river basin and the appreciation of the culture of the local population, especially indigenous peoples. In this path, we made progress in 2022, strengthening Belo Monte's role as a company that seeks to generate shared value for all its stakeholders.

Over the company's 12 years, we have strengthened our dialogue with local communities, especially with indigenous peoples, fishermen and riverside dwellers.

**Regarding business performance, Norte Energia totaled R$5.57 billion in net revenues, which represented a 15% increase compared to 2021.**

**In 2022, an important achievement: the transfer to municipal management of the basic sanitation system and other assets built by Norte Energia in the city, which was formalized with the signing of a Term of Commitment with the Municipality of Altamira, approved by the State Public Ministry.**

In 2022, we expanded our understanding of the needs and expectations of the local population in relation to Belo Monte and how we can contribute to regional development, involving important governmental and non-governmental actors, such as the National Foundation for Indigenous Peoples (Funai), Special Secretariat for Indigenous Health (Sesai), Special Indigenous Health District (DSEI) and the Amazon Entrepreneurship Center (CEA).

We continue promoting relevant actions in Volta Grande do Xingu with the measures that make up the Environmental Commitment Term Action Plan – TCA, a commitment made by the Company with the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama), within the scope of the licensing environmental. Among the highlights are accomplishments in the area of health and basic sanitation in the communities and in the productive activities financed by Norte Energia, such as the planting of cocoa crops and the installation of fish ponds.

In order to enhance actions to mitigate socio-environmental impacts in Volta Grande do Xingu, in 2022, we advanced with the studies of the sills. This is an additional mitigation measure to maintain the hydrograph established by the Brazilian State and provided for in the environmental licensing. Throughout the year, we presented the reduced engineering models to leaders of the communities of Volta Grande do Xingu, directors and staff of the licensing body.

Still in the context of licensing obligations, in Altamira, in 2022, an important achievement was the transfer to municipal management of the basic sanitation system and other assets built by Norte Energia in the city, which was formalized with the signing of a Term of Commitment with the Municipality, approved by the State Public Ministry.

In the field of innovation, we made progress with investments in photovoltaic generation, hydrogen storage, dam safety, reforestation and climate change projects, supported by the understanding that research and development of new technological solutions will help us bring sustainable growth to the Norte Energia and the Amazon. One example is the project called the Amazon Multimodal Intelligent System (Sima), carried out in partnership with the Federal University of Pará, which implemented the first green corridor of electric mobility in the capital of Pará. This project started in 2019 and was completed in 2022.

To learn more about this project, **visit here**.

In order to go beyond licensing commitments and contribute to sustainable regional socioeconomic development, we launched the Belo Monte Oportunidades program. The program is aimed at training technical trainees for the plant's operation and maintenance areas, an initiative that promotes the training and professional qualification of residents of Altamira and region. Through this program, we are promoting qualification and guaranteeing exclusive job vacancies in the Company for the local population since the beginning of the training.

Also in 2022, we joined the Brazilian Business Council for Sustainable Development (CEBDS) and started 2023 as members of the United Nations (UN) Global Compact in Brazil.

In addition, we received the Seal Alliance for Brazilian Waters, awarded by the Ministry of Regional Development (MDR) for actions to protect permanent preservation areas and plant native trees for forest restoration in six thousand hectares in the region of the Belo Monte power plant, an initiative that makes up the set of licensing actions, with a forecast total investment of approximately R$250 million during the plant's concession period.

We celebrate our achievements, aware that strategic partnerships are fundamental in achieving our goals. In this sense, we signed two major partnerships in 2022 with the National Bank for Economic and Social Development (BNDES) to make two projects viable: Floresta Viva, aimed at protecting the territory and restoring forests in the Amazon; and Novos Rumos, which invests in professional qualification around Belo Monte to contribute to regional socioeconomic development.

These and other highlights are in our 2022 Sustainability Report, which I invite you to read. We understand that our growth and strength are directly related to how we generate shared value with local communities. Therefore, we will remain firm with our commitment to operate in the region with responsibility and dedication to building a legacy for future generations.

Enjoy the text!

**Paulo Roberto Ribeiro Pinto**
Chief Executive Officer of Norte Energia

# Message from the **Management**

GRI 2-22

It is with great pride that we present our third Sustainability Report. The exercise of looking to 2022 provokes important reflections on how we are conducting this undertaking, which allows us to evolve more and more in the management of Norte Energia to achieve our goals and our commitments to the sustainability of the business and our surroundings, delivering robust results to shareholders, the market and all the publics with which we relate.

On a daily basis, we deal with the challenge of managing and operating Belo Monte, the only 100% Brazilian hydroelectric plant that uses the hydroelectric potential of the Xingu river to generate renewable energy for millions of Brazilians, thus playing an important role in the operation of the Brazilian electricity sector.

In addition to this management challenge, there are many others, such as the commitments related to the ESG agenda, which continued throughout the year. For this challenge, we count on the consolidation of the Sustainability Committee, created in 2021, with the objective of strengthening our actions with all our stakeholders, especially with the audiences directly impacted by the plant's operations: riverside populations and fishermen, indigenous peoples and the local community of cities around Belo Monte.

We remain supported by a strengthened governance structure that is committed and guided by the precepts of sustainability, and which, in addition to the aforementioned Committee, has an Advisory Board and a Sustainability Superintendence. These have been developing relevant projects, aligned with the Company's strategic pillars and establishing goals focused on the sustainable development of the region in which Belo Monte is located.

Increasingly, we have become a Company committed and engaged with regional development and this can be noticed throughout this report with the presentation of all our initiatives developed throughout 2022, as well as the results achieved in the actions with each stakeholder that we impact.

With a broad and deep look at the communities of Volta Grande do Xingu, we intend to continue contributing to the well-being of the local population and indigenous peoples, promoting the socioeconomic development of companies and people and preserving the ecosystem of the Xingu river basin.

For Altamira, within the scope of the environmental licensing process, the installation and operation of Belo Monte determined that Norte Energia would create a modern basic sanitation system, build new neighborhoods, basic health units, schools, public parks, that is, a modern urban infrastructure in order to promote better health,

**For this challenge, we count on the consolidation of the Sustainability Committee, with the objective of strengthening our actions with all our stakeholders.**

**Altamira's basic sanitation infrastructure has more than 220 km of collection networks, 18 pumping stations and a sewage treatment plant that guarantee the return of used water to the Xingu river with over 99% purity.**

better quality of life and more leisure for Altamirenses.

Ten years ago, only 18% of homes in Altamira had treated water and sewage and more than 30,000 people lived on stilts, which were susceptible to constant flooding and endemic diseases such as malaria. Today, there are more than 220 km of collection networks, 18 pumping stations and a sewage treatment plant that guarantee the return of used water to the Xingu river with over 99% purity. In addition, the city's water supply and distribution system was also improved and expanded. With that, we made basic sanitation possible for about 92% of the urban population of Altamira.

The safety of the population and of the animal and plant species that inhabit the surroundings of the plant continues to be a priority in the operation of Belo Monte, so much so that we periodically carry out maintenance on all the structures of the complex. In 2022, we reinforced monitoring with state-of-the-art technology, starting to use an autonomous surface boat equipped with sonar and sensors to collect data in underwater inspections. Therefore, we improved safety actions and the Emergency Action Plan (PAE) to ensure that the vicinity of the plant are always safe places to live.

The conviction that we need to strive more and more to leave a great legacy drives us to act beyond the constraints of the Basic Environmental Project (PBA) and the Basic Environmental Plan – Indigenous Component (PBA-CI) and promote initiatives that go beyond our obligations. For this, we seek to work together with the local public authorities, in order to guarantee the sustainability and continuity of our role as a contributing agent of transformation and sustainable regional development.

Among the examples of actions that go beyond licensing conditions are the Belo Monte Empreende program, which, in partnership with the Amazon Entrepreneurship Center (CEA), creates shared value and encourages the formation of new generations of sustainable business entrepreneurs; the Conecta Xingu project, which has already reached the installation of 119 satellite internet antennas, which promotes connectivity and expands communication between communities in Volta Grande do Xingu and indigenous peoples; and the Energia Verde project, which delivers solar energy to the communities of Volta Grande do Xingu while contributing to the reduction of greenhouse gas emissions and acting in the fight against climate change.

In the institutional field, throughout 2022, we received important international visitors, such as representatives of the Embassy of Norway, who visited the plant. Through this visit, they checked out the infrastructure works and solar panels installed in the villages. On that occasion, we had the opportunity to present relevant aspects of the relationship with indigenous peoples, based on respect for human rights and active listening.

Two other international delegations were in Belo Monte in 2022: representatives of the Embassy and Senate of France and the Embassy of Austria, who learned about the Company's sustainability actions. In addition to the international delegations, we also had visits from representatives of the BNDES and shareholders.

These events, added to others presented in this report, increased our level of positive exposure in the media, giving us the opportunity to present to Brazilian society the real impacts of the Belo Monte operation and the legacy we are building in the region, especially in the Volta Grande do Xingu.

Exposing our socio-environmental initiatives to public opinion is always a great challenge in the face of the many resistances we have faced over the last few years, but we believe that we have managed to make positive progress with this agenda in 2022.

The year 2023 began with our adherence to the UN Global Compact. Through this adhesion, we made a formal and public commitment to the 10 Principles of the Global Compact and the 17 Sustainable Development Goals (SDGs). With this important movement within our ESG agenda and with all the results presented below, Norte Energia reaffirms its commitment to align its actions with the best sustainability practices.

Enjoy the text!

**Pedro Luiz de Oliveira Jatobá**
Chairman of the Board of Directors of Norte Energia

# Summary

# 1 Highlights


# In 2022:

## 36,767 GWh of renewable energy generated

- ✓ **Belo Monte Comunidade** Program in Volta Grande do Xingu, in addition to the five new neighborhoods in Altamira
- ✓ **Belo Monte Empreende** Program with ten workshops and 523 participants, with 62% of women
- ✓ **Energia Verde (Green Energy)** Project in Volta Grande do Xingu

- ✓ Adherence to the **BNDES Floresta Viva** matchfunding
- ✓ Joining the **BNDES Novos Rumos** matchfunding
- ✓ Adherence to the **Pacto Global**
- ✓ Adherence to the **Brazilian Business Council for Sustainable Development** (CEBDS)
- ✓ Participation in the **United Nations Climate Conference** – COP 27

- ✓ **Sustainable Energy Gold Seal**, issued by the Acende Brasil Institute
- ✓ **Gold Seal of the Brazilian** GHG Protocol Program
- ✓ **Seal Alliance for Brazilian Waters**, issued by the Ministry of Regional Development
- ✓ **Mario Bhering Award** for the Conheça Belo Monte program
- ✓ **Friend of Culture Seal** to the Transamazônica Song Festival (Fecant)
- ✓ **André Nunes Award** at the IV Xingu Indigenous Literary Fair, for the short film *Contos do Iriri*, produced by the Xipaya indigenous people from the Cupi village, with support from the PBA-CI of the Belo Monte HPP

- ✓ **Publication of the first Greenhouse Gas Inventory**

**R$413.3 million**
**in socio-environmental and sustainability actions**

**R$3.2 billion**
**Ebitda**

**R$16.9 million**
**for R&D**

**R$229.9 million**
**in royalties**

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# Profile

GRI 2-1, GRI 2-2, GRI 2-6, EU1, EU2

Norte Energia Employees

Norte Energia is a private power generation company, established in 2010. Its specific purpose is to carry out the activities necessary for the implementation, operation, maintenance and exploration of the Belo Monte Hydroelectric Complex (Belo Monte HPP), on the Xingu River, located in the state of Pará.

It is supported by 369 employees, 1,850 third parties and/or temporary workers. It has 3,222 suppliers in its supply chain. In 2022, it was responsible for producing 36,767,325 MWh of energy, which supplies 6.1% of the national market. **GRI 3-3**

## Discover a little of our history GRI 2-1

In 1975, studies began on the Hydroelectric Inventory of the Xingu river basin, which covers municipalities in Mato Grosso and Pará, conducted by the Brazilian State and completed in 1980. In this study, seven locations for the implementation of hydroelectric developments in the Xingu basin were mapped, totaling 18,300 km$^2$ of floodable areas. Of this total, about 3,700 km$^2$ referred to the beds of the Xingu and Iriri rivers, leaving an effectively floodable area of 14,600 km$^2$ Such area represented 3% of the total area of the basin and would flood 12 indigenous territories that gathered, at the time, 1,800 indigenous people of different ethnic groups.

The possible impacts of the project generated great mobilization of the society, defending the rights of indigenous peoples, of the local population and of the environment, and led to the use of two of the seven sites of water use mapped: Babaquara and Kararaô, both located in Volta Grande do Xingu, two plants that made up the Altamira Hydroelectric Complex with an installed capacity of 14,000 MW.

As a result of discussions and mobilizations, in 1989 the historic 1st Meeting of the Indigenous Peoples of the Xingu took place in Altamira. It was a milestone in the trajectory of Belo Monte, whether for the manifestation of the indigenous peoples, or for the response to a claim regarding the change of the name of the Kararaô Power Plant (name of Kayapo origin). Thus, the project was renamed Belo Monte. Since the beginning, the development project has undergone important changes, especially since the 1st Meeting of the Indigenous Peoples of the Xingu, in Altamira. The event made it possible for dialogue to be expanded through communities, civil society and government. This contributed a lot for Belo Monte to get here. The dam was even, at the time,

moved 70 km upstream from the site foreseen in the previous study, with a run-of-river configuration and reducing the flooded area.

In 2008, the National Electric Energy Agency (ANEEL) issued Order No. 2,756 approving the "Update of the Hydroelectric Inventory of the Xingu River Basin", determining that the energy potential to be explored in the Xingu river should only be that located between the urban center of the municipality of Altamira and its mouth. The current layout of the enterprise comprises 36 earth and rock structures (dikes and dams), 7 main canals (bypass and transposition) and 12 main concrete structures (water intakes, powerhouses, spillway, fish transfer system etc.).

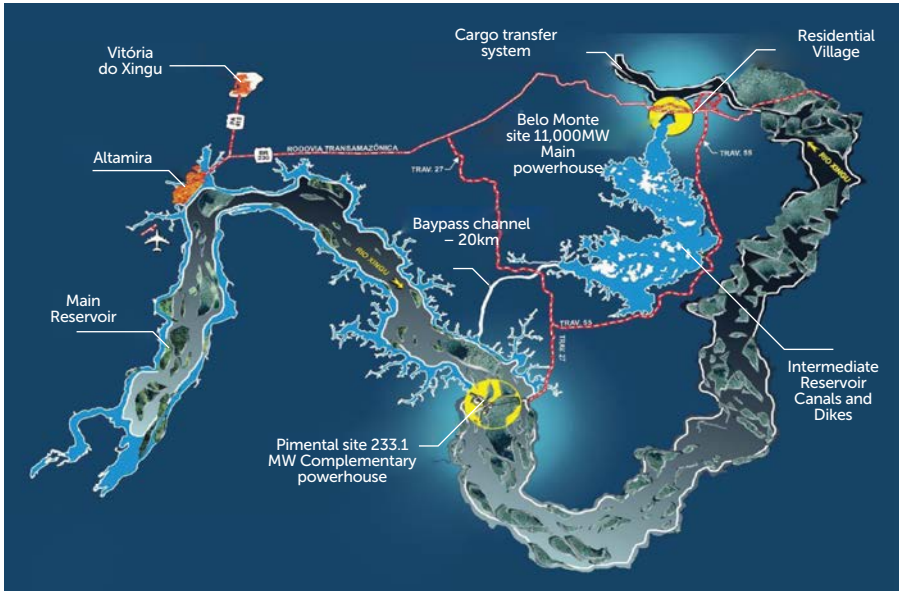
In addition to this arrangement, the Belo Monte Complex also has a fish transfer system, located at the HPP Pimental, which was designed to guarantee the passage of shoals between the reduced flow stretch and the Xingu reservoir and to preserve events such as spawning, which takes place annually. It is also important to highlight the existence of the anti-shoal grid system in the main powerhouse, installed to protect the ichthyofauna in the tailrace channel. The vessel transposition system, in turn, guarantees navigability for river users on the Volta Grande do Xingu.

The water dam, in addition to its main function of generating hydroelectric power, contributes to the regularization of the water level in the region of the city of Altamira, which historically faced floods at each rainy season, affecting all the families that lived on the banks of the Xingu river.

As a member of the National Interconnected System (SIN), Belo Monte HPP significantly contributes to the country's energy supply, by supplying clean and renewable energy to the country. Its generation is concentrated in the first half of each year and is inserted into the system in addition to the generation of other Brazilian hydroelectric plants, such as those in the Southeast and South regions, which have different periods of greater generation.

In the context of renewable energies, hydroelectric plants play an important role in the complementarity of energy sources and in the stability of the system, as they have steady, large-scale generation and compensate for the intermittency of sources such as solar and wind. It is also worth highlighting the role of Belo Monte HPP in the SIN as a provider of ancillary services – essential to regulate the electrical frequency of the system, ensuring the supply of electrical energy in the country.
**GRI 3-3**

The Company's activities are distributed between Brasília (DF), where its administrative headquarters




Main distances: from Altamira to Belo Monte Site: 55 km. From Altamira to Pimental Site: 65 km. From Vila Belo Monte Residential to Belo Monte Site: 6 km. From Belo Monte Residential Village to Pimental Site: 49 km.

are located; Altamira (PA), core municipality in the project's region; and Vitória do Xingu (PA), where important plant structures are located. The development has direct influence on the municipalities of Altamira, Anapu, Brasil Novo, Senador José Porfírio and Vitória do Xingu; and indirect on Gurupá, Medicilândia, Pacajá, Placas, Porto de Moz and Uruará, all in the state of Pará.

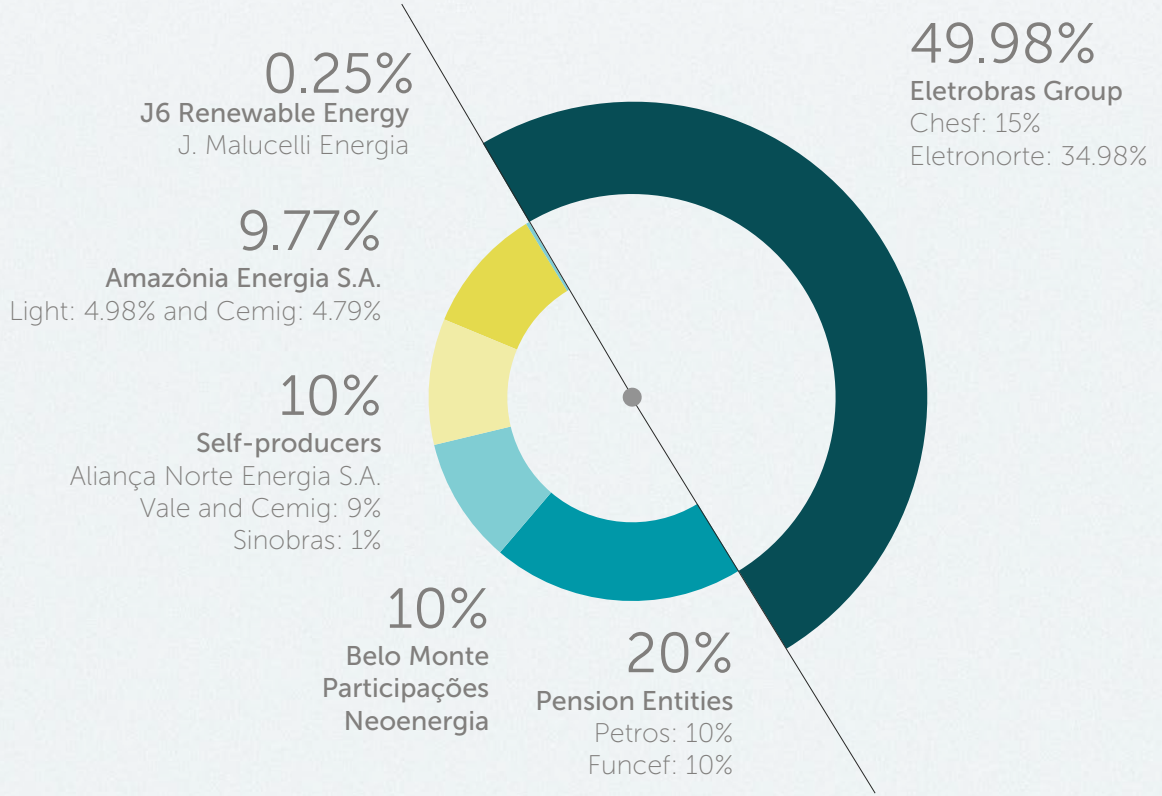
**GRI 2-6**

In early 2022, we signed the third amendment to the concession agreement to formalize the extension of the concession term to operate the Belo Monte HPP, which was extended from August 25, 2045 to July 11, 2046.

Norte Energia is a publicly-held corporation and its shareholders come from different segments, in addition to pension funds.

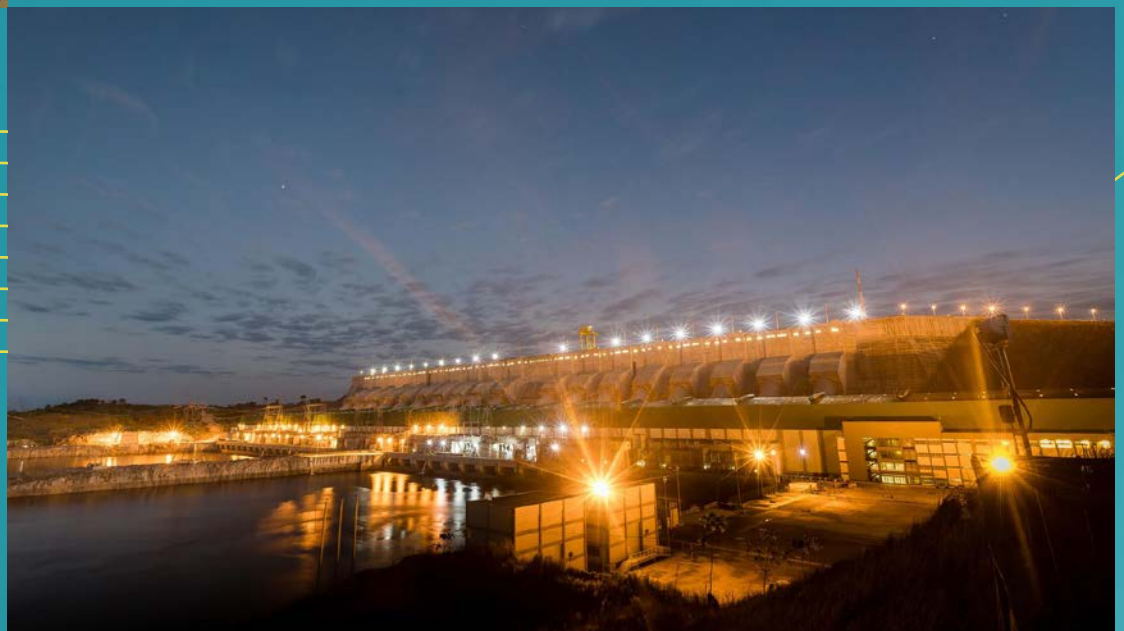
## Shareholding composition

**Norte Energia is a publicly traded corporation and its shareholders come from different segments, in addition to private pension funds.**



# 3 Strategy and Business Model

GRI 2-22, GRI 2-23, GRI 2-24, GRI 2-29



# Strategic drivers **and business model**

**GRI 2-23, GRI 2-24**

The actions we develop are in line with our strategic guidelines defined from our organizational ideology and the socioeconomic and regulatory environment in which we operate, as well as taking into account risks and opportunities.

We also consider the guidelines present in our **Sustainability Policy**, which direct our actions towards a culture based on the perpetuity of the business, the planet and people.
**GRI 2-23, GRI 2-24**

In addition, we structure our actions in the plant's region considering the conditions of the Basic Environmental Project (PBA) and the Basic Environmental Plan for Indigenous Components (PBA-CI), presented throughout this report.

Our Business Model is structured in accordance with the International Framework for Integrated Reporting, which establishes six capitals: Manufactured; Natural; Human; Intellectual; Social and Relationship; and Finance. Through them, we carry out renewable energy generation and sales activities.

With these capitals acting together, we achieved good results for the Company and its shareholders and shared value with the parties involved, through the generation of renewable energy for millions of Brazilians; socioeconomic development actions for the population; investment in proposals and projects for the environment; among other things.

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## Mission

Generate energy and sustainable development for Brazil's growth.

## View

To be a respected and admired company in the global electricity sector, which encourages socioeconomic development and is committed to projects that improve the quality of life of the population in the region where it operates.

## Values

- Ethical behavior;
- Respect for people and the environment, as well as for the company's assets;
- Focused on results;
- Courage and perseverance.

# BUSINESS MODEL

## INPUTS

**Natural Capital**
- Renewable natural resources (water and sunlight for electricity generation)
- Permanent Preservation Areas

**Human Capital**
Collaborators and third parties

**Intellectual Capital**
Investments in innovation projects related to biodiversity, renewable energy, electric mobility and safety of plant structures

**Social and Relationship Capital**
- Relationship with local communities, indigenous and riverside populations and other stakeholders
- Customers/distributors
- Listening advice

**Financial Capital**
- Income
- Loans
- Capital from third parties

**Manufactured Capital**
- Belo Monte Hydroelectric Complex
- Photovoltaic plant modules
- Infrastructure, materials and equipment necessary for the operation of the company

## MISSION

Generate energy and sustainable development for Brazil's growth


### Business activities

**Generation and commercialization of electricity** for the national system, from renewable sources
**Provision of ancillary services to SIN** to ensure that the national electricity system, from generation consumption, works properly
**Promote ESG strategies and practices,** as well as implement socio-environmental actions linked to licensing, regional socio-economic development and environmental protection

### Risk management – External environment

Economic and political-institutional scenario
Hydrograph and climate change
Hydrological risk and transmission restrictions

## VALUE GENERATION

**Natural Capital**
- Ecosystem restoration and biodiversity conservation
- Interference in natural environments
- Maintenance of the water quality of the Xingu river
- Investments in innovation, prevention, mitigation and licensing, environmental maintenance and safety, environmental projects, educational actions

**Human Capital**
- Employee training, development and engagement
- Health and Safety Programs
- Correct execution of the standards established in the strategic planning, aligned with the goals and requirements of the interested parties

**Intellectual Capital**
- R&D and innovation projects
- Investments in forest entrepreneurship
- New technologies, more efficient processes, more effective and safer processes,

resulting in the quality and safety of generation, less impact on the environment and communities, retention and dissemination of knowledge, etc.

**Social and Relationship Capital**
- Investments to strengthen sustainability, social responsibility, inclusion, respect for diversity and engagement with all its stakeholders.
- Generation of work and income
- Management of the Company's brand, reputation and image, which portray reliability in the solidity of the organization)
- Interlocution, strengthening and feasibility of projects in indigenous communities
- Interlocution with socio-environmental and impact business organizations for the development of communities
- Relocation of the interfered population
- Reconstruction of riverside ways of life
- Repair projects and actions
- Relationship with governments and regulatory agencies

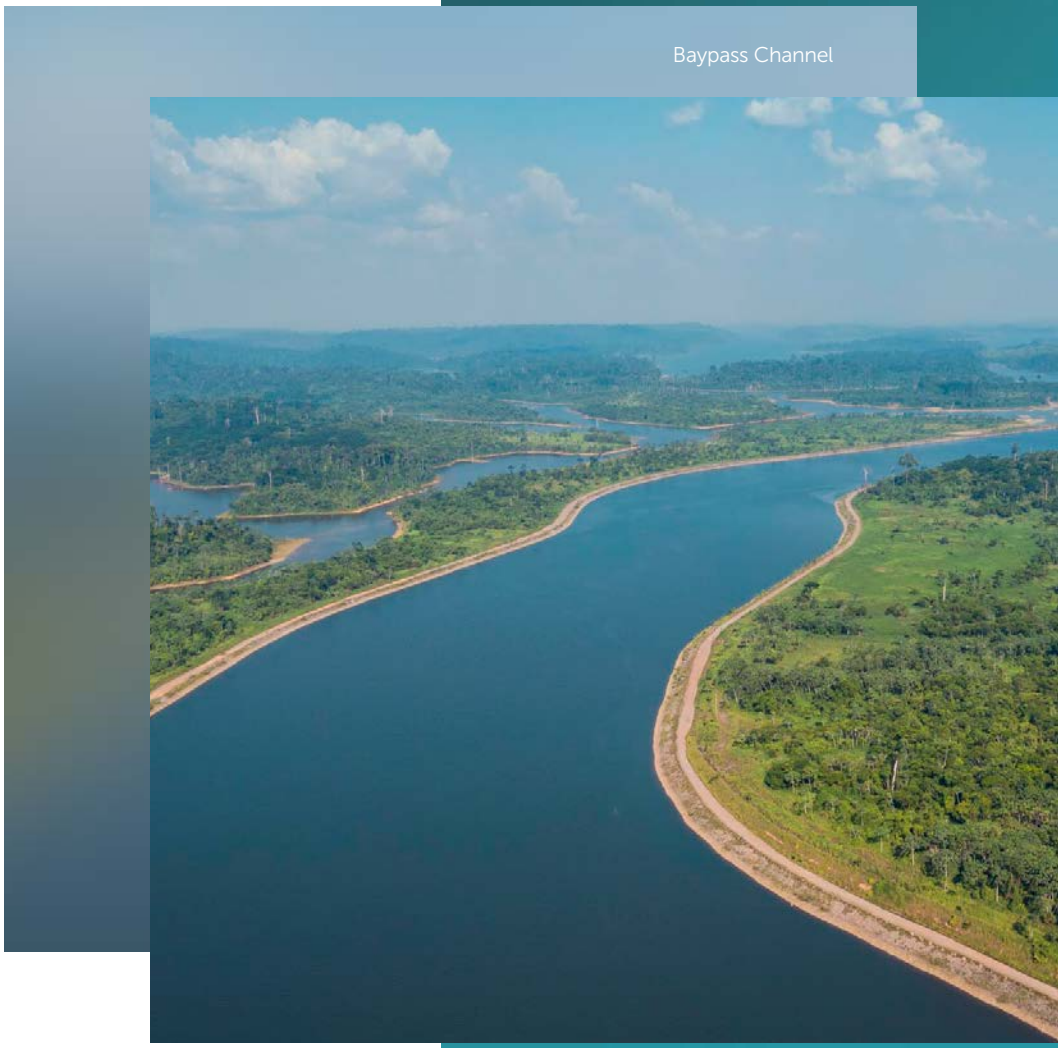
**Financial Capital**
- Income from taxes and royalties
- Remuneration of own capital and capital from third parties
- Fostering the economy and local development

**Manufactured Capital**
- Renewable energy generated and certified to supply the country
- Urban, rural and indigenous land infrastructure in the area covered by the plant,

including housing, health, sanitation, public safety, education, social assistance, communication system, as well as cultural and institutional equipment

Monitoring the Company's performance guarantees the availability, quality and accessibility of capital, giving Norte Energia the ability to adapt to changes in the external and internal environments and to identify new impacts, risks or opportunities, adapting the defined strategies, if necessary.

To measure performance, indicators that may be related to impacts on the Company are used, such as plant availability, training hours and financial results; or impacts on the surroundings, such as investment in communities, renewable energy generated and atmospheric emissions.



Baypass Channel

# Industry scenario and **generational challenges**

**EU2, EU6, EU11, IF-EU-140a.1, IF-EU-140a.3, GRI 3-3**

The year 2022 did not present difficulties in meeting the demand for energy consumption in the country. We left a situation of water restriction in 2021, with high energy prices and pressure on consumers, to a scenario of great energy supply and low prices, which will have repercussions in 2023.

Specifically about Belo Monte, in 2022, according to data from the National Electric System Operator (ONS), on average for the year, Belo Monte contributed with more than 6% of the total generation in Brazil, serving millions of people from all Brazilian regions. Generation surpassed 2021 production by

27.46% due to the high affluence in the months of January and February and the high availability of generation at Belo Monte HPP.

With regard to consumer demand, there was low growth, still influenced by the effects of the Covid-19 pandemic and poor economic performance. The sectoral scenario for 2022 also dealt with a significant increase in distributed generation and some advances in market opening. The agenda on the opening of the energy market provides for an environment in which generators, traders and consumers can freely negotiate the supply of energy, giving flexibility to transactions and price reductions. Currently, the free energy market has just over 30,000 consumers, approximately 0.03% of the total of 89 million across the country, although free market consumption exceeds 36% of the total consumption market. **EU7**

In Brazil, around 60% of the electricity matrix comes from hydraulic sources. A renewable source of energy, hydroelectric power plants, in addition to having low operating costs, have low levels of greenhouse gas (GHG) emissions. However, although they effectively contribute to the fight against climate change, their generation capacity depends on the rainfall and river flow. The hydrological risk therefore consists of a reduction in the levels of hydroelectric power generation due to the effects of droughts. **GRI 305-5**

In addition, the hydrological risk (GSF – Generation Scaling Factor) is affected by the change in the Brazilian electricity matrix which, in recent years, has had a greater share of energy generation from wind and solar sources, which are intermittent. The priority dispatch of these sources reduces hydroelectric generation and aggravates the hydrological risk (GSF).

Altering the generation level of hydroelectric plants across the country may entail financial risk due to the reduction in hydraulic generation with increased compensation costs in the Energy Reallocation Mechanism (MRE), worsening of the GSF factor (Generation Scaling Factor) and changes in energy prices. **GRI 3-3**

For Norte Energia, renegotiating the hydrological risk (GSF) and managing energy sales, including long-term contracts entered into at the time of the plant auction, are factors that mitigate financial risks. Since 2018, the Company adhered to the renegotiation of the hydrological risk and the protection of 70% of its energy destined for the Regulated Contracting Environment, with insurance costs at the value of 10% of the energy price of these contracts.

To contribute to combating climate change and reducing hydrological risks, the Company carries out projects to recompose vegetation in the Xingu basin, environmental education and other renewable energy projects, both within the scope of environmental licensing and within the scope of voluntary sustainability actions. We also carry out Research and Development projects for new technologies, studies of extreme weather events and greenhouse gas emissions in hydroelectric plant reservoirs, which will be presented throughout the report.

Turbine cone of Generating Unit 04 of Belo Monte HPP


# Commercialization **of energy**

The physical guarantee of Belo Monte HPP is marketed as follows: 70% in the regulated market with Energy Purchase Agreements in the Regulated Environment (CCEAR) for 26 states and the Federal District through 45 distributors; 10% for self-producers, direct or indirect partners of Norte Energia; and 20% to manage the GSF and commercialization of energy on the free market.

Throughout 2022, we were actively positioned in the free energy market. With over 450 commercialization processes, we sold 32,033 GWh in the regulated contracting environment, 4,004 MWh to self-producers and Company partners and 6,142 GWh in the free market.

# 4 Commitment to **Sustainability**

GRI 2-23

In addition to our commitments established within the scope of the environmental licensing process, we invest in voluntary actions that seek to contribute to and strengthen the socioeconomic development of the region and the environmental protection of the Xingu basin.

In 2022, we value ESG aspects in our management and present our letter of request to join the UN Global Compact. In January 2023, after completing the adhesion process that verified several aspects of the company's operations, we became members of the Global Compact. In the next annual report, we will report on our annual progress against commitments made. Along the way, Norte Energia reiterates its work with the best sustainability practices. **GRI 2-23**

Our work is structured on strategic pillars related to the SDGs. They are: regional socioeconomic development; renewable energy generation; and protection of the Amazon, focusing on the Xingu Basin. Our goal is to build a positive legacy and contribute to the socioeconomic development of the territories where Norte Energia operates.

## 10 Principles of the Global Compact GRI 2-24

### Human Rights

1 Businesses must support and respect the protection of internationally recognized human rights;

2 Ensure your non-participation in violations of these rights;

### Work

3 Businesses should support freedom of association and the effective recognition of the right to collective bargaining;

4 Elimination of all forms of forced or compulsory labor;

5 Effective abolition of child labor;

6 Eliminate employment discrimination;

### Environment

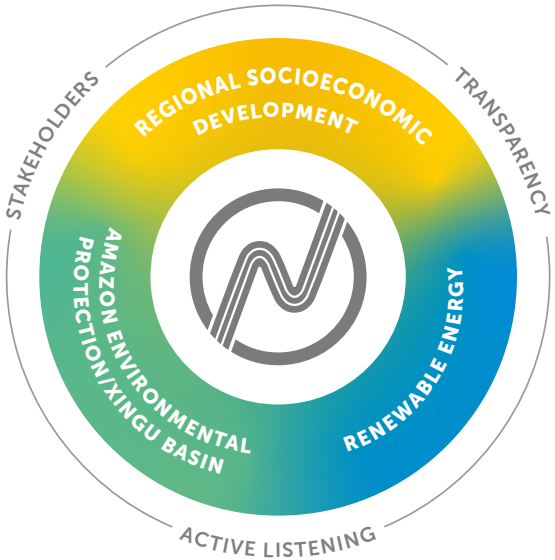
7 Businesses should support a precautionary approach to environmental challenges;

8 Develop initiatives to promote greater environmental responsibility;

9 Encourage the development and dissemination of environmentally friendly technologies;

### Against Corruption

10 Businesses must fight corruption in all its forms, including extortion and bribery.




For each pillar, we defined three lines of action, as shown in the table below.
**GRI 2-23, GRI 2-24, GRI 2-25, GRI 413-2**

Along this path, in 2022, we joined the Brazilian Business Council for Sustainable Development (CEBDS). An association that brings together the largest companies in the country, CEBDS is an environment that contributes to the dissemination of best practices in the private sector. Throughout the year, we participated in the Technical Chamber of Biodiversity, the Business Movement for the Amazon and the Technical Chamber of Social Impact.

## Commitments

### Regional Socioeconomic Development

- Promote inclusive and sustainable economic growth
- Strengthen production chains based on bioeconomy
- Foster Businesses with Social and Environmental Impact (NIS)


### Renewable Energy

- Reduction in the emission of Greenhouse Gases
- Combating climate change
- Research and Development


### Amazon Environmental Protection – Xingu Basin

- Forest conservation and reduction of deforestation in the Amazon
- Promoting reforestation associated with income generation
- Monitoring and protection of the Xingu river basin

In addition to the sustainability plans and actions carried out directly by the Company and which will be presented throughout this report, Norte Energia carries out the Xingu Regional Sustainable Development Plan (PDRSX). With the objective of contributing to the reduction of regional inequalities, through the implementation of actions aimed at regional development, Norte Energia has the commitment, signed when the Belo Monte Complex was granted, to invest R$500 million in this Plan, in the period from 2010 to 2030. Find out about the program details on page 110.

Formation of the Waterway Workers Course – Altamira/PA

**Waterway Training Course in partnership with the Brazilian Navy through the Port Authority of Pará.**

Each socio-environmental action promoted by Norte Energia reiterates our commitment to respect the territory and culture of local communities and indigenous peoples. In 2022, we invested more than R$408 million in socio-environmental licensing programs. **GRI 2-28**

## Our Human Rights Policy

In 2022, we prepared and approved, together with the Board of Directors, our **Human Rights Policys**. In this document, we define the general principles of conduct and the guidelines for our actions regarding respect for human rights in the exercise of our activities and our relationships. Given its relevance, the elaboration of the policy made up the variable compensation of the Company's executives. **GRI 2-23**

Governed by national and international human rights parameters, our policy is directed to all directors and members of the Board of Directors, members of the advisory committees and the Fiscal Council, employees, agents, service providers, investors, suppliers, representatives, customers and organizations supported.

The dissemination of the Human Rights Policy took place during the *Business & Human Rights training – a journey for everyone, aimed at all employees*, as well as through internal communication and material on our Digital Integration Platform (PID). **GRI 410-1, GRI 2-23**

We participate in the meetings of the CEBDS Social Impact Chamber, which deals primarily with the issue of human rights and companies. In this environment of private sector participation, it has been possible to share experiences, absorb the best market practices and keep up-to-date on common challenges experience.

# Governance for **sustainability**

**GRI 2-24, GRI 2-13**

For sustainability governance at Norte Energia, we have a Sustainability Committee and an Advisory Board, in addition to the Sustainability Superintendence, which reports directly to the Presidency.

With a strategic role, the Sustainability Committee, created in 2021 and coordinated by an independent director, is formed exclusively by members of the Board of Directors and its main objective is to guide and define the Company's strategies so that we can achieve the commitments made in our Policy of Sustainability, as well as the incorporation of ESG practices as an organizational culture.

The Advisory Board is formed by multidisciplinary professionals with notorious knowledge. Its members are external to the Company and have na independent relationship with Norte Energia. Its purpose is to map society's expectations regarding critical ESG issues and facilitate the integration of these aspects into the Company's business strategy.

The Sustainability Superintendence, structured in two departments – Management and Monitoring and Sustainability Projects – aims to develop projects aligned with the area's strategic pillars of action, and which go beyond the socio- environmental obligations imposed by the company's environmental licensing.

Employees during the "Dia de Plantar" (Planting Day) action"

**We have a Sustainability Committee, an Advisory Board and a Sustainability Superintendence.**

# Communication **with stakeholders**

**GRI 2-29**

The process of engagement and dialogue with stakeholders, in particular local communities, takes place through interaction and social communication actions, such as community meetings, door-to-door visits, reports broadcast on local radio and TV stations, and through the Popular Communication Network (RCP), a digital communication tool, via the messaging application.

A social communication channel created as part of the licensing process. In 2011, the Belo Monte HPP Social Monitoring Forum (FASBM) was created. It is a participatory space for dialogue to answer question and exchange information with stakeholders. In its periodical meetings, representatives of communities, civil society, local city halls, Ibama and other interested parties monitor the progress of work related to the undertaking.

Norte Energia also maintains other communication channels and listening mechanisms that seek to expand dialogue with interested parties, in order to favor continuous dialogue and facilitate the mediation of possible conflicts. The main channel is the Belo Monte 24 Hours Central, a free telephone service (0800-091-2810) managed by Norte Energia. **GRI 2-26, GRI 2-29, GRI 413-2**

In 2022, 3,724 calls were made via 0800. Of these, 49% were answered by the Central. Approximately 1% of the demands were partially met and another 50% remained open, that is, they are being analyzed by Norte Energia.

## Belo Monte 24h Central (0800 091 2810) GRI 2-16

| | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| Number of reports identified through the mechanism | 5,940 | 4,577 | 4,830 | 3,724 |
| Number of reports addressed | 5,940 | 4,577 | 4,830 | 3,724 |
| Number of reports resolved | 5,146 | 3,993 | 3,304 | 1,789 |
| Number of reports filed before the period covered by the report and resolved during this period | N.D. | N.D. | N.D. | N.D. |

The predominant topics of interactions at the Central were related to documental issues and resettlements. In the Documental category, the most representative subjects were about the Transition Fund for riverside people, with a request for information regarding the date of payment of the aid; and information regarding the payment of the reparation sum to the fishermen. In the topic Resettlements, the main subject was related to constructive aspects of the residences.

In order to improve the Belo Monte 24 Hours Central service and effectively improve the response rate, actions were initiated in 2022, such as: raising awareness among the technical areas responsible for the responses; review of the focal points responsible for dealings;

update of the answer booklet to speed up the work of the operators; and the implementation of a new internal system to record servicing to improve management, reliability and access to data. This work will continue throughout 2023.

In addition to the Belo Monte Central, we also provide assistance at the Communication Centers in Volta Grande do Xingu, specifically in Vila da Ressaca and in the Rio das Pedras community, via the Itinerant Social Plan. **GRI 2-29, GRI 413-2**

To communicate with indigenous peoples, we have a radio system, which is part of the Indigenous Communication Program (PCI) in the Belo Monte environmental licensing process. This system was implemented in 2011 with the initial installation of 34 radios, being expanded according to the demand of indigenous peoples. **GRI 2-29, GRI 411-1**

Currently, the radio system has 94 radios installed in indigenous lands and in the city of Altamira. It brings together the service mechanisms and responses to answer questions, comments and complaints from indigenous people, as well as facilitating the search for a solution to their demands.

Requests, complaints and compliments are received remotely and/or in person, then registered in the Indigenous Assistance System (SAI). The procedure is direct at Norte Energia's Indigenous Socio-Environmental Management, where the records receive due treatment and responses are given to the indigenous people.

Since 2020, PCI has also started to produce institutional communications translated into Tupi and Macro-Jê and Karibe family languages, in addition to Portuguese, which promotes greater access by the indigenous population to information disclosed by the Company. **GRI 2-29, GRI 411-1**

## Communication Centers in Volta Grande do Xingu (Ressaca e Rio das Pedras) GRI 2-16

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| Number of reports identified through the mechanism | 279 | 206 | 107 |
| Number of reports addressed | 279 | 206 | 107 |
| Number of reports resolved | 129 | 79 | 107 |
| Number of reports filed before the period covered by the report and resolved during this period | N.D. | N.D. | N.D. |

The activities of this set of communication channels and their results are monitored by Ibama, by Funai and by the independent audit of financing banks within the scope of the Equator Principles.

Still with regard to communication and engagement actions, below, we present our highlights of 2022.

**The Indigenous Communication Program has 94 radios installed and produces announcements in Portuguese and in the indigenous languages of the Tupi and Macro-Jêunks.**

## Numbers of the Indigenous Assistance System (SAI)

**GRI 2-16**

| Year/Indigenous Requests | 2020 | 2021 | 2022 |
|---|---|---|---|
| Total requests | 2,815 | 2,838 | 2,209 |
| Closed/processed/closed requests | 2,722 | 2,824 | 2,147 |

### Conheça Belo Monte Webseries

In order to tell stories of those who live in the Middle Xingu and how the arrival of the Belo Monte HPP changed the reality of the population, Norte Energia broadcast, in 2022, the webseries Conheça Belo Monte, through the topics: Our People, Dialogues, Our North, Our Security, Xingu Fish, Green Energy, Innovation and Xingu Protection. The webseries was broadcast on YouTube and the institutional website, in addition to being shown on TV stations in Altamira and the region. To watch the episodes, access the **HPP Belo Monte** channel on YouTube. The production showed the Company's contribution to the socioeconomic development of the region, to the preservation of the Xingu basin and the generation of renewable energy for Brazil.

### Belo Monte Informa

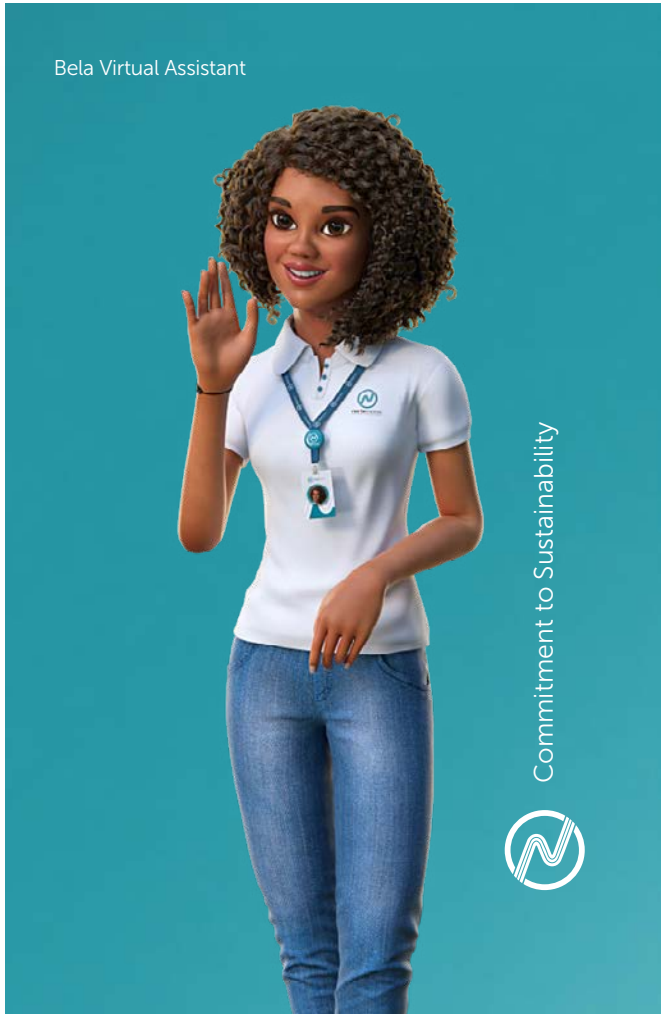
In 2022, we continued the production and dissemination of new editions of the Belo Monte Informa program, which addresses Norte Energia's actions in the area of influence of the Belo Monte HPP. The episodes are published periodically on the Company's social networks and on TV stations in Altamira and region.

**LinkedIn**
**YouTube channel**
**Instagram**

### Launch of the virtual assistant Bela

We developed and launched a chatbot with artificial intelligence technology to help communicate with the Company's various stakeholders. The virtual assistant is personified by the brand persona Bela, created in 3D modeling with the aim of humanizing contact with our audiences. **EU8**

The chatbot was trained to talk about various topics, including the program Conheça Belo Monte visits, R&D projects, press demands, among other subjects. In addition, the tool generates periodic reports for input analysis, curation of new content and platform improvement. The new functionality is available on the Company's website.



## Virtual tour launch

In 2022, the Meet Belo Monte Visitor Program was enhanced by a virtual tour that can be accessed by visitors from anywhere in the world through the internet. The experience displays panoramic photos and information about the main structures of the largest 100% Brazilian hydroelectric power plant. The virtual tour is available on the Company's website. **Click here.**

## Conheça Belo Monte

Our **Conheça Belo Monte** visit program welcomes visitors from all over the country, with the right to guided tours through the largest 100% Brazilian hydroelectric power plant. This program has already assisted, since the beginning of its activities, in 2014, a total of 20,464 people – including visitors to the Belo Monte HPP and participants in its itinerant actions. After the restrictive scenario during the coronavirus (Covid-19) pandemic, the program resumed its activities with increasing public participation.

In 2022, we recorded 1,543 visitors to Belo Monte HPP, including students from public and private schools, university students, teachers, researchers, journalists, liberal professionals, traders and businessmen from the region, public servants, bankers, rural producers, farmers, tourists Brazilians and foreigners, Norte Energia employees and their families, as well as surrounding and indigenous communities (villagers and city dwellers).

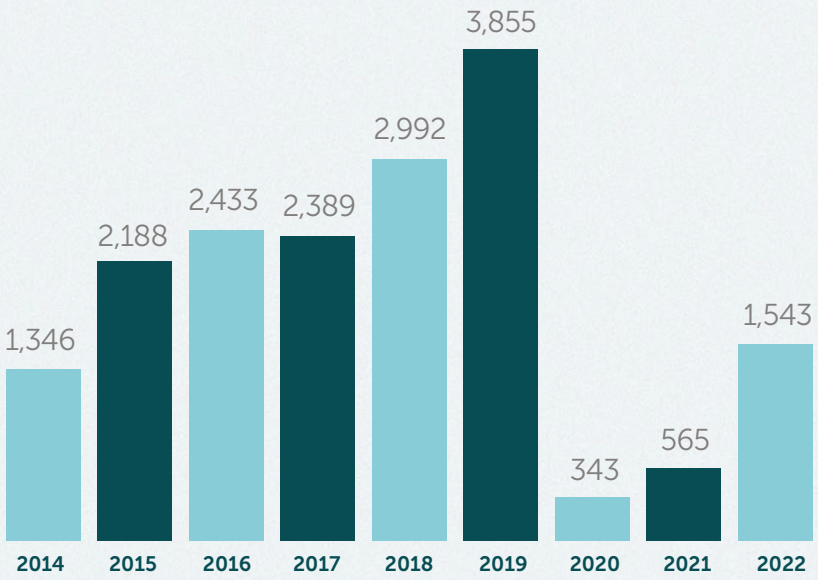
Regarding itinerant activities in 2022, such as Belo Monte at Schools, we highlight activities in 13 schools in Altamira, reaching 2,810 students, teachers and faculty.

Throughout 2022, considering the structure from April 2022, more than 100 meetings were held with 100% direct involvement of communities and community leaders, actively participating in the construction of these agendas for the presentation of results, studies and/or planning of activities and projects planned to mitigate socio-environmental impacts inherent to the communities of fishermen, riverside dwellers and residents of the Volta Grande do Xingu region (VGX), included in the AID. **GRI 413-1**

**In 2022, 1,543 people visited the plant through the Conheça Belo Monte Program.**

Conheça Belo Monte Program visit day

## Number of visitors to the Conheça Belo Monte program




### FIPA 2022

From October 19th to 22nd, Norte Energia was present at the XV Pará Industry Fair (FIPA 2022), in Belém (PA), promoted by the Federation of Industries of the State of Pará (Fiepa), at its own stand. Visitors to the fair had the opportunity to learn more about the commercialization of energy and Renewable Energy Certificates, as well as the sustainability initiatives that we have developed in the region of the plant.

With the topic *Aqui Tem Indústria*, the event brought together an audience of around 30,000 visitors at the Hangar – Centro de Convenções e Feiras da Amazônia and more than 100 stands with an exhibition of products and services from local, national and multinational industries, in addition to cultural presentations, technical meetings, lectures and forums, business roundtables, innovation tournaments and technological presentations.

Within the FIPA 2022 schedule, Norte Energia also participated in the ESG Day forum, focused on presenting good management and governance practices that include the environment and the social area. The Company's Sustainability Superintendence participated in the Sustainability and the generation of renewable energy in the Amazon panel, when it shared the initiatives developed by Belo Monte HPP within the scope of its Sustainability Policy.

## Other events: environment, culture and sports

With a decrease in the number of Covid-19 cases, the easing of restrictive measures and the resumption of face-to-face events in Brazil and around the world, throughout 2022, we participated in important events, including:

- VIII Transamazônica Song Festival;
- IV Xingu International Literary Fair;
- 1st Belo Monte Cycling Tour;
- Concert by the Brazilian Symphony Orchestra;
- 1st Indigenous Fair for the Creative Economy of the Peoples of the Middle Xingu.

Belo Monte Cycling Tour

Norte Energia neutralized the emissions from electricity consumption at the XV Fipa by issuing renewable energy certificates I-REC (International Renewable Energy Certificate), to the largest industry event in Pará.

**Xingu River Flow Daily Bulletin**

From Monday to Friday, we publish, on our website, the forecast of the hydrological conditions of the Xingu river in the area of influence of the Belo Monte HPP. **Access here.**

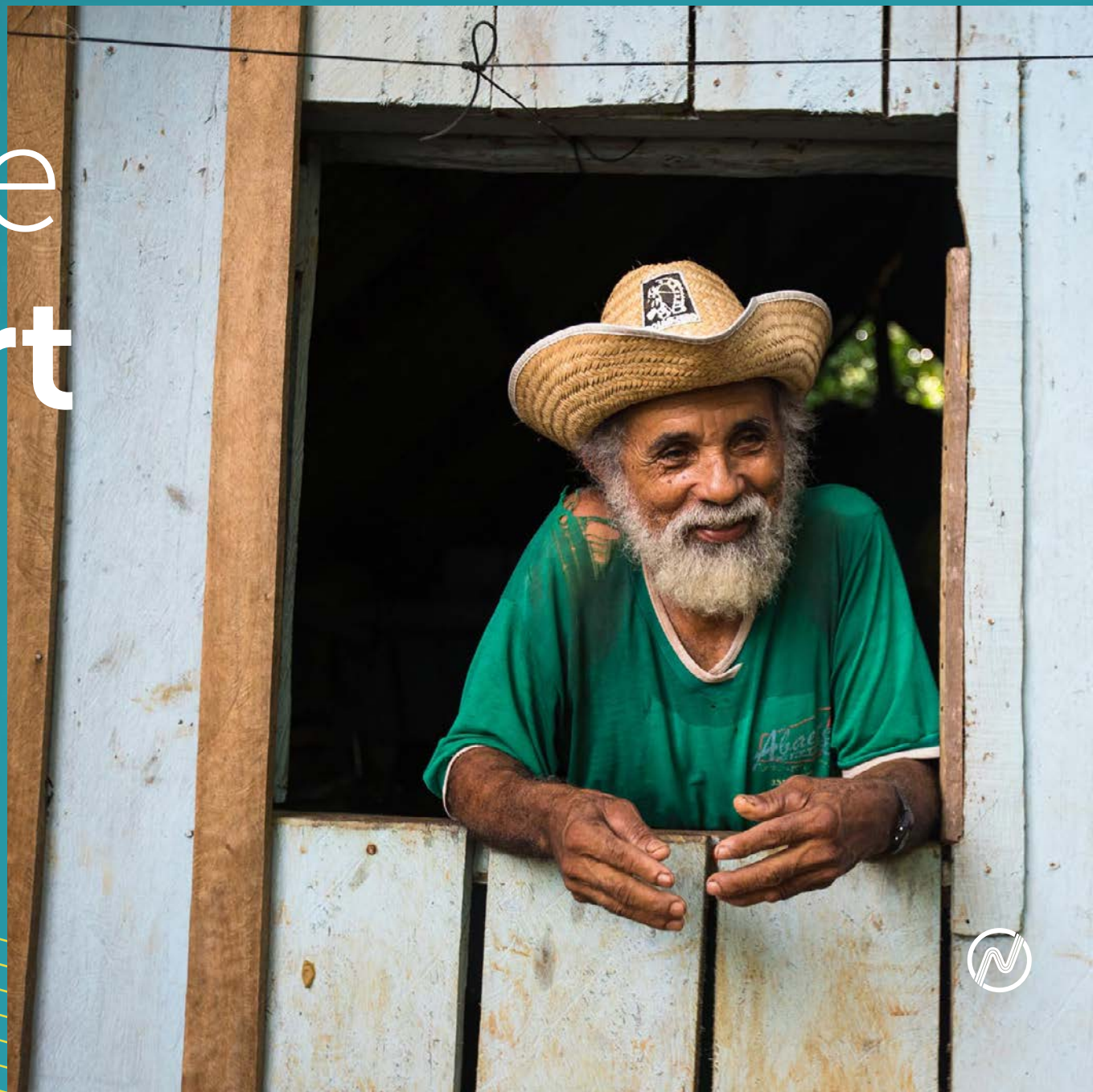
**Launch of a website focused on the commercialization of electricity**

**EU8**

We launched a new website aimed at the free energy market to meet the electricity demand of the country's industries that can buy energy and renewable energy certificates directly from Belo Monte HPP, without intermediaries and with economy and predictability. **Access here.**

# About the 5 Report

GRI 2-3



# About the **Report**

**GRI 2-3**

Our 2022 Sustainability Report covers the period from January 1st to December 31, 2022 and highlights strategies, objectives, indicators, management processes and actions taken. Its content contemplates the same period and the same operations contained in the annual Financial Statements, which follow the accounting practices adopted in Brazil, which include the rules of the Securities and Exchange Commission (CVM), the pronouncements and guidelines of the Accounting Pronouncements Committee and the rules International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB), being audited by Ernst Young.

The Sustainability Report follows the guidelines of the Global Reporting Initiative (GRI) in its 2021 version and the requirements of Aneel's Annual Socio-Environmental and Economic-Financial Responsibility Report.

This report also addresses the disclosure and metrics topics of the Sustainability Accounting Standards Board (SASB) for energy distributors and generators and the International Integrated Reporting Framework (IIRC) proposed by the Value Reporting Foundation.

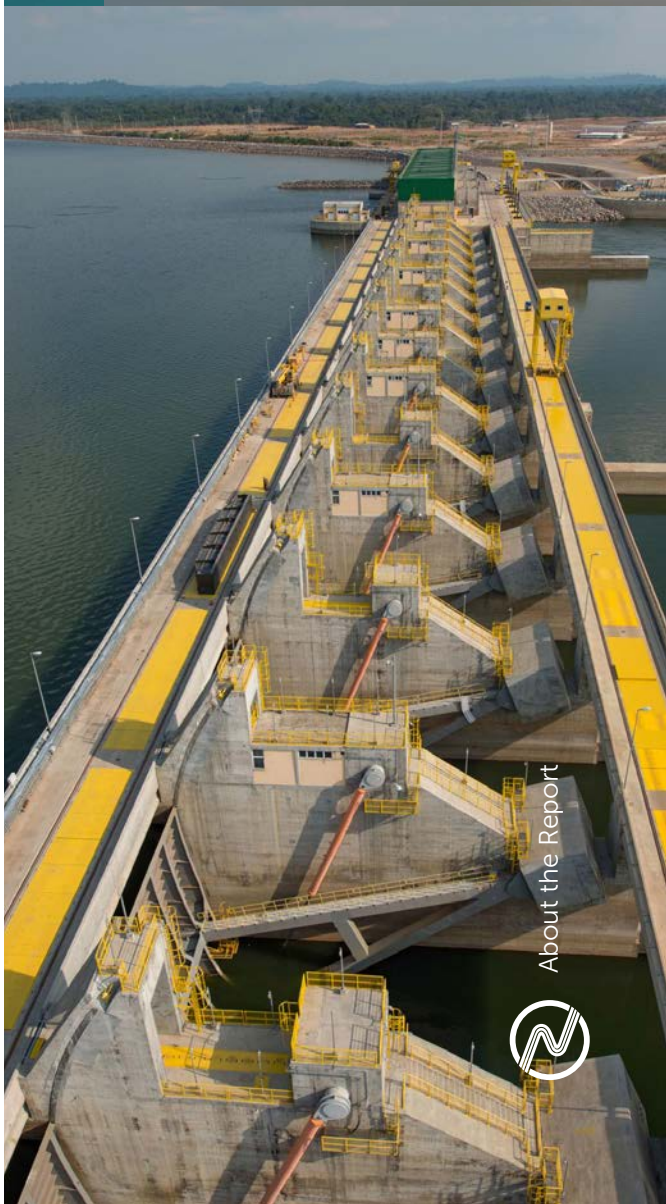
Performance data are also correlated with the Sustainable Development Goals (SDGs) of the United Nations (UN).

The information contained in our 2022 Sustainability Report was verified by the company Ernst & Young, which issued the Letter of Assurance, available as an attachment. **GRI 2-5**

It should also be noted that the report adheres to two other relevant annual reports prepared by Norte Energia: Reference Form, required and regulated by the Securities and Exchange Commission (CVM); and the Complete Financial Statements (**https://ri.norteenergiasa.com.br/en/**), provided for in Law No. 6,404/1976 (Corporations Law).

More information about our 2022 Sustainability Report can be obtained by contacting our Sustainability area, by email **sustentabilidade@norteenergiasa.com.br** or by Contact Us, available on our **site**.

Pimental HPP Spillway



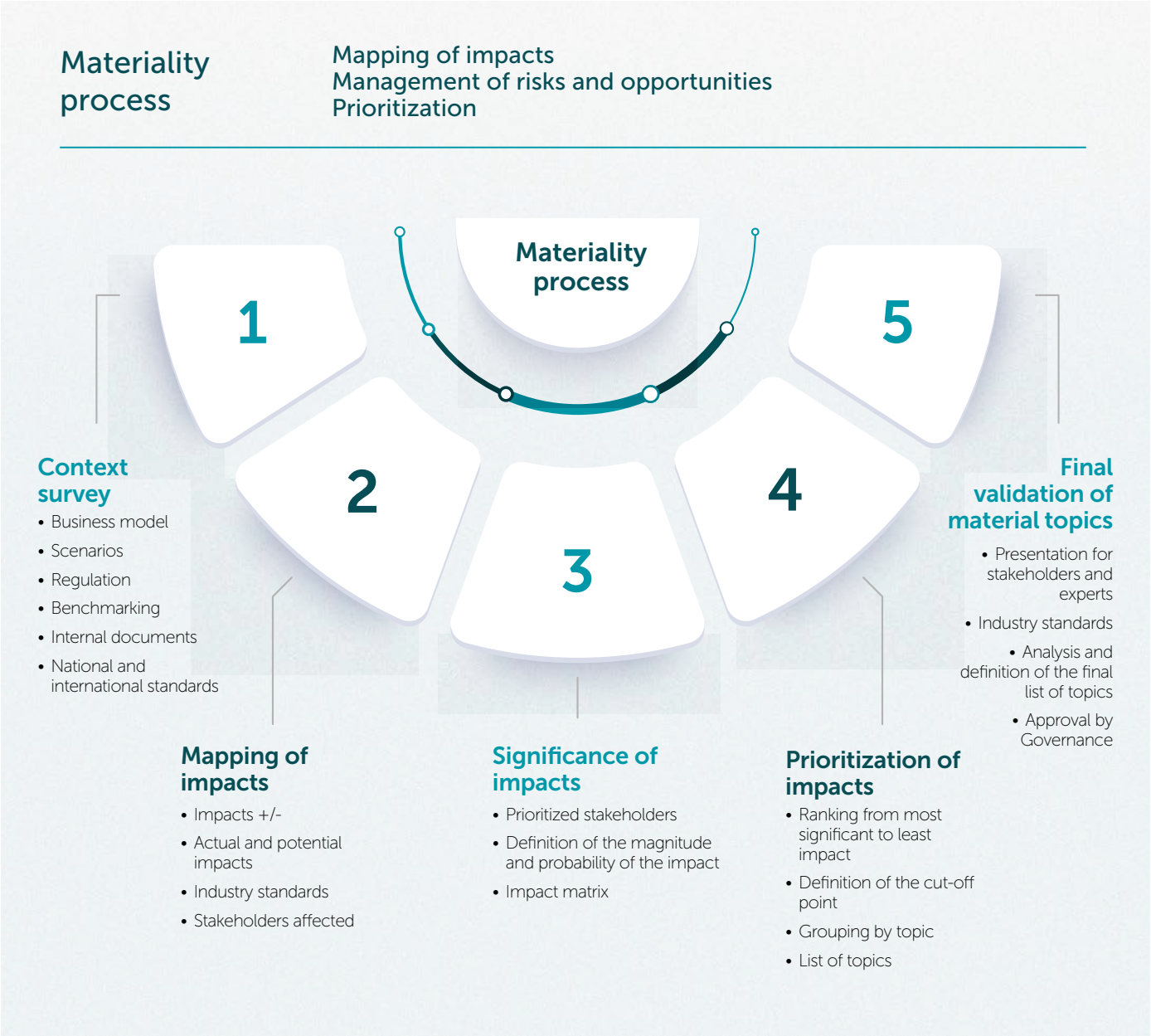
# Definition of **material topics**

GRI 3-1

In 2022, we reassessed the material topics presented in the previous year's report, in accordance with the GRI 2021 Standards. The materiality methodology was based on the GRI Standard 3: Material Topics 2021.

The common thread of our 2022 Sustainability Report came from our business model and the mapping of its most significant impacts on the economy, the environment and people's lives.

The materiality process considered five main steps, described below:



**1st Stage | Survey of the context:** for this stage, based on the business model, we analyze external and internal scenarios, the regulations for the sector and various internal documents, such as: matrix of impacts of the Environmental Impact Studies (EIA), progress reports of the Basic Environmental Project (PBA) and its Indigenous Component (PBACI), compliance with the conditions of the Operating License, strategic risk matrix and previous materiality report.

**2nd Stage | Mapping of impacts:** at this stage, several sectoral documents were consulted which, together with our internal documents, allowed the survey of the Company's positive and negative impacts, both real or potential, and the identification of affected stakeholders. Among the documents consulted to map impacts, the Sustainability Accounting Standard Board (SASB) – Electric Utilities & Power Generators standards, the Global Reporting Initiative (GRI G4) standards, Electric Utilities Sector Disclosures, Aneel indicators, among others stand out.

**3rd Stage | Significance of impacts:** based on the mapped impacts and considering the prioritized stakeholders, we attribute significance to each impact, considering the magnitude of each one – scale, scope, irremediable character – and the probability of occurrence of the impact. We then built a matrix of positive and negative impacts.

**4th Stage | Prioritization of impacts:** based on the impact matrix, they were organized from the most significant to the least significant. Three significance ranges were defined – high, medium and low. To compose the new materiality, high and medium significance impacts were selected. Having grouped the impacts by topic, we defined the list to be validated.

**GRI 2-25**

**5th Stage | Final validation:** to validate the result obtained, we promote engagement with selected stakeholders: employees, suppliers, class associations, government bodies, universities, civil society organizations, representatives of local communities, class entities, social movements. Stakeholders were chosen based on those mapped in the previous materiality process. Employees answered an online survey, while the other audiences answered a survey and participated in specific meetings/ interviews with a specialized consultancy to assess the proposed topics and present suggestions and comments. Interactions with the mapped stakeholders sought to identify the perception of the evolution of the ESG agenda at Norte Energia; evaluate their level of engagement, understanding and perception of the degree of relevance regarding the topics; recognize the challenges faced; receive suggestions; and identify opportunities.

**GRI 2-29**

For the construction of the new materiality matrix, the following criteria were considered:

1. The abscissa axis (x) was constructed based on the severity x probability analysis of the Company's impacts, which were grouped into topics.

2. The ordinate axis (y) was defined based on the average of the scores attributed by the stakeholders to the topics proposed in the validation stage. Both the assessment of impacts and the scores attributed by stakeholders ranged on a scale from 1 to 10.

Considering that one of the stages of the process of defining material topics was the prioritization of impacts, the topics taken to the validation stage were those evaluated as of high and medium significance from the perspective of the impacts caused by the Company. As a result, all topics were also considered relevant by stakeholders and focused on the two upper quadrants of the matrix.

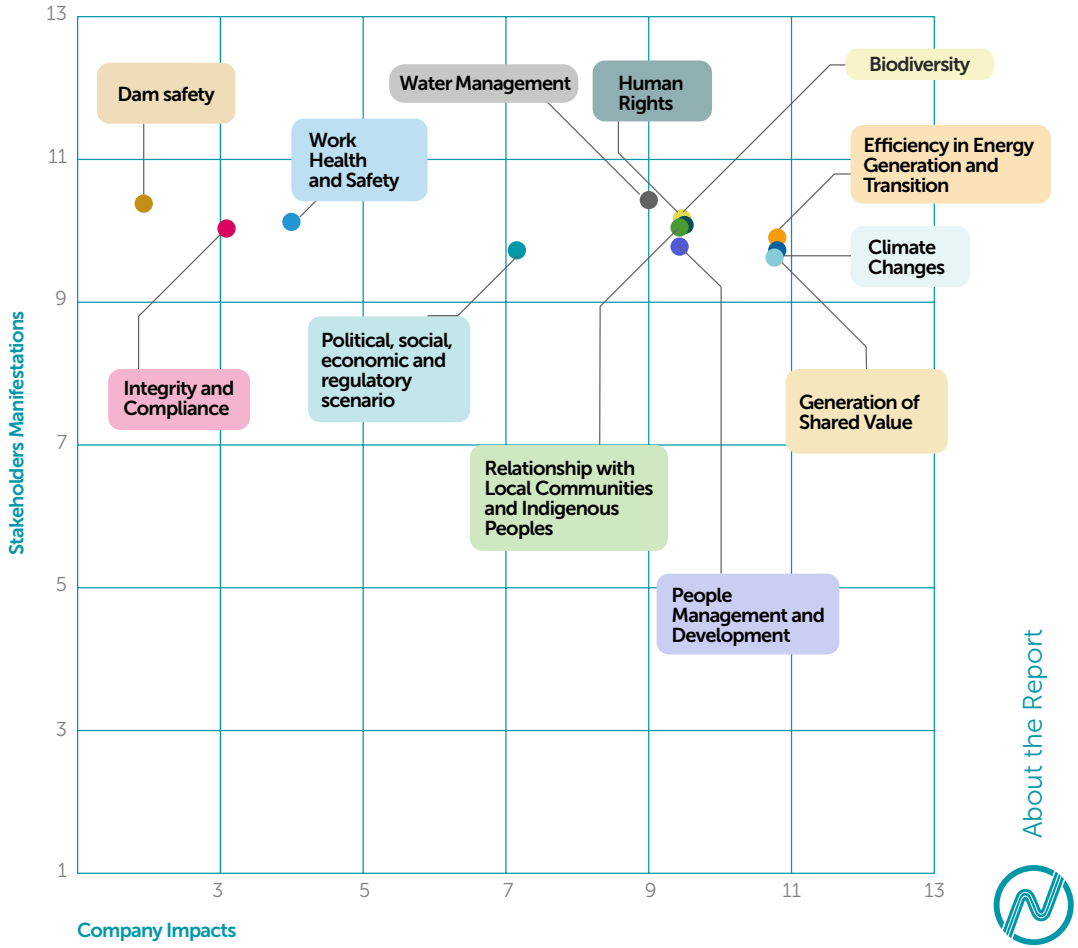
The issues we observe in the left quadrant represent those that, although significant in terms of severity, are less likely to occur, according to the Company's assessment, based on the actions implemented: Dam Safety; Integrity and Compliance; and, Occupational Health and Safety.

In turn, the topics that are concentrated in the upper right quadrant are those that represent a real impact on the Company, positive or negative, as they are linked to its business model and are the result of its activity: Efficiency in Energy Generation and Transition; Generation of Shared Value; Climate changes; Biodiversity; Human rights; Water Management; Relationship with Local Communities and Indigenous Peoples; and, People Management and Development.

| Material Topics 2021 | Material Topics 2022 |
|---|---|
| 1. Shared sustainable value | 1. Generation of shared value |
| 2. Biodiversity | 2. Biodiversity |
| 3. Human rights | 3. Human rights |
| 4. Local social and economic legacy | 4. Relationship with local communities and indigenous peoples |
| 5. Climate changes | 5. Climate changes |
| 6. Worker safety | 6. Efficiency in energy generation and transition |
| 7. Natural environments | 7. Occupational health and safety |
| 8. Combating corruption/Compliance with applicable legislation in force | 8. People management and development |
| | 9. Water management |
| | 10. Political, social, economic and regulatory scenario |
| | 11. Dam safety |
| | 12. Integrity and compliance |

The result of this work was taken to the appreciation and approval of Norte Energia's Board of Directors.
**GRI 2-14**

The management of material topics will be described throughout the report, as shown in the table below.



| Material topic | Scope | Approach | Stakeholders affected | Related disclosures | SDG |
|---|---|---|---|---|---|
| Generation of shared value | It considers the promotion of sustainable regional socioeconomic development that, integrated with the actions of the public power, adds quality of life to local communities through advances in the areas of health and sanitation, education, housing, generation of direct and indirect jobs, dynamization of the economy location, preservation and enhancement of historical and cultural heritage, among others. It also addresses the prevention, management, monitoring and mitigation of negative impacts, as well as the enhancement of the positive impacts resulting from the operation of the Belo Monte HPP. | Prosperity | Shareholders<br>Governments<br>Local community<br>Native peoples<br>Workers<br>Suppliers | GRI-2-6<br>GRI-201-1<br>GRI-201-2<br>GRI-203-1<br>GRI-203-2<br>GRI-204-1<br>GRI-401-1<br>GRI-401-2 |  |
| Biodiversity | It addresses the protection and conservation of local biodiversity, as well as the appreciation of ecosystem services provided by indigenous peoples and traditional communities in the Amazon, focusing on the Xingu Hydrographic Basin. It also considers the risks, opportunities and dependencies, as well as the prevention, management and mitigation actions of the Company's negative impacts on nature. | Planet | Riverside community<br>Fishermen<br>Extractivists<br>Indigenous peoples<br>Regulatory bodies<br>Inspection bodies | GRI-304-1<br>GRI-304-2<br>GRI-304-3<br>GRI-304-4 |  |
| Human rights | The topic addresses Norte Energia's performance in relation to the responsibility to respect human rights in the development of its activities and relationships, as well as in its value chain. It also considers the strengthening of the movement of self-affirmation of the ethnic identity and visibility of the indigenous peoples of the Middle Xingu, as well as the treatment of alleged violations of the rights of indigenous peoples, traditional communities and labor rights in general. It also considers actions related to gender diversity. | People | Employees<br>Suppliers<br>Indigenous peoples<br>Fishermen<br>Riverside dwellers<br>Inspection bodies | GRI-405-1<br>GRI-405-2<br>GRI-406-1<br>GRI-407-1<br>GRI-408-1<br>GRI-409-1<br>GRI-410-1<br>GRI-202-1<br>GRI-2-7 |  |
| Relationship with local communities and indigenous peoples | The theme deals with active listening and transparent communication with the various stakeholders. It also addresses the institutional strengthening of community and indigenous associations, development programs and training and qualification actions. It also includes actions with riverside populations, fishermen, indigenous peoples and the local community around the operation of the Belo Monte HPP. | Prosperity | Indigenous peoples<br>Fishermen<br>Riverside dwellers<br>Extractivists<br>Public bodies linked to indigenous policies<br>Inspection bodies | GRI-411-1<br>GRI-413-1<br>GRI-413-2<br>GRI-414-1 |  |

GRI 3-2

| Material topic | Scope | Approach | Stakeholders affected | Related disclosures | SDG |
|---|---|---|---|---|---|
| Political, social, economic and regulatory scenario | Addresses the Company's exposure and the execution of its projects and programs in the economic, social, political and regulatory context. | Governance policy | Regulatory and supervisory bodies<br>Governments<br>National Congress<br>Society<br>Community<br>Shareholders<br>Employees | GRI-2-23<br>GRI-2-24<br>GRI-2-25<br>GRI-2-26<br>GRI-2-27<br>GRI-415-1<br>GRI-418<br>GRI-2-15 |  |
| Climate changes | The topic deals with the Company's resilience, the risks and effects of climate events for the business and operation of the Belo Monte HPP, as well as actions related to the reduction of Greenhouse Gas (GHG) emissions and the environmental protection of the Xingu basin. | Planet | Society<br>Community<br>Shareholders | GRI-305-1<br>GRI-305-2<br>GRI-305-3<br>GRI-305-4<br>GRI-305-5<br>GRI-305-6<br>GRI-305-7<br>GRI-306-1<br>GRI-306-2<br>GRI-306-3<br>GRI-306-4<br>GRI-306-5<br>GRI-308-1<br>GRI-308-2<br>IF-EU-110a.1.<br>IF-EU-110a.2<br>IF-EU-120a.1 |  |
| Efficiency in energy generation and transition | The Company's commitment to the generation and commercialization of renewable and accessible energy, I-REC and the search for solutions based on innovation, studies and scientific research to adapt to the energy transition through low carbon economy in the Amazon. | Planet | Society<br>Governments<br>MME<br>Shareholders<br>Employees | EU1<br>EU2<br>EU7<br>EU4<br>EU8<br>GRI-302-1<br>GRI-302-2<br>GRI-302-3 |  |
| Work health and safety | Actions to promote the quality of life, health, safety and well-being of direct and indirect employees and outsourced workers, in addition to preventing accidents and incidents at work. | People | Employees<br>Third parties<br>Service providers<br>Inspection bodies | GRI-403-1<br>GRI-403-2<br>GRI-403-3<br>GRI-403-4<br>GRI-403-5<br>GRI-403-6<br>GRI-403-7<br>GRI-403-8<br>GRI-403-9<br>GRI-403-10<br>IF-EU-320a.1 |  |

| Material topic | Scope | Approach | Stakeholders affected | Related disclosures | SDG |
|---|---|---|---|---|---|
| Water management | It considers the importance of the rational and shared use of water and its impacts on it, from the generation of renewable energy to changes in the dynamics of water in Volta Grande do Xingu due to the application of the Hydrogram. | Planet | Fishermen<br>Riverside dwellers<br>Indigenous peoples<br>National Water and Basic Sanitation Agency (ANA)<br>National Secretaria of Ports and Waterway Transport (SNPTA) | GRI-303-1<br>GRI-303-2<br>GRI-303-3<br>GRI-303-4<br>GRI-303-5 |  |
| Integrity and compliance | The topic covers corporate integrity, positioning in relation to ethics and anti-corruption and promotion of a balanced and fair environment. | Policy and governance | Shareholders<br>Executive Board Member<br>Employees<br>Suppliers<br>Service providers<br>Local community<br>Indigenous peoples<br>Riverside dwellers<br>Fishermen<br>Governments | GRI-2-26<br>GRI 2-27<br>GRI-205-1<br>GRI-205-2<br>GRI-205-3<br>GRI-418-1 |  |
| Dam safety | Initiatives related to dam safety and the integrity of the Belo Monte Complex structures, including guidance and simulation actions with the population surrounding the project. | Planet | Fishermen<br>Indigenous peoples<br>Riverside dwellers<br>Local community<br>Shareholders<br>Employees | GRI-417-3<br>IF-EU-320a.1 |  |
| People management and development | Valuing human capital through actions that promote inclusion and respect for diversity. Talent training and retention, maintaining qualified and motivated teams, aligned with the organizational culture, that add value to the community. | Planet | Employees | GRI-404-1<br>GRI-404-2<br>GRI-404-3 |  |

# A deeper look **at engagement**

GRI 2-29

Aiming at investing more in engagement, we consulted a wide network of stakeholders in order to enhance our listening in this process of reviewing our material topics. For that, we carried out interviews with representatives of residents' associations, women's associations, youth collective, Riverside Council, Indigenous Management Council, residents of new neighborhoods, indigenous representatives, Federation of Industries of the State of Pará (Fiepa), Federal University of Pará (UFPA), Aneel, Municipality of Altamira, Funai Regional Coordination, Special Indigenous Sanitary District (DSEI), suppliers, service providers, shareholders, directors and employees of Norte Energia (managers, superintendents and directors). 24 interviews were carried out with that audience.

For this process, five questions related to sustainability, ESG aspects, energy transition, positive and negative impacts of the Company on communities were prepared. In addition to these questions, 12 material topics were presented, identified from a survey of the impacts caused on and by Norte Energia (double materiality). The topics were based on the GRI methodology applied by a specialized external consultancy.

For each topic, the people interviewed evaluated the relevance of each topic through a score from 1 (no relevance) to 10 (extreme relevance). In addition to the topics presented, the consulting process allowed the guest to present any other topics not addressed and considered relevant.

**The stakeholder engagement process addressed issues related to sustainability, ESG, energy transition, negative and positive impacts on communities and the territory.**

Thus, it was possible to present the impacts caused from the perspective of Norte Energia and the interested parties, promoting interaction between the different perspectives and subjects involved in the business.

81 respondents participated in the email survey, including employees (59) and suppliers (22). That information allowed the revision of the materiality matrix based on a broad and diverse group of stakeholders in two moments: for employees and suppliers, in an online survey; other stakeholders and suppliers, in an interview. The consultation was approved by the Sustainability Committee, which requested the inclusion of the Diversity and Inclusion content in the material topics. **GRI 2-14**

# 6 Policies

GRI 2-23

# Governance

GRI 2-9

Our governance is guided by the guidelines of the Code of Best Corporate Governance Practices of the Brazilian Institute of Corporate Governance (IBGC) and governed by different internal instruments (bylaws, codes, policies and regulations).

At Norte Energia, the governance structure is formed by the General Shareholders' Meeting, the Company's highest body, and by the Board of Directors, Fiscal Council and Board of Executive Officers, in addition to Advisory Committees. GRI 2-9

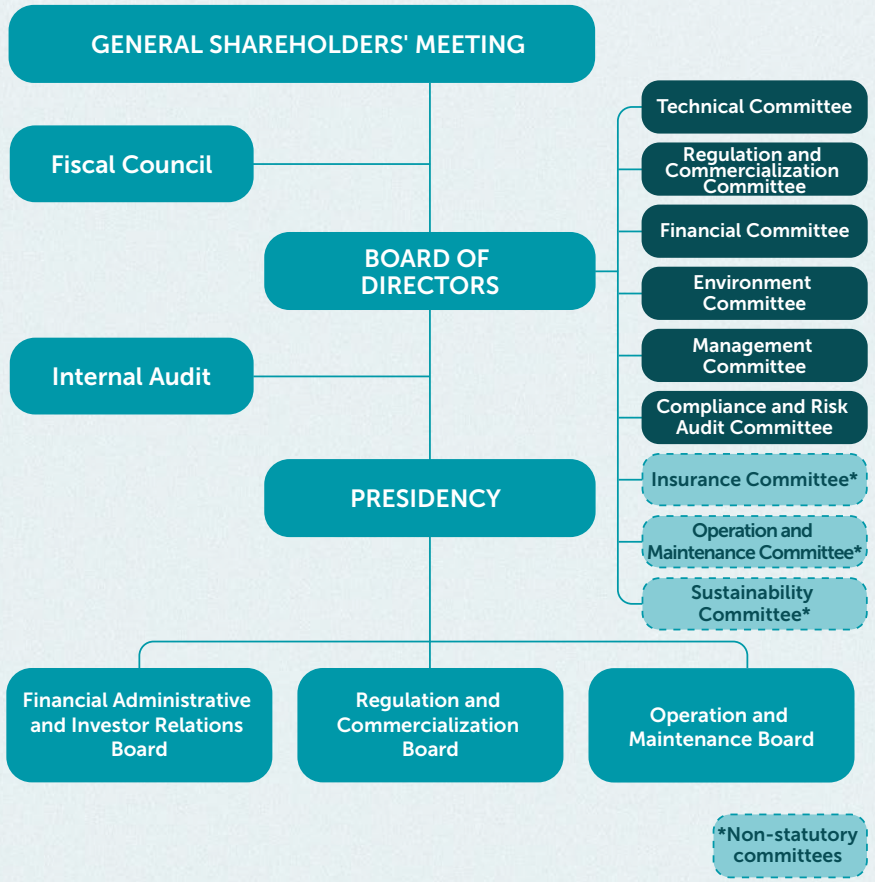
The General Meeting elects, among the elected board members, those who will exercise the functions of chairman and vice-chairman of the Board of Directors. The CEO cannot be elected to the position of chairman of the Board of Directors, even if he is also a member of the Board. GRI 2-11

## Administrative Council

The Board of Directors is a collegiate decision-making body composed of 12 full members and their respective alternates, with a two-year term of office, all of whom are elected and dismissible at any time by the General Meeting. Re-election is allowed. The Board of Directors has two independent directors.

It is incumbent upon the Board of Directors, in addition to other attributions entrusted to it by law or by its Bylaws: obeying the Business Plan; elect and remove the Board of Executive Officers, complying with the provisions contained in the Shareholders' Agreement, determining the areas of activity of each Officer; supervise the management of directors, examine, at any time, the Company's books and papers, request information on contracts entered into or about to be entered into, and any

## Composition of governance at Norte Energia



other acts; express an opinion on the management report and the board's accounts; choose and dismiss the independent auditors, following the rules of the Securities Commission – CVM. It is also responsible for approving policies and guidelines for the Company's management, including analyses related to positive and negative impacts caused or suffered by Norte Energia S/A. Article 20 – The Board of Directors will ordinarily meet once a month and extraordinarily whenever called by its Chairman or by 2/3 (two thirds) of its members. Regarding the report of the impacts to the Board of Directors by those responsible, it always occurs in the monthly meetings, previously passed by their respective committees and scheduled in advance.

**GRI 2-13**

Among the responsibilities of the Board of Directors, we highlight the definition of general strategic guidelines for the long-term business and the choice of the Executive Board, as well as the supervision of its performance.

As provided for in Art. 20, the Board of Directors ordinarily meets once a month and extraordinarily when called by the Chairman or by 2/3 of its members. The meetings will be convened by means of a written communication, with acknowledgment of receipt, informing the time, date and place of the meeting, as well as a brief description of the matters on the agenda, sent to each Director at least three (3) business days before the meeting date. The day of communication and the day of the meeting are excluded from the prior notice period.

**GRI 2-12, GRI 2-29**

## Advisory committees

**GRI 2-9**

Norte Energia's Board of Directors relied, in 2022, on the advice of nine committees of an advisory and informative nature, six of which were statutory and three were bylaws.

See below the duties of each committee:

- **Financial Committee** – Assesses studies, analyses and proposals related to financial operations, relevant financial issues and selection processes for financial service providers.

- **Technical Committee** – Analyzes selection processes for engineering, supply and construction suppliers, as well as other matters involving technical aspects.

- **Environment Committee** – Analyzes processes to select suppliers of environmental services and progress reports on compliance with environmental conditions.

- **Management Committee** – Analyzes processes to select suppliers of administrative services, reports on health and safety indicators, and compensation and benefit policies.

- **Audit, Compliance and Risk Committee** – Analyzes and monitors the Company's annual internal audit plan, risk management and internal controls, external audit reports and the Financial Statements and their respective opinions.

- **Regulation and Commercialization Committee** – Responsible for monitoring the Company's energy commercialization policies, as well as studies, opinions and technical notes on the regulation of the electricity sector and the current commercialization rules.

- **Sustainability Committee** – Aims at advising the Board of Directors in the fulfillment of its attributions regarding the sustainability of the Company's businesses, and in the development and implementation of the ESG (Environmental, Social and Governance) Strategy, which includes the guidelines and corporate acts in the management of environmental, social and governance issues.

- **Operation and Maintenance Committee** – is responsible for monitoring and advising the Board of Directors in relation to the operation and maintenance of the Belo Monte HPP Complex. It was created after the completion of the Belo Monte HPP, with the entry into operation of GU 18 on November 19, 2019.

- **Insurance Committee** – Aims at supporting and advising the Company on taking out insurance and, unlike other non-statutory committees, meets when necessary.

Norte Energia's Board of Directors also has the support of three other regimental committees: Insurance Committee, Operation and Maintenance Committee and the Sustainability Committee.

Regarding the composition of the Board of Directors, of the 12 full members, three are women (25%). No full member was younger than 30 years old, 16.67% were between 30 and 50 years old and 83.33% were over 50 years old.
**GRI 2-9, GRI 405-1**

The Company still does not have a formal policy to assess the performance of the Board of Directors and committees, in compliance with the rules governing the Board's activities contained in Law No. 6,404/1976 and other applicable regulations.
**GRI 2-18**

## Fiscal Council

Acting on a permanent basis, Norte Energia's Fiscal Council is the supervisory body of management actions. It comprises five members and their respective alternates, elected annually at the General Meeting. The mandate of the members of the fiscal council ends on the date of the first Ordinary General Meeting of the fiscal year following their election. They can be reelected.

## Executive Board GRI 202-2

At the Company, the positions of the Executive Board are those occupied by members who are elected and dismissible by the Board of Directors, with a term or mandate of three years. Reelection is allowed. The choice regarding the election, takes place after a recruitment and market selection process, followed by an integrity assessment by the Compliance area. The current Board positions in 2022 were: Chief Executive Officer (to whom the Sustainability Superintendence and the Social and Environmental Superintendence report directly); Operation and Maintenance Board; Administrative, Financial and Investor Relations Board; and Board of Regulation and Commercialization, which have powers of internal management and representation of the Company. Of the four Directors, one is hired locally (representing 25% of the Board)*.

## Nomination and selection for the highest governance body and its committees

**GRI 2-10**

Only people who meet the legal and regulatory requirements, as well as the following conditions, can be elected to the Board of Directors:

- Have completed higher education;

- Have unblemished reputation;

- Have at least ten years of experience in the management of public or private companies.

* A member of the local Board of Directors is someone who worked in the State where he/she was born when he joined the Company. In this case, the Director of Operations and Maintenance was born in Pará and works in the Belo Monte HPP region, which is located in the same State.

Regarding the advisory committees, the members have two-year terms and must have experience and technical capacity related to the key issues of the committees in which they participate, to support the Board in the definition of strategic and operational guidelines. The Board of Directors is responsible for deliberating on the creation, composition and operating guidelines of the advisory committees.

See the composition of Norte Energia's Statutory Board, Board of Directors and Fiscal Council at this **link**.

## Top leadership compensation policy

**GRI 2-19, GRI 2-20**

The global compensation of the members of the Board of Directors, the Fiscal Council and the Statutory Board is determined annually by the Annual General Meeting, in accordance with our Compensation Policy for senior management.

The members of the Board of Directors do not have an employment relationship and do not receive any variable compensation or participate in the Stock Option Plan. Therefore, their remuneration refers to fixed monthly fees.

The members of the Fiscal Council do not have an employment relationship with Norte Energia, but receive fixed remuneration, which cannot be less than 10% of the average remuneration paid to each executive director.

The remuneration of the Statutory Board is divided into fixed monthly remuneration, in line with market standards for positions of similar complexity; variable compensation linked to the target plan approved by the Board of Directors, paid in the fiscal year following the assessment of the result; and benefits package.

The main indicators evaluated for directors' participation in the Company's profits and results include Ebitda, reduction in capital contributions by shareholders, sustainability targets, among others.

It is important to highlight that the remuneration practices adopted by Norte Energia also follow the criteria and recommendations of the Brazilian Institute of Corporate Governance (IBGC) and the Brazilian Code of Corporate Governance.

## How we handle conflicts of interest

**GRI 2-15**

Committed to identifying and managing conflicts of interest and situations that may influence the conduct of business, the Company follows the Conflict of Interests Policy, whose guidelines guide the conduct of employees and third parties in relation to situations that may result in conflict of interests. It applies to all Norte Energia employees, managers and representatives in any relationship with third parties, both in the public and private segments. Access our **Policy.**

## Communication of critical concerns

**GRI 2-16**

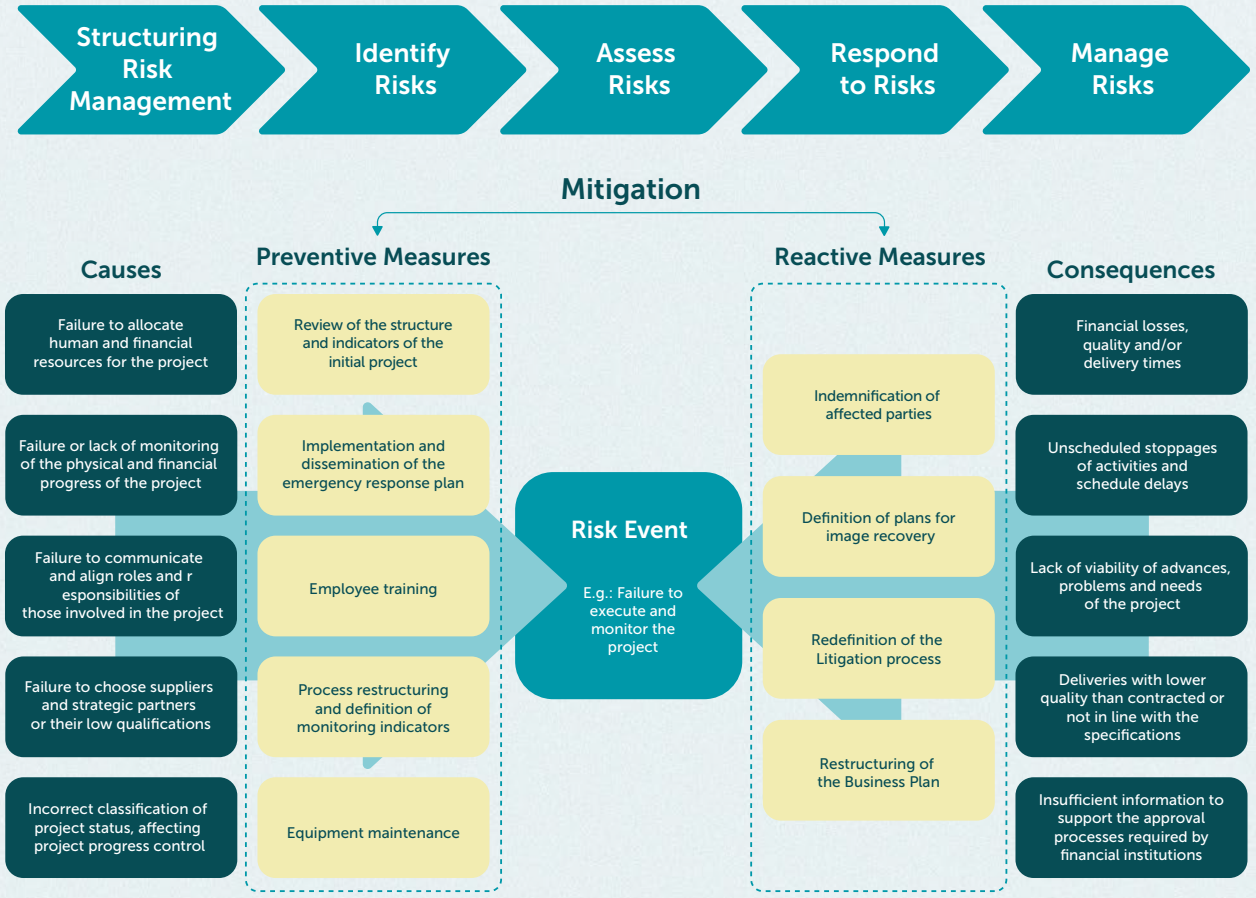
Critical concerns are communicated monthly at meetings of the Company's Board of Directors. In 2022, concerns related to hydrological risk were reported on a recurring basis, in particular, concerns related to the hydrograph and flows in Volta Grande do Xingu. In addition to these, communications were also made regarding the progress of the socio-environmental constraints of the enterprise, which make up the process of renewing the Operating License of the Belo Monte HPP.

Relevant concerns are identified through the Communication Plan that is part of the Emergency Plan for the Belo Monte Complex, identified by the respective channels and forwarded to the areas or professionals responsible for taking appropriate measures. There were no reports during the period.

# Risk **management**

Our Risk Management Policy defines the principles, guidelines and structure for risk management, establishing the responsibilities of the areas and the processes to identify, assess, respond to, treat and monitor corporate risks. Thus, it is possible to prevent their impacts on Norte Energia's business strategies.

The risk management structure is incorporated into the Company's strategic decision-making process, practices and organizational processes. The internal risk assessment is carried out periodically (annually) or whenever there is a significant change in the organizational structure or business environment.



It is also important to mention that this policy is in line with the recommendations of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) ERM Framework Update and the ISO 31000 Standard.

The main risks to which the Company considers itself exposed and which it seeks to manage, mitigate and protect involve:

- **Business Risk:** iuncertainty of variables intrinsic to the business, such as hydrological risk and energy commercialization conditions in the Free Contracting Environment (ACL); **IF-EU-140a.3**
- **Financing Risk:** uncertainty that the financial resources contracted are not enough to finance the operation of the enterprise;
- **Regulatory, Legal and Political Risks:** obligations related to environmental licensing; regulatory, tax, labor and environmental inspection; any regulatory changes by regulatory bodies; and the risks of political changes that may affect legal certainty and the legal framework applicable to the business;
- **Operational Risks:** possibility of losses resulting from inadequate internal processes, technological failures, human or system errors, which include environmental, social or fraud-related risks;
- **Reputational Risks:** potential negative impact on the Company's value resulting from conducting activities below the expectations created by stakeholders.

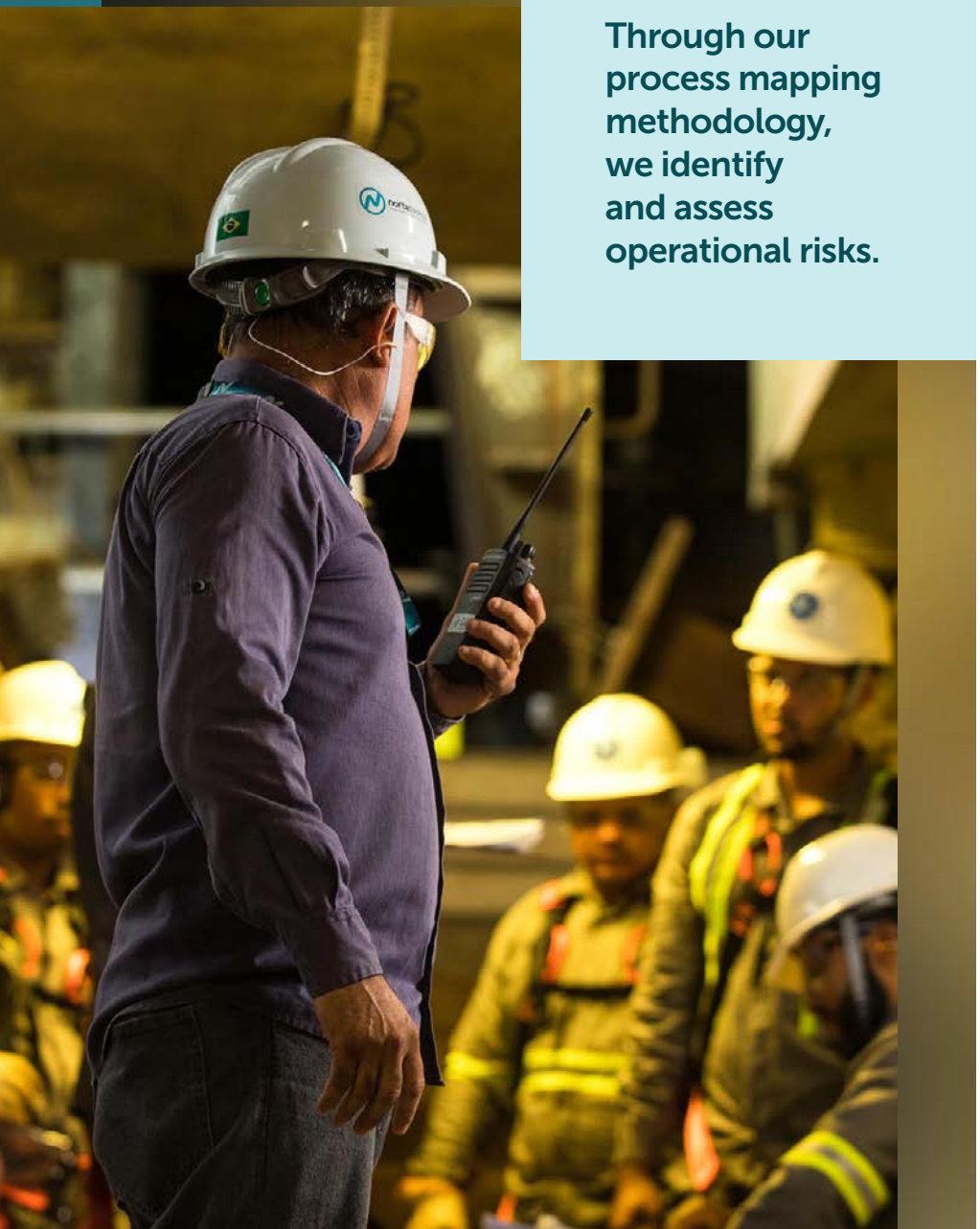
## How we protect ourselves from risk

The risk management and mitigation model originates from the identification of risks by the management areas of each process, considering the external contexts: financial, economic, regulatory, environmental, climate, relations with stakeholders, among others. Added to these risks, there is also the identification of risks linked to internal contexts: governance model, organizational structure, strategic objectives, capital structure, access to credit, among others. Both are analyzed based on studies of corporate materials, interviews with managers and external sources of information.

Once the risks are identified, they are classified according to the category, the risk factors involved, the relevance, the magnitude of impact and the probability of occurrence. The risks and their classification make up our Corporate Risk Matrix.

Our risk management model establishes that the direct managers of each area, as a priority, are responsible for developing strategies to treat and execute controls that can protect Norte Energia from the risks to which it is exposed. The action plan to mitigate these risks is developed with the support of the Risk Management area and is evaluated by the Executive Board based on the Board of Directors' guidelines.

Norte Energia employees and third parties



**Through our process mapping methodology, we identify and assess operational risks.**

## How we control risks

The Risks, Internal Controls and Compliance Superintendence assists in defining and implementing controls and mitigation plans in response to risks in accordance with best market practices, as well as monitoring these response activities and periodically analyzing the effectiveness of the measures adopted.

The Internal Audit Superintendence acts in the independent assessment of internal controls and reports to the Board of Directors. Its performance is essential to strengthen the efficiency of our control environment, as well as the reliability and integrity of information.

Through our process mapping methodology, we identify and assess operational risks, define and apply internal control methodologies and establish standards to be followed according to the need for risk management and control. Our objective is the continuous improvement of our internal control environment, which guarantees management more accurate information for decision-making.

# Integrity and **compliance**

**GRI 2-27, GRI 3-3**

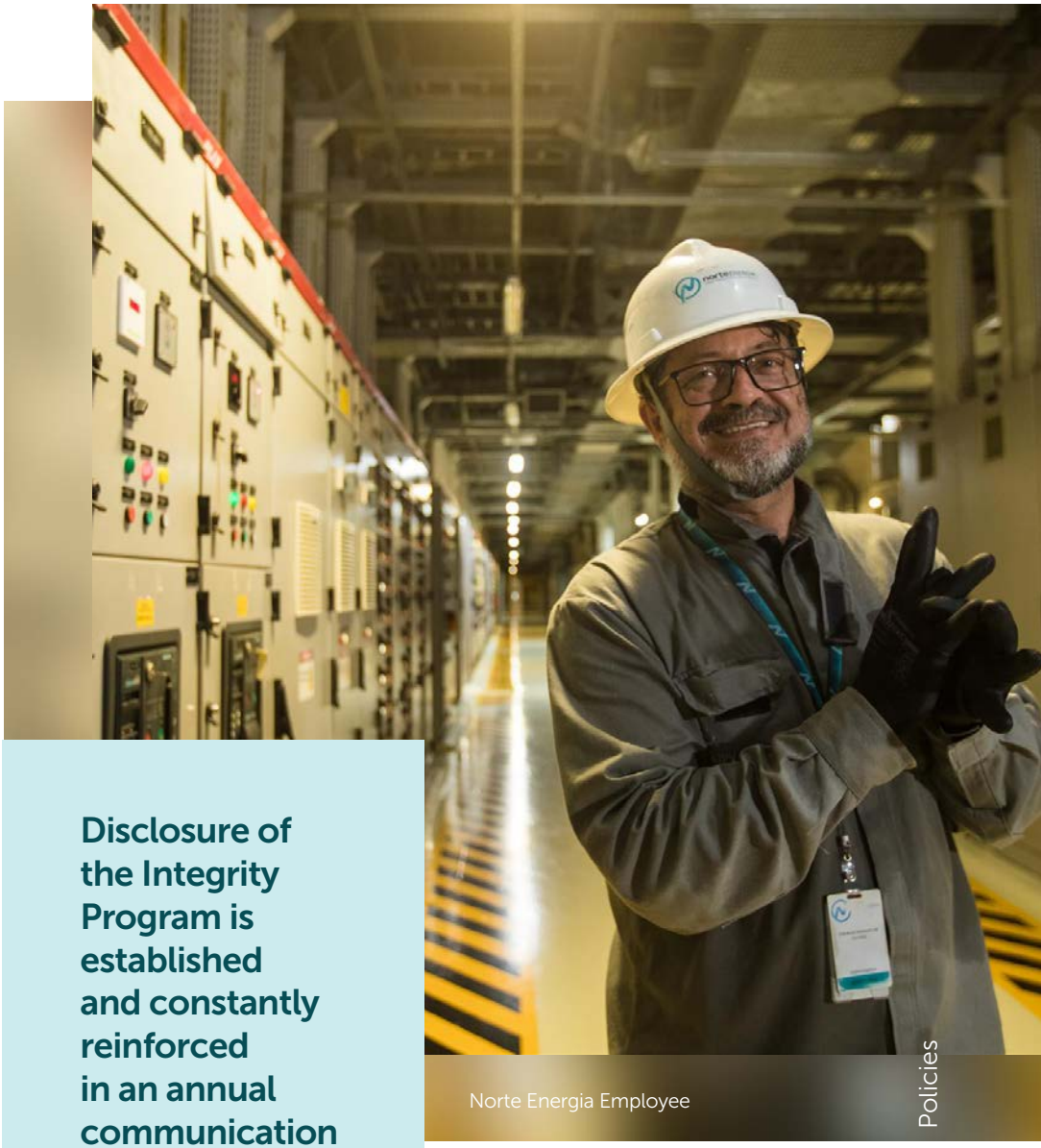
We are committed to maintaining the conduct of our business. Thus, the Integrity Program aims to prevent, detect and remedy situations of fraud and corruption through a set of integrity mechanisms and procedures, such as:

- Internal Audit;
- Ethics and Corporate Integrity Committee;
- Confidential and outsourced Reporting Channel;
- Encouraging the reporting of irregularities and protection for whistleblowers;
- Effective application of the Code of Conduct and Ethics;
- Fraud Risk Matrix.

This Program was conceived based on the anti-corruption legislation and the guidelines of the Comptroller General of the Union (CGU), and is mainly composed of the Integrity Program Manual, Code of Conduct and Ethics, Conflict of Interests Policy, Consequences Policy and by the Normative Instructions for Determination of Responsibility, Due Diligence, Gifts and Presents; and Sponsorships, Donations and Agreements.

The Risks, Internal Controls and Compliance area is responsible for updating, applying and disclosing

**Disclosure of the Integrity Program is established and constantly reinforced in an annual communication plan based on continuous training.**



Norte Energia Employee

the Company's Integrity Program, as well as disseminating the culture of ethical behavior in the corporate environment.

Employees and third parties must respect and follow the Integrity Program. Thus, the dissemination of the Program is established and constantly reinforced in an annual communication plan based on continuous training, internal awareness campaigns and the commitment of senior management to prioritize the subject in the conduct of daily activities.

As provided for in the annual communication plan, in the second half of 2022, the Compliance area promoted reinforcement actions with third-party employees on the principles of the Norte Energia Integrity Program, highlighting the main values and the proper use of the Reporting Channel.
**GRI 2-24, GRI 205-2**

As part of our Integrity Program, the Code of Conduct and Ethics establishes conduct, guidelines and ethical principles to govern the actions of all employees, interns, minor apprentices, shareholders, customers, suppliers of goods and services and representatives of the Company. **GRI 205-2**

The Code is mandatory and without exception applied to everyone, regardless of their hierarchical level or location. Employees and third parties hired by Norte Energia become aware of and formally adhere to the Code of Conduct and Ethics by signing the document.
**GRI 2-23**

Norte Energia does not accept any type of discrimination or prejudice, whether based on race, ethnicity, color, sex, ideology, nationality, religious belief, sexual orientation, disease transmitted through social contact or any other personal, physical or social condition or other situations protected by Brazilian law, the UN and the Organization for Economic Cooperation and Development (OECD).

In relation to the General Data Protection Law (LGPD), we structured the External and Internal Data Privacy Policies, which establish the guidelines for action and guarantee the protection of personal data.
**GRI 418-1, IF-EU-420a.2**

**Documents related to corporate integrity can be accessed here.**

## Donations, agreements and sponsorships

The guidelines to approve actions related to sponsorships, donations and agreements are provided for in a specific corporate rule and are evaluated by a committee.

According to such regulations, political parties or candidates cannot receive donations, agreements or sponsorships.
**GRI 415-1**

## Ethical conduct and internal policies: monitoring

**GRI 2-26**

All of Norte Energia's internal policies require the approval of the Board of Directors.

The systematic supervision of compliance with the policies and rules established by the Company is carried out by the Ethics and Corporate Integrity Commission, by the Risks, Internal Controls, and Compliance Superintendence and by the Internal Audit Superintendence.


Norte Energia Employees

**In the first half of 2022, "knowledge pills" were published on the theme *Demystifying Compliance*.**

The other areas complement this follow-up in the execution of controls.

The Code of Conduct and Ethics is managed by the Ethics and Corporate Integrity Commission, which is also responsible for guiding and advising leaders, employees and third parties with regard to ethical issues related to people, assets and the image of Norte Energia, as well as recommending deliberations on conduct that is questionable from an ethical point of view. The Commission coordinator is the Risks, Internal Controls and Compliance superintendent.

The Risks, Internal Controls and Compliance Superintendence has the objective of advising the Company in detecting possible violations of laws and/or internal policies, in disclosing and verifying compliance with the Code of Conduct and Ethics, the Conflict of Interests Policy and of the Integrity Handbook.

The Internal Audit is responsible for verifying compliance with the Company's policies and rules and for generating reports with the results of the analyses carried out. The results are reported monthly to the Audit, Risks and Compliance Committee and to the Collegiate Board; and quarterly to the Board of Directors and Fiscal Council.

## Dissemination of ethical precepts

In the first half of 2022, "knowledge pills" were published on the theme *Demystifying Compliance*, aiming at providing employees with greater clarity on how the issue is handled by the Company.

In the second half, we promoted a communication action with webseries on sexual harassment, work analogous to slavery and corruption, and illegal activities. They are short videos that reinforce the main concepts of each theme in an objective and didactic way. **GRI 205-2**

## Our reporting channel

**GRI 2-26**

Norte Energia provides internal and external audiences with a reporting channel managed by a third-party company, which manages the initial negotiations of the investigation process. This channel can be accessed by employees, suppliers, service providers, customers, the local population and any other person who wants to report any possible illegality related to Norte Energia, guaranteeing the anonymity of the whistleblower, unless otherwise required by law.

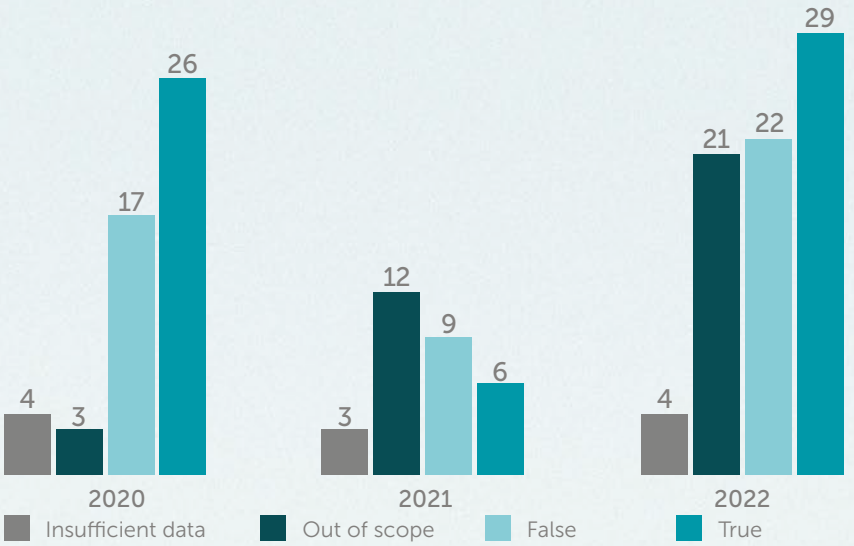
Complaints can be investigated both by the Risks, Internal Controls and Compliance area and by the Internal Audit Superintendence. They can also be analyzed by a specialized company, always at the request of the Ethics and Corporate Integrity Commission, which conducts the processes related to complaints received, analyzes the evaluation and provides a response to the whistleblower. If necessary, they adopt measures based on the conclusions of the investigations which, in specific cases, can also be carried out by third parties.

## Reporting channel

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| Complaints in the investigation of the previous year | 14 | 7 | 12 |
| Complaints received | 43 | 35 | 69 |
| Complaints closed | 50 | 30 | 76 |
| Complaints under investigation at the end of the year | 7 | 12 | 5 |

## Complaints closed

What are the closing categories



If the result of any investigation could materially impact Norte Energia's Financial Statements, senior management is immediately notified so that it can take the necessary actions and remedy the situation.

In 2022, 69 complaints were received, of which 64 were completed, and the remaining five are under investigation phase. During the year, no complaints were received that entailed commitments to promote or collaborate with the repair of negative impacts that the Company has caused or contributed to cause. **GRI 2-25**

Complaints being investigated for more than 120 days must be explained before the Ethics and Corporate Integrity Commission.

We reinforce that, in addition to the Reporting Channel, the other communication channels made available and already detailed in the Communication with Stakeholders subchapter also allow the presentation of complaints or communication of worrying information to the Company.


Norte Energia Reporting Channel website

## How to access the Reporting Channel

**GRI 2-26**

By phone 0800 941 9667,
Monday to Friday,
from 9am to 5pm

Via website
**https://canalconfidencial.com.br/norteenergia**

# 7 People: Our People, Our Direction

GRI 2-7, GRI 401-1, GRI 405-1, GRI 413-1

# Our **people**

GRI 3-3

In 2022, we revisited the Human Resources guidelines within Norte Energia and consolidated projects started in previous years, especially in 2021. The care for the health and well-being of our employees, already strengthened by the actions taken due to the pandemic context, was expanded and has been consolidating ever since.

The Company believes that the future of labor relations lies with people. That is why, in 2022, we launched the manifesto (Our People, Our Direction), supported by six pillars: Inspiring, Evolving, Valuing, Supporting, Celebrating & Caring, which translate what people represent to Norte Energia.

The program is based on the GNH (Gross National Happiness), a UN indicator that calculates the well-being of people in general, and on

## 6 pillars drive us into the future

**inspire**
Because we know the power of **connections.**

**value**
Because we are aware of our **potential.**

**evolving**
It only makes sense to us when it makes sense to **you.**

**supporting**
People, initiatives and ideas that make us **stronger.**

**celebrating**
Because our evolution is **exponential.**

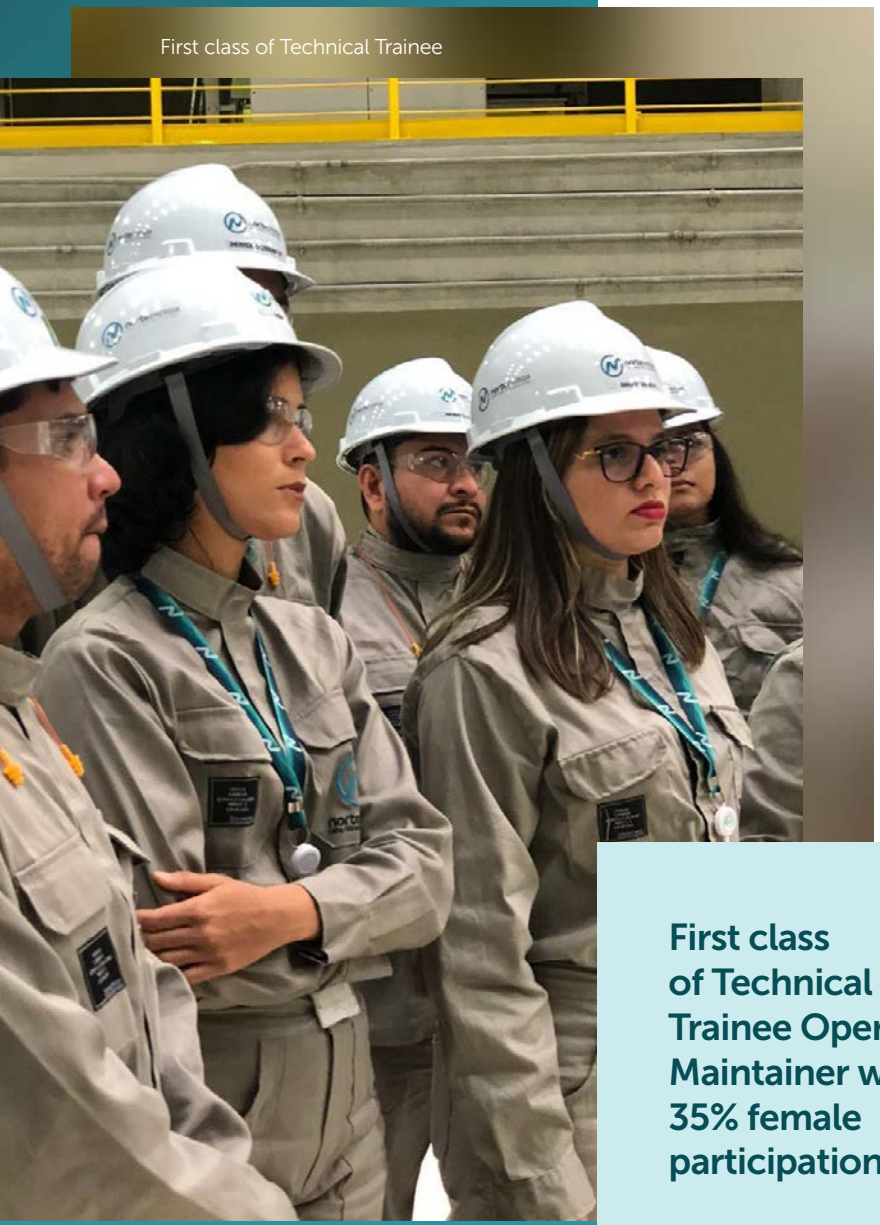
**caring**
Because the safety of our people always comes **first.**

Positive Psychology, which defends the development of virtues to promote the health and well-being of individuals and corporations.

As the method chosen to measure and monitor the effectiveness of actions implemented and carried out, the Wellbeing Survey, which served as a benchmark for actions against Covid-19 until the year 2021, was remodeled to collect data regarding the seven GNH indicators, adapted to the labor market. Data collection took place between August and December, in pulse[3] format, with one indicator at a time, with a maximum of four questions and in the Net Promoter Score (NPS) format. The total number of respondents was greater than 60% of the target audience. **GRI 3-3**

The activities or actions that comprise each pillar are shown in the following figure:


[3] According to the GPTW, this survey format refers to quick and frequent measurements (weekly or daily) related to a specific issue in the Company's environment.



First class of Technical Trainee

**First class of Technical Trainee Operator Maintainer with 35% female participation.**

## Belo Monte Oportunidades

Created in 2022, the Belo Monte Oportunidades program offers professional training courses for residents in the Belo Monte Complex region, in partnership with an accredited educational institution. **GRI 413-1**

The program is part of the Evolving pillar and the Technical Trainee Operator Maintainer project is the first training offered by the Belo Monte Oportunidades program, arising from the need to prepare Norte Energia for the transition from activities to full operation. The training is called "technical" because it was not aimed at university graduates (search for next generation leaders), but at the professional technical level (employment, for people with high school and technical training).

In addition to providing formal employment opportunities for the population in the region of the Belo Monte Hydroelectric Complex where we operate, the program contributes to women's access to the technical area of the electricity sector, boosts the socioeconomic development of the region and favors improvements in the quality of life of the local population.

In total, there were 285 applicants for 26 vacancies. Based on the demand and quality of candidates, we were able to expand the number to 27 vacancies. Norte Energia sought to increase the participation of women in the project, which generated a positive result: nine women were selected, which corresponds to around 35% of the vacancies, in a sector and a role historically and mostly male.

The learning path for this project was divided into theory – 500 hours of training at SENAI – and practical – 400 hours at the plant. The two moments count on evaluations and systematic follow-up of the trainees.

It should be noted that the trainee is hired by Norte Energia when starting training, which lasts approximately six months. The employment contract with us is compliant with the CLT (consolidated labor laws), with salary, benefits and career path already defined.

In 2022, the Technician Operator/ Maintainer Trainees group reached the end of the theoretical part and the results monitored so far have been quite satisfactory and of great positive impact for the Company.

## Internship Program

The Internship Program at Norte Energia had its methodology reformulated in 2022, now having a learning path divided into five steps: Arrive, Know, Develop, Do and Achieve. This program aims at contributing to the training of the new generation of professionals, by offering training, challenges and opportunities that promote the development of interns, enabling them to work at Norte Energia or in the job market in general in the future.

Norte Energia Employee

**Training offer, challenges and opportunities that promote the intern's development.**

# Profile of **our people**

GRI 2-7, GRI 2-8

369
Employees

**258**
**Male**

**111**
**Female**

1,850
Third Parties

**1,553**
**Male**

**297**
**Female**

6
Interns

10
Persons with disabilities

109
Hired in the year

**Workplace**

Altamira:
258

Brasília:
111

Norte Energia Employees


Total number of workers who are not employees and whose work is controlled by the organization:

- Total third parties: 1,850
- Male: 1,553 – 84%
- Female: 297 – 16%
- Types of workers: consultants, apprentices, interns, outsourced workers, freelancers and volunteers.
- Type of work they perform: administrative, operational (maintenance and operation) within the operations of the plants, relationship with the community, institutional relationship, general services (cleaning in general).

**GRI 2-8**

In December 2022, Norte Energia's own staff numbered 369 people, distributed as follows: 258 in Altamira and 111 in Brasília. Of this total, 115 were allocated to the Operation and Maintenance sector; 22, in the Board of Regulation and Commercialization; 129, in the Presidency Board; and 103, in the Administrative, Financial and Investor Relations Department, representing a planned growth of approximately 21.4% in relation to the previous year.

**GRI 2-7**


Norte Energia Employees

## Diversity and inclusion

**GRI 405-1, GRI 405-2**

We believe in diversity and inclusion as essential values in building an equitable and productive work environment. For this reason, we plan to expand initiatives to ensure diversity in our workforce.

When we assess gender equality, we notice an evolution in relation to previous years, with an increase in the representation of the female workforce from 27.6% in 2021 to 30% in 2022. This scenario is reinforced by the lower number of women leaving, with a 52% reduction when compared to the previous year.

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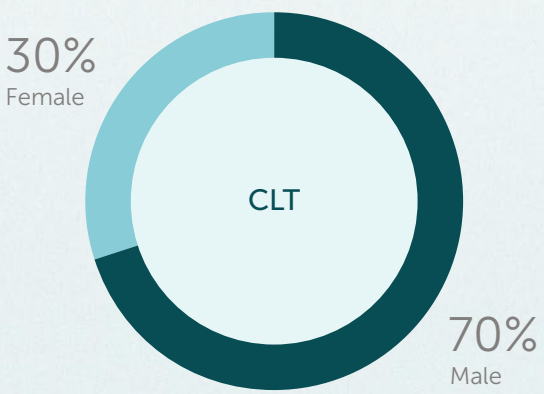
## Total number of employees by gender and by region

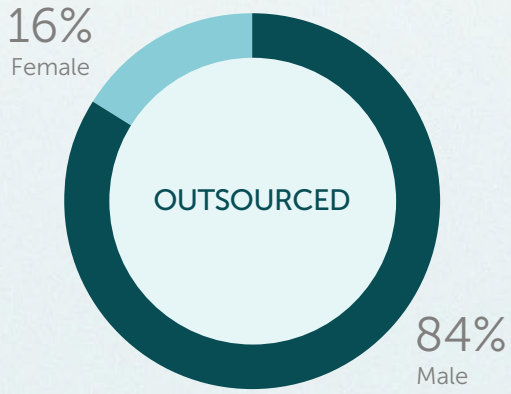
**GRI 2-7**

| | 2020 | | | 2021 | | | 2022 | | |
|---|---|---|---|---|---|---|---|---|---|
| **Regions** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Altamira | 164 | 60 | 224 | 147 | 53 | 200 | 183 | 75 | 258 |
| Brasília | 62 | 41 | 103 | 73 | 31 | 104 | 75 | 36 | 111 |
| **Total** | **226** | **101** | **327** | **220** | **84** | **304*** | **258** | **111** | **369** |

Note: all employees are full-time and permanent.
* In order to adjust the methodology for the year 2022 and thus also include the category of Interns, we adjusted the total number of employees disclosed in 2021 here.

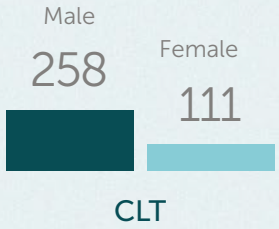
## Employees x gender

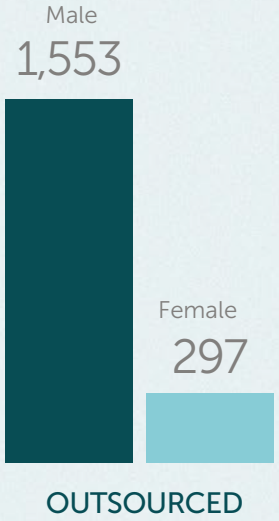



## Number of employees by gender

**GRI 2-8, 405-1**




Note.: all employees are full-time and permanent.

## Compensation and benefits for our employees

We are committed to establishing compensation practices that encourage productivity in all areas and the satisfaction of being part of Norte Energia The remuneration package includes competitive salaries, similar to those practiced in the market, and annual adjustments based on the cost of living. Variable remuneration is also possible, based on the fulfillment of the Company's annual plan goals. Currently, the following benefits are offered: health and dental plan; life insurance; meal vouchers and food vouchers; and internet for employees who live in the municipality of Altamira (PA).

**GRI 201-3**

As for the retirement policy for direct employees, the Company does not have a private retirement plan. Pursuant to Brazilian labor legislation, Norte Energia pays INSS, PIS/Pasep and FGTS (Brazilian employment taxes) on a regular basis.

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| **INSS payment** | 23,583,648 | 18,039,868 | 22,221,982 |

**GRI 201-3**

# Professional **training**

**GRI 404-1, EU14**

We believe that investing in employees adds value to the business and society. Therefore, we are dedicated to providing development and training opportunities to our professionals.

In 2022, on the subject of human rights, three types of training were offered: two on indigenous peoples and one on companies and human rights. In training on indigenous peoples, sustainability and human rights, 83 employees participated (22% of the company's total). In the training on Business and Human Rights: a journey for everyone, 173 employees participated (46% of the company's total).

The training courses "Indigenous peoples: knowing and respecting" and "Sustainability, indigenous peoples and human rights" were conceived and taught by anthropologists who collaborate with the company and aimed to present basic anthropological concepts, ethno-historical information regarding the peoples in the area covered by the Belo Monte HPP and the importance of indigenous peoples in protecting the planet's biodiversity.

The training "Companies and human rights – a journey for all", given by an external consultancy specialized in the subject, was held in December 2022.

In addition to training for employees, since 2014, due to a licensing commitment, we have also been continuously conducting training for employees and third parties. These trainings make up the Non-Indigenous Communication Program (PCNI) at Belo Monte HPP. These trainings are aimed at all employees and third parties who will enter indigenous lands. Its objective is to present general information about the indigenous legislation and basic recommendations for the work of professionals in these territories.

In 2022, adding up the hours of all training and qualifications carried out by the various areas, we totaled 12,063 hours of training, involving 325 professionals. The average hours of employee training increased compared to 2021: 12.2 to 32.69, an increase of 168%, demonstrating the Company's effort in valuing the development of its employees.

**"The training provided me with knowledge of a subject completely different from that taught at school, via literature and common sense. The importance of understanding the issue of identity and belonging broadened my worldview in this perspective and in the treatment and understanding of indigenous peoples."**

**Clara Monteiro,**
**Socio-Environmental Legal manager**


Post in PID about Indigenous Peoples Training agenda

**Training on Sustainability, Indigenous Peoples and Human Rights carried out for different areas of the company, including senior leadership.**

**"The training added a lot of value to our training. There was an exchange of ideas and information about communities and peoples whose culture we did not know, even though they are from the region. It brought us a perception of sensitivity and concepts of identity. It was essential for our professional and personal development."**

**Bruna Silva,**
**intern at the Maintenance Superintendence**

Still aiming at properly directing our investments in human and financial resources, we have structured the Training and Development Program (T&D) into the following categories: Mandatory Training/Procedures/ Technicians, Integration and Development.

- **Mandatory Training/ Procedures/Technician** – Its target audience is employees in the areas of Operation, Maintenance and Occupational Health and Safety. In 2022, 14 actions were carried out in this category, totaling 1,427h45min of participation by this audience. In addition, the 27 trainees in December underwent training in two Regulatory Standards, totaling over 2,160 hours.
- **Development** – Its target audience is employees from the Operation, Maintenance and Occupational Health and Safety areas: In 2022, 26 actions were carried out in this category, totaling 1,430h30min of participation by this audience. In addition, the 27 trainees went through part of the theoretical learning trail, between November

and December, totaling over 5,832 hours.

- **Integration** – Its target audience is employees from the Operation, Maintenance and Occupational Health and Safety areas. In 2022, 28 actions were carried out in this category, totaling 324 hours of participation by this audience.

We also carry out mandatory training in accordance with current legislation and training and development actions based on job descriptions, organizational skills and individual development plans.

**GRI 404-2**

In 2022, 96% of men and 92% of women underwent performance appraisal and career development.

| CATEGORY | ACTION NAME | TARGET AUDIENCE |
|---|---|---|
| MANDATORY TRAINING/ PROCEDURES OR TECHNICIANS | Reliability analysis: Basic knowledge | Engineers, operation and maintenance specialists and managers |
| | Reliability Analysis – module I: Life data analysis | |
| | Reliability Analysis – module II: Systems reliability | |
| | Training in machine lubrication and oil analysis | Maintenance technician, specialist and managers |
| | Meteorology and hydrology training applied in the electricity sector | Analyst, specialist, manager and superintendent of Commercialization and Portfolio and Pricing |
| | Ergonomics in operational activities | Diversified |
| | Volunteer Brigade Training – Theoretical and Practical | Diversified |
| DEVELOPMENT | Learning path – Trainees (modules: Basic notions of systems and tools/ Communication/Organizational sensitivity/Innovation/Analytical sense) | Interns |
| | Guarantee insurance | Analysts and specialists from different areas |
| | International Security Fair – Exposec | Corporate Security Technicians |
| | Workshop The Risk Factor | Managers and superintendents |
| | DNA – Development of safety skills for leadership | Managers and superintendents |
| INTEGRATION | New Employee Integration Program | All newly hired employees |

## Training with employees and third parties on indigenous peoples within the scope of licensing

**GRI 410-1**

| Year | Number of trainings | Professionals trained |
|---|---|---|
| **2020*** | 60 | 256 |
| **2021*** | 29 | 283 |
| **2022** | 49 | 325 |

* Lower numbers in 2020 and 2021 were due to the Covid-19 pandemic and restrictions on access to indigenous lands determined by Funai in the period.

## Employees who have received regular performance and development appraisals

**GRI 404-3**

| Appraisal by gender | Male | Female | Total |
|---|---|---|---|
| % Assessed | 94.3% | 94.0% | 94.2% |

| Category | Total |
|---|---|
| Leadership | 40.0% |
| Intermediate managers and qualified technicians | 98.0% |
| Professionals and support team | 94.9% |
| **% Assessed** | **94.18%** |

The Structured Performance Management was carried out from 2022, when the 1st Evaluation Cycle took place, because until entry into full operation phase, most of the existing positions were transitory and the most effective way of evaluating performance was by monitoring the construction and deployment schedules.

## Average hours of employee training by gender and functional category

**GRI 404-1**

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| **Gender** | | **Hours in training** | |
| Male | 11.88 | 14.71 | 32.09 |
| Female | 0.12 | 5.63 | 34.09 |
| **Average hours trained** | **3.72** | **12.20** | **32.69** |

| ESG category | | Hours in training | |
|---|---|---|---|
| Leadership | 0.42 | 18.50 | 14.78 |
| Intermediate managers and qualified technicians | 5.46 | 12.46 | 46.87 |
| Professionals and support team | 1.59 | 9.92 | 7.97 |
| **Average hours trained** | **3.72** | **12.20** | **32.69** |

Note: When applying the 2022 methodology for the recalculations of the 2020 and 2021 scenarios, we have 3.72 and 12.20 hours/employee, respectively.

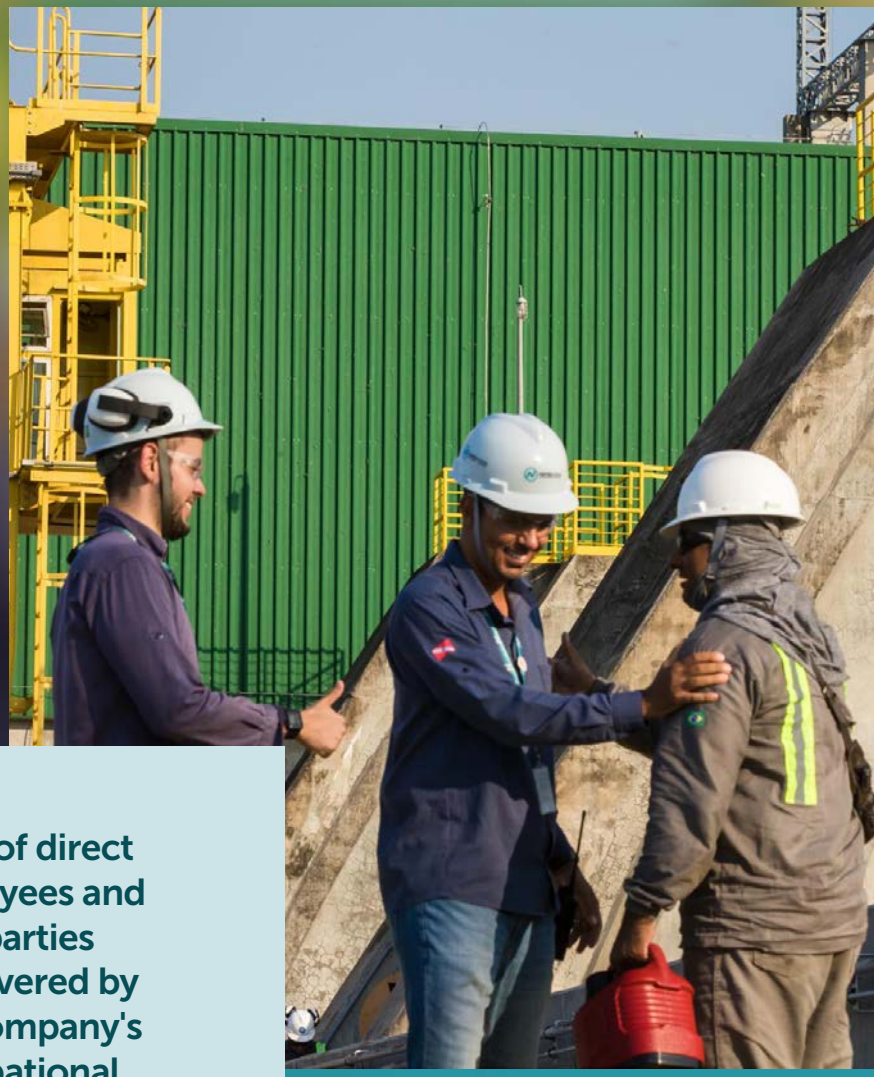
# Health and **safety**

**GRI 3-3, GRI 403-1, GRI 403-2, GRI 403-3, GRI 403-4, GRI 403-5, GRI 403-6, GRI 403-7, GRI 403-8, GRI 403-9, EU16, EU17, EU18, IF-EU-320a.1**

In order to preserve the health and physical integrity of workers, Norte Energia requires all its employees (direct employees) and third parties to comply with the legislation and all standards related to Occupational Health and Safety System (OHS). Thus, processes and risks present in work environments are duly identified, while employees, service providers, suppliers and visitors to the enterprise are instructed on prevention and control measures.

In this regard, Norte Energia has been adopting the best practices for safety campaigns, risk management, OHS culture transformation program and health programs and for the development of indicators for monitoring and decision-making. At Norte Energia, 100% of direct and third-party employees – whether operating the plant, at surrounding works and in socio-environmental programs – are covered by the Company's OHS. In absolute numbers, 2,409 people were covered by this system in 2022, including direct and third parties.
**GRI 3-3, GRI 403-8, EU16**

Norte Energia employees and third parties



**100% of direct employees and third parties are covered by the Company's Occupational Health and Safety System (OHS).**
GRI 403-8

In our day-to-day activities, we manage Health and Safety through five macro themes:
**GRI 403-1, EU16, IF-EU-320a.1, EU18**

- **Emergency response:** a contracted emergency brigade supports the management of all emergencies at the Belo Monte HPP, such as industrial and forest fires, wildlife rescue, environmental emergencies, accidents, sudden illness, various rescues, medical care, among others;
  **IF-EU-320a.1, EU18**

- **Legal service:** encompasses issues related to compliance with regulatory standards, and the entire legal foundation related to the subject;

- **Quality of life:** includes ergonomics and quality of life programs for employees;

- **Occupational health:** in addition to inspecting contractors with regard to health, this also includes occupational and quality of life exams, management of the outpatient clinic at the Belo Monte HPP and management of the Company's levels of absenteeism;

- **Occupational safety:** based on compliance with legal requirements, it addresses the development of improvements in activities and in the work environment, aiming at reducing the risks involved, as well as inspecting contractors.

We have a specialized team responsible for managing the Occupational Health Medical Control Program (PCMSO) and the Environmental Risk Prevention Program (PPRA). The area controls and implements health-related actions – such as scheduling occupational exams and health and vaccination campaigns – and holds Security Dialogues related to health issues with outsourced companies.

We have an Occupational Health and Safety Management System that covers all employees and service providers/third parties. This system is part of the Company's Integrated Management System (SGI).

Within the scope of the Management System, in addition to determining procedures, we carry out inspections and supervision of activities carried out both by ourselves and by third parties, and we require documents to assess compliance with current legislation and the Company's procedures. This system works based on the official regulations in force in the country and the Equator Principles, as well as in compliance with the ISO 45001 guidelines. **GRI 403-1**

It is worth mentioning that before the contracts are signed, companies undergo a compliance analysis, in which the issues that may affect the Company are evaluated, including work safety. **GRI 403-7**

## Identification and assessment of health and safety risks

**GRI 403-2**

Our Occupational Health and Safety Risk Management Program (PGR) defines the guidelines to manage the Company's occupational risks, which go through a process of anticipation, identification, evaluation and control, either by Norte Energia or by service providers. The PGR consists of preparing an inventory of occupational hazards and planning actions to eliminate or reduce the risks identified and analyzed.

In this context, the Specialized Service in Safety Engineering and Occupational Medicine (SESMT), together with the areas, surveys the dangers and risks related to activities carried out by employees, service providers, suppliers and visitors. In this step, the generating sources and the level of occupational risk are identified based on the severity

and probability of an accident or occupational disease. Then, risk mitigation measures are proposed, as well as actions to eliminate or reduce them.

The information concerning the PGR is recorded in a base document and serves as a fundamental structure for the development of other Occupational Health and Safety processes and programs, such as the PCMSO (Program for Medical Control of Occupational Health), the PPR (Program for Respiratory Protection), the PCA (Hearing Conservation Program), reports, among others.

Another way for employees to find out about the risks related to their activities is the Occupational Health and Safety Service Order. As for the risks to which service providers are subject, Norte Energia initially informs those who are part of its facilities, complying with the provisions of NR-01. It then routinely performs field inspections and documentary audits. The inspection process involves checking all the legal documentation of the provider company, including the Risk Management Program. On that occasion, the legal compliance of the documents, the risk analysis and the progress of the proposed actions are verified. During the process, when any inconsistency in documents or in the field is identified, a Deviation Record is opened where the adjustments necessary for technical and legal compliance are highlighted and addressed.

With regard to service providers, the Company adopts an audit system through checklists, in which it checks the health and safety management system of service providers. Inspection is carried out both routinely and periodically, and on a timely and unscheduled basis. This system makes it possible to manage and apply control measures in order to eliminate hazards and minimize risks. **EU17**
As for dangerousness, NR-16 recommendations are adopted, and a Dangerousness Report is prepared by external specialists. Also, the Company's internal normative instruction is applied. All identified deviations are managed through specific action plans, for the discrepancies observed during the inspection process.

Accidents at work with employees or service providers are duly communicated, analyzed and investigated. We have an internal Normative Instruction on the subject, which is based on current legislation and best practices. The investigation process aims to raise the causes of the accident and eliminate or reduce the risks that would lead to reoccurrence.

The participation of our employees in risk management is also guaranteed through the Internal Commission for Accident Prevention (Cipa), made up of representatives of all contractors and which greatly contributes to the risk management process. This committee prepares risk maps and inspects facilities and activities.

Cipa plays a fundamental role in risk mitigation actions through health and safety campaigns, as well as in addressing deviations identified in inspections. Within this context, as established by NR-05, Cipa is responsible for carrying out regular inspections, aiming at identifying risks in the work environment. it also prepares reports, which are presented at regular monthly meetings. In those meetings, possible accidents at work, internal procedures and health and safety programs are also analyzed, such as the Risk Management Program (PGR) and the Medical Control and Occupational Health Program (PCMSO), for example.

Workers have access to information regarding the risks of the activities to be carried out through a physical and/or electronic document made available, such as **GRI 403-4**:

- Work permission;
- Entry and work permission;
- Preliminary risk analysis.

In addition to these participation modalities, there is also the Company's Reporting Channel, through which any employee or third party can register a possible irregularity. It is worth noting that the channel allows registration anonymously. In addition, every task has the right of refusal, as provided by law.

## Health services

**GRI 403-3, GRI 403-6**

Norte Energia has a medical clinic in Belo Monte, where it provides occupational care to employees, as well as assistance and emergency care for the entire workforce that interacts directly with the Belo Monte Complex. In 2022, 8,127 medical consultations were provided to employees and third parties (occupational and assistance support).

In service, we have a specialized team, responsible for managing the Medical Control and Occupational Health Program (PCMSO), which follows the Risk Management Program (PGR). This team is responsible for controlling and implementing health-related actions, such as scheduling occupational exams, health and vaccination campaigns, among others necessary to meet health programs and ensure the well-being of workers.

The health sector also carries out activities aimed at reducing risks in the workplace, such as:

- Blood pressure measurement of workers before carrying out activities at heights or in confined spaces;
- Vaccination campaigns;
- Cancer prevention campaigns;
- Health and safety dialogues in the Company's areas.

All employees are offered a health insurance plan with nationwide coverage.

Throughout the year, we carry out campaigns to prevent breast cancer, prostate cancer, sexually transmitted diseases, Covid-19, among others. The work is carried out through lectures and educational materials sent by email and published on the main communication channel with the internal public: the Digital Integration Platform (PID).

In addition, flu vaccination campaigns were carried out, in which 401 people were immunized, including employees, dependents and third parties. We also started the monitoring program for chronic cases, through the quality-of-life program. In 2022, 63 employees received this follow-up.

In addition to promoting and protecting the health and safety of employees and third parties, we are also concerned with the health of the community surrounding our facilities For this reason, we provide support to the communities in the Reduced Flow Stretch, through the Norte Energia Emergency Brigade. In 2022, we provided 64 services to surrounding communities. The main calls were related to traffic accidents, bites of venomous animals and trips to the hospital in Altamira/PA for pregnant women or people who are sick or with a health problem. Several of these services were carried out in partnership with teams from the health centers in the region of the Reduced Flow Stretch, where first aid is provided.

## Workplace Safety Transformation Program

In order to improve and disseminate the culture of health and safety at work, in 2022, we developed Norte Energia's Cultural Transformation Program, based on the following pillars:

- Security governance;
- Leadership and culture;
- Risk perception for leaders and operators;
- Critical risk management;
- Learning from deviations, incidents and accidents;
- Contractor management.

The Workplace Safety Transformation Program was carried out in partnership with Dupont Sustainable Solutions (DSS), a consultancy specializing in OHS. The actions of said Program were defined based on the best market practices in Risk Management and through the development of organizational skills necessary for the change process.

The program aims to enhance the mitigation of accident risks, obtain operational and work environment improvements and efficiency for employees, third parties and the community.

During the year, we developed relevant stages of the Program within the scope of Occupational Health and Safety Governance, Employee Leadership and Culture and Risk Perception. Of the actions carried out, we highlight the training for the Company's senior and middle leadership in developing an OHS culture and risk perception in the work environment, with follow-up coaching via DSS consultants. The continuation of the program is scheduled for 2023.

## Training

**GRI 403-5, EU18**

All employees, before starting their activities, carry out a health and safety at work integration, when internal safety, health, emergency and applicable legislation procedures are presented. As for service providers, we carry out integration with representatives for the presentation of internal procedures; applicable laws; work health and safety inspection system and dealings with deviations identified in the process.

Legal qualification training is also carried out, according to each topic and applicable regulatory standard, such as NR-06, NR-10, NR-11, NR- 12, NR-23, NR-26, NR-33, NR35, among others.

These trainings are carried out to raise awareness of OHS issues. The Security Dialogues (DS).

## Work accidents

**GRI 403-9, EU25**

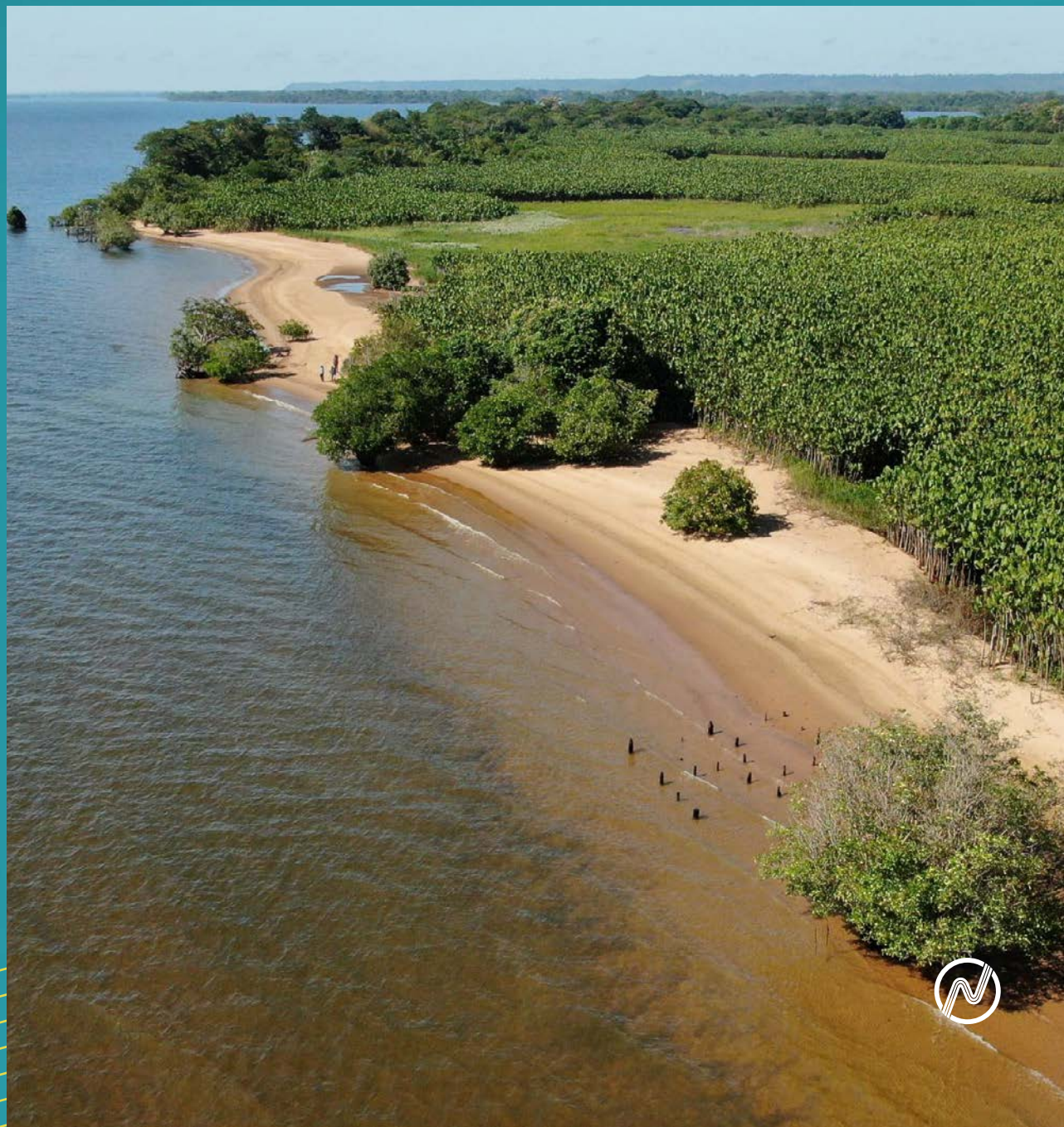
| | Employees | Workers who are not employees | Employees and non-employees |
|---|---|---|---|
| Number of hours worked | 809,614 | 3,985,501 | 4,795,115 |
| Number of deaths resulting from accidents at work | 0 | 1 | 1 |
| Rate of deaths resulting from accidents at work | 0 | 0.25 | 0.21 |
| Number of accidents at work with serious consequences (except deaths) | 0 | 0 | 0 |
| Rate of accidents at work with serious consequences (except deaths) | 0 | 0 | 0 |
| Number of mandatory reporting accidents at work | 1 | 28 | 29 |
| Rate of mandatory reporting accidents at work | 1.24 | 7.03 | 6.05 |

Note: Rates were calculated based on 1,000,000 hours worked.

Such dialogue involve employees and third parties. When they occur, topics related to day-to-day activities, proper care and points of attention to be observed are addressed.

# 8 Planet

GRI 201-2, GRI 303-1, GRI 308-1, IF-EU-110a.1, IF-EU-110a.2, IF-EU-110a.3, IF-EU-120a.1, IF-EU-140a.1, IF-EU-140a.2, IF-EU-140a.3



# Enviromental **management**

**GRI 302-1, GRI 302-2, GRI 302-3, GRI 302-5,GRI 303-1, GRI 303-2, GRI 303-3, GRI 303-4, GRI 303-5, GRI 304-1, GRI 304-2, GRI 304-3, GRI 304-4, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4, GRI 305-5, GRI 305-6, GRI 305-7, GRI 306-1, GRI 306-2, GRI 306-3, GRI 306-4, GRI 306-5, GRI 308-1, GRI 308-2, GRI 3-3**

Our business directly depends on the natural resources of the Xingu river and, therefore, robust and efficient environmental management is essential for the operation of the Belo Monte HPP. To this end, Norte Energia operates an Integrated Management System (SGI), based on ISO 14001 and which has a documentary framework of 342 documents consisting of Manuals, Policies, Normative Instructions (IN), Work Instructions (IT) and Process Instructions (IP). **GRI 3-3**

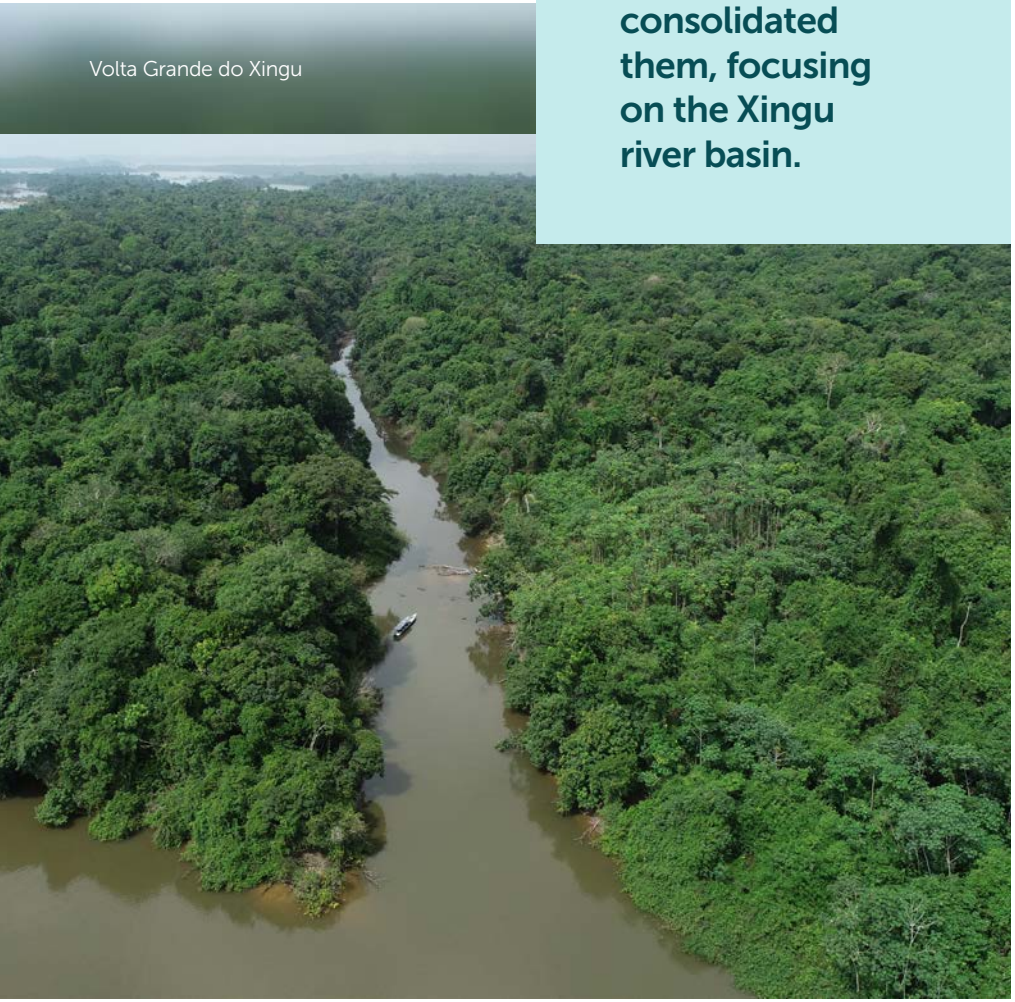
These guidelines contribute to Norte Energia's performance in compliance with current Brazilian legislation, with its actions analyzed and monitored by the bodies involved in the environmental licensing process. At the same time, it directs additional efforts to voluntary initiatives, which go beyond legal requirements and effectively contribute to the conservation of the ecosystems of the Xingu river.

The Company's environmental management actions are supported by studies conducted by specialists. Thus, attention to environmental and social impacts also function as one of the guiding elements of our work. Depending on the results of studies and monitoring, and the request or consent of the supervisory bodies and those involved in the licensing process, mitigation and compensation actions can be changed and/or supplemented to better adapt and reduce the negative impacts.

Norte Energia employees in voluntary action

**In addition to licensing actions, we direct additional efforts to voluntary initiatives that contribute to the conservation of ecosystems on the Xingu river.**

**In 2022, we reorganized our actions and consolidated them, focusing on the Xingu river basin.**



Volta Grande do Xingu

# Environmental protection of the **Amazon Xingu Basin**

**GRI 201-2, GRI 303-1, GRI 303-2, GRI 303-3, GRI 303-4, GRI 303-5, GRI 308-1, IF-EU-140a.1, IF-EU-140a.2, IF-EU-140a.3**

National and international debates on climate change, hydrological risk, a systemic view of business and the impacts of the pandemic on people's lives have moved companies in various parts of the planet to rethink the way they relate to society and the environment. In this context, we established internal debates on how we could act differently and even more responsibly in the territory, based on local knowledge, partnerships and thematic focuses.

Through these reflections and guided by the **Sustainability Policy**, we believe that potential paths for the Amazon involve greater alignment between economy and nature as a key factor for regional transformation.

Thus, in 2022, we reorganized our actions and consolidated them focusing on the Xingu river basin, linked to a vision of contributing to society and the planet, contemplating guaranteeing the future for our business, which is so dependent on water resources. We also focus on something the Brazilian population urgently needs: renewable electricity.

This new positioning is also the result of an active listening process and continuous engagement with local and external stakeholders, such as the Advisory Board. Thus, aiming at deepening the understanding of the socio-environmental reality of our region of operation, as well as its challenges and opportunities, Norte Energia contributes with an executive vision and with its management experience through the execution and promotion of projects by establishing strategic partnerships.

In this context, the following initiatives and actions stand out:

## Ecological Restoration of APPs

**GRI 304-2**

In 2022, Norte Energia continued the environmental licensing actions related to the Programs for the Recovery of Degraded Areas (PRAD) and the Recovery of Permanent Preservation Areas (APP) of the Belo Monte HPP. In this process, different ecological restoration methodologies were used to ensure the effectiveness of actions based on the characteristics of each area.

Thus, seedling planting, nucleation, enrichment and isolation of areas were implemented in favor of natural regeneration.

Through these actions, Norte Energia reached, in 2022, a total of 2,200 hectares recovered and/or in the recovery/regeneration stage.

In addition, through actions to restore the Term of Environmental Commitment (TCA) in Volta Grande do Xingu, seedlings were also planted in the Reduced Flow Stretch of the project.

We believe that investing in initiatives like this one has the potential to leverage positive changes and solutions with a concrete impact on biodiversity and on the lives of local populations, strengthening a sustainable, fair and inclusive economy, and contributing to the forestry and climate agenda in the Amazon.

Nature of the Middle Xingu region

## Floresta Viva

**GRI 304-2, GRI 304-3, GRI 304-4**

One of the main partnerships established in 2022 was Floresta Viva, a matchfunding with the National Bank for Economic and Social Development (BNDES). With the main objective of developing ecological restoration actions with native species and agroforestry systems in Brazilian biomes, we joined this initiative in order to direct resources totaling R$10 million for actions to protect the Xingu Hydrographic Basin. By means of incentives for the formation of ecological corridors and the generation of opportunities based on the productive chains of non-timber forest products, we were one of the first companies to sign a formal commitment with the BNDES. We believe that investing in initiatives like this one has the potential to leverage positive changes and solutions with a concrete impact on biodiversity and on the lives of local populations, strengthening a sustainable, fair and inclusive economy, and contributing to the forestry and climate agenda in the Amazon. To learn more about this BNDES initiative, **click here**.

### Kayapó Project

**GRI 411-1, GRI 413-1**

Likewise, as part of the actions for the territorial strengthening of the headwaters of the Xingu River and in compliance with the environmental licensing commitments, Norte Energia also continued to support the Kayapó people. As a result, Eletrobrás and Norte Energia allocate resources to support socio-environmental projects and programs aimed at this people. In 2022, we continued to support the Kayapó Mekrãgnoti Program through the execution of a Cooperation Agreement with the Kabu Institute.

The Kayapó indigenous lands, components of the aforementioned program, are Mekrãgnoti and Baú, which constitute the lands of the Kayapó D'Oeste, located in the region known as Arco do Desmatamento (Arc of Deforestation), in the south of Pará. The Kayapó have played a fundamental role in protecting the forest's natural resources. The thematic axes of the Mekrãgnoti Program are:

- Surveillance and territorial protection;
- Sustainable economic activities;
- Cultural appreciation.

Regarding the protection of indigenous lands, other actions within the scope of licensing, such as those of the Territorial Protection Plan for the Middle Xingu, will be detailed in item **12.1. Interaction with Indigenous Peoples** (**click here**).

### Environmental inspection and fight against deforestation

**GRI 308-1**

Within the scope of the environmental licensing process, Norte Energia executes the Environmental and Asset Management Plan (Pg. ASP), through which it carries out environmental monitoring and inspection actions with to identify, avoid and curb

activities of third parties with negative potential impact on Permanent Preservation Areas (APP). The total area of the plant's APPs is 26,000 hectares and corresponds to a variable strip that has an average width of 500 meters and was established as a measure to protect and maintain the quality of the water and the entire aquatic ecosystem of the two reservoirs.

We also developed the Project for Monitoring Mining Activities in a section of the Volta Grande do Xingu, whose data guide actions by inspection bodies in the fight against illegal mining in this area of the Xingu river.

In addition, in 2022, Norte Energia maintained the Technical Cooperation Agreement (ACT) No. 03/2011 with Ibama to continue strengthening, operational and logistical support actions for inspection and curbing environmental offenses in the area of influence of the enterprise, such as deforestation and illegal logging, wild animals trafficking, predatory fishing and illegal mining.

The different dialogue and listening mechanisms, added to the Reporting Channel, record the comments and information received from the communities about environmental degradation actions, which are formally redirected to the competent bodies.

Norte Energia provides support to Ibama in carrying out inspection actions to curb deforestation, illegal logging, illegal mining, wild animals trafficking and other environmental offenses in the area influenced by the Belo Monte HPP.


Supporting IBAMA in inspection actions to curb environmental violations

# Atmospheric emissions and combating **climate change**

**GRI 3-3, GRI 305-1, 305-2, GRI 305-3, GRI 305-4, IF-EU-110a.1, IF-EU-110a.2, IF-EU-110a.3**

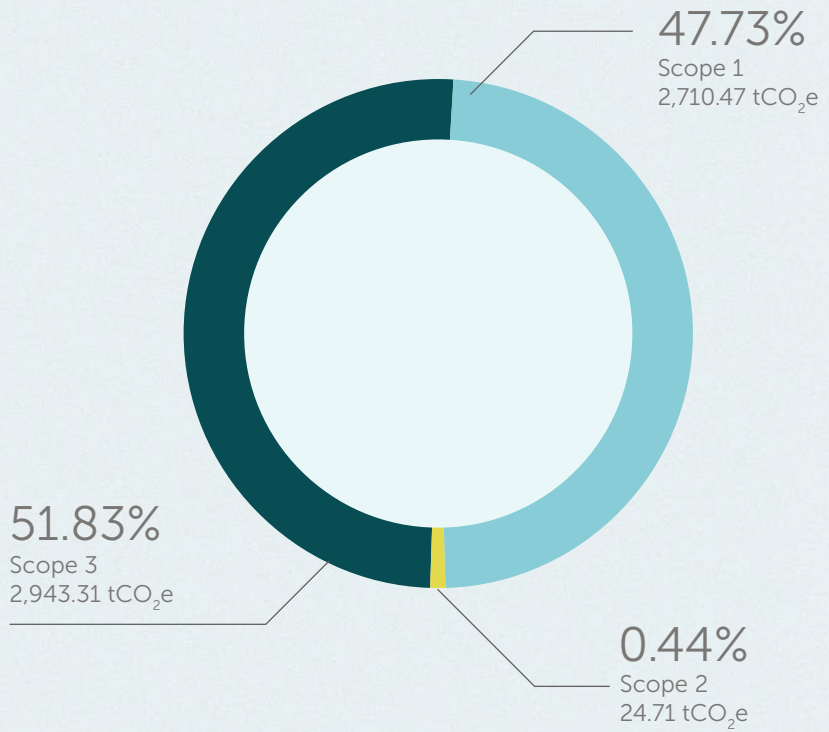
Generating 100% renewable energy and carrying out activities with low levels of greenhouse gas (GHG) emissions demonstrate the Company's positive role in combating climate change and contributing to a clean and renewable energy matrix. **GRI 305-5**

Seeking to reinforce the fight against climate change, the Company carried out and published its first greenhouse gas (GHG) emission inventory in 2022, referring to the year 2021, following the operational control approach and guidelines of The Greenhouse Gas Protocol – GHG Protocol (WBCSD/WRI, 2011), from ABNT NBR ISO 14064-1 and IPCC (2006), which was duly verified by independent auditors. Its publication in the following year guaranteed Norte Energia the Gold Seal of the Brazilian GHG Protocol Program. The inventory is available for consultation on the Norte Energia website (**click here**). **GRI 3-3, GRI 305-5**

During 2022, Norte Energia prepared its second GHG inventory, which identified a total of **5,678.49 $tCO_2e$** emissions distributed in Scopes 1, 2 and 3 (Figure 1). Considering only Scopes 1 and 2, for which reporting is mandatory, **2,735.18 $CO_2e$** were issued.

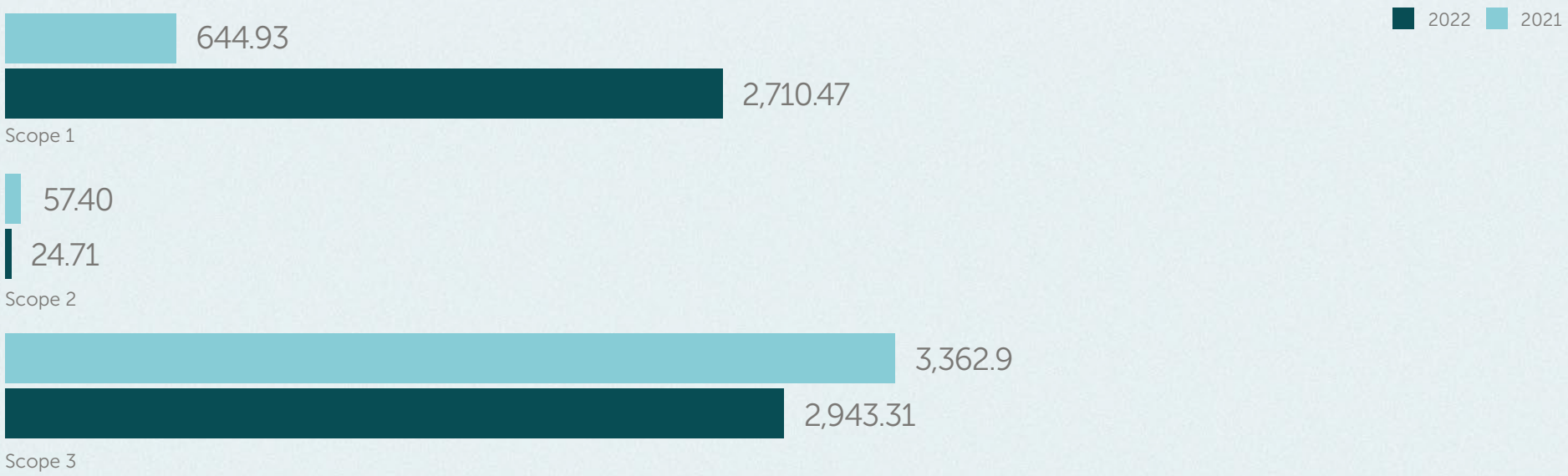
Figure 1

## Representativeness of GHG emissions by scope in $tCO_2e$




Note: Data for 2022 are preliminary and will still undergo an audit, scheduled for June 2023. Updated information will be on the greenhouse gas (GHG) inventory on the corporate website.

## Emissions 2021–2022 ($tCO_2e$)




With regard to 2022 emissions, the most representative direct emissions within Scope 1 became the fugitive emissions category (70% of the total) with a significant contribution from the recharge of insulating and refrigerant gases, mainly HFC-227ea (or FM- 200) used in suppression and fire- fighting equipment, and the R-410A gas used in air conditioning recharges. **GRI 305-1**

Total electricity consumption was 572.70 MWh, distributed among the plants at Belo Monte HPP, Pimental, offices in Altamira and Brasília, among other locations where Norte Energia consumes electricity.

Such consumption resulted in 24.71 $tCO_2e$, 57% lower than the scope 2 emissions of 2021. The reduction is explained mainly by the non-recording of electricity consuming units that are not part of the Company.

For greater transparency of information, the emissions of electricity consumed by sites not controlled by Norte Energia were reported in Annex II of the 2022 Emissions Inventory.

Under Scope 2, Norte Energia issued I-RECs for these emissions, which totaled 24.71 $tCO_2e$. **GRI 305-2**

In the previous year, Scope 2 emissions were 57.40 $tCO_2e$, i.e., 65% higher than in 2022. It is important to emphasize that the SIN emission factor, in 2022, published by the Ministry of Science, Technology and Innovation (MCTI), was 0.1264 $tCO_2e/MWh$. That is, it was 66% higher than the factor referring to the year 2022 (0.0426 $tCO_2e/MWh$), which coincides with the reduction in scope emissions. **GRI 305-2**

## Scope 3
**GRI 305-3**

The largest source of emissions in Scope 3 is logistics in transport and distribution (upstream), referring to the transport of outsourced service providers by Norte Energia, corresponding to 75% of the total scope. Emissions from air travel and rented cars on business trips accounted for 16% of the total.

## Intensity GRI 305-4

From the result of emissions, it is possible to identify the intensity of emissions based on the net generation of electricity achieved by Norte Energia (Belo Monte HPP) in the year inventoried. The indicators are obtained through the ratio of net energy generated and the amount of emissions from scopes 1, 2 and 3. In 2022, the Company generated 36,767,325 MWh and emitted 5,678.49 $tCO_2e$. Thus, Norte Energia's emission indicator for the year 2022 was 0.000154 $tCO_2e/MWh$.

The evolution of the emissions indicator is shown in the table below. There is an increase of 21.26% in the emission intensity indicator in relation to the year 2021, mainly due to the increase in fugitive emissions from Scope 1.

The low emission intensity of the undertaking demonstrates the high efficiency of the operation of the Belo Monte HPP in the generation of energy with low emission of greenhouse gases. Compared to reference values of intensity of emissions from energy generating sources, released by the Intergovernmental Panel on Climate Change (IPCC), published in 2014, on Renewable Energy Sources and Mitigation of Climate Change, it is possible to verify how effective Belo Monte is as a generator of renewable energy.

### Evolution of the GHG emissions indicator
(per MWh)

| | 2021 | 2022 |
|---|---|---|
| Evolution of indicators ($tCO_2e/MWh$) | 0.000127 | 0.000154 |

## Renewable energy certificates (I-REC)

The International Renewable Energy Certificates (I-REC) are titles that prove that the electricity consumed comes from a renewable source, but do not necessarily need to be linked to a specific energy supply contract.

By acquiring I-RECs, companies can neutralize Scope 2 emissions (indirect emissions from energy consumption) from their Greenhouse Gas Emissions Inventories, within the scope of the Brazilian GHG Protocol Program. Belo Monte HPP generates energy equivalent to around 37,000 I-RECs/year and sells certificates. Learn more **in this link**.

Belo Monte HPP

**Emissions from reservoirs and spillway of Belo Monte HPP**

Norte Energia, aiming at improving robustness, transparency and bringing innovation to information related to climate issues, presents the GHG emissions from the gas flows ($CO_2$, $CH_4$ and $N_2O$) in the reservoirs of the Belo Monte HPP, in the area of Reduced Flow Stretch (TVR), as well as the gases that escape from the water (degassing) when they pass through the turbines and spillways of the undertaking.

Such information was obtained through the Research and Development (R&D) project "Development of a Methodology for the Calculation of Greenhouse Gas Emissions in the Reservoir of the Belo Monte HPP", together with the Alberto Luiz Coimbra Institute of Post-Graduation and Research of Engineering, Federal University of Rio de Janeiro (Coppe/UFRJ).

Considering the emissions from Norte Energia's corporate inventory for 2022 of 5,678.49 $tCO_2e$, referring to scopes 1, 2 and 3, and the annual average of net emissions from R&D at Coppe/UFRJ, of 268,538.41 $tCO_2e$, the total net emissions were 274,216.90 $tCO_2e$.

Considering the net energy generation of Belo Monte HPP in 2022 of 36,767,325 MWh, there is an intensity of emissions rate of 0.007458 $tCO_2e$/MWh (or 7.46 $gCO_2e$/kWh).

It should be noted that the Belo Monte HPP has a run-of-river reservoir, formed more recently than the other reservoirs compared. For this reason, it has much more biological activity and, consequently, the formation of biogenic gases. It is expected that between five and ten years, the project's reservoirs and spillway will present a lower emission intensity than this initial phase. Even so, Belo Monte is configured as the fifth most efficient power plant in terms of GHG emission intensity rate per energy generated, being the one that emits the least in the Amazon, when compared to the other plants analyzed.

The Belo Monte HPP Emissions Intensity rate was also compared to the rates of other energy sources. The Climate Change 2014 document: Mitigation of Climate Change, which composes the Fifth Assessment Report (AR5), Annex III, of the Intergovernmental Panel on Climate Change (IPCC), published in 2014 and the Technical Note of the Energy Research Company (EPE) published in 2022, present the Indexes of Intensity of Emissions from other sources. It is observed that the intensity of emissions from the Belo Monte HPP, of 7.46 g $CO_2$/kWh, is lower than the average of the hydroelectric source and is at a similar or lower level than other renewable sources, such as, for example, solar and wind.

## Comparison of the GHG Emission Intensity Index of reservoirs studied by the Balcar project

| HPP | Reservoir year | Biome | Emission/energy generated (g $CO_2$Eq/kWh) |
|---|---|---|---|
| Xingó | 1994 | Caatinga | -0.54 |
| Segredo | 1992 | Atlantic forest | 1.9 |
| Funil | 1969 | Atlantic forest | 2.2 |
| Itaipu | 1984 | Atlantic forest | 3.3 |
| **Belo Monte** | **2016** | **Amazon** | **7.46** |
| Tucuruí | 1985 | Amazon | 48.7 |
| Serra da Mesa | 1996 | Cerrado | 69 |
| Três Marias | 1962 | Cerrado | 91 |
| Balbina | 1987 | Amazon | 1,719 |

Source: Norte Energia.

## Life cycle GHG emissions by source of electricity generation (g $CO_2$eq./kWh)

| Source | Minimum | Average | Maximum |
|---|---|---|---|
| Mineral coal | 740 | 820 | 910 |
| Natural gas | 410 | 409 | 650 |
| Geothermal | 6 | 38 | 79 |
| Hydroelectric | 1 | 24 | 2,200 |
| Dedicated biomass | 130 | 230 | 420 |
| Nuclear | 3,7 | 12 | 110 |
| Concentrated solar | 8.8 | 27 | 63 |
| Photovoltaic solar | 18 | 48 | 180 |
| Onshore wind | 7 | 11 | 56 |
| Offshore wind | 8 | 12 | 35 |
| Ocean | 5.6 | 17 | 28 |

Source: IPCC, 2014.

6. The intensity value of 13.2 was obtained using the average energy generation from the years 2017 to 2021, according to the R&D project. The value 7.46 was obtained using only the energy generation value for the year 2021.
1. Research and development project Carbon Balance in Reservoirs (Balcar Project), coordinated by the Electrical Energy Research Center (Cepel) together with Eletrobras and Coppe/UFRJ.
3. Schlömer S., T. et al: Annex III: Technology-specific cost and performance parameters. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge and New York, NY, USA. Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf.

**Climate strategy**

Norte Energia's climate strategy is currently being prepared. In 2022, we started the process of preparing the Plan for Decarbonization and Combating Climate Change, considering management, monitoring and data collection to assess GHG emissions. This will enable the definition of goals based on science and adhering to the commitments of the UN 2030 Agenda. **GRI 201-2**

In November 2022, the Sustainability Superintendence was part of the delegation of the Brazilian Business Council for Sustainable Development (CEBDS) at the 27th United Nations Climate Conference (COP 27) on climate change, which took place in Egypt. This was a unique opportunity to gain greater knowledge and identify best practices to fight and mitigate climate change.

**Climate risks**

Weather conditions can impact the operation of Belo Monte, especially if they cause low flows in the Xingu River. A reduction in the water level would directly affect the power generation capacity of the Project. **GRI 201-2**

For this reason, in our Risk Matrix, we have identified the following physical risk factors in the context of climate change:

1. Impacts on the flow of the Xingu river that are inconsistent with those predicted in hydrological studies that supported the generation and physical guarantee of the Belo Monte HPP;

2. Schlömer S., T. et al: Annex III: Technology-specific cost and performance parameters. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge and New York, NY, USA. Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf.

## Climate extreme forecast system and its influence on the electricity sector

Reaffirming Norte Energia's alignment with the global policy for preventing and adapting to climate change, we selected, in 2022, a Research and Development (R&D) project to be developed by the Institute of Technology for Development (LACTEC), which analyzes climate extremes and its influence on the electricity sector, especially on the relationship between rainfall and the flow of hydroelectric power plants.

The project is basically divided into four large groups, which aim to take a look at the past (analysis of historical series), the future (projections based on climate change scenarios) and the rainfall-flow relationship. In addition, at the end of the project, a system capable of performing analysis, generating real-time estimates and projections will be developed.

The research will deepen the knowledge of climate changes on the hydrographic basins in Brazil, enabling the National System Operator (ONS) and the Energy Research Company (EPE) to carry out sensitivity analyses of extreme conditions in the planning of the operation and the planning of the expansion of the Brazilian electrical system. More information about the project can be accessed **here**.

2. Operational limitation caused by environmental restriction resulting from climate change;
3. Atmospheric discharges that affect the operation;
4. Extreme floods or droughts that impact dams;
5. Reporting aspects of climate risks that impact image and reputation;
6. The multiple uses of water and the different interests related to this natural resource.

## Innovation and Energy Transition

Norte Energia started and continued other Research and Development (R&D) initiatives with universities and research institutions with potential contribution in the fight against climate change.

**Intelligent Multimodal Electric Mobility Efficient Management System (Sima)**

In 2022, the project, which establishes the first green corridor in Pará and that will connect the campus of the Federal University of Pará (UFPA) with gas stations to supply electric vehicles, continued. Started in 2019, it should be completed in 2023. The project includes the development of an electric vessel to transport passengers.

Green Energy installed in the TeraWangã village, Arara Indigenous Land of Volta Grande do Xingu

**Green Energy installed in the TeraWangã village, Arara Indigenous Land of Volta Grande do Xingu.**

**Floating photovoltaic plant tracking system**

Another R&D started in 2022 related to the climate issue is the development of systems to generate electricity from a floating photovoltaic plant with tracking of the apparent trajectory of the sun (tracking system) for specific sites in the Amazon region. This project includes the installation of floating photovoltaic plants of 1 MWp, with mono and bifacial panels, in the reservoir of the Belo Monte HPP. Through them, alternative arrangements of systems and technologies applicable to tracking systems of the sun's apparent trajectory will be evaluated in order to determine which ones are more efficient and can be added to floating photovoltaic systems, thus learning about maximizing the use of solar radiation in the region.

## MIRAVH

Also launched, the R&D of Isolated Photovoltaic Micro Network with Electric Energy Storage in Green Hydrogen for Continuous Load Service (MIRAVH) will seek to implement a 100% renewable isolated system, consisting of a 100 kWp photovoltaic generator, 60 kW electrolyser, storage for 45 kg of hydrogen and 50 kVA national green hydrogen synchronous generator for operation in power-to-power mode and MIRAHV software for planning, operation, supervision, control and protection of isolated systems.

## Integrated Supercapacitors with Photovoltaic Generation

Also launched in 2022, this R&D project aims to implement a photovoltaic generation system, with energy storage in banks of supercapacitors to serve an isolated community in the Amazon region, aiming to increase the reliability and quality of the local energy supply through optimized management of the energy generated and its assets.

## Energia Verde no Xingu (Green Energy in Xingu)

**GRI 305**

The Energia Verde no Xingu project aims to expand access to renewable energy to communities and reduce greenhouse gas (GHG) emissions. Through this project, we provide renewable energy from photovoltaic solar energy generation to replace energy generation from fossil fuels (generators) in communities in Volta Grande do Xingu.

In 2022, the project was implemented in four indigenous communities in Volta Grande do Xingu to replace the use of diesel generators. In the Terrawangã village, the indigenous people chose to install a solar plant at the school. The Kaniamã indigenous community chose to install the plant on the soil. In the Guary-Duan and Jaguar villages, the indigenous people decided to install floating photovoltaic units in the riverbed.

## Electric flying boat

In addition to power generation in some communities on the Volta Grande do Xingu, in 2022 we also carried out the first navigation test of the electric motorboat on the Xingu River. We have developed a vessel with an adapted hull and a photovoltaic electric propulsion system, which represents a sustainable alternative to move around the region.

**GRI 201-2, EU8**

# Biodiversity

GRI 3-3, GRI 304

Acting in the conservation and preservation of biodiversity and natural environments in the area of influence of the Belo Monte HPP – respecting the parameters established or agreed with the competent bodies – is part of the strategy and guidelines of our Sustainability Policy. In 2022, Norte Energia participated in forums related to the topic, such as the Technical Chamber on Biodiversity (CTBio) of the Brazilian Business Council for Sustainable Development (CEBDS).

We still participate in the Environmental Working Group of the Brazilian Association of Electric Energy Generating Companies (Abrage) and joined the Business for Nature initiative called Call to Action, a call for collective actions to reverse the loss of nature by 2030.

Actions like these are in line with our goal of being an active agent in the conservation of biodiversity and ecosystem services.

Currently, we monitor the vulnerable and endangered species that appear on international and national lists, such as The International Union for Conservation of Nature, Ramsar Convention and MMA Ordinance No. 148/2022 – see detailed information in the Annex table.

It should be clarified that there is no Conservation Unit (CU) directly affected by the operation of the Belo Monte HPP. In the area of indirect influence, there is the Refúgio de Vida Silvestre (Revis) Tabuleiro do Embaubal. It is a CU with an area of 4,033.94 hectares, located in the municipality of Senador José

**Norte Energia is committed to the conservation of the Amazon and its biodiversity.**

Podostemaceae plants recorded in Volta Grande do Xingu

Porfírio, managed by the Institute for Forestry Development and Biodiversity of the State of Pará (Ideflor-bio). **GRI 3-3, GRI 304-1**

Thus, in line with the management body and the licensing body, Norte Energia developed specific monitoring, management and environmental education actions in this CU. **GRI 304-3**

## Impacts on biodiversity

With regard to the impacts on local biodiversity, within the scope of the environmental licensing of the Belo Monte HPP, the Plans for the Conservation of Terrestrial Ecosystems and Aquatic Ecosystems are carried out, which are part of the environmental constraints. Faunistic and floristic studies and monitoring are carried out there, identifying species and mapping habitats, with special attention to rare, endemic and endangered species. **GRI 304-2**

The results of the monitoring carried out in 2022 showed changes in terrestrial and aquatic ecosystems, in magnitudes compatible with those predicted in the Preliminary Environmental Impact Study (EIA), but without the environmental condition of the areas affected by the plant.

In this context, actions are systematically proposed to avoid, reduce, mitigate, repair and/or compensate for identified impacts, preventing risks, in accordance with the best environmental practices. In addition, during the operation of the Belo Monte HPP, monitoring may indicate the need for new actions and investments in technologies and processes to reduce impacts. **GRI 2-25**

## Chelonians

Until 2022, Norte Energia, through fauna conservation and management projects, carried out within the scope of the Basic Environmental Project (PBA) of the Belo Monte HPP, guaranteed the protection of more than 6 million hatchlings of Amazonian turtles (*Podocnemis expansa*), pitiús (*Podocnemis sextuberculata*) and tracajá tortoises (*Podocnemis unifilis*) born on the beaches of Tabuleiro do Embaubal, Volta Grande do Xingu and the Xingu Reservoir. Regarding the protection of baby animals in the last three years, the numbers are: 537,206 in 2020; 552,228 in 2021; and 511,898 in 2022. **GRI 304-2**

Currently, the Company monitors, via satellite, eight Amazonian tortoises in the Tabuleiro do Embaubal region, in addition to another 24 individuals of Amazonian tortoises and 70 tracajás (a species of tortoise) in the Volta Grande do Xingu and in the Reservoir of Xingu, since 2014. Each of these animals has been registered and carries a device on its hull to track and analyze its natural history, which involves migration and other ecological aspects, such as feeding and reproduction areas of the species.

By means of several ecological parameters, we developed an extensive work of monitoring aquatic chelonians, which aims to promote the preservation of the fauna. **GRI 304-2**

## Conservation and care for biodiversity

The Tartarugas do Xingu Project is a voluntary action by Norte Energia and is carried out in the Refúgio de Vida Silvestre (REVIS) area, Tabuleiro do Embaubal, with Norte Energia employees and partner institutions, such as Ideflor-bio, Federal University of Pará (UFPA) and Xingu Regional Environmental Education Center (CREAX).

The project aims to raise awareness among participants about the importance of conservation actions, about the need to protect species as a resource for riverside communities, and also about the procedures that are adopted to monitor these animals.

In the reproductive period of 2022/2023, the actions had the participation of 94 people, including Norte Energia employees, surrounding communities and guests from Ideflor-bio, UFPA and CREAX, in addition to members of the research team.

The actions for the release of the 2022 baby turtles had the participation of local residents to involve the community, replace environmental education and strengthen ties with the company's projects in the region.

Volunteers supported the excavation of nests at risk of flooding due to the natural rise in the level of the Xingu River, resulting in the removal of more than 9,100 baby turtles, which were released in areas that provide greater shelter for their survival.

Norte Energia volunteers in action

## Ichthyofauna

Norte Energia develops conservation, monitoring and mitigation actions aimed at fish and fishing through the Ichthyofauna Conservation Program, part of the Belo Monte PBA. Currently, the following projects are in progress:

- Ichthyofauna Rescue and Saving Project;
- Project to Implement and Monitor a Mechanism for Transposition of Fish;
- Ichthyofauna Monitoring Project;
- Sustainable Fishing Incentive Project.

The actions of the Ichthyofauna Rescue and Saving Project have been carried out since 2012 and, daily, environmental monitoring is carried out in the operations of the spillways, in the generating units, in the areas of the reservoirs, in the Reduced Flow Stretch, in the derivation channel and in the igarapés from the urban area of Altamira. When necessary, fish are rescued. In 2022, fish of 114 species were rescued.

The main powerhouse of Belo Monte HPP has anti-shoal grids, installed in 2018, which contribute very efficiently to reducing impacts on ichthyofauna, making it impossible for fish to enter the turbines.

With regard to fish species that have a migratory behavior, the Belo Monte HPP has the Fish Transposition System (STP or "fish ladder"). System operation is carried out on a continuous basis and is interrupted only for scheduled maintenance and/or periods of prolonged drought. The Fish Transposition Mechanism Monitoring Project is coordinated and executed by the Federal University of Pará (UFPA) and aims to evaluate the performance of the system based on the result of a set of four biotic and one hydraulic monitoring. The analysis of the data obtained from 2016 to 2022 indicates that the STP has relevant representativeness of the local ichthyofauna, with 108 species captured, which represents 68.3% of the total richness of identified species. To learn more about the system, **click here**.

Also conducted by UFPA, the Ichthyofauna Monitoring Project reached its 44th campaign in 2022, totaling 11 years of execution on the Xingu river and its main tributaries. The results obtained so far confirmed what had already been advocated in the Environmental Impact Study (EIA), which pointed to changes in the ichthyofauna in the area of influence of the Belo Monte HPP. That happened because the hydrological cycle of the river was modified with its pulses, determined by the succession of dry and rainy periods, which have a decisive influence on the structuring of the ichthyofauna and on the development of their life strategies.

Since the beginning of the project, a total of 324,714 individuals belonging to 422 species and morphospecies, 48 families and 13 taxonomic orders have been collected. The results of the Hierarchical Modeling of Species Communities (HMSC) carried out in 2022 confirmed the changes in the abundance and occurrence of fish species after the installation of the Belo Monte HPP. For the period from 2023 to 2024, environmental DNA studies are planned to strengthen this monitoring.

## Flora conservation

**GRI 304-2**

In 2022, continuity was given to conservation actions for the flora of the Xingu region through which various projects are carried out to rescue, reintroduce into nature, monitor, study, catalogue, produce

and cultivate plants in the area of influence of the power plant. Solid ground forests, alluvial forests and also the typical vegetation of the boulders are monitored. To date, 721 plant species have been identified.

In the areas of suppression and demarcated collections, around 4 million seeds and propagules were rescued or collected, as well as more than 200,000 specimens of plants and seedlings – of which 97.8% were reintroduced into nature.

The project also included the production of 19,475 specimens (samples dehydrated and preserved in a systematic and organized manner) for scientific purposes, and use by teaching and research institutions.

## Seedling and planting growth

In 2022, an R&D project began, in partnership with the Federal University of Pará (UFPA), the Federal Rural University of the Amazon (UFRA), the Federal University of Viçosa (UFV) and the Institute for Forestry Development and Biodiversity of the State of Pará (Ideflor-bio), which seeks the development of new technologies to accelerate the growth of seedlings for strategic plantings for restoration in the Reduced Flow Stretch of Volta Grande do Xingu, in Pará. The project aims to accelerate the development of slow-growing seedlings by means of top grafting and induction of early flowering of the 16 target species with the application of paclobutrazol, improving techniques that guarantee greater survival of seedlings in the field and shortening seed production.

## Biotechnology applied to the reproduction of native fish

In the list of Norte Energia's initiatives related to ichthyofauna, the Research and Development (R&D) project for Biotechnology applied to the reproduction of fish native to Volta Grande do Xingu, such as pacu and tucunaré species, deserves special mention. Started in 2021 and expected to be completed in 2024, the project has an investment of more than R$11 million. Executed by BIOCEV Serviços de Meio Ambiente and by the Institute of Biosciences Foundation (FUNBIO). The objective of developing a biotechnology model that favors the conservation and reinforcement of the stock of endemic species of the Xingu river, through the promotion and articulation between the different indigenous, riverside and scientific knowledge.

For the development of the project, a research center for fish reproduction was built at the Center for Environmental Studies (CEA) of Norte Energia, in Vitória do Xingu/PA, to form and house an *ex-situ* genetic bank. This center has infrastructure for the development of research on reproductive protocols, larviculture and nursery in door.

## Discovery of new fish species

As an important achievement of this project, 21 new species were described with the direct or indirect participation of researchers involved in monitoring or of material made available by the research, among which 16 are endemic to the Xingu river. Additionally, four undescribed species are in an advanced stage of description, with articles accepted for publication, submitted or about to be submitted. Three other species had their taxonomic studies started in 2020, with the encouragement of technical cooperation between Norte Energia and UFPA. Finally, for seven species not yet described, the description process has not been finalized.

New fish species discovered

The Sustainable Fishing Incentive Project, in turn, aims at assessing the changes that have occurred in the commercial fishing activity of fish for consumption and aquarium fish, also including possible variations in subsistence fishing and fish consumption by the local population. The project allows for the targeting of mitigation actions in the region where the project is located.

With an area ranging from Gurupá and Porto de Moz, passing through Senador José Porfírio, Vitória do Xingu, Altamira to São Félix do Xingu, including the region of Maribel on the Iriri river, since April 2012 information has been registered about fisheries in the region. This Project is also coordinated by researchers from the Federal University of Pará (UFPA). Within the scope of the Indigenous Component (PBA-CI), monitoring of fishing and hunting is carried out in the two Indigenous Lands of Volta Grande do Xingu (TI Paquiçamba and TI Arara of Volta Grande do Xingu).

All the results obtained by these projects are consistent with what is reported in the scientific literature on other hydroelectric projects in Brazil and around the world, as well as with the predictions of the EIA of the Belo Monte HPP. However, in addition to the effects of the enterprise and fishing effort x, fishing yields respond to environmental variations, such as the intensity and duration of the river's hydrological pulse (measured by means of flow), as well as to differences between more and less rainy weather, or changes resulting from global climate events (El Niño and La Niña). Despite this, the social monitoring of fishermen in 2022 indicated an improvement in living conditions in general. Only 4% of families are still below the poverty line. In 2017, according to data from the social monitoring of fishermen, carried out by Norte Energia, this percentage was 13%.

The mitigation and repair actions that are being carried out by Norte Energia with the fishermen can be seen in item 12.2 of this report, **Development of Local Communities**.

Note: Fishing effort means the number of operations or operating time of fishing gear in a given fishery during a given period.

# Water

GRI 303

Taking care of water, the main input used by the Company, is present in all our activities. To this end, Norte Energia develops continuous monitoring work to conserve the water quality of the Xingu river through the Water Resources Management Plan. **GRI 303-1**

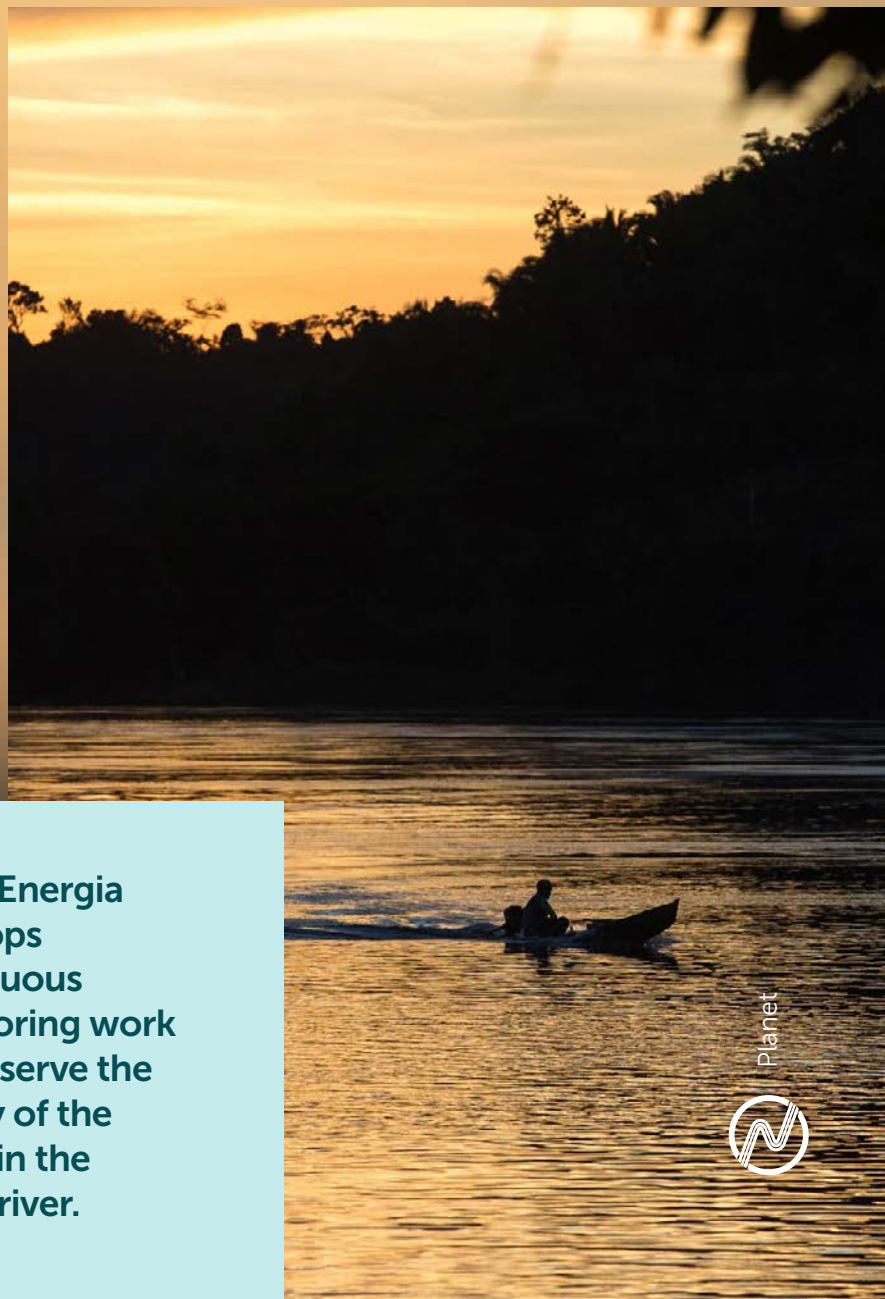
The Water Resources Management Plan is characterized by studies and activities to collect data and generate results related to the water bodies in the region of influence of the Belo Monte HPP, subsidizing the understanding of aspects inherent to the biotic and socioeconomic environments, both in terms of the behavior of fauna and flora and human occupation, which may depend on issues related to hydrodynamics in the region. The results are regularly reported to the control bodies.

One of the projects that make up this plan is the Limnological and Surface Water Quality Monitoring, implemented to detect and measure possible changes in water quality arising from changes in the aquatic environment arising from the construction, filling of reservoirs and daily operation of the power plant.

Over the past 12 years, monitoring carried out on a weekly, monthly and quarterly basis has considered a wide and complete territorial coverage and enabled obtaining important prognoses.

Monitoring carried out on a weekly, monthly and quarterly basis has shown that the Xingu river maintains its classification as a Class 2 body of water before, during and after the filling of the reservoirs.

Sunset at Xingu



**Norte Energia develops continuous monitoring work to conserve the quality of the water in the Xingu river.**

This classification means that, according to the National Council for the Environment (Conama No. 357/2005), its waters can be used for domestic supply (after conventional treatment), for the protection of aquatic communities, for primary contact recreation (such as swimming and diving), the irrigation of vegetables, fruit trees, gardens, parks and sports fields and the natural and/or intensive breeding of species intended for human consumption (aquaculture and fishing, for example).

The maintenance of water quality results, among other factors, from the interventions that Norte Energia has carried out in Altamira since its arrival in the region. We improved the water supply and distribution system and implemented collection networks, pumping stations and a sewage treatment plant, which ensure basic sanitation and quality of life for more than 90% of the local population.

In 2022, a Term of Commitment was signed with the Municipality of Altamira for the transfer of basic sanitation assets built by the company, to municipal management as of January 2023.

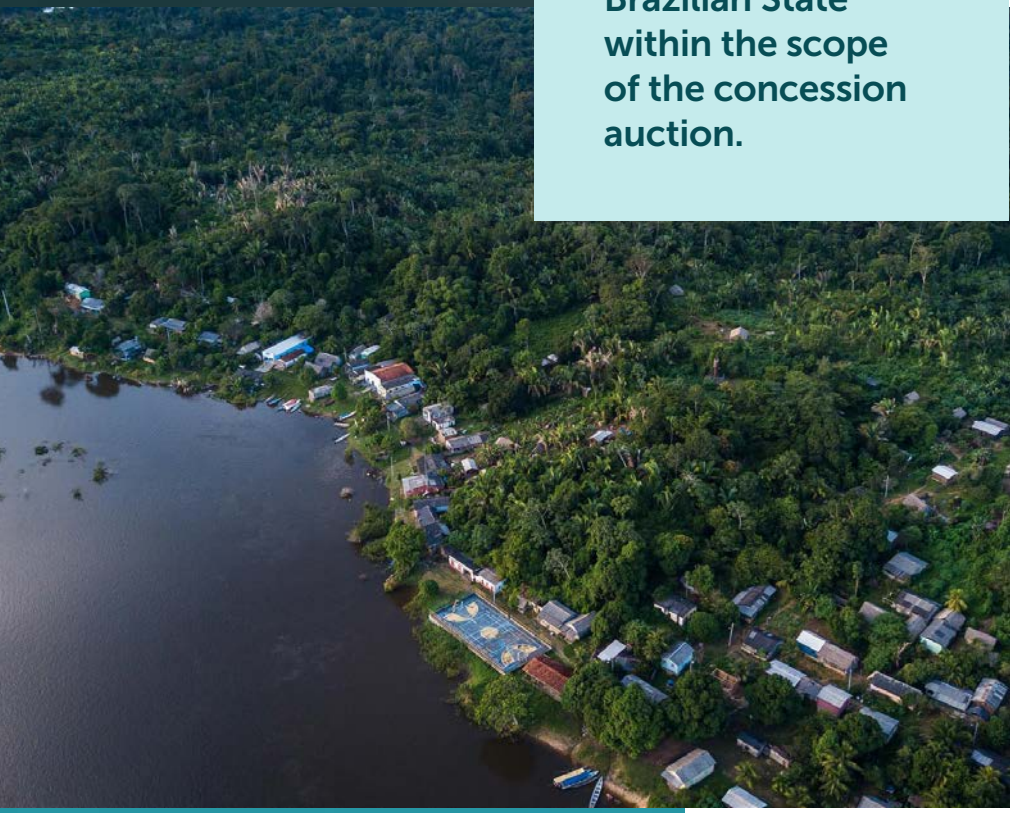
Annually, we send Ibama and the National Water Agency (ANA) a report with hydrological, climatological and water quality data. **GRI 303-2**

We improved the water supply and distribution system and implemented collection networks, pumping stations and a sewage treatment plant, which ensure basic sanitation and quality of life for more than 90% of the Altamira population.


Altamira Sewage Treatment Plant

**The operation and water management rules are specified in the so-called hydrographs A and B, which were established by the Brazilian State within the scope of the concession auction.**

Ilha da Fazenda Community



# Water management in Volta Grande do Xingu – **Hydrogram**

GRI 3-3

The hydroelectric project on the Xingu river has undergone changes since its first proposal, prepared 40 years ago. These changes took place in order to meet the claims of indigenous peoples and local communities, as well as the need to preserve biodiversity in Volta Grande do Xingu.

It was a long process of studying and adapting the project to reduce social, environmental and economic risks and impacts. The flooded area foreseen in the first inventory was redesigned, in order to reduce the size of the reservoirs, which, together, added up to around 18,300 km$^2$ and then increased to the current 478 km$^2$. This reduction ensured that no indigenous land was flooded.

In the current arrangement of the project, which has been in place and in operation since 2016, the Reduced Flow Stretch was established downstream from the Pimental plant dam, which corresponds to approximately 100 km of the 1,800 km long Xingu river.

The operation and water management rules that determine the amount of water to pass through the Reduced Flow Stretch (TVR) are specified in the so-called hydrographs A and B, which were established by the Brazilian State within the scope of the concession

auction for the Belo Monte HPP, that is, in a period prior to the creation of Norte Energia S.A.

The two hydrographs, which are an integral part of the plant's environmental licensing, must alternate annually, with minimum flows forecast for each month of the year, based on technical and ecological studies, to ensure the maintenance of water quality and the preservation of ichthyofauna, alluvial vegetation, chelonians, fishing, navigation and the ways of life of local populations.

During the dry season, the plant's power generation is minimal, and the water that reaches the reservoir (affluent flow) is dedicated to the Reduced Flow Stretch. During the rainy season, the flow is controlled, as determined by the ANA.

The matrix of impacts generated during the environmental studies of the Belo Monte HPP indicated how the project could affect the socioeconomic activities of the populations that live on the margins of the Reduced Flow Stretch, as well as the flora and fauna. Based on these studies, it was established by the regulatory and supervisory bodies that the hydrographs should be tested for a period of six years after the start of full operation of Belo Monte.

In this context, the Volta Grande do Xingu Integrated Management Plan (Pg. IVGX), which makes up the Basic Environmental Project (PBA), and specific projects for the Reduced Flow Stretch, including those of the Basic Environmental Plan for the Indigenous Component, are being carried out (PBA-CI).

These are the measures planned to monitor and mitigate the occurrence of such impacts, under the guidance of the competent environmental agency, which inspects, monitors and directs the way in which projects and mitigation and compensation measures are implemented.

Throughout 2022, we preserved such mitigation measures under development in the region through the execution of the PBA and the Term of Environmental Commitment (TCA) No. 03/2021, signed with Ibama.

We maintained dialogue with riverside communities and indigenous peoples and worked together on issues of mitigation and compensation in the face of impacts. The ongoing actions with the population of the Reduced Flow Stretch are, mainly, improvements in basic sanitation conditions, measures to support navigation in the region, support for productive fish farming activities, cocoa and food planting and improvements in the health system, terrestrial accesses and communication system via Internet.

Norte Energia also strengthened its process of dialogue and relationship with the communities, studying and sharing with riverside and indigenous peoples new proposals for measures to ensure the improvement of the conditions of local biodiversity.

The set of measures provided for in the TCA are divided into six lines of action: Biodiversity, Monitoring, Social, Health, Communication and Sanitation. Regarding biodiversity and monitoring actions, the main actions for 2022 are presented in the Biodiversity chapter. Actions in the Social, Health, Communication and Sanitation axes are reported in the chapter Development of local communities.

In the judicial sphere, Public Civil Action (ACP) No. 1000684-33.2021.4.01.3903 filed by the Federal Public Ministry is in progress. Despite this, in June 2022, Norte Energia managed to maintain the decision of the President of the Court, which suspended the effects of the preliminary decision of the ACP, maintaining the application of the hydrographs as they are established in TCA No. 03/2021.
**GRI 3-3**

## Sills

Norte Energia has been working to improve the minimization of possible effects arising from the application of hydrographs.

In order to enhance actions to mitigate socio-environmental impacts on Volta Grande do Xingu, in 2022 we advanced with studies for the implementation of sills. The objective is to extend the flooding period and area of stretches of alluvial forests and pioneer formations that are essential for the reproduction and feeding of fish, chelonians and the entire ecological chain of the 100 km that make up the Reduced Flow Stretch. This is an additional mitigation measure to maintain the hydrograph established by the Brazilian State and provided for in the environmental licensing.

The sill project is being developed, considering socio-environmental and engineering aspects. We invested in the construction of a reduced hydraulic model, on a scale of 1:100[7]. This model was built by LACTEC, an institute specializing in the subject to assess project criteria and possible impacts. The proposed solution replicates the natural conditions that already exist in the Xingu river, where boulders, natural sills of the river, cause the water flow to be contained and become submerged with the increase in flows. In 2022, the socio-environmental studies of the sill project were presented to the project's stakeholders. Leaders from the communities of Volta Grande do Xingu visited the reduced model, and made visits with a technical team to the location of the sills, on the Xingu river. Managers and technicians from Ibama and Funai also saw the reduced model, to better understand the project under analysis.

## Total water consumption

**GRI 303-5**

Norte Energia collects the consumption of potable and non- potable water in its operation, maintenance and administrative offices.

The values of total consumption (uptake minus water disposal) were obtained in two ways:

- Direct reading of water meters, with transfer of data to control spreadsheets for monitoring. This methodology is applied to the Water Treatment Stations (ETAs) and to the Belo Monte HPP;
- Estimated values, based on NBR 5626 – Requirements and the following mathematical formula: (effective+20%)x150 liters per person number of working days. This methodology was applied to the administrative offices of. Tancredo Neves Avenue and Perimeter Highway. For the Brasilia office, we considered the supply of water by the supply concessionaire.

## Water consumption (ML)

**GRI 303-5**

| Destination types | All areas | Areas with water stress |
|---|---|---|
| Total water consumption | 8.3 ML | 0 ML |

[7] Each 1 meter in the model represents 100 meters in full scale.

Water abstractions are currently superficial, directly from the Xingu river. The water used by Norte Energia for sanitation and industrial purposes has a catchment flow at a level (49,235 megaliters) below the allowable level. Thus, there is no current and predicted future water stress, since this theme refers to the availability, quality or accessibility of water. Sanitary and industrial effluents are considered significant in Norte Energia's Environmental Aspects and Impacts Significance Assessment Matrix, which treats 100% of this type of waste generated. **GRI 303-4**

Sanitary effluents are treated in conventional systems, while industrial effluents, basically composed of oily substances, in a Water and Oil Separation System (SAO).

Sludge residues resulting from the Sewage Treatment Station (ETE) are sent to municipal sanitary landfills, and the oily residues, to the company specialized in treatment and refining them. Norte Energia follows the standards for disposal of sanitary and industrial effluents established by Conama Resolution No. 430/2011 and by the International Finance Corporation (IFC), presented below:

| Water consumption |
|---|
| pH – 6.0 - 9.0 |
| Total coliforms – NMP/100ml – absent |
| DBO – 30 mg/l |
| COD – 125 mg/l |
| Total nitrogen – 10 mg/l |
| Total phosphorus – 2mg/l |
| Oil and greases – 10mg/l |
| Total suspended solids – 50 mg/l |

Regarding these standards, we implemented a pilot project at the Pimental ETE, in November 2022, in order to meet the IFC EHS standards as follows:

- Transformation of the anaerobic phase of the treatment system into an aerobic phase, using compressed air blower mechanisms;
- Insertion of another effluent filtration step, using a double filtration system (sand and activated carbon);
- Insertion of the effluent disinfection step, by dosing sodium hypochlorite solution, using dosing pumps.

The pilot project is currently being monitored so that we can assess its effectiveness. The perspective is to be able to replicate the improvements for the other ETEs of the Belo Monte Complex.

The amount of sanitary effluents generated in the administrative offices and in the Belo Monte HPP was estimated in accordance with NBR 9646 – Project for Sewage Collecting Networks. ETEs 1 and 2, as of September 2022, began to measure the flow of treated effluents using flow meters. It is important to point out that, during the period covered by this report, the flow and load limits of the ETEs did not exceed the projected values, and no supplier was found to have generated impacts on the effluents.

Still regarding water resources, in 2022, we consumed a total volume (collection minus disposal) of 8.30ML of water. **GRI 303-5**

# Waste

GRI 306

At Belo Monte HPP, the management of collection and final disposal of Class I waste is carried out by a group of specialized companies, with which Norte Energia has a service agreement. These companies operationally control waste, register their activities and carry out constant and effective monitoring.

For actual and potential impacts related to Norte Energia's waste, depending on the type of waste and an analysis of its economic viability, different reuse, recycling, and disposal techniques may be adopted. As for the waste generated during routine activities and inherent to the activities of the Belo Monte Hydroelectric Complex, these are linked to the plant's operation and maintenance routines, as well as administrative activities.

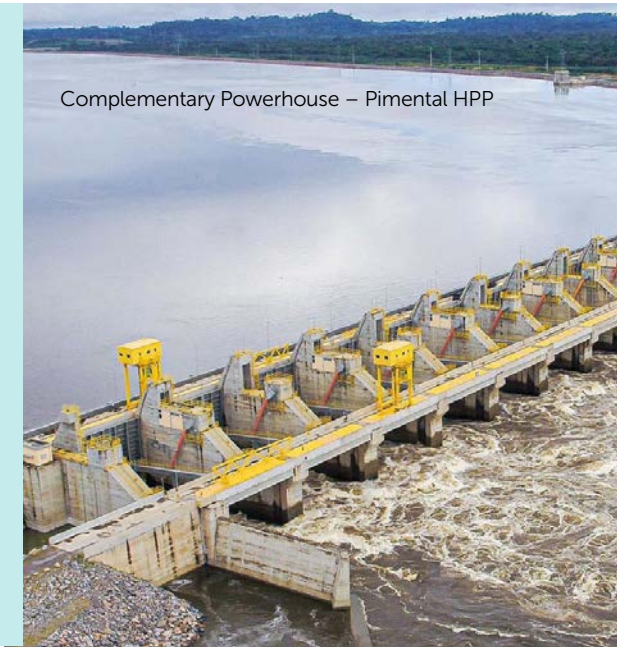
The disposal of Class I – Hazardous waste is a risk activity, which can cause significant impacts on the environment. Therefore, disposal processes were instituted as preventive measures, which are monitored following environmental requirements where the service providers responsible for the final destination are constantly supervised by Norte Energia's Environment area. **GRI 306 -1**

From 2019, when full operation of the Belo Monte Complex began, until 2022, the total waste destined for final disposal decreased by approximately 93.4%, from 2,594.16 to 170.27 tons. **GRI 306-5**

It should be noted that part of the waste destined in 2019 belonged to the implementation phase of the project, and that the waste destined in the 2020–2022 period was generated by the operational phase of the hydroelectric complex.

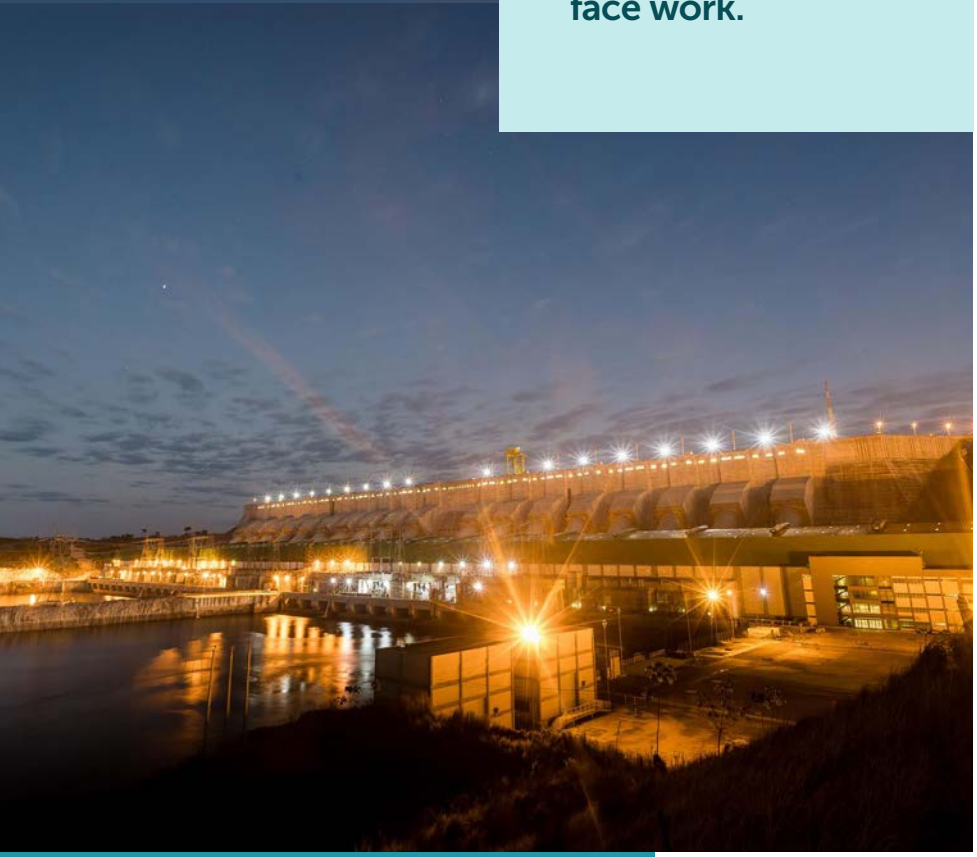
Regarding reuse, recycling, and destination techniques, these will depend on the type of waste and analysis of economic viability. We can highlight that, in 2022, out of 100% of the waste destined, 65.40% were organic, 0.02% infectious, 3.92% contaminated, 0.05% batteries, 1.12% light bulbs, 23.11% recyclable, 6.37% non-recyclable and 0.005% ETE sludge. **GRI 306-2**

**In the 2020–2022 period, after completing the implementation phase of the Belo Monte Complex, we recorded a significant reduction in the volume of waste generated, compared to previous years.**



Complementary Powerhouse – Pimental HPP

**In 2022, our energy consumption increased compared to 2020 and 2021, mainly due to the return to face-to-face work.**



Night photo of the Belo Monte HPP

# Power

GRI 302

Regarding Norte Energia's internal consumption, computerized systems allow a daily, quick and correct analysis of data and variations in this consumption. The goal is always to seek reductions and deal with any non-compliance.

Fuel consumption and fleet management are monitored, as well as costs using the Guiando software. Considering the three-year period 2020–2022, the reduction in fuel consumption between 2020 and 2021 can be explained by the decrease in the number of vehicles in the fleet, as well as compliance with the working from home regime.

The increase in consumption in 2022 was influenced by the return to face- to-face work, which led to more trips and, consequently, higher fuel consumption. The reduction in ethanol consumption in 2021 and 2022 resulted from a combination of factors: the precarious fuel supply network in the city of Altamira/PA and the price and performance of this fuel in relation to gasoline.

Norte Energia's electricity consumption showed a significant variation in 2020 in view of the Covid-19 pandemic, when offices were closed and other complementary services were interrupted. The return to face-to-face work generated a gradual increase in consumption and all consumption was offset by I-REC.

# 9 Prosperity

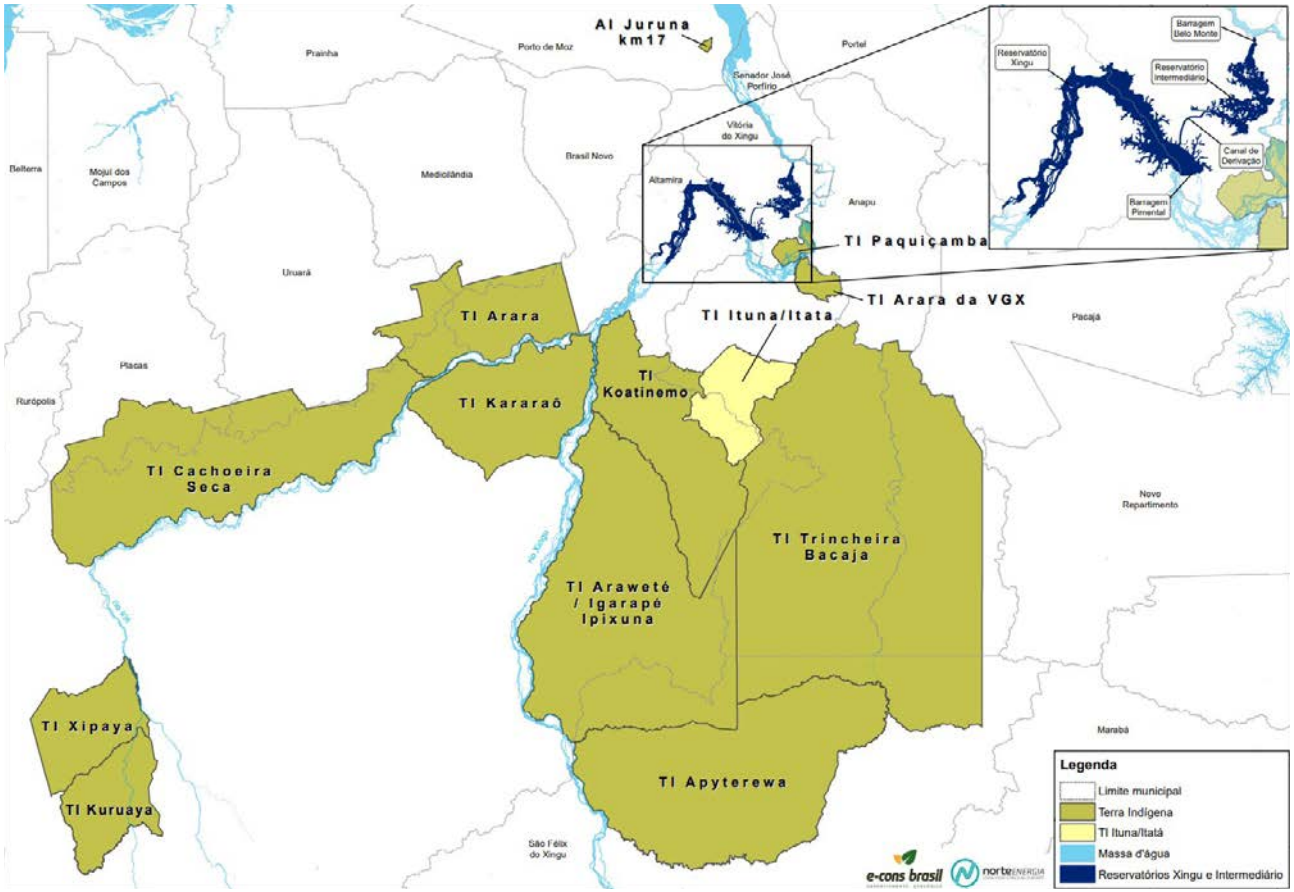
# Relationship with indigenous **peoples and local communities**

**GRI 3-3, GRI 411-1**

## Indigenous peoples

The Basic Environmental Plan for the Indigenous Component (PBACI), part of the Belo Monte HPP environmental licensing process, covers an area of approximately five million hectares, in which 11 indigenous lands and one indigenous area are located.

In this territory, nine ethnic groups speak nine different languages. In December 2022, according to data from the DSEI (Special Indigenous Health District) Altamira, this population was distributed in 124 villages and totaled approximately 5,000 indigenous people. In addition to this audience, the PBA-CI also serves more than 3,400 non-village indigenous people, called riverside and city dwellers, in the Altamira region.



The PBA-CI comprises 11 programs, 30 projects and a plan. In addition to the PBA-CI, within the scope of the commitments of the environmental licensing process, there is also the Territorial Protection Plan for the Indigenous Lands of the Middle Xingu (PPTMX), the result of the Cooperation Agreement signed in 2015 with the National Foundation for Indigenous Peoples (Funai).

The programs and projects for mitigation and/or compensation of the impacts of the enterprise are directed to the following lines of action: Environmental Supervision; Indigenous Land Management; Territorial and Environmental Protection of Indigenous Lands; Indigenous School Education; Indigenous Health; Productive Activities; Cultural heritage; Material and Immaterial; Institutional Strengthening of Indigenous Organizations; Infrastructure; Indigenous and Non-Indigenous Management and Communication.

Within the scope of the execution of the PBA-CI, Norte Energia has promoted qualified listening and indigenous participation in carrying out the planned actions, in order to expand the spaces for dialogue with the indigenous communities and with the indigenist body, and thus guarantee the quality of its performance. **GRI 2-29, GRI 411-1**

As part of the licensing process, forums for participation and monitoring of established conditions were set up, formed by the Indigenous Management Committee, the Reduced Flow Stretch Committee and the ten indigenous subcommittees, in order to facilitate specific discussions with each people. **GRI 2-29, GRI 411-1, GRI 413-1**

1st Indigenous Fair for the Creative Economy of the Peoples of the Middle Xingu. Indigenous Crafts

In addition to this set of instances and formal forums, we also have the dialogue exercised throughout the execution of the activities of the PBA- CI programs and projects and a frequent schedule of meetings with indigenous peoples, Funai, Special Secretariat for Indigenous Health (Sesai) , Special Indigenous Health District (DSEI), District Council for Indigenous Health (Condisi) and other entities, to monitor ongoing activities and plan future actions. In 2022, we held 74 meetings in this context. **GRI 413-1**

Another form of interaction with indigenous peoples takes place via face-to-face consultations in Altamira, at the headquarters of the Indigenous Communication Program, as well as telephone consultations, radiophony and messages via application. Information on the main topics dealt with through these channels can be found in the Communication with Stakeholders subchapter, which includes information on other communication methods with indigenous peoples.

In 2022, we continued to support actions to prevent and combat the new coronavirus pandemic, monitoring reported cases of Covid-19 among indigenous peoples. In that year, we carried out 3,613 immunochromatographic tests for viral antigen research and medical assessment/report for employees in activities that entered indigenous lands. These tests started in 2021, year in which we carried out 1,853 tests.

In the context of health promotion, we advanced in debates with the indigenous health bodies and Condisi in defining land in Altamira for the construction of the new headquarters of the DSEI and the Casa de Saúde Indígena (Casai).

## Indigenous audiovisual productions

Actions to value indigenous culture stood out with the Institutional Strengthening and Material and Intangible Cultural Heritage programs. Through these two programs, indigenous people received advice and equipment for the production of audiovisual materials, which were awarded in competitions in the region. The short film *Contos do Iriri*, produced by the indigenous people of Aldeia Cupi, won 1st place in the André Nunes Award at the IV Xingu Indigenous Literary Fair. At the same festival, the film *Yarumê*, by chief Josemir Chipaia, Aldeia Yarumê, won 3rd place in the Jenipapo category. In addition to these two films, there was also the premiere of the documentary *Yawaidu: Mãe de um Povo (Mother of a People)*, from the Bitata Association.

It is also worth mentioning the 1st Indigenous Fair of Creative Economy of the Peoples of the Middle Xingu, held during the 8th Transamazônica Song Festival (Fecant), which featured exhibitions and sales of handicrafts and food products from the nine ethnic groups that inhabit the area covered by the Belo Monte Complex.

The fair fostered income generation for indigenous peoples and contributed to the strengthening of relations between local entrepreneurs and communities, while at the same time promoting the dissemination and appreciation of cultures and ethnic identities of indigenous peoples.

With regard to the protection of indigenous lands, we continued to comply with the actions of the Territorial Protection Plan for the Middle Xingu. Through this plan, we created and implemented the Remote Monitoring Center (CMR), located at Funai's headquarters in Brasília, where we have maintained specialized labor for its operation since 2016.


Remote Monitoring Center – CMR website

In addition to the commitment established in the Cooperation Agreement, we responded to Funai's request to expand the monitoring area of the CMR so that it could reach all indigenous lands in Brazil. In order to help the Brazilian State fulfill its mission to protect indigenous lands, we have responded to this request. Currently, the CMR monitors the entire national territory. To learn more about the CMR, visit the link **here**.

Also, within the scope of the Territorial Protection Plan for the Middle Xingu, we are committed to building 11 territorial protection units, eight of which have already been built and are in operation, with 56 employees hired by Norte Energia, under the management of Funai. The three missing units were delayed in their execution schedule due to their location in conflict areas. For construction, support from public security services is required, as provided for in a specific clause of the Cooperation Agreement. In 2022, Funai made this support possible with the National Public Security Force (FNSP), which made it possible to advance the planned actions. Of the three units mentioned, in 2022, two had their construction phase started and one is awaiting authorization to start the works. **GRI 411-1**

Finally, among the investments in infrastructure carried out in 2022, we highlight the implementation of 300 works aimed at productive activities in indigenous lands, foreseen in subsistence and commercialization projects, both of the Productive Activities Program (PAP), which totaled up to December 2022, 536 units implemented, namely: flour mills, feed warehouses, rafts for net tanks, for aviary fish farming, cocoa greenhouses, corrals, slaughterhouses, chestnut warehouses, babassu processing unit and canteens.

1st Indigenous Fair for the Creative Economy of the Peoples of the Middle Xingu

Despite the large volume of actions within the scope of environmental licensing, working with indigenous peoples is complex. The extensive geographic area added to the ethnic and linguistic diversity and the challenges inherent in interethnic relations pose unique challenges to the ongoing work.

In 2022, at the judicial level, there was no decision denoting and/or showing violation of the rights of indigenous and traditional peoples by Norte Energia. We continue as defendants, along with Funai and the Union, in Public Civil Action (ACPs) No. 0003017-82.2015.4.01.3903, filed by the Federal Public Ministry, whose allegation is the alteration of the traditional ways of life of the indigenous peoples of the Middle Xingu. That ACP is still pending in the Federal Court. **GRI 411-1**

Still with regard to the rights of indigenous peoples and Belo Monte, in 2022, there was a relevant movement in Public Civil Action No. 0000709-88.2006.4.01.3903 (RE No. 1,379,751), which deals with the validity of the Legislative Decree (DL) No. 788/2005 that authorized the installation of the Belo Monte HPP, mainly with regard to the alleged non-hearing of indigenous people. Although it has been demonstrated that there were several hearings with those peoples, by monocratic decision, Justice Alexandre de Moraes confirmed the decision of the Federal Regional Court, which considered Legislative Decree No. 788/2005 invalid for violation of Art. 231, paragraph 3 of the Federal Constitution, and violation of Convention No. 169 of the International Labor Organization (ILO) Norte Energia is not a party to this ACP, since at the time, the company had not been incorporated and the responsibility for conducting its licensing process was still with the Union. It should be noted, however, that the process is still pending judgment of appeals filed by the parties.

## Local communities

We carried out a series of actions with the local communities of Volta Grande do Xingu, in order to promote socioeconomic development, generate jobs and income and improve living conditions.

Within the scope of the Term of Environmental Commitment (TCA), in 2022, we strengthened health care and sanitation conditions with the construction of wells and septic tanks for more than 100 families, renovations in the Basic Health Units and the financing of mobile teams, medicines and inputs. Throughout the TCA, R$157 million will be invested, of which 91 million have already been invested by the end of 2022. **GRI 413-1, EU20, EU22**

On the communication axis, we continued the #Conecta Xingu project, with the installation of totems and satellite antennas so that indigenous and non-indigenous communities of Volta Grande do Xingu have access to the internet. In total, there are already 129 antennas installed, 49 of which are from 2022. This project began during the Covid-19 pandemic and boosted the communication capacity of communities.

In terms of social and infrastructure, we continued interventions in land accesses, which reached the 290 km mark. Added to navigation support measures, these interventions contribute to the improvement of the population's mobility conditions, enabling access to school, health center, church, in addition to improving the flow of local production. With regard to productive activities, progress was made in the projects financed by us, with the donation of agricultural inputs to families that work with cocoa plantations, as well as the installation of fish farming tanks for another 45 families.

Conecta Xingu – Internet installation in the community of Volta Grande do Xingu

**We continued the #Conecta Xingu project, which provides communities with Internet access. There are already more than 129 satellite antennas installed, 49 of which are from 2022.**

With regard to urban communities, we highlight our actions in the city of Altamira. In 2022, the sanitation system and other assets built by Norte Energia were transferred to municipal management.

As part of the actions foreseen in the commitment signed with the municipality of Altamira, we also negotiated with residents of Lagoa do Jardim Independente I, the vacancy of the area for future interventions by the municipality. To this end, we offered pecuniary compensation to 300 families, as provided for in the Term of Commitment signed with the City Hall. **EU22**

Regarding the Urban Resettlement Project, another 293 families were compensated in 2022.

In response to requests to change their place of residence, "in 2022, we relocated four indigenous families to the Collective Urban Resettlement (RUC) Tavaquara, designed, built and intended for riverside and indigenous families. This new neighborhood has 150 residences and is the result of demands from this specific public. **EU22**. RUC Tavaquara is equipped with a school, Basic Health Unit (UBS), multi-sports court, living space and daycare. **EU20**

## Fishermen*

The impact matrix generated during the socio-environmental studies at the Belo Monte HPP indicated possible impacts on the ichthyofauna and fishermen, due to the adaptation of a river environment to a reservoir environment, in addition to the formation of a reduced flow stretch in Volta Grande do Xingu. Therefore, mitigation measures were adopted specifically aimed at that audience.

Throughout 2022, the change in the flow of the Xingu river was registered as a negative impact, especially in the flood period, being a factor of complaints by the communities located in the area of direct influence of the project. The flow reduction in the period comprising the flood of the Xingu river, which runs from December to May, changes the dynamics of river flow. Monitoring indicates a reduction of fish species of around 14% in the Reduced Flow Stretch (TVR), therefore, there is no indication of species extinction.

With regard to impacts, in line with socio-environmental studies, throughout 2022 there was a 14% reduction in fishermen's income, which was also influenced by external issues, such as: higher fuel prices, inflation and low sale value. The socioeconomic survey of the population indicated that, despite the reduction in income from fishing, there was a reduction in the percentage of fishing families living below the poverty and extreme poverty line, from 18% in 2017 to 3.6%, in 2022.

As a way of mitigating these impacts, the actions of the Term of Environmental Commitment (TCA), promoted by Norte Energia in the region throughout 2022, resulted in the implementation of 90 fish farming tanks for riverside residents of Volta Grande do Xingu and 136 wells and septic tanks, also for residents of that region.

Based on actions to mitigate these impacts, Norte Energia seeks to eliminate the problems and promote a socio-economic and cultural environment that is as or

* This text has been updated to correct information.

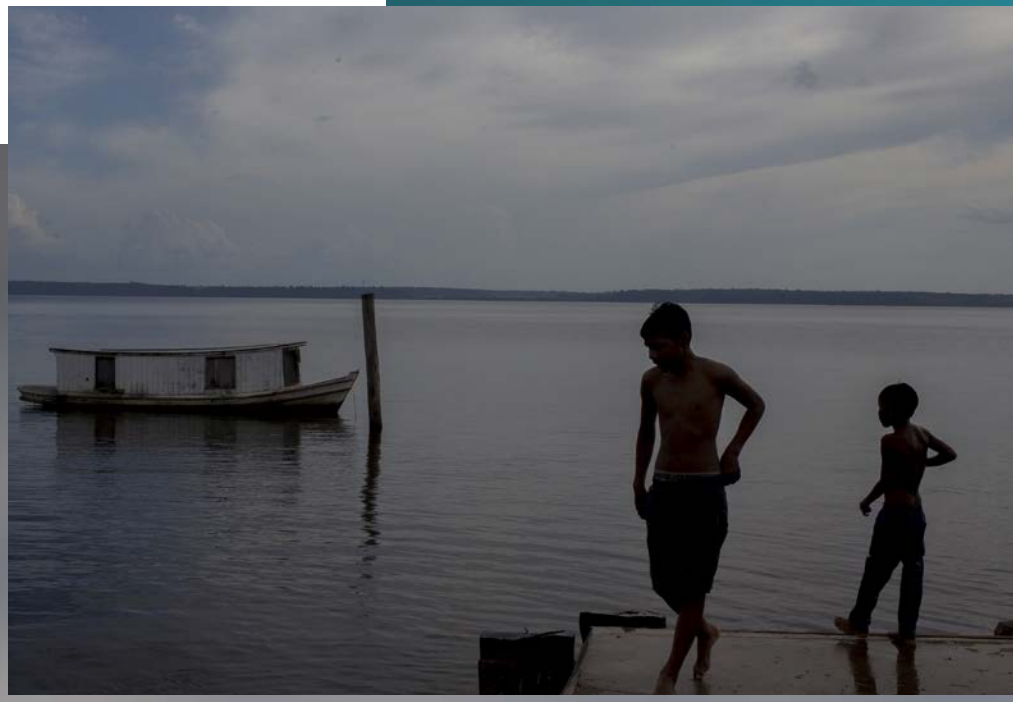
more structured than what local communities had before the project was implemented in the region. **GRI 413-2**

We currently have a register of 1,976 fishermen working in the Xingu, who were affected by the implementation and operation of the enterprise. We prepared this register based on: a list of fishermen who were already working on the Xingu river before the reservoir was filled and who maintained fishing activities during the operational phase of the Belo Monte HPP; on data obtained from participatory workshops in which fishermen were registered through self-declaration, followed by active search; and lists of fishermen monitored during fishing unloading and social monitoring.

In 2022, understanding that the mitigation actions carried out by Norte Energia, of a collective nature, did not have the expected effects on the individual assistance of fishermen, Ibama recommended the payment of a reparation fund. In compliance with that, in 2023 we started service shifts for fishermen in the municipalities of Altamira, Anapu, Senador José Porfírio and Vitória do Xingu. **GRI 413-1**

At the judicial level, there are individual and collective demands for indemnity that require payment for alleged damages to the fishing activity. Until 2022, there was no decision recommending such additional payments.

With regard to fishing and riverside communities, in 2022, we recorded more than 100 meetings with the direct involvement of communities and community leaders. These meetings aimed to build projects to mitigate socio-environmental impacts directed at these communities in the Volta Grande do Xingu region, an area of direct influence of the Belo Monte HPP. **GRI 413-1**



Xingu river in the municipality of Senador José Porfírio

## Riverside dwellers

In the process of environmental licensing, riverside dwellers residing in the reservoir area were assisted, initially, through the Population Relocation Plan, which included the construction of collective urban and rural resettlements in Altamira and Vitória do Xingu.

The process of relocating the families was carried out and monitored by social teams, in addition to monitoring and social and psychological assistance provided to families throughout the process of moving and adapting to their new home.

However, due to the specificities of the riverside way of life, especially that by the river and directly related to artisanal fishing, subsistence activities and extractivism, a proposal was presented to Norte Energia, by the Riverside Council, regarding the creation of a Riverside Territory.

According to the members of this Council and their support group, this new territory would best facilitate the recomposition of their traditional way of life.

After interactions to adjust the proposal presented, the identification of the location for the resettlement of the riverside families in the Xingu reservoir, in the perimeter of the permanent preservation areas of the Belo Monte HPP, as well as the acquisition of land beyond this perimeter, began. This measure was carried out with follow-up by Ibama, the Riverside Council and its support group within the scope of environmental licensing.

In October 2021, we asked Aneel for a Public Utility Declaration for a portion of the area necessary for the implementation of the riverside territory. At the same time, in 2022, we continued the socio-patrimonial inventory of properties in the area of interest and started real estate negotiations.

The proposal for the riverside territory provides for the resettlement of 322 families, of which 141 were resettled by 2021. In 2022, the resettlement process began for another 23 families. **EU22**

Concomitantly with the negotiations to obtain the riverside territory, Norte Energia monthly pays a transition/maintenance allowance to all the riverside families involved, according to the parameters defined by the supervisory body.

## Xingu Regional Sustainable Development Plan (PDRSX) GRI 3-3, GRI 413-1

As a result of the commitment assumed by Norte Energia in Aneel's Public Auction No. 06/2009, we are responsible for investing a total of R$500 million in projects that contribute to sustainable regional development in the region from 2010 to 2030, through the Xingu Regional Sustainable Development Plan (PDRSX).

The PDRSX aims to implement programs and actions that promote sustainable development, the generation of jobs and income and the improvement of the quality of life in the region where the Belo Monte HPP is located, in the Pará municipalities of Altamira, Anapu, Brasil Novo, Gurupá , Medicilândia, Pacajá, Placas, Porto de Moz, São Félix do Xingu, Senador José Porfírio, Uruará and Vitória do Xingu.

In its first ten years of execution (2011–2021), the PDRSX has already supported 363 projects distributed over 342,000 km² of operation area and the amount of approximately R$305 million, distributed as follows: 48.8% of the projects were implemented in the sphere of civil society, 32% in actions in the municipal government, 8.5% in the Federal Government, 8% in the state government and 2.8% in the management of the PDRSX.

In 2022, the Plan's governance model was redefined and, from then on, the following entities were selected through a public notice to compose the new Management Committee: Living, Producing and Preserving Foundation; Kirinapãn Indigenous Peoples Association; Association of Residents of the Rio Iriri Extractive Reserve – AMORERI Traditional Communities; Xingu Regional Environmental Education Center (CREAX); Federation of Rural Workers and Family Farmers of the State of Pará; Black Women's Collective Maria Maria – Comumema Altamira; and Union of Rural Workers and Family Farmers of the Municipality of Medicilândia (STTR).

These representatives of civil society, together with representatives of the federal, state and municipal public authorities, will give continuity to the projects in execution and the selection processes for the next ones.

Below, the amount allocated to projects in the last three years:

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| **PDRSX** | 11,012,995.17 | 10,578,832.54 | 5,910,637.81 |

To learn more about PDRSX, visit **here**.

**Belo Monte Community**

An initiative that promotes social responsibility actions in favor of the populations that live around the plant, Belo Monte Community works on the following items: Citizenship, Preventive Health, Environmental Education, Art and Culture, Education, Sports, Volunteering, Digital Inclusion and Job and Income Generation. To learn more, click **here**.

In 2022, Belo Monte Community expanded its scope to Volta Grande do Xingu. In July, in the Ressaca community, located in the municipality of Senador José Porfírio, we carried out the following activities for each item:

- **Health:** ophthalmological and dental evaluation, medical consultation, bioimpedance, rapid tests and vaccination;
- **Citizenship:** issuance of personal documents, such as identity card, individual registration and birth certificate, in addition to enrollment in the Single Registry;
- **Education:** running quick courses in bakery, electrical and plumbing, motorcycle maintenance, in addition to Cozinha Brasil workshops;
- **Environmental Education:** dynamics of interactive games about environmental education;
- **Culture and Leisure:** inflatable toys, face painting, paper painting, racquetball, chess and table tennis.

The activities served 11 communities located in Volta Grande do Xingu: Ilha da Fazenda, Mangueiras, Cana Verde, Ituna, Itatá, Pirarara, Pontão, Garimpo do Galo, Kaituká, Bacajaí and Landir, with Vila Ressaca as the headquarters.

Belo Monte Comunidade Social Soccer

## New directions

In order to add even more actions in the field of professional qualification for the population of the region, in 2022, we entered into a partnership with BNDES through the Novos Rumos Program, through which we will make professional qualification projects possible for people in social vulnerability, in order to increase their employability and family income. To learn more about this BNDES initiative, click **here**.

In August 2022, in Vila Ceará, municipality of Anapu, we promoted the same activities described in another 11 communities located in Volta Grande: Belo Monte do Pontal; Terra Preta; Rio das Pedras; Nova Conquista; Maranhenses; Caracol; Bacajá; Surubim; Ramal dos Araras; Ramal do Julião and Novo Progresso.

In both actions – in Ressaca and in Vila Ceará –, 160 volunteers supported the activities.

In 2022, we also held a professional qualification course in cutting and sewing for 36 women from the communities of Belo Monte do Pontal and Belo Monte, as well as a course in Informatics – Computer Operator for 17 young students from the Vila Ceará region. Both with a workload of 160 hours.

In Altamira, we continued the Social Soccer project, which, in 2022, assisted around 650 children and young people from the five new neighborhoods (Jatobá, Laranjeiras, Água Azul, São Joaquim and Casa Nova) to play soccer, twice a week, during school hours. The activities are carried out on the sports courts built by Norte Energia. Championships between neighborhoods were held throughout the year, as well as environmental education activities and lectures on the importance of healthy eating, physical activity and the environment, in order to promote health.

This project promotes leisure, interaction and a sense of belonging to residents of the new neighborhoods.

Workshop for the Awakening phase of the Belo Monte Empreende Program

## Belo Monte Empreende

In 2022, we started the **Belo Monte Empreende** program in partnership with the Centro de Empreendedorismo da Amazônia (CEA). Aimed at young people in the Middle Xingu region, this initiative aims to create shared value and encourage the formation of a new generation of entrepreneurs for

**Belo Monte Empreende promotes the formation of a new generation of entrepreneurs for sustainable businesses in the region. Executed by the Amazon Entrepreneurship Center, it involved more than 500 participants, with 62% of women participating.**

sustainable business in the region. The training lasts 24 months and has an entrepreneurial journey in four stages: Awakening, Pre-Acceleration, Demoday (Project Demonstration Day) and Acceleration.

In 2022, the program promoted ten workshops and included communities in Volta Grande do Xingu and the population of the new neighborhoods built by Norte Energia. There were 523 participants, 62% of whom were women, who presented business ideas aimed at family farming, sustainable and community tourism, handicrafts, exploitation of non-timber forest products, gastronomy, among others. The next phases will be executed in 2023 and 2024. Learn more **here**.

**Investments in infrastructure and service support**
**GRI 203-1**

In 2022, we completed the construction of the headquarters and Porto dos Areeiros, in the city of Altamira. Both works represented an investment of approximately R$2.8 million. The works were delivered to Cooperativa dos Areeiros do Rio Xingu (Cooparxing) in December 2022.

The construction of the Port complies with the extrajudicial agreement reached with the category as a way of mitigating the impacts arising from the formation of the Belo Monte HPP reservoir.

We also promoted the proper disposal of urban solid waste in the territory of Anapu with the construction of the Sanitary Landfill of Anapu, which received an investment of R$4.1 million and was delivered to the City Hall in June 2022. This landfill was built in compliance with the Sanitation Program in Belo Monte and Belo Monte do Pontal, as well as condition 2.10, item "c", of Operating License 1,317/2015. **GRI 306-4**

## Malaria control

Norte Energia has invested, since 2011, in the Action Plan for Malaria Control. The success of the plan in the five municipalities in the area directly influenced by Belo Monte; and in Pacajá, municipality in the area of indirect influence with the highest incidence of case records, can be measured by the 85.65% reduction in disease case records in the period 2011–2022, according to data from the Epidemiological Surveillance Information System (Sivep) of the Ministry of Health.

Through the execution of TCA 03/2021-GABIN, signed between Ibama and Norte Energia, the actions of the Action Plan for Malaria Control are carried out focusing on Volta Grande do Xingu, which should last for the 36 months recommended in the aforementioned Term. As a result, there is a reduction of 99.4% in the records of malaria cases in the region of the Reduced Flow Stretch compared to 2011.

# Dam **safety**

**GRI 3-3, EU21**

As determined by federal legislation No. 12,334/2010, amended by Law No. 14,066/2020, which provides for the safety of dams in Brazil, the Belo Monte Complex has a Dam Safety Plan (PSB) and an Emergency Action Plan (PAE), which walk in partnership with the activities of the Civil Defenses of the municipalities where we operate.

PSB actions are periodically inspected by Aneel, and the program has a support system for dam safety management. Structure monitoring, one of the preventive measures contemplated in the PSB, is carried out with 2,640 instruments of 12 different types, which periodically assess the performance of the concrete structures – water intake, spillway and two powerhouses – of the 28 dykes that form the intermediate reservoir and the Pimental and Belo Monte dams.

In 2022, we complemented the monitoring of dikes, dams and other structures in the complex with the use of an autonomous surface boat, equipped with sonar and sensors to collect data in underwater inspections.

In search of continuous improvements, in recent years, we have implemented new technologies to improve the monitoring of installed instruments and thus promote greater accuracy and reliability in monitoring structures, including:

Aerial view of Dyke 14C

**The Belo Monte Complex has a Dam Safety Plan and an Emergency Action Plan, which work in partnership with the Civil Defenses of the municipalities.**

- Identification of all dyke and dam survey instruments by QR Code;
- Geodetic monitoring of structures using robotic total stations;
- Aerial inspections with the support of drones;
- Regular underwater inspections supported by underwater robot and autonomous boat;
- 24-hour rainfall records with online transmission by six rainfall stations.

Additionally, we carry out continuous and systematic monitoring through routine inspections of the project's structures, in compliance with Aneel Normative Resolution No. 696/2015, duly registered in the Dam Safety Management System.

The completion of the first Periodic Review of Dam Safety at the Belo Monte Complex, in accordance with the deadlines established in Aneel Normative Resolution No. 696/2015, was an important event in 2022. This review aimed at verifying the general safety status, the updating of hydrological data and changes in conditions upstream and downstream of the dam. In all, 47 structures were inspected and received a normal safety level diagnosis, the best category established by Aneel, which means that the structures do not have anomalies and do not compromise safety.

## Emergency Action Plan (PAE)

The Emergency Action Plan (PAE) of the Belo Monte Complex is an important tool to identify and compile the procedures and actions that must be implemented to mitigate risks and efficiently respond to emergencies that may compromise the safety of the dam and the area it influences.

Regarding self-protection elements, in 2022, 20 sirens were installed in three communities, 2,000 meters of better paths and 50 signposts to guide and indicate safe meeting points outside the flood zone.

Periodically, we carry out training so that our teams are always up to date in processes and techniques to monitor and maintain structures. In 2022, we highlight the 3rd Real Scale Drill (evacuation). It had the participation of 95 residents living in the self-rescue zones of the project, volunteer collaborators from Norte Energia, agents of the Municipal and State Civil Defense, the Federal Highway Police and the National Force.

The news of this drill was the inclusion of new areas in the coverage of the Company's Emergency Notification System, which received more modern equipment. Through them, it was possible to provide internet access to residents residing in self-rescue zones. The use of connectivity aims to diversify and expand the communication channels between Norte Energia and the population in that area.

In addition to the technology and performance of the inspection team, we receive support from consultants whose knowledge and experience is recognized in the national and international markets. They worked on the conception of the consolidated basic project and started to provide continuous technical support for the monitoring and maintenance of the structures. **EU21**

R&D – Biotechnology applied to the reproduction of native fish

**In 2022, we launched Saiba+ P&D (Learn+ R&D), a workshop that encourages a culture of innovation at Norte Energia.**

# R&D at **Norte Energia**

**EU8**

Norte Energia continuously carries out R&D projects to develop innovative solutions for the electricity sector, in line with our strategic objectives, generating value for the Company, partners and society. **EU8**

Pursuant to Law No. 9,991/2000 and its amendments, we annually invest a percentage of our Net Operating Revenue (NOR) in Research and Development (R&D) projects.

R&D activities follow the following guidelines:

- Develop innovative solutions in line with the national productive sector, universities and science, technology and innovation institutions aimed at the needs of the electricity sector;
- Prioritize the participation of executing institutions in the North, Northeast and Midwest regions;
- Promote cooperation with agents in the electricity sector;
- Allocate resources to projects aligned with the Company's business plan;
- Prioritize projects that present practical results through innovation;

## In the following table, the projects developed in 2022 EU8, IF-EU-420a.3

| Themes | Projects | Investment |
|---|---|---|
| Alternative generation sources | Photovoltaic | R$4,245,139 |
| | Electrolyser | |
| | Supercapacitor | |
| Energy efficiency | Electric Mobility | R$1,451,359 |
| Safety | Critical Structures | R$2,372,523 |
| | Upstream Slopes | |
| | Canaliculi | |
| Environment | Drone RPAS | R$7,386,982 |
| | Biotechnology | |
| | Ecological Restoration | |
| | Reforestation | |
| Management of basins and reservoirs | GHG | R$416,774 |
| | Climate Changes | |

To learn more about R&D, **visit here**.

- Promote a culture of innovation with the engagement of all employees;
- Forming technical skills focused on innovative processes.

In 2022, we invested R$16.9 million in 16 projects, of which 13 are related to alternative sources, energy efficiency, operation of electric energy systems, safety, environment and management of basins and reservoirs.

In 2022, we launched Saiba+ P&D (Learn+ R&D), a workshop that encourages a culture of innovation at Norte Energia.

R&D – Activities with Drone

# Strategic **partnerships**

**GRI 2-28, GRI 3-3**

Through the promotion of dialogues, the celebration of alliances and multisectoral partnerships — such as governments, academia, the private sector and third sector institutions, we continue to focus on expanding a network of partnerships.

In this pace, in 2022, aiming at also leveraging the positive impacts and enhancing the generation of value shared by the different lines of action that make up the three pillars of Sustainability (Regional Socioeconomic Development; Renewable Energy; and Amazon Environmental Protection), we established strategic partnerships that made it possible to mobilize financial resources for the Xingu region, focused on actions for technical training, entrepreneurship, job and income generation, promotion of innovation and technology projects, forest restoration, among others. **GRI 3-3**

## Our contribution to SDG 17: partnerships to implement the goals

In 2022, the Company became a member of the Brazilian Business Council for Sustainable Development (CEBDS) and actively participates in its Thematic Chambers of Social Impact (CT Social), Biodiversity and Biotechnology (CT Bio), of Water (CT Água) and the Thematic Chamber on Climate, Energy and Sustainable Finance (CT Clima), as well as the Amazon Working Group.

- We joined the Brazilian GHG Protocol Program, which was developed by the Center for Sustainability Studies of the Getúlio Vargas Foundation (FGVces) and WRI Brasil.

Actions of the Belo Monte Comunidade Program in Volta Grande do Xingu

**We consolidated strategic partnerships that made it possible to mobilize financial resources for the Xingu region.**

- Two matchfunding agreements were signed with the National Bank for Economic and Social Development (BNDES) in 2022: Floresta Viva, focusing on territory protection and reforestation; and Novos Rumos, which invests in professional qualification in industry 4.0 themes, technology and green qualification, for people in social vulnerability or low income, aiming at increasing employability and, consequently, the family income of the surrounding population of Belo Monte, considering future trends in the labor market and the alignment between supply and demand for services. In addition to SDG 17, Novos Rumos also contributes to other UN SDGs, namely: SDG 4 – Quality Education, SDG 8 – Decent Work and Economic Growth and SDG 10 – Reduced Inequalities.

- The Belo Monte Comunidade Program has partnerships with various agents, notably city halls and municipal departments of the municipalities contemplated by the project; collectives and community leaders; associations of residents of the five new neighborhoods built by Norte Energia in Altamira for resettlement of families; National Service for Industrial Learning of Pará (Senai-PA) Social Service for Industry (Sesi); Federation of Industries of the State of Pará (Fiepa); Civil Police of the State of Pará (PCPA); and Federal University of Pará (UFPA).

- The Company developed a partnership with the Centro de Empreendedorismo da Amazônia (CEA), a third sector institution, for the implementation of the Belo Monte Empreende Program.

- With Eletrobrás and the Kabu Institute, we maintained a partnership for the development of ethnodevelopment projects, income generation, surveillance and territorial monitoring, aimed at indigenous peoples.

- Norte Energia began its process of participation in the United Nations Global Compact in 2022, and its membership was consolidated in January 2023.

In addition to the formalized partnerships, in 2022, we worked on building dialogues and bringing together strategic actors, such as other companies, public bodies, banks, funds, academia, institutions, foundations, the press, community leaders and third sector organizations, to establish future partnerships and expand the positive impact of the actions carried out by Norte Energia.

## Affiliations GRI 2-28

Norte Energia is affiliated with the following class associations and institutions:

- Brazilian Association of Business Communication (Aberje);
- Brazilian Association of Electric Energy Generating Companies (Abrage);
- Brazilian Association of Energy Traders (Abraceel);
- Brazilian Association of Independent Electric Power Producers (Apine)
- Brazilian Association of Investors in Energy Self-Production (Abiape);
- Federation of Industries of the State of Pará (Fiepa);
- Commercial, Industrial and Agropastoral Association of Altamira (Aciapa).

# Our **suppliers**

**GRI 2-6, GRI 414-1**

In order to support the Belo Monte Complex's operation and maintenance projects, energy sales and the execution of socio-environmental and sustainability actions, we manage a base with more than eight thousand suppliers of products and services, of which 3,222 are active. In 2022, 918 new registrations and 117 supplier updates were carried out.

The permanence of suppliers in Norte Energia's active base is conditioned to technical performance and adherence to the Company's policies. Thus, aware of the potential for the multiplication of good practices in our chain of suppliers and business partners, Norte Energia shares its corporate guidelines with that audience, in particular the Code of Conduct and Ethics and the Sustainability Policy through specific contractual clauses. **GRI 205-2**

In 2022, we developed a pilot project to register, approve, select and contract suppliers considering ESG and integrity aspects, based on risk analysis, in order to prevent and mitigate risks in these contracts.

In this context, during the year, we did not identify operations and suppliers with significant risks of incidents of child labor, young people exposed to hazardous work, forced or slave labor or even cases of violations of the rights of indigenous peoples.
**GRI 408-1, GRI 409-1, GRI 411-1**

## Operations with engagement, impact assessments and development programs focused on the local community

**GRI 413-1**

| | 2021 |
|---|---|
| **Item** | **Number** |
| Assessments of environmental impacts and continuous monitoring[1] | 8 |
| Public disclosure of the results of environmental and social impact assessments[2] | 55 |
| Local development programs based on the needs of local communities[3] | 3 |
| Stakeholder engagement plans based on stakeholder mappings[4] | 1 |
| Committees and processes for broad consultation with the local community including vulnerable groups[5] | 6 |
| Work councils, health and safety at work commissions and other entities representing employees to discuss impacts[6] | 1 |
| Formal processes for grievances and claims by local communities[7] | 4 |

1. Refers to the number of social monitoring programs and projects carried out within the scope of environmental licensing.
2. Refers to Volta Grande Cycle meetings, holding the Belo Monte Social Monitoring Forum and support to the meetings of the Dam Safety Plan and Emergency Action Plan.
3. Refers to the chelonians monitoring and participatory management project; actions to strengthen productive and subsistence activities; actions of the transitional family plan directed to the group of fishermen.
4. Refers to the Project to Strengthen Collective Urban Resettlement associations (RUCs).
5. Number refers to active commissions, committees and collegiate bodies (Commission for the Main and Intermediate Reservoir; Commission for Volta Grande do Xingu; Commission for the Assistance Plan for the Affected Population; Commission for Fisheries and Aquaculture; Committee to Monitor the Collective Urban Resettlement Project; Board of the Social Monitoring Forum).
6. Refers to the Internal Commission for Accident Prevention.
7. Refers to the communication channels established by the company to interact with communities. The channels are Belo Monte Central 24 hours (0800), Volta Grande do Xingu Communication Centers, Indigenous Communication Program (radio system) and Itinerant Social Work (the latter, due to the restrictions imposed by the pandemic, did not carry out activities in the year 2021).

Suppliers are evaluated by the technical and/or corporate areas of Norte Energia via the Supplier Portal using one of the following qualification lines:

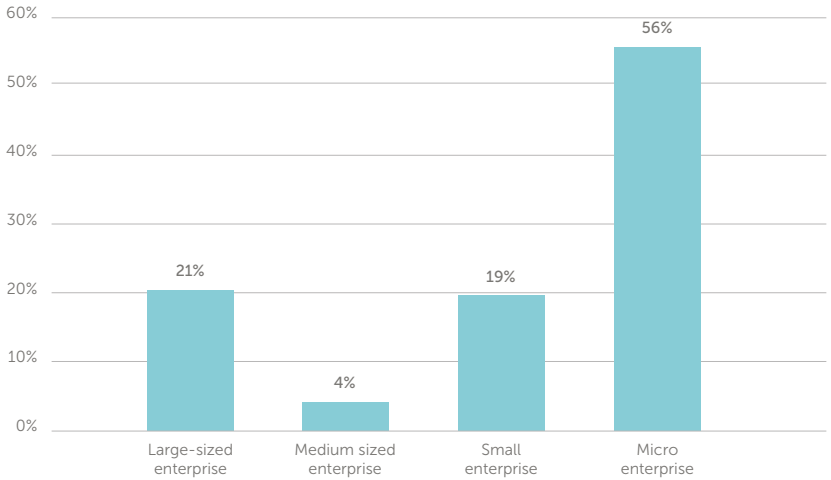
- Evaluation of the technical area;
- Occupational health and safety restrictions;
- Compliance restrictions;
- Legal restrictions.

In 2022, 1,010 suppliers delivered products and/or provided services to Norte Energia.

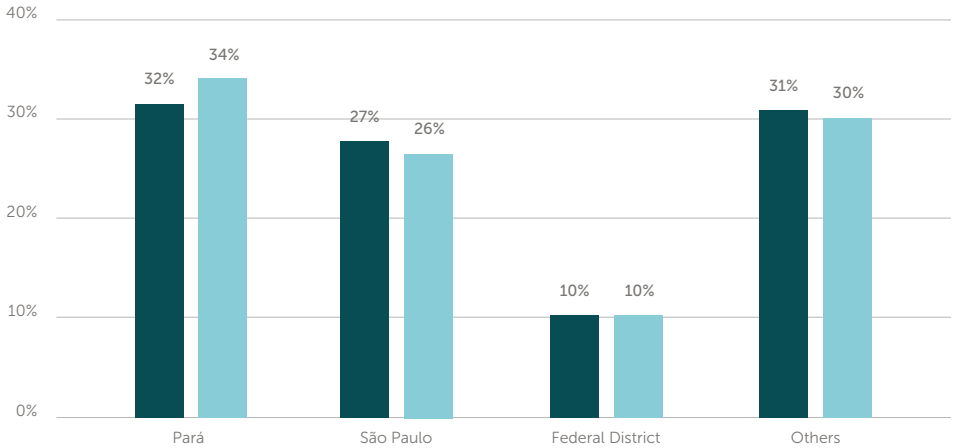
As part of the policy of prioritizing local hiring, in 2022, 341 service provision contracts were signed with suppliers in the state of Pará, equivalent to 34% of service hiring. This percentage represents a 2% increase compared to the base of active contracts at the end of 2021. **GRI 204-1, GRI 204-1**

For the coming years, our objective is to expand the participation of suppliers located in Pará for the development of local trade. A measure already adopted in 2022 was the partnership with Fiepa, which made the +Negócios Platform available to search for suppliers in the Pará region.

## Suppliers by size




## Hiring local suppliers GRI 204-1



## Supplier selection criteria

**GRI 205-1, GRI 308-1, GRI 308-2, GRI 414-1**

In the process of contracting suppliers, we consider the scope of action to define the criteria by which they will be analyzed. All are evaluated in socio-environmental aspects and hired only if they are compliant with our Code of Conduct and Ethics.

Our contracts contain clauses, sub-clauses and annexes that condition the execution of services and/or supply of materials to full compliance with laws, policies and standards committed to human rights, ethics, compliance, health and safety at work and the preservation of the environment. **GRI 408-1, GRI 409-1**

Contractual guidelines and internal policies are monitored by contract managers, field inspectors, audits and reporting channels.

The right to exercise freedom of association and collective bargaining is expressed in our Code of Conduct and Ethics, attached to contracts and published on the Company's website, which all suppliers are aware of. **GRI 407-1**

We also have a specific regulatory instruction on due diligence, which conceptualizes and details the process we carry out with our suppliers. This assessment is based on the application of the Due Diligence Questionnaire, a tool that seeks to identify and classify the risks that may arise in the relationship with suppliers. Risk classification is done through a score assigned to each of the questions answered.

The contracting of suppliers of goods and services of the Company relies on the evaluation of the Conflict-of-Interest Form and the Due Diligence Questionnaire. The first seeks to identify potential conflicts between third parties and the Company, and the second aims to assess which risks are linked to the operation with third parties. **GRI 204-1, GRI 414-1**

## Supplier training

**GRI 414-1**

In 2022, a total of 15 suppliers were trained in specific activities. These trainings were carried out jointly with the Federation of Industries of the State of Pará (Fiepa), through Redes, as an integral part of the Supplier Development Program.

In addition to training, the program offers technical advisory services and business diagnosis to improve the performance of local suppliers, prepare them for new business and make them more qualified for the market, which also contributes to the region's economic growth.

Training aims to provide suppliers with up-to-date and practical knowledge about market needs, as well as effective tools to improve their skills and competencies in their respective segments.

The program also offers business advice. Through individual advice, it has been possible to support the implementation of management tools, according to the reality of each supplier, customize the service and focus directly on solutions on a case-by-case basis. In 2022, we provided 105 hours of individual advice.

The supplier training/development program enables:

1. **Cost reduction:** when working with local suppliers, it is possible to reduce costs with transport, import and customs fees;
2. **Greater quality control:** by being close to suppliers, it is possible to carry out inspections and monitor product quality more easily;
3. **Shorter delivery time:** the transport of products is faster when working with local suppliers, which can help reduce delivery time;
4. **Strengthening the local economy:** by developing local suppliers, the company contributes to strengthening the local economy, generating jobs and increasing income in the region;
5. **Greater flexibility:** working with local suppliers allows greater flexibility to adjust deadlines, quantities and product specifications;
6. **Better communication:** geographic proximity facilitates communication between the company and suppliers, which can help to avoid problems and resolve any conflicts more quickly;
7. **Risk reduction:** by working with local suppliers, the company reduces risks related to transport, import and regulatory issues, which can help ensure business continuity.

Supplier training

**In 2022, in our supplier development program, we carried out training and provided individual advice.**

# Engagement in energy **planning discussions**

**EU1, EU2, EU6, EU7, EU19**

Due to the importance of Belo Monte HPP, our engagement in energy planning and regulation discussions related to the generation and sale of electricity is essential. In 2022, we acted directly and/or indirectly in the following actions or processes:

- Investments in research and development in the electricity sector. (**Refer to page 135**)
- Delivery of the Stochastic model of Weekly Policies for the SIN Hourly Dispatch, developed by the R&D project SPARHTACUS II;
- Conducting a study on the constrained-off situation[9] of generators, presented in the second phase of Public Consultation Aneel No. 045/2019, coordinated by the Brazilian Association of Independent Electric Power Producers (Apine) and sponsored by Norte Energia, which discusses criteria for the ONS (National Electric System Operator) to reduce or limit the generation of power plants; **EU19**
- Carrying out a study on proposals to improve the ancillary services

Norte Energia present at an event on Sustainability


[9] The constrained-off operation restriction consists of the reduction of energy production in wind power plants that are centrally dispatched or considered in the schedule, for reasons originating externally to the plant's installations.

provided by generators to the ONS with the PSR consultancy, starting in 2022;

- Renewable hydrogen certification launched by the Electric Energy Trading Chamber (CCEE), dealt with in a specific meeting with Norte Energia;
- Videoconference called *EPE's Vision on the prospects for the expansion of the energy sector in the years 2022/2031*, held on February 16, 2022, with the participation of the president of Norte Energia as a debater.

Norte Energia Employees

Also, throughout 2022, we played an active role in regulatory discussions and sent contributions to public consultations (PCs), as described below:

- Improvement in the formation of electricity prices and dispatch of generation in the SIN (CPs MME 121/2022, MME 128/2022 and Aneel 043/2022);
- Ordinary review of the physical guarantee of hydroelectric plants (CPs MME 121 and 132/2022);
- Monitoring and financial safeguards of the electricity market (CPs Aneel 10 and 11/2022);
- Competitive procedure to contract flow margin for the SIN (CP MME 141/2022);
- Consideration of environmental benefits in the electricity sector – Law No. 14,120/2021 (CP MME 118/2022);
- Methodology to calculate tariffs to use the transmission system (CP Aneel 039/2021);
- Mitigation of the constrained-off of generators (second phase Public Consultation Aneel 045/2019);
- Export of energy from hydroelectric turbine spills (MME Ordinance 49/2022);
- Reliability requirements for transmission facilities (TS Aneel 021/2021);
- Improvement of ancillary services provided by generators to the system (CP Aneel 083/2021). **EU19**

# Tax **approach**

**GRI 207-1**

Our tax strategy is based on the principles of the Company's Code of Conduct and Ethics, which values the integrity of actions aimed at the best performance of Norte Energia.

The execution of the tax strategy and tax compliance is the responsibility of the Tax Management, an area that is part of the Superintendence of Finance, Control and Investor Relations (RI), subordinated to the Financial and Investor Relations Department.

The main tax incentive adopted by the Company comes from Profit from Exploration, granted by the Superintendence for the Development of the Amazon (Sudam), according to Explanatory Note 24 of the Financial Statements. Since its concession, in 2018, the Company has already saved R$194 million. **GRI 201-4**

Another tax incentive that we have used, less expressive for the Company, but of great impact for the local populations, is the State Cultural Incentive Program (Semear), created by the Government of the State of Pará with the main objective of promoting and stimulating the cultural and artistic production in the region. **GRI 201-4**

As a result of this incentive, we periodically sponsor cultural events in our area of operation. Over the past three years, Norte Energia has donated more than R$1 million in sponsorships to Semear, an amount that has been converted into R$994,000 in ICMS credits.

Also, in relation to the tax strategy, we are committed to following the legal provisions and accompanying the changes in rules and jurisprudence. Thus, the adoption of new procedures is carried out only after extensive scrutiny by internal and external legal advisors, in order to guarantee our social duty of fair tax contribution and compliance with legislation.

Given the magnitude of Belo Monte and its location, we present the amount we collected for each municipality in 2022, both through the payment of own taxes and third-party withholding taxes and through Financial Compensation for the Use of Water Resources (royalties).

Aerial photo of the Belo Monte HPP Main Powerhouse

**The main tax incentive adopted by the Company comes from Profit from Exploration, granted by the Superintendence for the Development of the Amazon (Sudam).**

## Charges and taxes by municipality (PA) 2022

| Municipality | ISS | CFURH | Total |
|---|---|---|---|
| Vitória do Xingu | 18,349,213.05 | 65,602,800.10 | 83,952,013 |
| Altamira | 11,052,399.06 | 67,824,741.94 | 78,877,141 |
| Anapu | 225,268.90 | - | 225,269 |
| Senador José Porfírio | 133,689.31 | - | 133,689 |
| Brasil Novo | - | 31,785.96 | 31,786 |
| São Felix do Xingu | 15,163.81 | - | 15,164 |
| Porto de Moz | 11,338.50 | - | 11,339 |
| Placas | 3,056.20 | - | 3,056 |
| Uruará | 32.16 | - | 32 |
| **Total** | **29,790,160.99** | **133,459,328.00** | **163,249,489** |

## Financial Compensation for the use of water resources (royalties)

| | | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| **1st Financial Compensation (R$)** | State of Pará | 35,885,082.97 | 37,646,002.13 | 51,330,510.77 |
| | Altamira | 47,416,174.73 | 49,742,936.82 | 67,824,741.26 |
| | Brasil Novo | 22,221.19 | 23,311.60 | 31,785.49 |
| | Vitória do Xingu | 45,862,819.09 | 48,113,356.37 | 65,602,800.23 |
| | FNDTC | 5,741,613.27 | 6,023,360.34 | 8,212,881.72 |
| | MMA | 4,306,209.96 | 4,517,520.26 | 6,159,661.29 |
| | MME | 4,306,209.96 | 4,517,520.26 | 6,159,661.29 |
| **2nd Financial Compensation (R$)** | ANA | 17,224,839.82 | 18,070,081.02 | 24,638,645.17 |
| | **Year total (R$)** | **160,765,170.99** | **168,654,088.79** | **229,960,687.22** |

Pimental HPP – Complementary powerhouse

## Governance, control and fiscal risk management

**GRI 207-2**

The fiscal control of Norte Energia's governance structure is carried out by the Fiscal Council, the Audit Committee and the Compliance and Risk Control Superintendence, and by external control bodies, which carry out periodic monitoring of the Company's actions, including those related to tax management and strategy. More information about the structure of the Fiscal Council and the Compliance and Risks Audit Committee can be found in the Policies chapter of this report.

Additionally, the activities of the Tax Management are audited by the Internal Audit Superintendence.

The Risks, Internal Controls and Compliance Superintendence has the role of identifying, assessing and monitoring risks. With this role, it periodically monitors corporate and operational tax risks. And, based on this monitoring, we create controls aimed at mitigating the possible risks identified. Monthly, such controls are monitored and validated by the area.

The amounts collected from each tax and the tax savings obtained are available monthly to all the Company's shareholders, which ensures transparency in our actions with regard to tax management.

In addition to the aforementioned internal controls, the processes and results of activities in the tax area, both main and ancillary obligations, are audited annually by external auditors and periodically by auditing and tax consulting firms to ensure tax compliance.

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# Economic-financial **result**

GRI 201-1

The Company's financial statements were prepared based on the accounting practices adopted in Brazil, which include the rules of the Brazilian Securities and Exchange Commission (CVM); the pronouncements, interpretations and guidelines of the Accounting Pronouncements Committee (CPC), approved by the Federal Accounting Council (CFC); and international financial reporting standards (IFRS), issued by the International Accounting Standards Board (IASB).

The Company also uses the guidelines contained in the Brazilian Electricity Sector Accounting Manual and the standards defined by Aneel, when these are not in conflict with the accounting practices adopted in Brazil and/or with international accounting practices.

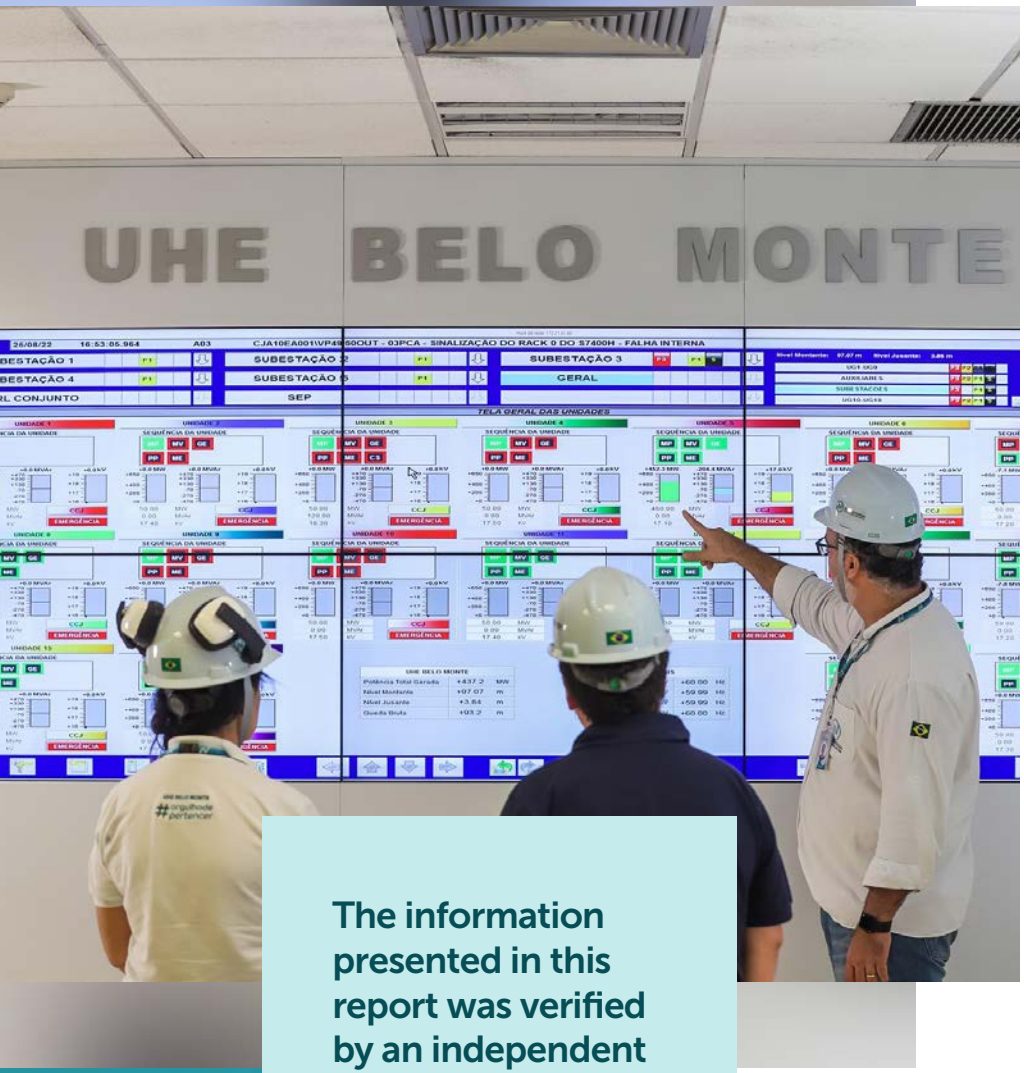
In turn, the information presented in this report was verified internally, with the consent of senior management, and underwent specific verification by a third party: Ernst & Young. **GRI 3-3**

## Financial statements

| Main indicators | 2021 | 2022 | % |
|---|---|---|---|
| Net operating revenue | 4,836,435 | 5,565,305 | 15% |
| EBITDA | 3,219,206 | 3,216,227 | 0% |
| EBITDA Margin | 66,6% | 57.8% | -8.8 p.p. |
| Net income | (432,813) | (647,346) | 50% |
| Investment | 404,059 | 725,842 | 80% |
| Net debt | 27,849,842 | 27,683,001 | -0.6% |
| **DRE** | **Accum 2021** | **Accum 2022** | **%** |
| **Net operating revenue** | **4,836,435** | **5,565,305** | **15%** |
| **Energy sales costs** | **(1,006,375)** | **(1,776,928)** | **77%** |
| Energy purchased for resale | 160,385 | (425,329) | -365% |
| Transmission charges | (1,112,493) | (1,263,981) | 14% |
| Operation and maintenance services | (54,267) | (87,618) | 61% |
| **Operation costs** | **(2,205,680)** | **(2,268,629)** | **3%** |
| Staff, admin, and third-party services | (105,602) | (107,641) | 2% |
| Depreciation and amortization | (1,691,724) | (1,683,861) | 0% |
| Other | (408,354) | (477,127) | 17% |
| **Gross profit** | **1,624,380** | **1,519,748** | **-6%** |
| **Operating expenses** | **(100,481)** | **4,639** | **-105%** |
| Administrative | (96,898) | 12,618 | -113% |
| Depreciation and amortization | (3,583) | (7,979) | 123% |
| Other | 0 | 0 | |
| Operating profit | 1,523,899 | 1,524,387 | 0% |
| EBITDA | 3,219,206 | 3,216,227 | 0% |

This positive number was due to the GSF agreement on the free portion.

Norte Energia Employees




**The information presented in this report was verified by an independent company.**

| DRE | Accum 2021 | Accum 2022 | % |
|---|---|---|---|
| **Financial result** | **(2,009,498)** | **(2,287,174)** | **14%** |
| Financial income | 88,630 | 235,784 | 166% |
| Financial expenses | (2,098,128) | (2,522,958) | 20% |
| **Profit before income tax and social contribution** | **(485,599)** | **(762,787)** | **57%** |
| Current income tax and social contribution | 0 | 0 | |
| Deferred income tax and social contribution | 52,786 | 115,441 | 119% |
| **Net income for the period** | **(432,813)** | **(647,346)** | **50%** |
| **Investments** | **Accum 2021** | **Accum 2022** | **%** |
| **Investments** | **404,059** | **725,842** | **80%** |
| Civil works | 17,262 | 137,581 | 697% |
| Supply and installation of equipment | 47,031 | 126,654 | 169% |
| Socio-environmental | 274,983 | 381,259 | 39% |
| Other | 64,783 | 80,348 | 24% |

Notes: The increase in investments in 2022, when compared to 2021, is the result of the resumption of the Company's investments in socio-environmental programs after the return of activities after the Covid 19 pandemic.

In turn, the increase in investments in Civil Works and Equipment Assembly throughout 2021 and 2022 is related to the implementation of the definitive structures of the Company's management and the warehouse, in addition to the acquisition of spare parts inventory.

The details of the result for the year 2022 can be found in the Management Report, published together with the Financial Statements, and in the Result Releases, published quarterly. **Access here.**

## Added value demonstration GRI 201-1

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| Income | 5,137,831 | 5,619,423 | 6,453,632 |
| Sales of goods, products and services | 5,137,831 | 5,619,423 | 6,453,632 |
| Inputs acquired from third parties | -1,796,888 | -1,527,597 | -2,244,117 |
| Cost of prods., Goods and servs. Sold | -1,369,170 | -1,006,375 | -1,776,928 |
| Materials, energy, services of third parties and others | -78,284 | -115,695 | -135,539 |
| Other | -349,434 | -405,527 | -331,650 |
| Gross added value | 3,340,943 | 4,091,826 | 4,209,515 |
| Retentions | -1,696,055 | -1,695,307 | -1,691,840 |
| Depreciation, amortization and depletion | -1,696,055 | -1,695,307 | -1,691,840 |
| Net added value produced | 1,644,888 | 2,396,519 | 2,517,675 |
| Added value received in transfer | 159,450 | 88,643 | 235,784 |
| Financial income | 159,418 | 88,630 | 235,784 |
| Other | 32 | 13 | 0 |
| Total added value to distribute | 1,804,338 | 2,485,162 | 2,753,459 |
| Added value distribution | 1,804,338 | 2,485,162 | 2,753,459 |
| Staff | 56,238 | 83,208 | 99,979 |
| Direct remuneration | 38,920 | 53,050 | 61,165 |
| Benefits | 5,443 | 11,656 | 17,252 |
| FGTS | 2,889 | 4,461 | 5,146 |
| Other | 8,986 | 14,041 | 16,416 |
| Taxes, fees and contributions | 579,477 | 730,201 | 772,885 |
| Federal | 567,405 | 716,843 | 772,163 |
| State | 12,072 | 13,358 | 722 |
| Remuneration of third-party capital | 2,029,016 | 2,104,566 | 2,527,941 |
| Interest | 2,025,477 | 2,098,128 | 2,522,958 |
| Rent | 3,539 | 6,438 | 4,983 |
| Equity remuneration | -860,393 | -432,813 | -647,346 |
| Retained earnings/loss for the period | -860,393 | -432,813 | -647,346 |

# 10 Annexes

# MAP OF IMPACTS RELATED TO THE BUSINESS MODEL

| MANUFACTURED | NATURAL | HUMAN | INTELLECTUAL | SOCIAL AND RELATIONSHIPS | FINANCIAL |
|---|---|---|---|---|---|
| **CAPITALS** | | | | | |
| Infrastructure Own Facilities: Belo Monte and Pimental Power Plant; Turbines; Generators; generation and transmission materials and equipment, safety materials and equipment, technological equipment; communication materials; office supplies and equipment. Ambulatory, vehicles and tools necessary for the operation of the company's activities. | Water resources, renewable natural resources, environmental projects that support the organization in the generation and commercialization of renewable energy and in the conservation of biodiversity (fauna, flora). | Skills, knowledge and individual skills of the professionals who make up the organization's collection of experiences and culture; actions to promote diversity, to align the workforce with the organizational culture and the company's strategies, focusing on results; training, internal communication, retention, engagement and promotion of integration between the different areas to optimize processes. | Tacit knowledge, organizational rules and procedures, corporate systems, patents, licenses, technologies, R&D projects, innovation processes and projects, energy transition, among others. It also encompasses knowledge management processes, aimed at training future generations. | Improving the relationship with stakeholders, especially the riverside population, fishermen and indigenous peoples, expanding participation in social networks and partnership networks, communication processes. Work to respect human rights, also in the supply chain. This capital includes established relationships, partnerships, common values, and the Company's image and reputation. | Resources available for business management, execution of obligations, and profit generation. Investments made in the Company, subsidies received, debts contracted, among others. |
| **AUDIENCES** | | | | | |
| Government, suppliers, class entities, service providers, inspection bodies. | Regulatory bodies, inspection bodies, representative entities and the surrounding community, NGOs, the press and academia. | Workforce, suppliers, class entities, companies in the sector, regulatory bodies, inspection bodies, media. | Academia, press, business partners, workforce and regulatory bodies. | Government, indigenous peoples, riverside people, community associations, community, suppliers, shareholders, class associations, academia, regulatory bodies, inspection bodies, representative entities, media in general. | Shareholders, investors, financial institutions, market analysts, regulators and federal, state and municipal governments, general press/media. |
| **IMPACTS** | | | | | |
| • Improvement of regional infrastructure<br>• Regional development<br>• Increased use of data and digital technology<br>• Expansion of energy supply to the country | • Change in the dynamics of river flow<br>• Interference in natural environments and local biodiversity<br>• Landscape alteration<br>• Change in navigability conditions<br>• Change in the migratory flow of fish<br>• Environmental investments for the conservation of terrestrial and aquatic ecosystems (fauna and flora)<br>• Increased technical and scientific knowledge about the region<br>• Participatory monitoring with local community involvement | • Generation of direct and indirect jobs<br>• Training of the workforce<br>• Investing in worker safety<br>• Social and economic inclusion<br>• Enhancement of actions related to diversity | • Investment in R&D and innovation<br>• Partnerships with universities and research centers<br>• Dissemination of knowledge and training of professionals in different spheres of education<br>• R&D and Innovation in the area of energy transition and climate change<br>• Local entrepreneurship development | • Changes in sociocultural and interethnic relations<br>• Resettlement of families<br>• Supplier development<br>• Social responsibility actions<br>• Prevention and health promotion actions | • Company perpetuity<br>• Tax payment<br>• Efficient use of resources<br>• Payment of royalties to the Union, states and municipalities |
| **INDICATORS** | | | | | |
| • Energy generated | • Water flow<br>• Water quality<br>• Environmental investments<br>• GHG emissions<br>• Clean energy produced<br>• Waste generation<br>• Fauna and Flora protected and conserved<br>• Articles in the media | • Hours of training per employee/year<br>• Total rate of serious incidents<br>• Turnover rate<br>• Jobs generated<br>• Diversity rate in positions/power spaces<br>• Pay equity | • Investments in R&D<br>• Investments in innovation | • Investments in social projects<br>• Skilled community labor<br>• Investment in green economy projects<br>• Engagement actions<br>• Number of mapped partners<br>• Articles in the media | • Net Revenue<br>• EBITDA<br>• EBITDA margin<br>• Net profit (loss)<br>• Net debt<br>• Net debt/EBITDA<br>• Investments<br>• Amount of royalties paid |

## Total number and rate of new employee hires broken down by age group, gender and region

GRI 401-1

| | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|
| | Number | Rate | Number | Rate | Number | Rate |
| **Age group** | | | | | | |
| Less than 30 years old | 8 | 44.44% | 6 | 13.04% | 52 | 45.22% |
| Over 50 years old | 0 | 0.0% | 4 | 8.70% | 0 | 0 |
| From 30 to 50 years old | 10 | 55.55% | 36 | 78.26 | 63 | 54.78% |
| **Total** | **18** | **100%** | **46** | **100%** | **115** | **100%** |
| **Gender** | | | | | | |
| Male | 9 | 50.00% | 32 | 69.57% | 71 | 61.73% |
| Female | 9 | 50.00% | 14 | 30.43% | 44 | 38.27% |
| **Total** | **18** | **100%** | **46** | **100%** | **115** | **100%** |
| **Regions** | | | | | | |
| Altamira | 8 | 44.44% | 30 | 65.22% | 96 | 83.47% |
| Brasília | 10 | 55.55% | 16 | 34.78% | 19 | 16.53% |
| **Total** | **18** | **100%** | **46** | **100%** | **115** | **100%** |

## Total number of employee turnover during the reporting period broken down by age group, gender and region

GRI 401-1

| | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|
| | Number | Rate | Number | Rate | Number | Rate |
| **Age group** | | | | | | |
| Less than 30 years old | 10 | 18.52% | 17 | 26.56% | 4 | 9.30% |
| Over 50 years old | 23 | 42.59% | 34 | 53.13% | 32 | 74.42% |
| From 30 to 50 years old | 21 | 38.89% | 13 | 20.31% | 7 | 16.28% |
| **Total** | **54** | **100%** | **64** | **100%** | **43** | **100%** |
| **Gender** | | | | | | |
| Male | 40 | 74.07% | 35 | 54.69% | 31 | 72.09% |
| Female | 14 | 25.93% | 29 | 45.31% | 12 | 27.91% |
| **Total** | **54** | **100%** | **64** | **100%** | **43** | **100%** |
| **Regions** | | | | | | |
| Altamira | 50 | 92.59% | 52 | 81.25% | 33 | 76.74% |
| Brasília | 4 | 7.41% | 12 | 18.75% | 10 | 23.26% |
| **Total** | **54** | **100%** | **64** | **100%** | **43** | **100%** |

## Ratio of the lowest wage paid, by gender, compared to the local minimum wage

**GRI 202-1**

| | 2020 | | | 2021 | | | 2022 | | |
|---|---|---|---|---|---|---|---|---|---|
| **Line Labels** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Leadership | 37.46 | 36.90 | 37.34 | 36.75 | 39.25 | 37.32 | 36.57 | 38.07 | 37.00 |
| Intermediate managers and qualified technicians | 14.10 | 11.13 | 13.14 | 13.77 | 10.87 | 12.88 | 13.01 | 10.64 | 12.25 |
| Professionals and support team | 6.11 | 3.16 | 5.37 | 6.22 | 3.10 | 5.56 | 5.08 | 2.61 | 4.46 |
| **Grand total** | **12.24** | **9.53** | **11.44** | **12.69** | **10.34** | **12.03** | **11.30** | **9.54** | **10.77** |

The data presented in the table represent the division of the lowest salary of the grouping category, divided by the minimum salary of the fiscal year.

## Percentage of individuals on the organization's governance bodies in each of the following diversity categories

**GRI 405-1**

| Board of Directors | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|
| **Age group** | **Number** | **Rate** | **Number** | **Rate** | **Number** | **Rate** |
| Less than 30 years old | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| From 30 to 50 years old | 0 | 0.00% | 1 | 8.33% | 2 | 16.67% |
| Over 50 years old | 11 | 100.00% | 11 | 91.67% | 10 | 83.33% |
| **Total** | **11** | **100%** | **12** | **100%** | **12** | **100%** |
| **Gender** | | | | | | |
| Male | 10 | 90.91% | 10 | 83.33% | 9 | 75.00% |
| Female | 1 | 9.09% | 2 | 16.67% | 3 | 25.00% |
| **Total** | **11** | **100%** | **12** | **100%** | **12** | **100%** |

| Fiscal Council | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|
| **Age group** | **Number** | **Rate** | **Number** | **Rate** | **Number** | **Rate** |
| Less than 30 years old | 0 | 0.00% | 0 | 0.00% | 0 | 0.00% |
| From 30 to 50 years old | 1 | 9.09% | 2 | 16.67% | 2 | 16.67% |
| Over 50 years old | 3 | 27.27% | 3 | 25.00% | 3 | 60.00% |
| **Total** | **4** | **100%** | **5** | **100%** | **5** | **100%** |
| **Gender** | | | | | | |
| Male | 4 | 100.00% | 4 | 80.00% | 5 | 100.00% |
| Female | 0 | 0.00% | 1 | 20.00% | 0 | 0.00% |
| **Total** | **4** | **100%** | **5** | **100%** | **5** | **100%** |

Our numbers show that there is still a lot to do for gender equality, especially in the functional categories: board, advisory and administrative, where the staff is 100% male. However, important advances in reducing inequality in the categories: superintendent, management, coordination, higher-level professional and medium-level specialist and achievement of gender equity in 2022 for the internship and apprentice categories.

## Age diversity by functional category

GRI 405-1

| | 2021 | | | 2022 | | |
|---|---|---|---|---|---|---|
| **Governance bodies** | **Less than 30 years old** | **30–50 years old** | **51+** | **Less than 30 years old** | **30–50 years old** | **51+** |
| **Administrative** | 0.00% | 100.00% | 0.00% | 0% | 80% | 20% |
| Advisors | 0.00% | 33.33% | 66.67% | 0% | 50% | 50% |
| Adviser | - | - | - | - | - | - |
| Coordinators | 0.00% | 80.00% | 20.00% | 0% | 87.5% | 12.5% |
| Directors | 0.00% | 25.00% | 75.00% | 0% | 25% | 75% |
| Managers | 2.78% | 80.56% | 16.67% | 0% | 80.56% | 19.44% |
| Mid-level professional | 22.22% | 68.52% | 9.26% | 30.16% | 60.32% | 9.52% |
| Top-level professionals | 15.25% | 77.97% | 6.78% | 21.01% | 73.19% | 5.8% |
| Expert top-level professional | 0.00% | 83.78% | 16.22% | 2.86% | 85.71% | 11.43% |
| Expert technical level professional | 0.00% | 62.50% | 37.50% | 70.37% | 29.33% | 0% |
| Superintendents | 0.00% | 53.85% | 46.15% | 0% | 42.86% | 57.14% |
| **Total** | **10.30%** | **74.75%** | **14.95%** | **-** | **-** | **-** |
| Interns | 100.00% | 0.00% | 0.00% | 100% | 0% | 0% |
| Apprentices | 100.00% | 0.00% | 0.00% | 100% | 0% | 0% |
| **Total** | **10.30%** | **74.75%** | **14.95%** | **-** | **-** | **-** |

## Ratio between the base salary and remuneration received by women and those received by men for each functional category

**GRI 405-2**

| GRI category | 2020 | 2021 | 2022 |
|---|---|---|---|
| Leadership | 1.03 | 1.07 | 1.04 |
| Intermediate managers and qualified technicians | 0.89 | 0.86 | 0.89 |
| Professionals and support team | 0.81 | 0.78 | 0.75 |
| **Coefficient = female salary/male salary** | **0.86** | **0.85** | **0.85** |

* Direct leadership: directors and superintendents; intermediate managers and qualified technicians: managers, experts and analysts; professionals and support staff: administrative, technical and operational personnel.
Note: The table shows the ratio of the sum of salaries received by women versus the sum of salaries received by men, in their respective job categories.
The presented results indicate the following: above 1, the woman's salary is higher than the man's; equal to 1 there are no differences; less than 1 means that women earn less than men. In 2022 there were no women in the positions of directors, or of specialist technical, administrative and advisor level professionals.

In the salary composition, many variables are considered, such as: length of experience, career plan, hiring in the market, among others. Gender is not necessarily the factor responsible for the difference. However, due to the global, national and electricity sector challenge regarding the promotion of gender equality, we started our path in the Ambição ODS (SDG Ambition) program of the Global Compact focusing on this theme.

## Benefits for full-time employees that are not provided to temporary or parttime employees

**GRI 401-2**

Among the benefits that are standard for full-time employees of the organization, but are not offered to temporary or part-time employees, we can mention:

a) life insurance;
b) health insurance;
c) disability and invalidity assistance;
d) maternity/paternity leave;
e) stock acquisition plan.

## Maternity/Paternity Leave

**GRI 401-3**

| | Male | Female | Total |
|---|---|---|---|
| **Total number of employees** | **255** | **108** | **363** |
| Employees who took leave | 3 | 2 | 5 |
| Employees who returned to work after leave ended | 3 | 2 | 5 |
| Return-to-work rates and employee retention after leave | 100% | 100% | 100% |

Note: This indicator started to be reported from 2022 and, as there is no historical basis, we still do not present the retention rate.

## Norte Energia's total emissions by type of gas and source in 2022

**GRI 305-1,GRI 305-2,GRI 305-3, GRI 305-6, GRI 305-7**

| | Emission sources | $CO_2$ | $CH_4$ | $N_2O$ | HFC | PFC | SF6 / NF3 | $CO_2e$ | Biomass $CO_2$ | Biogenic $CO_2$ removals | Non-Kyoto gases |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Scope 1 | **Stationary combustion** | | | | | | | | | | |
| | • Pimental HPP Generators | 2.37 | 0.000 | 0.000 | | | | 2.38 | 0.25 | - | - |
| | • Belo Monte HPP Generators | 9.47 | 0.000 | 0.000 | | | | 9.51 | 0.98 | - | - |
| | • Office generators and equipment | 100.68 | 0.004 | 0.001 | | | | 101.05 | 10.44 | - | - |
| | **Mobile combustion** | | | | | | | | | | |
| | • Car fleet | 612.21 | 0.18 | 0.06 | | | | 633.32 | 127.09 | - | - |
| | **Fugitive emissions** | | | | | | | | | | |
| | • Refrigeration equipment and fire extinguishers | 29.24 | - | - | 0.69 | | | 1,903.47 | - | - | 568.01 |
| | Change in land use | - | - | - | - | | | - | - | 23,069.89 | - |
| | **Waste and effluent treatment** | - | - | - | - | | | | | - | - |
| | • Effluents – Pimental HPP | - | 0.19 | - | - | | | 5.24 | - | - | - |
| | • Effluents – Belo Monte HPP | - | 0.06 | - | - | | | 17.99 | - | - | - |
| | • Effluents – lagoas | - | 1.34 | - | - | | | 37.52 | - | - | - |
| | **Total of Scope 1** | **753.97** | **1.778** | **0.061** | **0.692** | **0.000** | **0.000** | **2,710.47** | **138.765** | **23,069.89** | **568.01** |
| Scope 2 | **Purchase of electricity from the grid** | **24.71** | | | | | | **24.71** | | | |
| Scope 3 | Transport and e distribution (upstream) | 2,151.82 | 0.33 | 0.19 | | | | 2,212.24 | 363.81 | | |
| | Waste generated in operations | 0.75 | 1.93 | 0.01 | | | | 57.09 | 7.63 | | |
| | Business trip | 466.67 | 0.01 | 0.02 | | | | 471.26 | 3.92 | | |
| | Employee displacement | 198.49 | 0.01 | 0.02 | | | | 202.72 | 31.12 | | |
| | **Total of Scope 3** | **2,817.73** | **2.29** | **0.23** | **0.00** | **0.00** | **0.00** | **2,943.31** | **406.48** | **0.00** | **0.00** |
| **Total emissions** | | **3,596.41** | **4.07** | **0.29** | **0.69** | **0.00** | **0.00** | **5,678.49** | **545.25** | **23,069.89** | **568.01** |

## Total water withdrawal in all areas, broken down by the following sources

GRI 303-3

| 2022 | ml |
|---|---|
| **Source** | **All areas** |
| Surface water | 35.78 |
| Subterranean water | - |
| Sea water | - |
| Produced water | - |
| Third parties water | 13.89 |
| **Total** | **49.67** |

Notes: All intake sources are freshwater (total dissolved solids ≤1,000 mg/L).
There was no water collection in areas with water stress.

## Total water discharge in all areas separated by the following categories: fresh water and other types of water (total dissolved solids ≤1,000 mg/L)

GRI 303-4

| 2022 | ml |
|---|---|
| **Source** | **Water (Water)** |
| Freshwater | 30.26 |
| Other types of water (total dissolved solids >1,000 mg/L) | 11.11 |
| **Total** | **41.37** |

## Total water discharge in all areas in megaliters, broken down by destination

GRI 303-4

| 2022 | |
|---|---|
| **Source** | **All areas** |
| Surface water | 30.26 |
| Subterranean water | - |
| Sea water | - |
| Produced water | - |
| Third parties water | 11.11 |
| **Total** | **41.37** |

GRI 306-1

## Waste generated (ton) GRI 306-3

| Composition | 2022 |
|---|---|
| Organic | 97.17 |
| Infectious waste | 0.03 |
| Contaminated waste | 15.58 |
| Battery waste | 0.83 |
| Lamp bulb waste | 3.87 |
| Recyclable waste | 34.38 |
| Non-recyclable waste | 18.41 |
| ETE sludge | 0.01 |
| **Total** | **170.27** |

## Waste not intended for final disposal (ton) GRI 306-4

| Composition | 2022 |
|---|---|
| Organic | 0.00 |
| Infectious waste | 0.00 |
| Contaminated waste | 9.75 |
| Battery waste | 0.75 |
| Lamp bulb waste | 2.21 |
| Recyclable waste | 0.05 |
| Non-recyclable waste | 8.95 |
| ETE sludge | 0.00 |
| **Total** | **21.70** |

## Waste intended for disposal final (ton) GRI 306-5

| Composition | 2022 |
|---|---|
| Organic | 97.17 |
| Infectious waste | 0.03 |
| Contaminated waste | 5.83 |
| Battery waste | 0.08 |
| Lamp bulb waste | 1.66 |
| Recyclable waste | 34.33 |
| Non-recyclable waste | 9.46 |
| ETE sludge | 0.01 |
| **Total** | **148.57** |

## Waste intended for final disposal (ton)

GRI 306-5

| 2022 | Inside (kg) | Outside (kg) |
|---|---|---|
| **Hazardous waste** | **0.00** | **26.70** |
| Incineration (with energy recovery) | 0.00 | 0.00 |
| Incineration (without energy recovery) | 0.00 | 0.11 |
| Landfill | 0.00 | 0.00 |
| Other disposal operations | 0.00 | 26.59 |
| **Non-hazardous waste** | **9.46** | **112.41** |
| Incineration (with energy recovery) | 0.00 | 0.00 |
| Incineration (without energy recovery) | 0.00 | 0.00 |
| Landfill | 9.46 | 97.18 |
| Other disposal operations | 0.00 | 15.23 |
| **Total** | **9.46** | **139.11** |

## Waste not intended for final disposal (ton)

GRI 306-4

| 2022 | Inside (KG) | Outside (kg) |
|---|---|---|
| **Hazardous waste** | **12.75** | **0.00** |
| Preparation for reuse | 0.00 | 0.00 |
| Recycling | 0.05 | 0.00 |
| Other recovery operations | 12.70 | 0.00 |
| **Non-hazardous waste** | **8.95** | **0.00** |
| Preparation for reuse | 0.00 | 0.00 |
| Recycling | 0.00 | 0.00 |
| Other recovery operations | 8.95 | 0.00 |
| **Total** | **21.70** | **0.00** |

## Total number of species included in the IUCN Red List and national conservation lists with habitats in areas affected by the organization's operations, broken down by level of extinction risk

**GRI 304-4**

| | | |
|---|---|---|
| Critically endangered | 7 | Fauna: 0 species<br>Flora: 2 species<br>Ichthyofauna: 5 species |
| Endangered | 16 | Fauna: 12 species<br>Flora: 2 species<br>Ichthyofauna: 2 species |
| Vulnerable | 67 | Fauna: 53 species<br>Flora: 9 species<br>Ichthyofauna: 5 species |
| Near-threatened | 30 | Fauna: 22 species<br>Flora: 3 species<br>Ichthyofauna: 5 species |
| Least concern | 763 | Fauna: 617 species<br>Flora: 17 species<br>Ichthyofauna: 129 |

* In 2021, there were 16. In 2022, the species *Lecythis lurida* moved from "Lower Risk" to Least Concern.

## Energy consumption within the organization (GJ)

### GRI 302-1

| | 2022 |
|---|---|
| **Fuels from non-renewable sources** | **12,982.36** |
| Diesel | 4,599.22 |
| Gasoline | 8,383.14 |
| **Fuels from renewable sources** | **-** |
| Ethanol | - |
| **Purchased and sold electricity** | **2,061.71** |
| Purchased electricity | 2,061.71 |
| Electricity sold | - |
| **Total** | **15,044.07** |

Note: Conversion factors: Gasoline 1L = 0.03224GJ, Diesel Oil 1L = 0.0355GJ and Energy 1KWh=0.036GJ.

## Energy consumption within the organization (GJ)

### GRI 302-1

| | 2022 |
|---|---|
| Fuels from non-renewable sources | 12,982.36 |
| Fuels from renewable sources | - |
| Purchased electricity | 2,061.71 |
| Electricity sold | - |
| **Total** | **15,044.07** |

Note: Conversion factors: Gasoline 1L = 0.03224GJ, Diesel Oil 1L = 0.0355GJ and Energy 1KWh=0.0036GJ.

## Energy consumption outside the organization

### GRI 302-2

| | 2022 |
|---|---|
| **Energy consumption outside the organization (GJ)** | |
| Purchased electricity | 23.315,01 |

Note: Conversion factor: 1KWh=0,0036GJ.

## Energy intensity

### GRI 302-3

| | 2022 |
|---|---|
| Net energy generation (MWh) | 36,767,325.00 |
| Energy consumption within the organization (GJ) | 15,044.07 |
| Energy consumption outside the organization (GJ) | 23,315.01 |
| Energy intensity (GJ/MWh) | 0.0010433 |

Note: Conversion factors: Gasoline 1L = 0.03224GJ, Diesel Oil 1L = 0.0355GJ and Energy 1KWh=0.036GJ.

## Net energy production (MWh)

### GRI EU2

| Power supply | 2022 |
|---|---|
| **Hydraulic** | **36,767,325** |
| Thermal | |
| Wind | |
| Other (detail) | |

As observed in the availability indicators of Norte Energia's generation assets, we inform you that a new form of management focused on early action and operation and maintenance centered on reliability puts the indices at levels higher than those found on average in other plants in the sector and within the parameters established as goals. The reliability of the supply is provided by the maintenance plan for these assets, in accordance with the best practices in the sector. The process of operating the Belo Monte Complex is regulated by means of the ONS Grid Procedures and by granting the right to use water resources, in which the operating conditions are defined.

### EU6

## Installed capacity per power source

### GRI EU1

| 2022 | | | | | |
|---|---|---|---|---|---|
| **Capacity** | **Hydraulic** | **Thermal** | **Wind** | **Solar** | **Other source** |
| Capacity installed | 11.233 | - | - | - | - |
| Capacity under construction (specify date) | 0 | - | - | - | - |
| Planned capacity (specify date) | 0 | - | - | - | - |
| Projected demand | 0 | - | - | - | - |

## Planned capacity compared to projected electricity demand 2021

### GRI EU10

| | 2021 | 2022 |
|---|---|---|
| **Energy generation (MWh) 2021** | | |
| Belo Monte | 30,393,840 | 35,843,239 |
| Pimental | 1,401,240 | 1,353,330 |
| **Total (MWh)** | **31,795,080** | **37,196,569** |
| **Commercialization (MWh)** | | |
| Regulated Contracting Environment (ACR) | 28,029,372 | 32,033,000 |
| Free Contracting Environment (ACL) | 7,783,956 | 6,142,000 |
| **Total (MWh)** | **35,813,328** | **38,175,000** |

## Number of stops per generation unit 2022

### EU30

| Unit | Planned shutdown | Non-planned shutdown | Average availability |
|---|---|---|---|
| Belo Monte | 13,786 | 716 | 90.8% |
| Pimental | 1,478 | 166 | 96.87% |

## Distributed economic value (R$ thousand)

**GRI 201-1**

| Title | Source | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|---|
| **Direct economic value generated** | **Gross revenue** | **5,137,831** | | **5,619,422** | | **6,453,632** | |
| Distributed economic value | Operating cost (income statement for the year) | 3,448,152 | 54% | 3,212,055 | 50% | 4,045,557 | 51% |
| Distributed economic value | Employee salary and benefits (added value statement) | 56,238 | 1% | 83,208 | 1% | 99,979 | 1% |
| Distributed economic value | Payment to capital suppliers (added value statement) | 2,025,477 | 31% | 2,098,128 | 32% | 2,522,958 | 32% |
| Distributed economic value | Payments to government by country (added value statement) | 735,184 | 11% | 782,987 | 12% | 888,326 | 11% |
| Distributed economic value | Community investments (socio-environmental accomplished) | 173,898 | 3% | 306,357 | 5% | 407,976 | 5% |
| | | 6,438,949 | 100% | 6,482,735 | 100% | 7,964,796 | 100% |
| **Withheld economic value** | **Gross revenue – Subtotal 1** | **-1,301,118** | | **-863,313** | | **-1,511,164** | |

# GRI content **summary**

| | |
|---|---|
| **Declaration of use** | Norte Energia S/A reported in accordance with the GRI Standards for the period between January 1st and December 31, 2022. |
| **GRI 1** | GRI 1: Fundamentals 2021 |
| **Applicable GRI Sector Standard** | Electric Utilities |

## General disclosures

| GRI Standard | Content | Answer | Omission | | | GRI Sector Standard |
|---|---|---|---|---|---|---|
| | | | Omitted requirement | Reason | Explanation | |
| GRI 2: General Disclosures 2021 | 2-1 Organizational details | Pages 12 and 13. Norte Energia S/A is a special purpose company whose objective is to build and manage the Belo Monte Power Plant, located in Altamira – Pará, Brazil, with administrative headquarters in Brasília-DF | | | | |
| | 2-2 Entities included in the organization's sustainability reporting | Norte Energia S/A | | | | |
| | 2-3 Reporting period, frequency and contact point | Page 33. Annual report, whose period is from 01/01/2022 to 12/31/2022 | | | | |
| | 2-4 Restatements of information | None | | | | |
| | 2-5 External assurance | Page 33 Ernst & Young | | | | |
| | 2-6 Activities, value chain and other business relationships | Pages 11, 14 and 120 | | | | 2- General Contents – 2021 |
| | 2-7 Employees | Pages 54, 59 and 60 | | | | 2- General Contents – 2021 |
| | 2-8 Workers who are not employees | Pages 59 and 61 | | | | 2- General Contents – 2021 |

| | | | | | | |
|---|---|---|---|---|---|---|
| GRI 2: General Disclosures 2021 | 2-9 Governance structure and composition | Pages 42, 43 and 44 | | | | 2- General Contents – 2021 |
| | 2-10 Nomination and selection of the highest governance body | Page 44. | | | | 2- General Contents – 2021 |
| | 2-11 Chair of the highest governance body | Page 42. | | | | 2- General Contents – 2021 |
| | 2-12 Role of the highest governance body in overseeing the management of impacts | Page 43. | | | | 2- General Contents – 2021 |
| | 2-13 Delegation of responsibility for managing impacts | Pages 25 and 43 | | | | 2- General Contents – 2021 |
| | 2-14 Role of the highest governance body in sustainability reporting | Pages 36 and 40 | | | | 2- General Contents – 2021 |
| | 2-15 Conflicts of interest | Page 45. Follows Conflicts of Interest policy, intended for the entire Company and third parties | | | | 2- General Contents – 2021 |
| | 2-16 Communication of critical concerns | Pages 26, 27, 28 and 45 | | | | 2- General Contents – 2021 |
| | 2-17 Collective knowledge of the highest governance body | Through seminars, lectures, collective or individual workshops that contribute to everyone's knowledge | | | | 2- General Contents – 2021 |
| | 2-18 Evaluation of the performance of the highest governance body | Page 44 | | | | 2- General Contents – 2021 |
| | 2-19 Remuneration policies | Page 45. The Remuneration Policy is developed based on the Individual Employment Contract, Labor Legislation, Collective Agreement and hiring of Specialized Consultancy. The Executive Board is responsible for the administrative management of the personnel budget, approved by the Board | | | | 2- General Contents – 2021 |
| | 2-20 Process to determine remuneration | Page 45. Expert advice; Collective; Legislations | | | | 2- General Contents – 2021 |
| | 2-21 Annual total compensation ratio | The organization decided to protect itself because it considers it is about restricted data | All | Information not available | The organization considers it to be restricted data | 2- General Contents – 2021 |
| | 2-22 Statement on sustainable development strategy | Pages 2, 5 and 15 | | | | 2- General Contents – 2021 |
| | 2-23 Policy commitments | Pages 16, 22, 23 and 24 | | | | 2- General Contents – 2021 |
| | 2-24 Embedding policy commitments | Pages 15, 16, 22, 23 and 25 | | | | 2- General Contents – 2021 |

| | | | |
|---|---|---|---|
| GRI 2: General Disclosures 2021 | 2-25 Processes to remediate negative impacts | Pages 23, 35, 53 and 87 | 2- General Contents – 2021 |
| | 2-26 Mechanisms for seeking advice and raising concerns | Pages 26, 50, 52 and 53 | 2- General Contents – 2021 |
| | 2-27 Compliance with laws and regulations | Page 49. In 2022, only one (1) case of non-compliance was reported, the Notice of Infraction No. 22.272.316-5, drawn up by the Ministry of Labor and Employment against Norte Energia S/A, for failing to complete, from 2% (two percent) to 5% (five percent) of their positions, with rehabilitated beneficiaries or qualified people with disabilities. Amount of the fine to be defined by the agency. Due to Extrajudicial Enforcement No. 0000096242013.4.01.3903 filed in 2013 by the Federal Public Prosecutor's Office – MPF, in which it alleges the alleged breach of obligations undertook by Norte Energia in the agreement signed in 2012, before the start of works on the Belo Monte HPP, at a conciliatory hearing chaired by the MPF. On 3/11/2022, a decision was handed down by the judge who imposed a fine of R$20,000,000.00 (twenty million reais) on Norte Energia for such non-compliance, to be deposited within 5 days, which was done by the Company on 3/28/2022. For more information, see item 4.4 Relevant non-confidential processes, present in the Reference Form, **click on link**. | 2- General Contents – 2021 |
| | 2-28 Membership associations | Pages 24, 118 and 119 | 2- General Contents – 2021 |
| | 2-29 Approach to stakeholder engagement | Pages 15, 26, 27, 35, 40, 43 and 102 | 2- General Contents – 2021 |
| | 2-30 Collective bargaining agreements | At Norte Energia, 98.8% of employees are covered by collective bargaining agreements. For employees who are not covered by collective bargaining agreements, the organization complies with current legislation, both with regard to working conditions and labor relations. It also relies on collective bargaining agreements from other organizations. | 2- General Contents – 2021 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Material topics** | | | | | | |
| GRI 3: Material Topics 2021 | 3-1 Process to determine material topics | Page 34 | None | None | None | 3- Material Topics – 2021 |
| | 3-2 List of material topics | Pages 37, 38 and 39 | | | | |
| **Material topic: Generation of Shared Value** | | | | | | |
| GRI 201: Economic performance 2016 | 3-3 Management of material topics | Pages 39, 73 and 130 | | | | |
| | 201-1: Direct economic value generated and distributed | Pages 130, 132 and 146 | | | | 200 – Economic Value – direct generated and distributed – 2016 |
| | 201-2: Financial implications and other risks and opportunities due to climate change | 72, 74, 83 and 85 | | | | 200 – Economic Value – direct generated and distributed – 2016 |
| | 201-3: Defined benefit plan obligations and other retirement plans | Page 61. Norte Energia makes the monthly payment of the contribution to the Social Security of its employees, to the National Institute of Social Security (INSS), for the payment of retirement and other benefits to Brazilian workers (Law No. 8.213, of July 24, 1991). It also pays for the Severance Indemnity Fund (FGTS) | | | | 200 – Economic Value – direct generated and distributed – 2016 |
| | 201-4: Financial assistance received from government | Page 127 | | | | 200 – Economic Value – direct generated and distributed – 2016 |
| GRI 202: Market presence 2016 | 202-1: Ratios of standard entry level wage by gender compared to local minimum wage | Page 136 | | | | 202-1- Market Presence-2016 |
| | 202-2: Proportion of senior management hired from the local community | Page 44 | | | | 202-1 – Market Presence-2016 |
| GRI 203: Indirect economic impacts 2016 | 203-1: Infrastructure investments and services supported | Page 113 | | | | 203 – Indirect Economic Impacts – 2016 |
| | 203-2: Significant indirect economic impacts | Assessment scheduled to take place within the scope of the Project to Update the Impact Matrix and Revision of the PBA-CI | | | | 203 – Indirect Economic Impacts – 2016 |
| GRI 204: Procurement Practices 2016 | 204-1: Proportion of spending on local suppliers | Pages 122 and 123 | | | | 204 – Purchasing Practices |
| GRI 207: Tax 2019 | 207-1: Approach to tax | Page 127 | | | | 207 – Taxes – 2019 |

| | | | |
|---|---|---|---|
| GRI 207: Tax 2019 | 207-2: Tax governance, control, and risk management | Page 129.<br><br>Another tax incentive that we have used, less expressive for the Company, but of great impact for the local populations, is the State Cultural Incentive Program (Semear), created by the Government of the State of Pará with the main objective of promoting and stimulating the cultural and artistic production in the region. | 207- Taxes – 2019 |
| GRI 207: Tax 2019 | 207-3: Stakeholder engagement and management of concerns related to tax | The engagement of its main stakeholders, with regard to taxes, is based on the guidelines of the Code of Conduct. The Code determines that the company must comply with the provisions of Brazilian legislation in all levels of activity, always acting with integrity, as well as always seeking to maximize the company's performance, as a way of guaranteeing its perpetuity, its investments, the return to shareholders and proper working conditions for employees. Thus, in line with the values and principles that guide it, Norte Energia responds with total transparency and timeliness to the various inspection bodies. Tax compliance is strategic for the Company and compliance with its ancillary and main obligations must be fulfilled in accordance with current legislation. The execution of the tax strategy and tax compliance is the responsibility of the Tax Management, an area that is part of the Superintendence of Finance, Control and Investor Relations (RI), subordinated to the Financial and Investor Relations Department. This engagement goes through face-to-face and online meetings, communication channels and always strives for transparency and respect. | 207- Taxes – 2019 |
| GRI 401: Employment 2016 | 401-1: New employee hires and employee turnover | Pages 54 and 135 | 400-Employment – 2016 |
| | 401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees | Page 139 | 400-Employment – 2016 |

| | | | | | |
|---|---|---|---|---|---|
| **Material Topics: Biodiversity** | | | | | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Pages 73, 86 and 87 | | | - |
| **GRI 304: Biodiversity 2016** | 304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | Pages 86 and 87. Total area of 269.91 km², 40.34 km² referring to the Wildlife Refuge (REVIS) Tabuleiro do Embaubal, and 229.57 km² related to the Sustainable Development Reserve (RDS) Vitória de Souzel | | | 304- Biodiversity – 2016 |
| | 304-2: Significant impacts of activities, products, and services on biodiversity | Pages 73, 75, 76, 87 and 89 | | | 304- Biodiversity – 2016 |
| | 304-3: Habitats protected or restored | Pages 73, 76 and 87 | | | 304- Biodiversity – 2016 |
| | 304-4: IUCN Red List species and national conservation list species with habitats in areas affected by operations | Pages 73, 76 and 143 | | | 304- Biodiversity – 2016 |
| **Material topic: Human Rights** | | | | | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Pages 55 and 56 | | | - |
| **GRI 405: Diversity and equal opportunity 2016** | 405-1: Diversity of governance bodies and employees | Pages 44, 54, 60, 61, 137, 138 and 140 | | | 405- Diversity and Equality in Workplaces – 2016 |
| | 405-2: Ratio of basic salary and remuneration of women to men | Pages 60 and 139 | | | 405- Diversity and Equality in Workplaces – 2016 |
| **GRI 402: Employment Relations 2016** | 402-1: Minimum notice periods regarding operational changes | 2 weeks; through clauses of the collective bargaining agreement itself | | | 402- Labor Relations 2016 |
| **GRI 401: Employment 2016** | 401-3 Maternity/paternity leave | Page 139 | Were omitted as a reason | Information not available | 401- Employment – 2016 |
| **GRI 406: Non-Discrimination 2016** | 406-1: Incidents of discrimination and corrective actions taken | There were no reports of discrimination in the period | | | 406- No to discrimination – 2016 |
| **GRI 407: Fredom of association and collective bargaining 2016** | 407-1: Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | Page 123 | | | 407- Union Freedom and Collective Bargaining |
| **GRI 408: Child Labor 2016** | 408-1 Operations and suppliers with significant risk of incidents of child labor | Pages 120 and 123 There were no cases of child labor | | | 408- Child Labor – 2016 |
| **GRI 409: Forced or compulsory labor 2016** | 409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labor | Pages 120 and 123 | | | 409- Forced or Slave Labor – 2016 |

| | | | |
|---|---|---|---|
| **GRI 410: Security practices 2016** | 410-1: Security personnel trained in human rights policies or procedures | Pages 24 and 64 | 410-1-Security Practices – 2016 |
| | | **Material topic: Relationship with Local Community and Indigenous Peoples** | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Page 101 | - |
| **GRI 413: Local communities 2016** | 413-1: Operations with local community engagement, impact assessments, and development programs | Pages 54, 57, 76, 101, 102, 103, 106, 108, 110 and 121. 100%<br><br>Throughout 2022, considering the structure as of April, more than 100 meetings were held with 100% direct involvement of communities and community leaders, participating in these agendas for the presentation of results, studies and/or planning of activities and projects planned to mitigate socio-environmental impacts inherent to the communities of fishermen, riverside dwellers and residents of the Volta Grande do Xingu region (VGX), included in the AID | 413- Local Communities – 2016 |
| | 413-2: Operations with significant actual and potential negative impacts on local communities | Pages 23, 26, 27 and 108 | 413- Local Communities – 2016 |
| | 414-1: New suppliers that were screened using social criteria | Pages 120 and 123 | 414- Social Assessment of Suppliers |
| | 411-1 Cases of violation of rights of indigenous peoples | Pages 27, 76, 101, 102, 104, 105 and 120 | 411- Rights of Indigenous Peoples – 2016 |
| | EU20 Approach to managing displacement impacts | Pages 106 and 107 | 411- Rights of Indigenous Peoples – 2016 |
| | EU22 Number of people physically and economically displaced and compensation | Pages 106, 107 and 109 | 411- Rights of Indigenous Peoples – 2016 |
| | | **Material topic: Political, Social, Economic and Regulatory Scenario** | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Pages 18, 19 and 118 | - |

| | | | |
|---|---|---|---|
| | 2-23 Policy Commitments | Pages 41 and 50 | 2-23- Policy Commitments – 2021 |
| | 2-24 Incorporation of policy commitments | Page 50 | 2-24- Incorporation of policy commitments – 2021 |
| | 2-25 Processes to repair negative impacts | Pages 53 and 87 | 2-25- Processes to repair negative impacts |
| | 2-26 Mechanisms for counseling and raising concerns | Pages 50, 52 and 53 | 2-26-Mechanisms for counseling and raising concerns |
| **GRI 2-23: Strategy, Policies and Practices 2021** | 415-1 Political contributions | Page 50 The Company does not carry out political or partisan activities. Employees, interns or underage apprentices who wish to participate in any electoral process must do so individually, without involving the name or resources of the Company, which does not support candidates or political parties, and does not contribute to electoral campaigns. No professional is authorized to request participation, support or funding for any candidate or party. Political activities carried out by Company professionals must take place outside the work environment and at hours other than office hours. There were no political contributions as per the negative statement | 415- Public Policies – 2016 |
| | 418-1 Substantiated complaints regarding violation of customer privacy and loss of data | Page 50 There were no substantiated complaints or loss of customer data during the reporting period | 418- Customer Privacy – 2016 |
| | EU30 Average plant availability factor, broken down by energy source and by regulatory system | Page 145 | EU30- Availability Factor – 2016 |
| | | **Material topic: Climate Change** | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Pages 73 and 78 | 305-Emissions 2016 |

| | | | |
|---|---|---|---|
| | 305-1 Direct emissions (Scope 1) of greenhouse gases (GHG) | Pages 73, 78, 79 and 140 | 305- Emissions – 2016 |
| | 305-2 Indirect emissions (Scope 2) of greenhouse gases (GHG) from energy acquisition | Pages 73, 78, 80 and 140 | 305- Emissions – 2016 |
| | 305-3 Other indirect emissions (Scope 3) of greenhouse gases (GHG) | Pages 73, 78, 80 and 140 | 305- Emissions – 2016 |
| | 305-4 Intensity of greenhouse gas (GHG) emissions | Pages 73, 78 and 80 | 305-Emissions – 2016 |
| | 305-5 Reduction of greenhouse gas (GHG) emissions | Pages 19, 73 and 78 | 305- Emissions – 2016 |
| | 305-6 Emissions of substances that deplete the ozone layer (ODS) | Pages 76 and 140 | 305- Emissions – 2016 |
| | 305-7 Emissions of NOX, SOX and other significant atmospheric emissions | Page 140 | 305- Emissions – 2016 |
| | 306-1 Waste generation and significant impacts related to waste | Pages 73 and 142 | 306- Waste – 2020 |
| | 306-2 Management of significant impacts related to waste | Pages 73 and 98 Norte Energia S/A hires this service, and the company hired to manage this activity operationally controls all waste and registers its activities in spreadsheets, maintaining constant and effective monitoring of waste management from collection to delivery in its final destination | 306- Waste – 2020 |
| | 306-3 Waste generated | Pages 73 and 142 | 306- Waste – 2020 |
| | 306-4 Waste not intended for final disposal | Pages 113 and 142 | 306- Waste – 2020 |
| | 306-5 Waste intended for final disposal | Pages 73, 98 and 142 | 306- Waste – 2020 |
| | 308-1 New suppliers selected based on environmental criteria | Pages 72, 73, 74, 76 and 123 | 308- Environmental Assessment of Suppliers – 2016 |
| | 308-2 Negative environmental impacts of the supply chain and measures taken | Pages 73 and 123 | 308- Environmental Assessment of Suppliers – 2016 |
| | EU8 Research and development activities and expenses | Pages 28, 31, 85 and 116 | P&D – 2016 |

| | | | |
|---|---|---|---|
| **Material topic: Efficiency in Energy Generation and Transition** | | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Pages 13, 73 and 110 | |
| GRI 302: Energy 2016 | EU1 Installed capacity | Pages 11 and 145 | |
| | EU2 Net energy production | Pages 11, 18 and 145 | |
| | EU6 Management method to ensure availability and reliability of electricity supply | Pages 18 and 145 | |
| | EU7 Demand-side management programs | Page 19 | |
| | EU19 Participation of stakeholders in decision-making processes related to energy planning for infrastructure development | Pages 125 and 126 | |
| | 302-1 Energy Consumption within the organization | Pages 73 and 144 | |
| | 302-2 Energy Consumption outside the organization | Pages 73 and 144 | |
| | 302-3 Energy Intensity | Pages 73 and 144 | |
| | 302-5 Reduction in energy requirements of products and services | Norte Energia is in the process of preparing data related to energy production inputs in order to subsequently present an energy efficiency plan for energy production | |
| **Material topic: Health and Safety at Work** | | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Page 66 | 403- Occupational Health and Safety – 2018 |
| GRI 403: Occupational Health and Safety 2018 | 403-1 Occupational health and safety management system | Pages 66 and 67 | 403- Occupational Health and Safety – 2018 |
| | 403-2 Dangerousness identification, risk assessment and incident investigation | Pages 66 and 67 | 403- Occupational Health and Safety – 2018 |
| | 403-3 Occupational health services | Pages 66 and 69 | 403- Occupational Health and Safety – 2018 |
| | 403-4 Worker participation, consultation and communication to workers regarding health and safety at work | Pages 66 and 69 | 403- Occupational Health and Safety – 2018 |
| | 403-5 Training of workers in occupational health and safety | Pages 66 and 71 | 403- Occupational Health and Safety – 2018 |

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| GRI 403: Occupational Health and Safety 2018 | 403-6 Promotion of workers' health | Pages 66 and 69 | 403- Occupational Health and Safety – 2018 |
| | 403-7 Prevention and mitigation of impacts on health and safety at work directly linked to business relationships | Pages 66 and 67 | 403- Occupational Health and Safety – 2018 |
| | 403-8 Workers covered by an occupational health and safety management system | Page 66 | 403- Occupational Health and Safety – 2018 |
| | 403-9 Work accidents | Pages 66 and 71 | 403- Occupational Health and Safety – 2018 |
| | 403-10 Occupational diseases | No cases of occupational diseases were reported in the reporting period | 403- Occupational Health and Safety – 2018 |
| | EU16 Health and safety policies and requirements | Pages 66 and 67 | 403- Occupational Health and Safety – 2018 |
| | EU17 Days worked by outsourced workers and subcontractors involved in construction, operation and maintenance activities | Pages 66 and 68 | 403- Occupational Health and Safety – 2018 |
| | EU18 Percentage of outsourced and subcontracted workers undergoing relevant health and safety training | Pages 66, 67 and 71 | 403- Occupational Health and Safety – 2018 |
| | **Material topic: Water Management** | | |
| GRI 3: Material Topics 2021 | 3-3 Management of material topics | Pages 94 and 95 | |
| GRI 303: Water and Effluents 2018 | 303-1: Interactions with water as a shared resource | Pages 72, 73, 74 and 92 | 303- Water and Effluents – 2018 |
| | 303-2: Management of water discharge-related impacts | Pages 73, 74 and 93 | 303- Water and Effluents – 2018 |
| | 303-3: Water withdrawal | Pages 73, 74 and 141 | 303- Water and Effluents – 2018 |
| | 303-4: Water discharge | Pages 73, 74, 97 and 141 | 303- Water and Effluents – 2018 |
| | 303-5: Water consumption | Pages 73, 74, 96 and 97 | 303- Water and Effluents – 2018 |

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| | | **Material topic: Integrity and Compliance** | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Page 49 | |
| **GRI 205: Combating Corruption 2016** | 2-26 Mechanisms for counseling and raising concerns | Pages 26, 50, 52 and 53 | 205- Combating Corruption – 2016 |
| | 205-1: Operations assessed for risks related to corruption | Page 123 | 205- Combating Corruption – 2016 |
| | 205-2: Communication and training about anti-corruption policies and procedures | Pages 50, 51 and 120 | 205- Combating Corruption – 2016 |
| | 205-3: Confirmed incidents of corruption and actions taken | There were no reports of corruption in the period | 205- Combating Corruption – 2016 |
| | | **Material topic: Dam Safety** | |
| **GRI 3: Material Topics 2021** | 3-3 Management of material topics | Pages 36, 39, 114 and 115 | |
| **GRI 416: Customer Health and Safety** | EU21 Measures for contingency planning, management plan and training programs for disasters/emergencies | Page 114 | EU21- Emergency and Disaster Prevention and Preparedness – 2016 |
| | EU25 Number of accidents and deaths of service users involving company assets | Page 71 | EU25- Customer Health and Safety – 2016 |
| **GRI 417: Marketing and Labeling 2016** | 417-3 Cases of non-compliance regarding marketing communications | In 2022, there were no reports of cases of non-compliance with laws and/or voluntary codes regarding marketing communication, including advertising, promotion and sponsorship, broken down by: cases of non-compliance or voluntary codes with laws that resulted in a fine or penalty, warning. The Communication and Press Management, responsible for the matter, follows the guidelines of the code of conduct and the communication and sustainability policies, thus preventing any action in this regard | 417- Customer Health and Safety – 2016 |

# SASB **indicators**

## Topics and accounting metrics for sustainability disclosure | Sector: Electric Utilities

| SASB TOPIC | SASB METRICS | SASB CODE | PAGE |
|---|---|---|---|
| **Greenhouse gas emissions and energy resource planning** | (1) Scope 1 global gross emissions, percentage covered by | IF-EU-110a.1 | 72 and 78 |
| | (2) emission limiting regulations | IF-EU-110a.2 | 72 and 78 |
| | (3) emissions regulations | IF-EU-110a.2 | 72 and 78 |
| | Greenhouse gas (GHG) emissions associated with energy supply | IF-EU-110a.2 | 72 and 78 |
| | Discussion of the long- and short-term strategy or plan to manage Scope 1 emissions, emission reduction targets and review of performance against these targets | IF-EU-110a.3 | 72 and 78 |
| **Air quality** | Atmospheric emissions of the following pollutants: NOx (excluding N2O), SOx, particulate matter (PM10), lead (Pb) and mercury (Hg), specifying percentage of each in or near densely populated areas | IF-EU-120a.1 | 72 |
| **Water management** | Total water withdrawn and total water consumed | IF-EU-140a.1 | 18, 72 and 74 |
| | Number of incidents related to non-compliance associated with water consumption | IF-EU-140a.2 | 72 and 74 |
| | Description of risks related to water management, strategies and practices to mitigate these risks | IF-EU-140a.3 | 47 and 72 |
| **Workforce health and safety** | Occupational injury-related rates: total recordable incident rate, fatality rate, and near-miss frequency rate | IF-EU-320a.1 | 67 |
| **Efficiency and end-use demand** | Percentage of power utility revenues from tariff structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM) | IF-EU-420a.1 | Not applicable |
| | Percentage of load served by smart grid technology (smart grid) | IF-EU-420a.2 | 50 |
| | Energy savings from energy efficiency actions | IF-EU-420a.3 | 117 |
| **Nuclear safety and emergency management** | Total number of nuclear power units | IF-EU-540a.1 | Not applicable |
| | Description of efforts related to nuclear safety and emergency preparedness | IF-EU-540a.2 | Not applicable |

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| **Grid resilience** | Number of incidents related to non-compliance with physical and/or cyber security standards or regulations | IF-EU-550a.1 | There were no reports |
| | Average system outage duration, average system outage frequency, average customer outage duration including major event days | IF-EU-550a.2 | Not applicable |
| **Activity metrics** | Number of residential, commercial and industrial customers served | IF-EU-000.A | Not applicable |
| | Total electricity delivered by customer type | IF-EU-000.B | Not applicable |
| | Length of transmission and distribution lines | IF-EU-000.C | Not applicable |
| | Total electricity generated | IF-EU-000.D | Not applicable |
| | Total electricity purchased wholesale | IF-EU-000.E | Not applicable |

# Material **topics**

| MATERIAL TOPIC | SDG | SDG GOAL | GLOBAL COMPACT PRINCIPLE |
|---|---|---|---|
| GENERATION OF SHARED VALUE | **Objective 3. Ensuring a healthy life and promoting well-being for everyone, at all ages** | 3.3 By 2030, end epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases, and combat hepatitis, waterborne diseases, and other communicable diseases | |
| GENERATION OF SHARED VALUE | **Objective 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all** | 4.4 By 2030, substantially increase the number of young people and adults who have relevant skills, including technical and vocational skills, for employment, decent work and entrepreneurship | |
| GENERATION OF SHARED VALUE | **Objective 6. Ensuring the availability and sustainable management of water and sanitation for all** | 6.b Support and strengthen the participation of local communities to improve water and sanitation management | |
| GENERATION OF SHARED VALUE | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.3 Promote development-oriented policies that support productive activities, decent employment generation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro, small and mediumsized enterprises, also through access to financial services | |
| BIODIVERSITY | **Objective 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, stop and reverse land degradation and stop biodiversity loss** | 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, droughts and floods, and strive to achieve a land degradation-neutral world | |
| HUMAN RIGHTS | **Objective 5. Achieve gender equality and empower all women and girls** | 5.c Adopt and strengthen sound policies and applicable legislation to promote gender equality and the empowerment of all women and girls at all levels | Principle 1 – Human Rights: 1- Companies must support and respect the protection of internationally recognized human rights. 2-Ensure your nonparticipation in violation of these rights |

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| HUMAN RIGHTS | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including youth and persons with disabilities, and equal pay for work of equal value | Principle 1 – Human Rights: 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your nonparticipation in violations of these rights |
| HUMAN RIGHTS | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and ensure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers. By 2025, end child labor in all its forms | Principle 1 – Human Rights: 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your nonparticipation in violations of these rights. 3- Businesses should support freedom of association and the effective ecognition of the right to collective bargaining. 4- Elimination of all forms of forced or compulsory labor. 5- Effective abolition of child labor. 6- Eliminate employment discrimination |
| HUMAN RIGHTS | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular migrant women, and people in precarious employment | Principle 1 – Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| HUMAN RIGHTS | **Objective 10. Reduce inequality within and between countries** | 10.2 By 2030, empower and promote the social, economic and political inclusion of all, regardless of age, gender, disability, race, ethnicity, origin, religion, economic or other status | Principle 1 – Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| RELATIONSHIP WITH LOCAL COMMUNITIES AND INDIGENOUS PEOPLE | **Objective 10. Reduce inequality within and between countries** | 10.1 By 2030, progressively achieve and sustain income growth of the poorest 40% of the population at a rate greater than the national average | 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| RELATIONSHIP WITH LOCAL COMMUNITIES AND INDIGENOUS PEOPLE | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and ensure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers. By 2025, end child labor in all its forms | 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| RELATIONSHIP WITH LOCAL COMMUNITIES AND INDIGENOUS PEOPLE | **Objective 5. Achieve gender equality and empower all women and girls** | 5.5 Ensure the full and effective participation of women and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life | 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |

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| RELATIONSHIP WITH LOCAL COMMUNITIES AND INDIGENOUS PEOPLE | **Objective 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all** | 4.1 By 2030, ensure that all girls and boys complete free, equitable, quality primary and secondary education that leads to relevant and effective learning outcomes<br><br>4.4 By 2030, substantially increase the number of young people and adults who have relevant skills, including technical and vocational skills, for employment, decent work and entrepreneurship<br><br>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the most vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations | 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| RELATIONSHIP WITH LOCAL COMMUNITIES AND INDIGENOUS PEOPLE | **Objective 3. Ensuring a healthy life and promoting well-being for everyone, at all ages** | 3.5 strengthen the prevention and treatment of substance abuse, including substance abuse and harmful use of alcohol<br><br>3.3 By 2030, end epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases, and combat hepatitis, waterborne diseases, and other communicable diseases | 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| RELATIONSHIP WITH LOCAL COMMUNITIES AND INDIGENOUS PEOPLE | **Objective 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture** | 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, also through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and non-agricultural value-adding and employment opportunities | 1- Companies must support and respect the protection of internationally recognized human rights. 2- Ensure your non-participation in violations of these rights |
| POLITICAL, SOCIAL, ECONOMIC AND REGULATORY SCENARIO | **Objective 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development** | 17.7 Promote the development, transfer, dissemination and diffusion of environmentally friendly technologies to developing countries on favorable terms, including concessional and preferential terms, as mutually agreed | 10- Companies must fight corruption in all its forms, including extortion and bribery |

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| POLITICAL, SOCIAL, ECONOMIC AND REGULATORY SCENARIO | **Objective 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels** | 16.5 Substantially reduce corruption and bribery in all its forms<br>16.6 Develop effective, accountable and transparent institutions at all levels<br>16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels<br>16.8 Expand and strengthen the participation of developing countries in global governance institutions | 10- Companies must fight corruption in all its forms, including extortion and bribery |
| CLIMATE CHANGES | **Objective 13. Take urgent action to combat climate change and its impacts** | 13.1 Strengthen resilience and adaptive capacity to climaterelated risks and natural disasters in all countries<br>13.2 Integrate climate change measures into national policies, strategies and planning<br>13.3 Improve education, raise awareness and human and institutional capacity on mitigation, adaptation, impact reduction and early warning of climate change | 7- Businesses should support a precautionary approach to environmental challenges<br>8- Develop initiatives to promote greater environmental responsibility<br>11- Encourage the development and dissemination of environmentally friendly technologies |
| EFFICIENCY IN ENERGY GENERATION AND TRANSITION | **Objective 7. Ensure reliable, sustainable, modern and affordable access to energy for all** | 7.1 By 2030, ensure universal, reliable, modern and affordable access to energy services<br>7.2 By 2030, substantially increase the share of renewable energies in the global energy mix<br>7.3 By 2030, double the global rate of improvement in energy efficiency 7.a By 2030, strengthen international cooperation to facilitate access to clean energy research and technologies, including renewable energy, energy efficiency, and advanced and cleaner fossil fuel technologies, and promote investment in energy infrastructure and technologies for clean energy | 11- Encourage the development and dissemination of environmentally friendly technologies |
| EFFICIENCY IN ENERGY GENERATION AND TRANSITION | **Objective 12. Ensuring sustainable production and consumption patterns** | 12.2 By 2030, achieve sustainable management and efficient use of natural resources<br>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse | 11- Encourage the development and dissemination of environmentally friendly technologies |

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| HEALTH AND SAFETY AT WORK | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular migrant women, and people in precarious employment | |
| WATER MANAGEMENT | **Objective 13. Take urgent action to combat climate change and its impacts** | 13.1 Strengthen resilience and adaptive capacity to climaterelated risks and natural disasters in all countries<br><br>13.2 Integrate climate change measures into national policies, strategies and planning | |
| INTEGRITY AND COMPLIANCE | **Objective 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels** | 16.5 Substantially reduce corruption and bribery in all its forms<br><br>16.6 Develop effective, accountable and transparent institutions at all levels<br><br>16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels | 10- Companies must fight corruption in all its forms, including extortion and bribery |
| DAM SAFETY | **Objective 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, stop and reverse land degradation and stop biodiversity loss** | 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and arid lands, in accordance with obligations under international agreements | |
| PEOPLE MANAGEMENT AND DEVELOPMENT | **Objective 3. Ensuring a healthy life and promoting well-being for everyone, at all ages** | 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all | |

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| PEOPLE MANAGEMENT AND DEVELOPMENT | **Objective 5. Achieve gender equality and empower all women and girls** | 5.2 Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation<br><br>5.5 Ensure the full and effective participation of women and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life<br><br>5.c Adopt and strengthen sound policies and applicable legislation to promote gender equality and the empowerment of all women and girls at all levels | 3- Businesses should support freedom of association and the effective recognition of the right to collective bargaining<br><br>4- Elimination of all forms of forced or compulsory labor<br><br>5- Effective abolition of child labor<br><br>6- Eliminate employment discrimination |
| PEOPLE MANAGEMENT AND DEVELOPMENT | **Objective 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** | 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including youth and persons with disabilities, and equal pay for work of equal value | |
| PEOPLE MANAGEMENT AND DEVELOPMENT | **Objective 10. Reduce inequality within and between countries** | 10.2 By 2030, empower and promote the social, economic and political inclusion of all, regardless of age, gender, disability, race, ethnicity, origin, religion, economic or other status<br><br>10.3 ensure equal opportunities and reduce inequalities in outcomes, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and actions in this regard | |

# Correlation of GRI indicators with the **Equator Principles**

| GRI | PE |
|---|---|
| 2-1 Organization details | |
| 2-2 Entities included in the organization's sustainability report | |
| 2-3 Reporting period, frequency and point of contact | EP 5, EP 6, EP 10 |
| 2-4 Information restatements | |
| 2-5 External verification | EP 7, EP 9 |
| 2-6 Activities, value chain and other business relationships | EP 1 A, B |
| 2-7 Employees | |
| 2-8 Workers who are not employees | |
| 2-9 Governance structure and its composition | |
| 2-10 Nomination and selection for the highest governance body | |
| 2-11 Chair of the highest governance body | |
| 2-12 Role played by the highest governance body in overseeing the management of impacts | EP 6 |
| 2-13 Delegate responsibility to manage impacts | |

| GRI | PE |
|---|---|
| 2-14 Role played by the highest governance body in sustainability reporting | |
| 2-15 Conflicts of interest | |
| 2-16 Communicating key concerns | |
| 2-17 Collective knowledge of the highest governance body | |
| 2-18 Evaluation of the highest governance body's performance | |
| 2-19 Compensation policies | |
| 2-20 Process to determine compensation | |
| 2-21 Ratio of total annual compensation | |
| 2-22 Declaration on sustainable development strategy | EP 2 A, B, C |
| 2-23 Policy commitments | |
| 2-24 Incorporation of policy commitments | |
| 2-25 Processes to repair negative impacts | |
| 2-26 Mechanisms for counseling and raising concernss | EP 5, EP 6 |

| GRI | PE |
|---|---|
| 2-27 Compliance with laws and regulations | |
| 2-28 Participation in associations | |
| 2-29 Approach to stakeholder engagement | EP 5, EP 6 |
| 2-30 Collective Bargaining Agreements | EP 5, EP 6 |
| 3.1 Process to define material topics | EP 5 |
| 3.2 List of material topics | EP 5, |
| 3.3 Material topics management | EP 5, EP6 |
| 201-2 Financial implications and other risks and opportunities arising from climate change | EP 2 A, B,C |
| 203-1 Investments in infrastructure and services offered | EP 3 b |
| 204-1 Ratio of expenses with local suppliers | EP 4, EP 5 |
| 305-1 Direct emissions of greenhouse gases GHG) (Scope 1) | EP 2 A, B, C |
| 305-2 Direct emissions of greenhouse gases GHG) (Scope 2) | EP 2 A, B, C |
| 305-3 Other indirect emissions of greenhouse gases (GHG) (Scope 3) | EP 2 A, B, C, |

| GRI | PE |
|---|---|
| 305-6 Emissions of substances that deplete the ozone layer (SDG) | EP 2 A, B, C |
| 305-7 Emissions of NOX, SOX and other significant atmospheric emissions | EP 2 A, B, C |
| 308-1 New suppliers selected based on environmental criteria | EP 5, EP 6 |
| 308-2 Negative environmental impacts of the supply chain and measures taken | EP 5, EP 6 |
| 407-1 Operations and suppliers where the right to freedom of association and collective bargaining may be at risk | EP 6 |
| 408-1 Operations and suppliers with significant risk of incidents of child labor | EP 6 |
| 409-1 1Operations and suppliers with significant risk of cases of forced or compulsory labor | EP 6 |
| 411-1 Cases of violations of the rights of indigenous or traditional peoples | EP 6 |
| 414-2 Negative environmental impacts of the supply chain and measures taken | EP 5 |

# Independent **reader's letter**

Sustainability reports go beyond a simple descriptive memorial of actions. They are management tools that demonstrate how aligned the company is with regard to socioeconomic sustainability goals defined internally and also with regard to the best practices in the industry. Based on the identified improvement targets, executives have a starting point to continue their efforts, while other stakeholders can identify topics to contribute or where engagement with the company is necessary.

In order to be used as compasses in the company's sustainable development journey, the reports must follow strict frameworks, with a technical and scientific basis, which provide reliable, clear data that allow comparison. Norte Energia chose to adopt internationally recognized frameworks in its reports, such as the standards of the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB).

Although both are widely adopted, they fulfill different proposals: the GRI applies a multistakeholder approach, so that the report can be a source of information for all the company's stakeholders. SASB, on the other hand, is widely used by investors and, therefore, is significantly more specific and denser, which can make it difficult for the general public to understand.

As Norte Energia engages with different audiences, the adoption of GRI as a reference format for the report is seen as appropriate. Thus, we opted for a more accurate analysis based on this model and its guiding principles: accuracy, balance, clarity, comparability, completeness, context of sustainability, timeliness and verifiability. Throughout this report, we will seek to assess how Norte Energia applied these principles in its reality and whether it was successful in its attempt, especially from the point of view of best capital market practices with the Company's investors.

## Norte Energia's journey

The context of sustainability is extensively addressed in Norte Energia's 2022 report. The text demonstrates, among many aspects, that the consolidation of governance in the area of sustainability supported some of the most important actions of the Company throughout the year. It was evident how much the creation of the Sustainability Committee within the scope of the Board of Directors led to structural developments. The highlight was the renewal of the materiality matrix with the participation of external stakeholders, resulting in the addition of Diversity & Inclusion as part of the material topics for the company. The renewal of the matrix was even proposed by other independent readers, demonstrating Norte Energia's inclination to welcome suggestions to improve its processes.

Thus, the Committee contributes enormously to directing actions and for sustainability to become a crosscutting theme in the Board. In governance jargon, it is conventional to call the engagement of the board as "the tone that comes from the top", in order to defend the idea that the commitment of the leaders regarding a certain subject is reflected throughout the organization. Therefore, it is important that Norte Energia continues to communicate the development of this agenda to the Company's highest levels of governance.

Still regarding environmental sustainability, another significant advance was the publication of Norte Energia's first greenhouse gas (GHG) inventory, with subsequent achievement of the Gold Seal of the Brazilian GHG Protocol Program. The measure is relevant as it can support the next steps such as carbon neutrality policies, which have been widely adopted in the

sector. In this sense, the company's inclusion in discussion forums such as the Brazilian Business Council for Sustainable Development (CEBDS) and adherence to the United Nations (UN) Global Compact can provide fruitful subsidies for future policies to be developed by the Company.

From the point of view of governance, the inclusion of the human rights policy as part of the executives' variable compensation was also an example of good practice adopted by Norte Energia to align management with proposals that value the generation of shared value, which is a material theme of the Company. The adoption of financial performance and sustainability metrics as a parameter for leadership remuneration policies also has positive impact on investors, especially at a time when the topic is in evidence in the country.

The relationship with stakeholders is perhaps, among the material topics, one of the factors with the greatest impact on the Company's image, and it is positive to note that over the years the utility agency has sought to address this issue. Thus, the highlight of 2022 is precisely the broad process of engagement with stakeholders for the definition of the new materiality matrix, but we cannot fail to mention the expansion of important communication channels, such as Central Belo Monte, and the adoption of new technologies, like the chatbot Bela.

Norte Energia also dedicated itself to clarifying traditionally sensitive issues, such as the flow of water to Volta Grande do Xingu and its consequences for local communities and ichthyofauna. Taking into account the principle of balance, the utility agency did not shy away from detailing the impacts of its actions, also presenting the corresponding mitigation initiatives, such as investment in biotechnology research projects that help the reproduction of fish species native to the Xingu. At the same time, it is necessary to recognize that this is a structural issue for the Company's operations, requiring permanent negotiation work with local communities to reduce damage. So far, independent analyses suggest that the perspective of these stakeholders and public opinion remain negative on this issue, suggesting that efforts are still needed for mutual understanding. The suggestion for future editions is that the Company places even greater emphasis on how stakeholder feedback is included in decisionmaking (an action already carried out to a large extent in this edition) and how these publics are informed about how their contributions influenced this process, in line with good practices recommended by the GRI.

Still regarding the use of water, the plant's main input, Norte Energia has carried out conservation initiatives such as the planting of native trees in six thousand hectares to revitalize the Xingu watershed. It also contributed with basic sanitation actions in Altamira, which are highlights in the year. The strategy seems right and in line with the sector, which has increasingly sought the rational use of this resource, considering potential disruptions in rainfall cycles resulting from climate change. In this sense, the Research and Development (R&D) project sponsored by Norte Energia and developed by the Institute of Technology for Development (Lactec) sounds promising, which will analyze climate extremes and their influence on the electricity sector. We believe that future reports should highlight the results of the initiative and also give visibility to other measures, given that climate change has also become a material issue for the Company.

## Best market practices

Norte Energia operates in a sector with great potential from a sustainability point of view, which presents valuable opportunities, but also the challenge of being up to date with the best sustainability practices and integrated reporting. A brief analysis against industry peers listed on the B3 S.A. Sustainability Index. – Brasil, Bolsa, Balcão (B3), reference for investors in Brazil, points out that Norte Energia is well-positioned and can still generate actions to stand out towards best practices, especially with regard to diversity, carbon neutrality and cybersecurity. It is important to remember that such issues have been increasingly subject to regulation and evaluated by committed institutional investors, including foreign ones. At a time when the eyes of the world turn to the State of Pará in anticipation of COP 30, taking into account the concerns and ambitions of institutional and international investors could prove fruitful for the Company.

Regarding diversity, Norte Energia recognizes in its report that it has already identified gender equity as an issue to be addressed in the coming years. It is interesting to note that this vision goes beyond the company's internal environment, also impacting community incentive programs, such as the Belo Monte Empreende project, which had more than 60% of women in 2022. In addition, there is extensive disclosure of data to measure gender inequalities in the report. Such efforts are in line with the seriousness with which the issue has been treated by the benchmarks, which are already moving towards a broader understanding of what diversity would be, involving racial criteria, special needs and a greater spectrum of gender issues.

Decarbonization is another prominent trend in the sector, especially from the point of view of investors and international companies. Compared to the listed peers, Norte Energia has an innate advantage given its energy generation, which is efficient in terms of emissions, comes from a renewable source and there is no legacy infrastructure from polluting sources. In addition, the Company has been investing in recent years, carrying out its GHG emissions inventory and contributing to the generation of renewable energy in the region with initiatives such as the Energia Verde do Xingu project, which installed photovoltaic panels in local indigenous communities. This combination of factors puts Norte Energia in a privileged position to assume a greater role in relation to climate change and carbon neutrality. This vision is reinforced by the fact that the main listed peers in the sector continue with the plan to decarbonize their headquarters and disclose welldefined targets for carbon neutrality, in line with the global ambitions of the Paris Agreement.

Another point where we see investment by benchmarks is the disclosure of information related to cybersecurity. The subject is even a material topic for some companies in the sector, supported by the GRI guideline 418 and also by Principle 16 of the UN Sustainable Development Goals (SDGs). In light of the validity of the General Data Protection Law (LGPD) and the significant global increase in personal data leakage, ransomware attacks and other cyber threats, we believe it is in the interest of Norte Energia's stakeholders to disclose cybersecurity plans and metrics to protect one of the largest Brazilian plants.

## Future directions

Resorting once again to the GRI principles, we believe that this report presents satisfactory completeness, accuracy and balance. From the point of view of investors, a special mention should also be made of timeliness: the company has been presenting reports consistently for years, which also contributes to the construction of comparability tools. In this sense, it should be noted that investors usually evaluate their assets under different time windows and that the historical availability of this data helps them to study the company's development more accurately.

For the future, it is necessary to balance clarity and completeness. The effort to disseminate information comprehensively is commendable and necessary. Betting on resources that synthesize them, such as topical summaries at the beginning of the chapters, can greatly help the investors' evaluation process. In addition, taking into account the presence of a non-specialized audience, there is an opportunity to simplify the technical language and, potentially, provide support materials such as an index of acronyms and technical concepts of the energy industry and financial market. This last practice is also adopted by industry benchmarks.

Despite points that may further strengthen the quality of the report, we believe that Norte Energia carried out important work in 2022 by detailing the process of preparing the company's materiality matrix and showing how the topics fit in relation to the GRI framework and the UN SDGs. In the future, it would be relevant to quantify the commitments that the company wants to achieve, their deadlines and the status of achievement of the goal each year. Thus, Norte Energia will be able to provide even more transparency to its efforts.

**Fábio Henrique de Sousa Coelho**

*Fábio Coelho is President of the Association of Investors in the Capital Market (Amec) and member of the Brazilian Committee on Sustainability Pronouncements (CBPS). He was president of Previc, the regulator of pension funds in the Ministry of Economy. He was an Economist, Consultant and Chief of Staff at the Central Bank of Brazil. Participates in several capital market forums in Brazil and abroad. He is a Civil Engineer, Master in Finance and Doctor in Economics. He works as Professor of Executive Courses at FGV and IBMEC on topics such as sustainability, finance and corporate governance.*

# Letter **of assurance**

## Limited assurance report by the independent auditors on the nonfinancial information contained in the Annual Sustainability Report

To the
Shareholders,
Directors and Managers of
**NORTE ENERGIA S.A**
Brasília – DF

## Introduction

We were hired by Norte Energia S.A. ("Norte Energia" or "Company") to present our limited assurance report on the non-financial information contained in Norte Energia's 2022 Sustainability Report ("Report"), for the year ended December 31, 2022.

Our limited assurance does not extend to prior period information or any other information disclosed in conjunction with the Report, including any embedded images, audio files or videos.

## Norte Energia management responsibilities

The Company's management is responsible for:

- select and establish appropriate criteria to prepare the information contained in the Report;
- prepare information in accordance with the criteria and guidelines of the Global Reporting Initiative ("GRI Standards");
- design, implement and maintain internal control over the information relevant to the preparation of the indicators contained in the Report, which are free from material distortion, regardless of whether caused by fraud or error.

## Responsibility of independent auditors

Our responsibility is to express a conclusion on the non-financial information contained in the Report, based on the limited assurance work carried out in accordance with Technical Communication CTO 07 – Limited Assurance Work referring to the non-financial information contained in the Integrated Report issued by the CFC, and based on NBC TO 3000 – Assurance Engagements Other than Audit and Review, also issued by the CFC, which is equivalent to the international standard ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information, issued by the International Auditing and Assurance Standards Board ( IAASB). These standards require the auditor to comply with ethical requirements, with independence and other responsibilities related to them, including the application of the Brazilian Quality Control Standard (NBC PA 01). Therefore, it also requires maintaining a comprehensive quality control system, including documented policies and procedures on compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Additionally, the aforementioned standards require that the work be planned and executed with the objective of obtaining limited assurance that the non-financial information contained in the Report, taken as a whole, is free of material distortions.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) consists primarily of inquiries to Norte Energia's management and other Company professionals who are involved in preparing the information, as well as the application of analytical procedures to obtain evidence that enable us to reach conclusions, with limited assurance, about the information taken as a whole. A limited assurance work also requires the execution of additional procedures, when the independent auditor becomes aware of matters that lead him to believe that the indicators disclosed in the Report, taken as a whole, may present material distortions.

The procedures selected were based on our understanding of aspects related to the compilation, materiality and presentation of the information contained in the Report, other circumstances of the work and our consideration of areas and processes associated with the material information disclosed in the Report, in which relevant distortions might exist. The procedures included, among others:

a) the planning of the work, considering the relevance, the volume of quantitative and qualitative information and the operational and internal control systems that served as a basis for the preparation of the indicators contained in the Report;

b) understanding the calculation methodology and procedures to compile the indicators through inquiries with the managers responsible for preparing the information;

c) the application of analytical procedures on the quantitative information and inquiries about the qualitative information and its correlation with the indicators contained in the Report;

d) for cases in which non-financial data correlate with indicators of financial nature, the confrontation of these indicators with the financial statements and/or accounting records.

Limited assurance work also included adherence to the guidelines and criteria of the GRI Standards structure applicable to the preparation of the information contained in the Report.

We believe that the evidence obtained in our work is sufficient and appropriate to support our limited conclusion.

## Reach and limitations

Procedures performed in limited assurance engagements vary in nature and timing and are less extensive than in reasonable assurance engagements. Consequently, the level of assurance obtained in a limited assurance engagement is substantially less than that which would have been obtained if reasonable assurance engagement had been performed.

If we had carried out reasonable assurance work, we could have identified other matters and possible distortions that may exist in the indicators contained in the Report. Accordingly, we have not expressed an opinion on this information.

Non-financial data are subject to more given the nature and diversity of methods used to determine, calculate or estimate such data. Qualitative interpretations of data materiality, relevance and accuracy are subject to individual assumptions and judgments. Additionally, we did not carry out any work on data reported for previous periods, nor in relation to future projections and targets.

The preparation and presentation of sustainability indicators followed the criteria of the GRI Standards and, therefore, are not intended to ensure compliance with social, economic, environmental or engineering laws and regulations. The aforementioned standards provide, however, for the presentation and disclosure of any non-compliance with such regulations when sanctions or significant fines occur. Our assurance report must be read and understood in the context inherent to the selected criterion (GRI Standards).

## Conclusion

Based on the procedures carried out, described in this report and on the evidence obtained, nothing has come to our attention that leads us to believe that the non-financial information contained in Norte Energia's Sustainability Report for the year ended December 31, 2022 was not prepared, in all material respects, in accordance with the criteria and guidelines of the Global Reporting Initiative (GRI Standards).

São Paulo (SP), June 13, 2023.

**Ernst & Young**
Auditores Independentes S/S Ltda.
CRC SP – 034519/O

Leonardo Masseli Dutra
**Sustainability Partner**

Flavio A. Machado
**CRC MG Accountant - 065.899/O-2**

norteENERGIA
USINA HIDRELÉTRICA BELO MONTE


**NORTE ENERGIA**

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**Bruno Bahiana**
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**Thomas Sottili**
Sustainability Project Manager – Presidency

**Vanessa Caldeira**
Sustainability Specialist – Presidency

**Diogo Amaral**
Sustainability Specialist – Presidency

**Marlon Oliveira**
Sustainability Analyst – Presidency

**EXPEDIENT**

Coordination – Planning, Editing and GRI Consulting
**Walk4Good**

Project and Relationship Management
**Glaucia Terreo e Regiane Abreu**

GRI, SASB, Sectorial and Engagement Consultancy
**Viviani Bleyer**

Writing and Editing
**Viviane Massi**

Review
**Agnes Rissardo**

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**Akemi Takenaka, Heloísa Barbosa and Yzadora Takano**

Technical support
**Emellyn Alves**

Editing Support
**Roberta Benamor**

Photographs
**Acervo Norte Energia**