



# Sustainability Report 2022

**Alupar**

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# Presentation



Electricity infrastructure is an essential input for every other productive activities, and thus has a strategic role in promoting sustainable development. Amid the key topics in the climate change agenda, energy generation and transmission sectors have great potential to contribute not only with the reduction of greenhouse gas emissions, but also by defining new paradigms on social-environmental impacts management, generating, at the same time, greater value to shareholders and investors.

At Alupar, we recognize the importance of building new transmission lines and energy generation projects guided by a governance that evaluates, with excellence

and professionalism, the aspects that influence our relationship with different audiences and the environment. Therefore, we have invested in the evolution of our ESG<sup>1</sup> policies and practices, as well as in communicating the goals achieved and the challenges we have to overcome.

Our Sustainability Report is an important tool to highlight this continuous improvement to shareholders, suppliers, employees, regulatory bodies and society in general. Together with the financial statements, the document provides an integrated and comprehensive view of our strategy for growth and consistent long-term value creation.

1. ESG is an acronym that stands for the management approach to risks and opportunities related to environmental, social and corporate governance aspects in the context of business strategy.



In its third edition, our **Sustainability Report** presents the breakthroughs and challenges in the management of ESG aspects integrated into our business strategy

Guided by the principles of transparency and balance, we adopt the most recognized standards for the communication and reporting of sustainability management. Our Report is in accordance with the GRI Standards for Sustainability Reporting, of the GRI (Global Reporting Initiative), and follows the guidelines of the SASB (Sustainability Accounting Standards Board) for the electricity industry.

The data and information that comply with these protocols, referring to the period between January 1 and December 31, 2022, cover 100% of the units

and businesses in Brazil, including the transmission assets operated by TBE in which we have an equity interest. Our goal is, in the coming years, to expand this governance to also include the businesses we have in Colombia and Peru.

The content of the Report was refined and built based on the internal controls and management tools of our Company, involving all administrative and operational areas. At the end, the data were checked and validated by the senior management – Executive Board and Board of Directors. The Report

is not yet subject to independent external verification, with the exception of financial information, extracted from the audited financial statements. No information disclosed in previous reports has been represented.

Via [ri@alupar.com.br](mailto:ri@alupar.com.br), we receive comments and suggestions from anyone interested about our Report. The contributions are important for the continuous improvement of our ESG communication and management practices.

Enjoy your reading!



# Materiality



The Materiality Matrix is a tool that allows, in the context of the ESG agenda, to identify and prioritize the most relevant and urgent issues for the assessment of risks and opportunities, considering the corporate strategy and the impacts of the activities on different audiences our Company relates to – stakeholders. It also enables a broad evaluation of the business model from a multidisciplinary perspective, encompassing sectorial studies and benchmarking, research and active listening to stakeholder’s representatives and connection with civil society initiatives aimed at promoting sustainable development.

In 2022, as part of the Sustainability Report preparation process, we reviewed our Materiality Matrix and identified ten themes that cover the most relevant impacts, risks and opportunities to our business context. Such themes guide the consolidation of the content and indicators used in this publication.

The review process took place through a benchmarking study with companies in the electricity sector and ESG benchmarks, such as international ratings, non-governmental standards and market indices (ISE, DJSI, etc.). Representatives of the types of audiences prioritized for the engagement of this edition – regulatory agents, investors and shareholders, financial institutions and public authorities – were also consulted through structured qualitative interviews.

To consolidate the results, we conducted interviews with Alupar executives, in which the strategic vision and internal expectations of the leaders and employees were weighed and correlated with the themes of the ESG agenda. At the end, we also consider the financial materiality of the themes and the correlation of their aspects with the SDGs (Sustainable Development Goals) and the 2030 Agenda, proposed by the UN (United Nations).

Thus, the revised Materiality Matrix in 2022 reflects the management maturation and the growth of operations. New themes have been added such as the issues of climate change, diversity and inclusion, and supplier management, providing a broader and more integrated understanding of our business model.



The update of our **Materiality Matrix** in 2022 considered external references and qualitative interviews with prioritized audiences, guiding the content of this Report

## Sustainable Development Goals

As a lever for the acceleration of ESG management in our Company, we seek to participate in civil society initiatives connected to the promotion of sustainable development. In this sense, one of the main actions is the adhesion to the Global Compact, a UN initiative that encourages companies from all over the world to integrate the 17 SDGs (Sustainable Development Goals) into their corporate strategies.

Since 2021, we have been part of the Global Compact Brazil Network and participated in the movement to strengthen the SDG goals. In 2022, we conducted an internal study and approved, through a resolution of the Board of Directors, the priority SDGs for Alupar.

We recognize and emphasize the importance of all 17 SDGs to achieve more sustainable levels of production and socio-environmental equity. The work of prioritization is important so that we can, in the definition of ESG plans and projects, take into account the themes and opportunities in which we can contribute more effectively so that Brazil can achieve its goals under the SDGs.

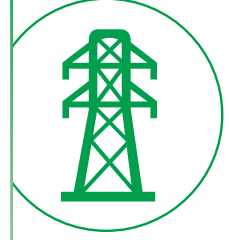
Aside from that, by joining the Global Compact we reinforce our alignment with the 10 Universal Principles of respect for human rights, combating corruption, promoting decent work and protecting the environment, which are part of our commitment to generating sustainable value for shareholders and society.



# Material topics



Click on the topics to understand the aspects and impacts covered by each of them





# Alupar in 2022



Start of **ESTE operation**

**15.5%** year-on-year growth in net revenue

**R\$ 422 million** approved in dividends (payment in 2023)



**AAA Corporate** rating (national scale) and BB (national scale) in the FITCH rating



MSCI ESG **Rating A**

**R\$ 180 million** in investments planned to meet the Basic Environmental Plan of the Indigenous Component in the construction of TNE

Signing of the memorandum of understanding (MoU) for the integration and development of the **green hydrogen hub** in the Pecém Complex (Ceará)



**31%** of leadership positions held by women

Launch of the **Alento Program – Diversity & Inclusion**



Achievement of the **FEEEx certificate** and entry into the **FIA ranking – Amazing Places** to Work

# Message from the CEO

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Since 2013, when Alupar became a listed company with shares traded at B3, our goal has been to generate value by growing a resilient business portfolio, developing greenfield transmission and electricity generation projects. After a decade since we signed this commitment to our shareholders, we had distributed R\$ 2.4 billion in dividends and doubled the Company's Market Cap.

In 2022, with the entry into operation of new transmission assets, we achieved a growth of 15.5% in net revenue and 17.1% in EBITDA, compared to the performance of the previous year. Net income increased even more significantly, by 41.5%, reaching R\$ 522.9 million.

During this decade of growth, our strategy has been designed and executed on solid competitive advantages that differentiate us in the energy sector. We combine a high technical standard of engineering and excellence in project management, cutting-edge financial management and the search for new solutions and innovations to maximize the generation of value in the long term. And we have a team of highly qualified employees

to make deliveries with efficiency, safety and quality – both in the deployment and in the operation of our assets.

Another feature that sets us apart is the management of ESG aspects. Since the first projects, the mitigation of potential environmental and social impacts, the construction of positive relationships with local communities and compliance with regulations have always integrated our decision-making and management process, with a focus on ensuring the maximization of value generation.

More recently, we have improved our governance model on those aspects of

the sustainability agenda, which are as relevant to the success of our strategy as the financial risks and opportunities. In 2021, our Company became a signatory to the Global Compact, an initiative that accelerates the integration of the principles and goals of the SDGs (Sustainable Development Goals) into strategic planning.

In 2022, we engaged employees in training actions on ESG issues and approved, within the Board of Directors, the mapping of the priority SDGs in our sustainability journey. In summary, this work is important to support the establishment of non-financial goals and the direction of projects to make our business model even more connected to sustainable development.



**We completed 10 years of Alupar's IPO, consolidating the Company's growth, technical and project management excellence and commitment to ESG best practices**

The creation of the Alento Program, aimed at strengthening diversity and inclusion in the Company, is one of the first results of this continuous improvement in our management. Moreover, we have structured the Diversity and Inclusion Commission, which will coordinate the actions of leadership engagement, employee training and monitoring of performance indicators.

The theme of climate change, another central aspect of the ESG agenda, has also been broadened and strengthened in our strategy. In addition to investments in new sources of renewable generation, such as wind farms and photovoltaic plants, in 2022 we signed a memorandum of understanding with the government of Ceará, which signals our intention to work on the development of the green hydrogen production project. This is an important initiative to position us on a promising research front, focused on replacing fossil fuels.

In current projects, already in the development phase, social responsibility and commitment to sustainability drive our ability to generate value. We have reached, together with government agencies and representatives of civil society, an

agreement with the Waimiri Atroari indigenous community that enables the construction of the Manaus-Boa Vista transmission line, a project of extreme relevance to connect the state of Roraima to the NIS (National Interconnected System).

In Colombia, where we are building the transmission line operated by TCE, we have made possible an important archaeological rescue work in the areas where the substations will be installed. The evidence found is on display at MANE (Nueva Esperanza Archaeological Museum), opened in 2022 for the appreciation of local history, education and culture.

The growing demand for new renewable energy sources creates opportunities for investment in generation and transmission assets, especially in the Brazilian market. With a successful strategy, financial strength and a team of excellence, we at Alupar are prepared to continue the trajectory of growth and value generation that we have designed and thus continue contributing to the development of the electricity sector with safety and sustainability.



Diversity, climate change and relationship with communities are some of the **prominent themes** in our sustainability management



**Paulo Roberto de Godoy Pereira**  
CEO of Alupar



**Our businesses**

Ten years ago, when Alupar Investimento S.A. became a publicly traded company, we began a trajectory of growth and development of new businesses in the electricity sector. Currently, we are one of the largest privately controlled Brazilian companies in the energy transmission segment and one of the main ones to invest in renewable generation, with operations in Brazil, Colombia and Peru.

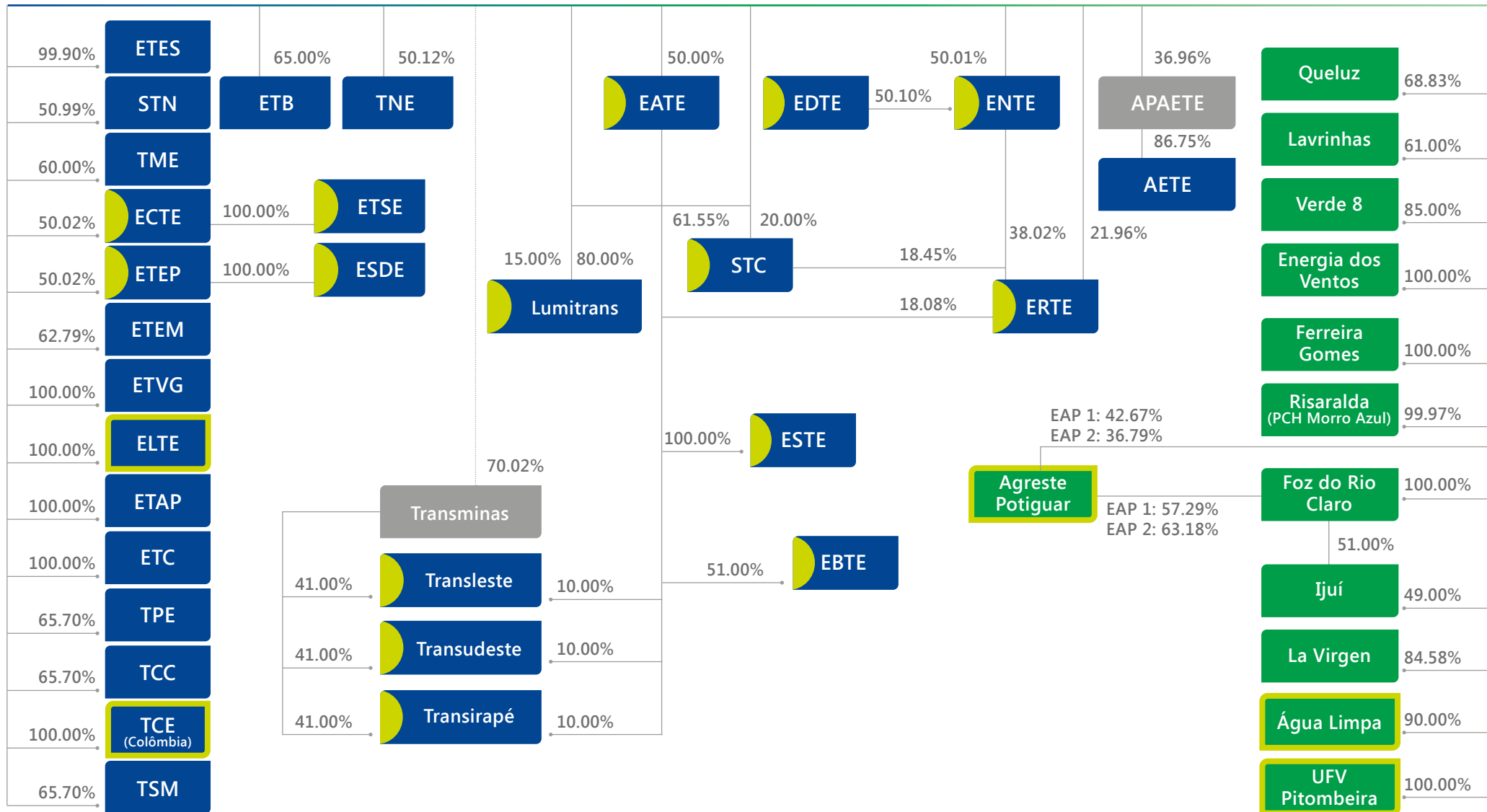
With a strategy aimed at winning and implementing greenfield projects, we maximize the generation of value for all shareholders holding our shares traded on B3 – Brasil, Bolsa and Balcão. We have 42 transmission and energy generation assets, with 8.1 thousand kilometers of lines, 22 substations and 821.5 MW of installed power, considering the concessions in operation and under construction.

Our portfolio consists of concessions and authorizations of operations controlled by us (except TNE – shared control). We are also responsible for the implementation, operation and maintenance of such generation and transmission assets.

42 assets  
in transmission and  
generation make  
up our portfolio

CORPORATE ORGANIZATIONAL CHART

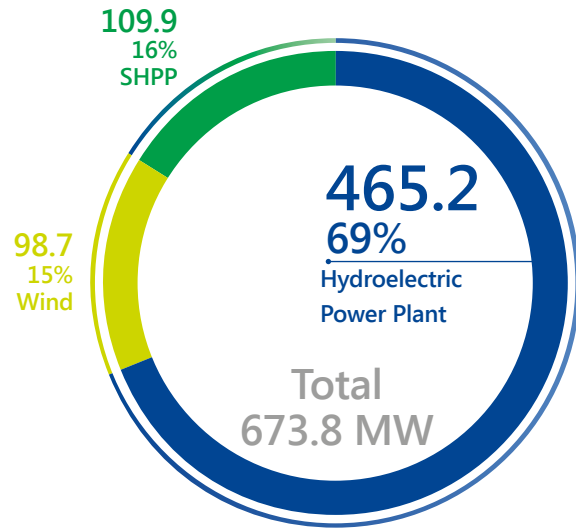
ALUPAR



- Transmission
- Generation
- Under deployment
- ◐ TBE Assets\*

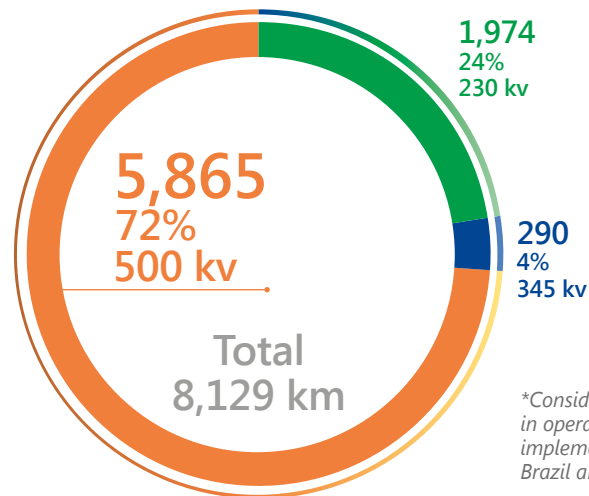
\*TBE is an economic group resulting from the partnership of the majority shareholders: Alupar and Taesa.

Installed capacity per generation source in 2022 (MW)\*



\*It considers only the assets in operation in Brazil and abroad. In addition to these, our pre-operational assets totaled, at the end of 2022, 23 MW in SHPP, 63 MW in wind and 61.7 MW peak in solar.

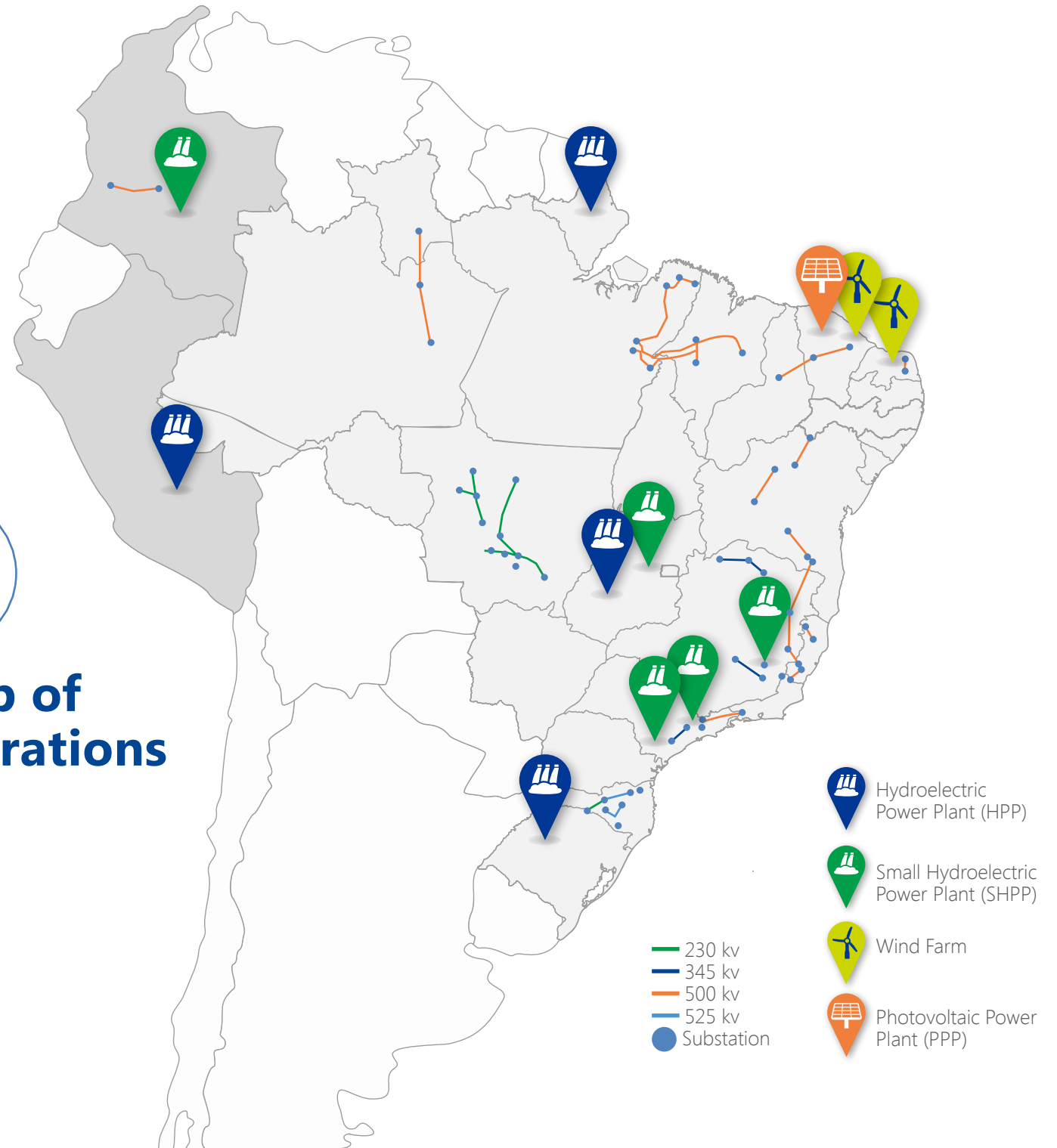
Extension of transmission lines in 2022, by voltage level (km)\*



\*Considers assets in operation and implementation in Brazil and abroad.



## Map of operations





## Mission

Transmit and generate energy with corporate, social and environmental responsibility, generating shareholder value, economic development and people's well-being.



## Vision

To be a respected, admired, modern and effective company, with the best performance indicators in the sectors it operates.



## Values

- Commitment
- Respect
- Planning
- Ethics and Transparency
- Meritocracy
- Result
- Innovation





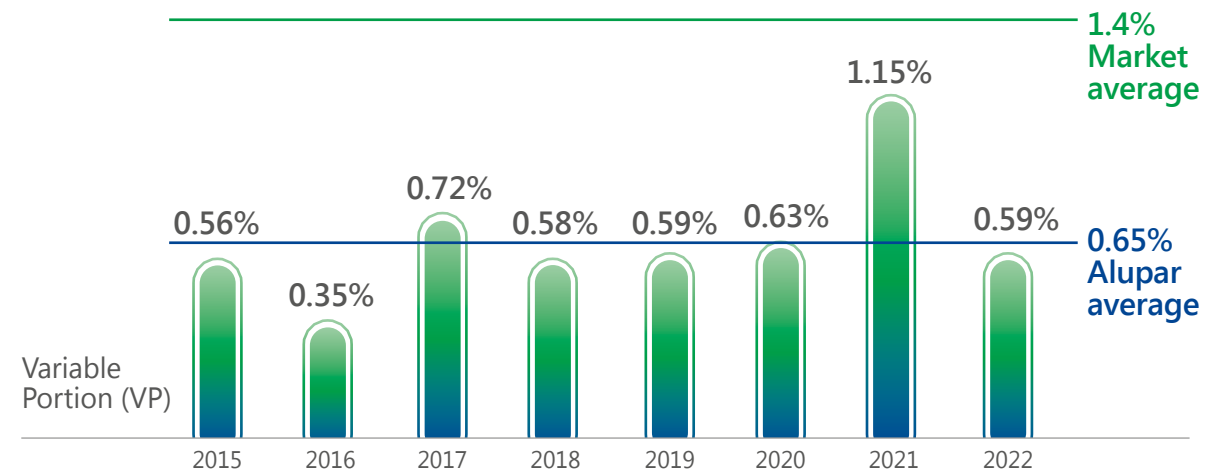
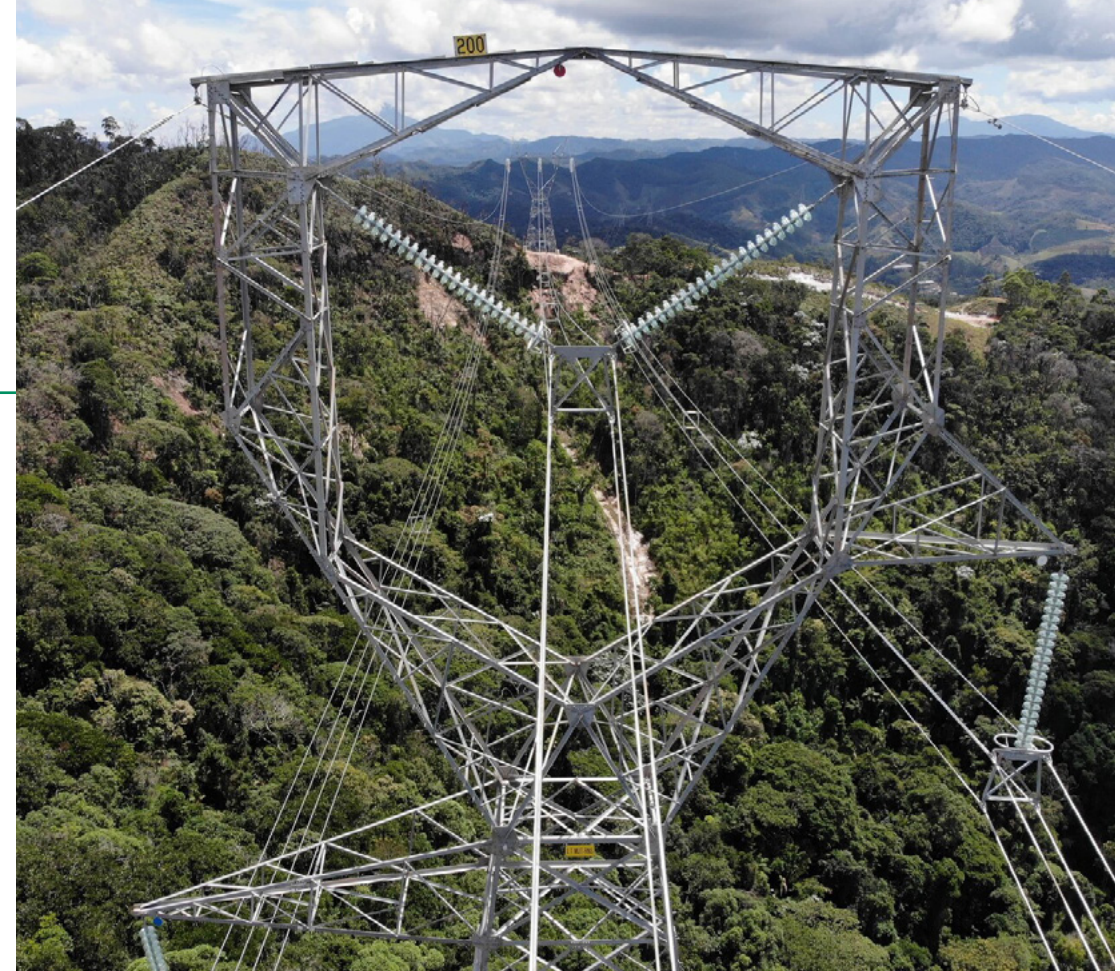
# Quality and efficiency

Throughout our trajectory, we have been recognized for having built and implemented projects that are relevant to the development of the Brazilian electricity sector with safety, efficiency and maximization of return to shareholders. Our know-how in project development and execution resulted in a historical average CAPEX lower than that estimated by ANEEL (National Electric Energy Agency), as demonstrated by the 21% savings obtained in the investment cycle of the 2016/2017 energy transmission auctions.

This efficiency is driven by a robust set of systems and processes for managing the projects being implemented and the assets already energized. We work with internally developed software and other digital solutions to structure an integrated platform, through which operational managers make notes

related to the works, the contracting and management of third parties, the financial flow of projects and the performance of assets in operation.

Efficiency in operation and maintenance (O&M) is a central factor in the success of our strategy of growth and generating shareholder value. In the transmission segment, we are remunerated by the RAP (Annual Permitted Revenue), established in the concession auction and readjusted according to ANEEL's tariff review cycles. The interruptions and unavailability of the equipment generate the collection of VP (Variable Portion from Unavailability), deducted monthly from the RAP to which we are entitled for the service provided. In the last three years, we have achieved an availability percentage above 99.7%.



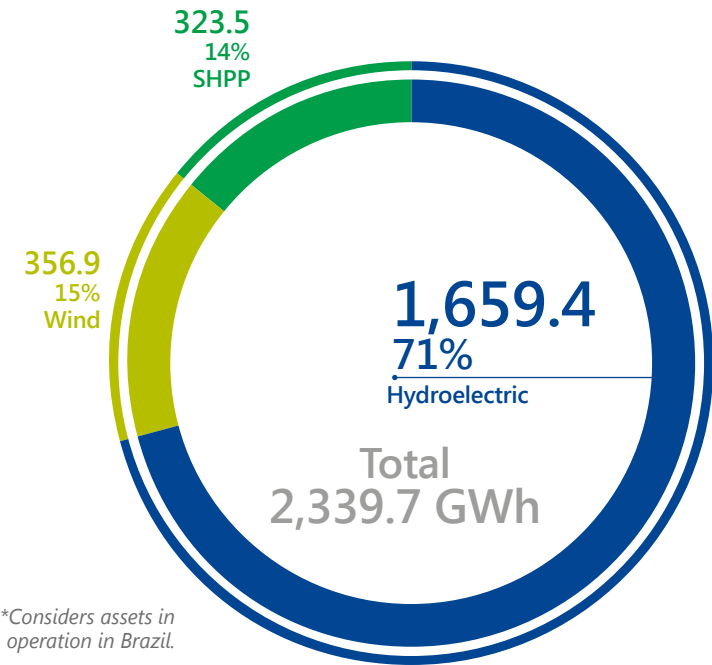
In the generation segment, our revenue comes from selling the energy generated in HPPs (Hydroelectric Plants), SHPPs (Small Hydroelectric Power Plants) and Wind Farms, as well as Photovoltaic Plants under construction. The sale of this energy occurs both in the regulated market (ACR), through auctions, and in the free market (ACL), based on freely negotiated bilateral contracts.

Therefore, as in transmission, the O&M activities that guarantee the availability of equipment are strategic for the generation of financial value and for the supply of energy demand. We monitor the availability factor of each generating unit, consolidating scheduled and unscheduled shutdowns. Between 2021 and 2022, the evolution of the average availability of our hydroelectric plants from 86.8% to 93.4% was highlighted, mainly due to the 55% reduction in the duration of unscheduled shutdowns.



## The operational efficiency and availability of our assets are key factors in expanding energy generation and trading

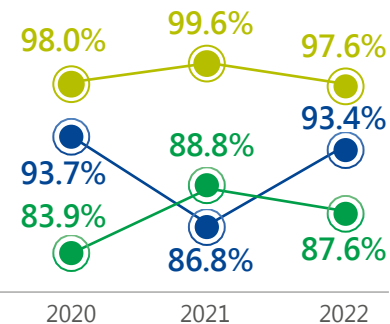
Net energy production by generation source in 2022 (GWh)\*



\*Considers assets in operation in Brazil.

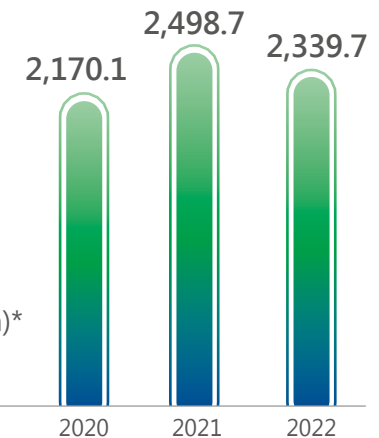
Average generation availability factor per source

- Hydroelectric
- SHPP
- Wind



Net energy production (GWh)\*

\*It considers assets in operation in Brazil.





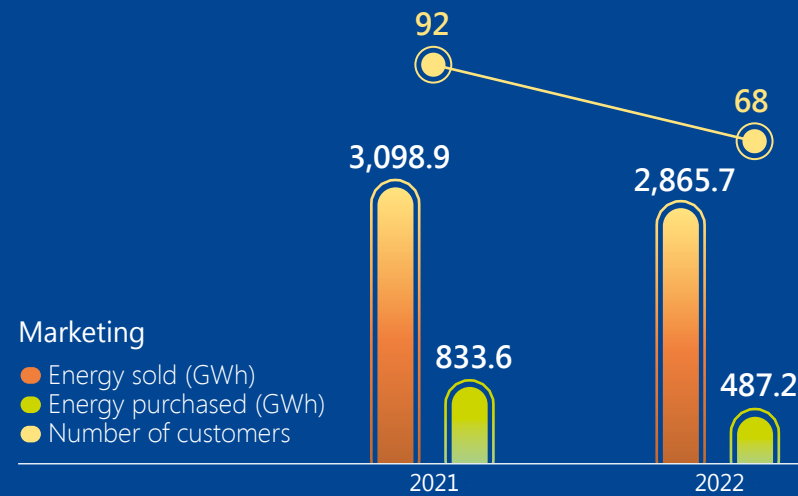
## New opportunities in the electricity sector with ACE

In 2022, together with the development of transmission and generation assets, we strengthened our presence in a new business segment of the electricity sector – energy trading. ACE received the qualification to act as a retail marketer, opening opportunities for the generation of value from the modernization and growth of the free market (ACL).

ACE is being structured to innovate and develop new businesses with customers at the heart of the

strategy. The greater number of consumers in the ACL will demand a digital business approach focused on sustainable solutions to deliver renewable energy with a lower carbon footprint.

Energy trading in 2022 totaled 2,900 GWh, including 487 GWh acquired by ACE. Our portfolio of clients is formed by 68 companies – 34 distributors of the electricity sector and 34 companies of other sectors qualified for acquisitions in the free market.

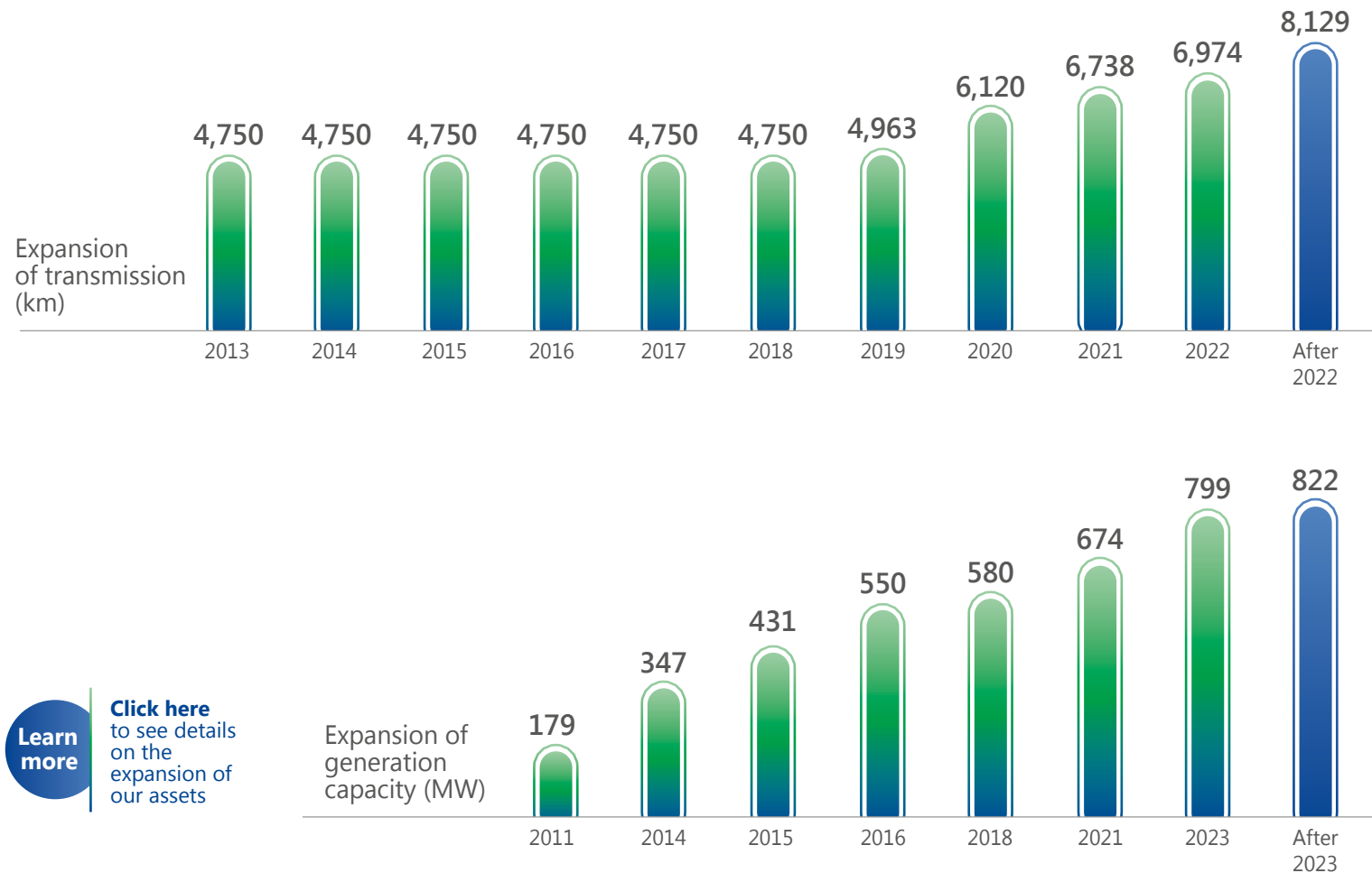


# New businesses

In 2022, we ended the cycle of investments in the development of new energy transmission and generation assets won in ANEEL auctions held between 2016 and 2017. During this period, we invested R\$ 7.2 billion in the implementation of transmission and generation assets.

We started the year 2022 with the full operation of TSM (Transmissora Serra da Mantiqueira S.A.), energized in December 2021 – eight months ahead of the schedule foreseen by ANEEL. TSM operates a 500 kV line that connects the state of São Paulo to the Rio Terminal Substation in the state of Rio de Janeiro.

We also started the operation of ESTE (Empresa Sudeste de Transmission de Energia S.A.), with 236 kilometers of 500 kV transmission line and a substation in the states of Minas Gerais and Espírito Santo. The asset, of which we have 50.02% of the total share capital, adds a RAP of R\$ 135.2 million to the 2022-2023 cycle.



In December 2022, ELTE (Empresa Litorânea de Transmission de Energia S.A.) received the Installation License for the start of the implementation of the Domênico Rangoni Substation, in the municipality of Guarujá. ELTE will implement Lot C of the ANEEL Transmission Auction No. 001/2014, with two transmission lines and two substations to reinforce the power supply in the Baixada Santista, on the coast of São Paulo. Completion of the project is scheduled for 2024.

Another asset in the finalization phase is TCE (Transmissora Colombiana de Energia S.A.S.E.S.P.), a concession of which we hold 100% of the capital. The 235-kilometer 500 kV line, located in Colombia, connects two substations, and its entry into operation is scheduled for 2023.

In the generation segment, our investments are directed towards the completion of phase 1 of the Agreste Potiguar Wind Complex and PPP Pitombeira (solar energy).

Located in Rio Grande do Norte, the Agreste Potiguar Complex is a project with a total expected capacity of 214.2 MWh – with 7 wind farms and 51 wind turbines. The first phase, expected to start operating in the second quarter of 2023, involves 2 wind farms (São João and Santa Régia), totaling 63 MW of installed power and 15 wind turbines.



2 wind farms  
in the RN are  
scheduled to start  
operating in 2023



In 2022, we concluded the cycle of investments in assets acquired in the 2016 and 2017 auctions, with **investments of around R\$ 7.2 billion**

PPP Pitombeira, scheduled to start operating at the end of 2023, is located in the municipality of Aracati (Ceará) and has a total capacity of 61.7 MWp.

Also in 2022, we won two new businesses to expand the Company's portfolio. In the generation segment, we sold 10.0 average MW in the ANEEL New Energy Auction A-5

at a price of R\$ 178.00/MWh. The energy will be supplied by AW São João (EAP I), wind farm of the Agreste Potiguar Complex.

We won (in consortium with Perfin) Lot 6 at the ANEEL 02/2022 Transmission Auction, referring to the concession Centro Substation, a strategic asset located in the city of São Paulo. In January 2023, the Federal Court of Auditors decided, in a collegiate session, for the withdrawal of Lot 6 from the auction. Our Company has been monitoring the evolution of the case, awaiting the manifestation of ANEEL.

The demand for new investments in the electricity sector continues to grow, driven mainly by renewable generation projects in the Northeast and the need to connect them to consumer centers in the Southeast. Therefore, we have teams dedicated to attracting new business, both in generation and transmission.

The projects foreseen in ANEEL's auctions are studied in detail, considering technical, environmental, land, regulatory and financial aspects. From this analysis, we raise the costs of implementation, risks inherent to the projects and mitigation measures for decision making, by senior management, on the participation or not in each event.



## TNE Project: Manaus-Boa Vista Transmission

One of the most important projects we will build in the transmission segment is that of TNE (Trasnorte Energia S.A.). The system is key for connecting the state of Roraima to the NIS (National Interconnected System), thus reducing local dependence on energy generated from thermoelectric plants powered by fossil fuels.

Approximately 17% (122 km) of TNE's transmission line passes through the Waimiri Atroari Indigenous Land. Therefore, the start of the work was postponed for assessment of the impacts and action plans, in compliance with the Inquiry Protocol of the Waimiri Atroari People. In September 2022, the agreement was signed involving TNE, ACWA (Waimiri Atroari Community Association), the Union,

FUNAI, IBAMA and the Federal Public Ministry, enabling the mobilization of preparatory activities for the implementation.

Several actions and programs have been defined so that the construction of the transmission line has the least possible impact on the way of life of the indigenous people, ranging from the definition phase of the project to the operation. The transmission towers, for example, will share the BR-174 domain range, occupying only 65 hectares (0.0025%) of the Indigenous Land area. To minimize the need for plant suppression, the project foresees the installation of raised towers, and the launching of the cables will be done with the use of drones whenever possible.

In addition, the towers will be pre-assembled in construction sites outside the Indigenous Land and the fronts of concomitant services will be limited, being able to act only in the daytime. There will also be no installation of housing for workers within the indigenous area.

The project also has the BEP-IC (Basic Environmental Plan of the Indigenous Component), which covers 24 socio-environmental programs and a series of actions to mitigate and compensate for impacts during the implementation and operation of the transmission line, for the benefit of the Waimiri Atroari people. With an expected investment of around R\$ 180 million, the BEP-IC was translated into the Kinjara language, discussed and approved with the community.

It is also planned to invest R\$ 55 million in environmental and socio-environmental actions outside the Indigenous Land during the implementation of the transmission line.

Three other subsidiaries have specific BEP-ICs for the relationship with indigenous communities within the scope of the environmental licensing of the projects: EBTE, EATE and ELTE.

Furthermore, ETB drew up the BEQP (Basic Environmental Quilombola Plan) in order to mitigate potential impacts on six remaining quilombo communities in the region of its influence. No cases of violation of the rights of indigenous peoples have been identified in our operations. Learn more about BEQP on page 61.



**1 transmission line of 500 kV** in dual-circuit  
**721 kilometers** long  
**2 new substations** | SE Equador and SE Boa Vista  
**1 expanded substation** | SE Lechuga

# BEP-IC - Basic Environmental Plan of the Indigenous Component



## Works

- Building the Environmental Management Center
- Building the Wild Animal Treatment Center
- Training indigenous teams to monitor the works
- Building the seedling nursery
- Acquiring equipment and cameras to strengthen the highway monitoring infrastructure



## Indigenous Health

### Construction

- 2** new health posts (Cacau and Maiamy)
- 41** houses to support indigenous health
- 1** dental office of Curiaú

### Reform

- 7** houses to support indigenous health
- 1** Curiaú ward



## Indigenous Education

- 1** new library at NAWA (Waimiri Atroari Support Center)
- Renovation of the Waimiri Atroari Museum
- Implementation and maintenance of solar energy generation systems in schools at 59 villages



## Indigenous Production

### Construction

- 59** flour houses
- 5** molasses houses
- 1** storage tank for chestnut
- 59** sheds for poultry farming activities
- 59** fish feed tanks
- 1** seedling nursery



## Indigenous Communication

- 86** radiophony kits
- 27** new internet points

*Additional radiophony kits and internet points are still under assessment for purchase.*

**24 socio-environmental programs**  
in the Waimiri Atroari Indigenous Territory

**19 Mitigation Programs**

**5 Compensation Programs**



# Economic and financial performance



In this section, we will show the regulatory results prepared in accordance with the Electricity Sector Accounting Manual (MCSE). The individual and consolidated financial statements, together with the Independent Auditor's Report, prepared in accordance with the accounting practices adopted in Brazil and with the international financial reporting standards (IFRS) issued by the International Accounting Standards Board (IASB), are available on the **Investor Relations** website.

In 2022, net revenue combining the transmission and generation segments increased by 15.5% over the previous year, totaling R\$ 2,931.9 million. This growth was driven by the entry into operation of the ESTE and TSM transmitters and by the readjustment of the RAPs of the concession contracts indexed by inflationary indices (11.73% of the IPCA and 10.72% for IGP-M).

On the same basis of comparison, EBITDA grew by 17.1%, reaching R\$ 2,464.0 million at the end of 2022. This evolution was one of the main factors for the 41.5% increase in net income, reaching R\$ 522.9 million.

Also in 2022, our investments totaled R\$ 1.1 billion, of which R\$ 543.3 million in the transmission segment, R\$ 566.7 million in the generation segment, and R\$ 6.1 million in new business development. The volume of investments mainly

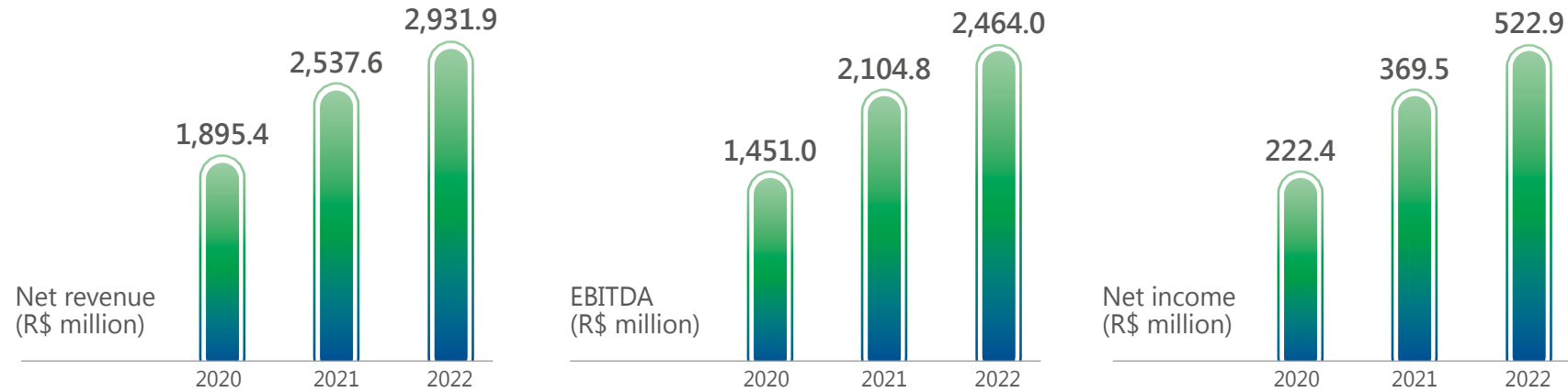
reflects the implementation of transmission assets (TCE and ELTE) and generation assets (Agreste Potiguar Wind Farm and PPP Pitombeira).

Our Company's debt profile supports the growth and development of new businesses. Consolidated net debt ended the year totaling R\$ 8,810.9 million, 90% of which has a long-term maturity.

The value added generated totaled R\$ 4.6 billion, an increase of 13% compared to the previous period. Regarding the distribution of value added, the portions related to operating costs and payment to capital providers deserve to be highlighted, which accounted for 41% and 42% of the total distributed in the period, respectively. The direct economic value retained was R\$ 544.4 million, representing 12% of the total generated.



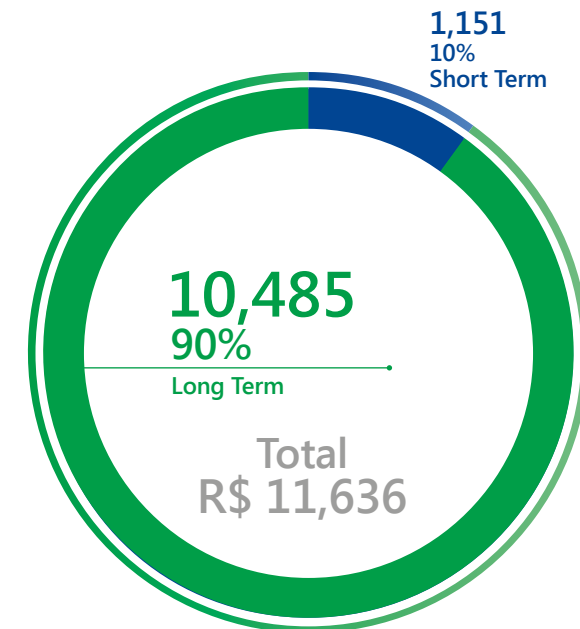
The year 2022 recorded **growth in the main financial indicators** and long-term profile of our indebtedness



**Statement of Added Value – main lines (R\$ thousand)**

	2022	2021	2020
<b>Direct economic value generated – Revenues</b>	<b>4,648,504</b>	<b>4,097,030</b>	<b>4,471,272</b>
<b>Retained direct economic value</b>	<b>544,500</b>	<b>338,397</b>	<b>343,652</b>
<b>Distributed economic value</b>			
Operating costs	1,692,014	1,557,261	2,505,930
Employee wages and benefits	207,053	189,120	194,013
Payments to capital providers	1,726,131	1,593,244	1,089,181
Payments to the government	472,935	413,479	331,686
Investments in the community	5,871	5,529	6,810
<b>Total distributed economic value</b>	<b>4,104,004</b>	<b>3,758,633</b>	<b>4,127,620</b>

Debt profile (R\$ million)



## Dividend Policy

In 2022, our Board of Directors approved Alupar's Dividend Policy, with the objective of establishing the main guidelines, criteria and procedures for the distribution of dividends and interest on equity. The Company will remunerate its shareholders in an amount equivalent to at least 50% of the regulatory net income (result that best expresses the Company's cash flow). Payments will occur quarterly, within a maximum period of 60 days from the date of the resolution of the distribution.

The Dividend Policy ensures compliance or complement with the criteria set forth in the applicable legislation and regulations, as well as with the Company's Bylaws, facilitating

the understanding of shareholders and other interested parties. In addition, it seeks to ensure continuity and financial sustainability, based on transparency, periodicity of distribution, growth and solidity for the maintenance of the business.

At the General Meeting, the Company's shareholders approved the payment of record dividends in the total amount of R\$ 422 million (R\$ 0.48/share and R\$ 1.44/unit), paid to shareholders on May 16, 2023.

In the trading sessions held in 2022, the average daily trading volume of Alupar's units (ALUP11) was R\$ 25.9 million, an increase of 16.9% compared to the previous year. The units ended the year quoted at R\$ 28.24, an increase of 22.8% compared to the end of 2021. In the same period, the Electric Energy Index (IEE) increased by 3.1%.



We approve the **payment of record dividends** related to the Company's results in 2022

Learn  
More

[Click here](#)  
to read the full  
Dividend Policy

# Corporate governance

Alupar Investimento S.A. was incorporated in 2006, holding equity interests in transmission and energy generation companies. In April 2013, the Company went public on the stock exchange and increased its share capital with the public offering of common and preferred shares.

This move we made was aimed at maximizing value creation for all shareholders through growth with investment in greenfield projects and the acquisition of assets in the generation and transmission segments. A journey that, ten years later and with the conquest of new business in ANEEL's auctions, doubled the market cap of the Company and the price of the shares.



Since the IPO in 2013, we have distributed **R\$ 2.4 billion** in dividends to shareholders

The robust growth we have delivered over the past decade reflects the strength of our corporate governance. Both the structure and the management processes we adopt – continuously evolving and improving – allow the integrated assessment of risks and opportunities, considering financial, environmental and social aspects associated with our business model.

With shares listed in the Governance Level 2 of B3 – Brasil, Bolsa e Balcão, our Company has a Board of Directors composed of seven effective members, elected at the General Meeting for a two-year term. The appointment and election of members are conducted in accordance with the requirements of the Brazilian Corporation Law, so as by CVM (Brazilian Securities and Exchange Commission) and B3 Level 2 Governance regulation. Such process considers the candidate's availability, suitability for the position and alignment with the Company's interests, ensuring a diversified profile of members to the governance instance, the representativeness of minority shareholders and the presence of independent members.

The performance of the Board of Directors is supported by five Advisory Committees, which support the analyses and make recommendations within the scope of their areas of competence.

In 2022, as a result of the continued evolution of our governance model, the Board of Directors approved the installation of two new Committees. The Ethics, Conduct & Compliance Committee, which has the participation of the Compliance Officer, is responsible for monitoring

and fostering the development of our Compliance and Integrity Program. The Sustainability Committee, in turn, guides and monitors the development of integrated management of socio-environmental aspects and programs (learn more on page 35).

The leadership and execution of our strategic plan is conducted by the Executive Board, whose members are appointed by the Board of Directors. The performance of the Executive Board is also supported

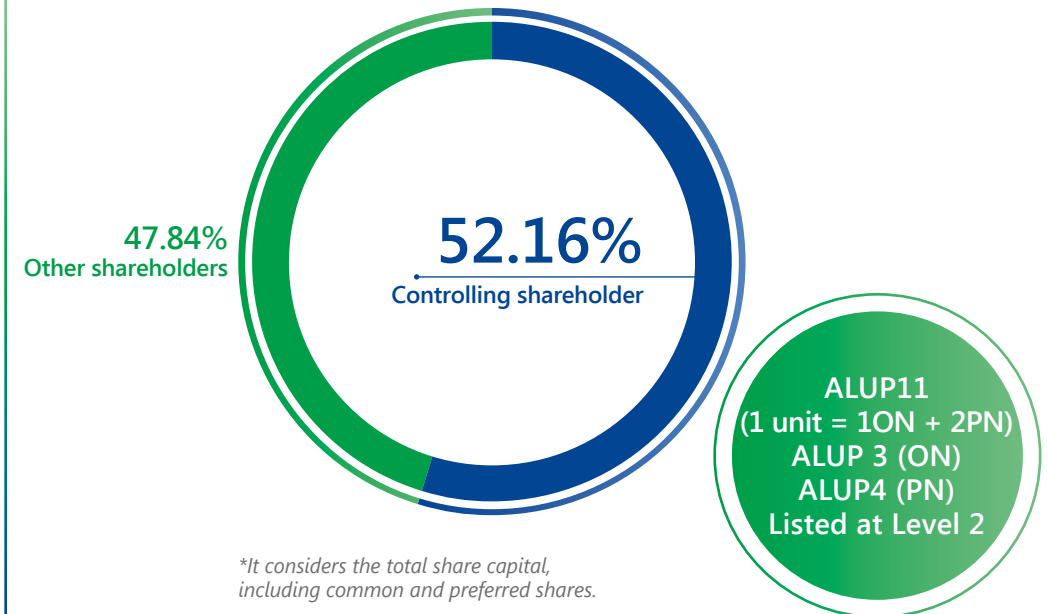
by different Executive Committees, which deepen the conduct of strategic issues for the Company (sustainability, diversity, innovation and other aspects).

The Fiscal Council completes the corporate governance structure of our Company. The body, of a non-permanent nature, is installed by resolution of the General Assembly and acts independently of the management and external audit. In 2022, the Fiscal Council had the participation of three full members and their respective alternates.

## GOVERNANCE STRUCTURE



## SHAREHOLDER COMPOSITION\*



## Ethics and compliance

The creation of the Ethics, Conduct & Compliance Committee in 2022 was an important breakthrough to strengthen our Compliance and Integrity Program. The advisory body of the Board of Directors provides greater robustness and criticality to the adoption of strategies, policies and measures to disseminate the culture of business ethics and to reduce risks and promote compliance with the standards applicable to Alupar and its subsidiaries.

At the executive level, in the last year, we finalized the outsourcing of the Whistleblowing Channel, aimed at receiving reports of behavior in disagreement with our Codes of Ethics, Conduct & Internal and third-party compliance, as well as with current laws or our values. Thus, the platform gives even more security, standardization and confidentiality to the flow of information.

The Channel allows the realization of identified or anonymous complaints and guarantees to all interested parties the rights of secrecy, confidentiality and

non-retaliation. Through a protocol number generated in the inclusion of the complaint, it is possible to follow the evolution of the treatment of the complaint made.

In 2022, through the platform, we received 11 complaints, of which 8 were considered unfounded and 3 were confirmed. The cases (27%) were analyzed, investigated and treated by the Compliance area, according to procedures established in the Internal Regulations of the Complaints Channel and in our Compliance Manual. None of them involved issues of corruption or discrimination.

To guide our employees on ethical dilemmas and answer questions, we provide an internal service channel by e-mail. In 2022, we received two inquiries through this channel. Employees can also request support through the Compliance Helpdesk, a tool available on the intranet.

Through the Compliance and Integrity Program, we annually conduct training and qualification for our employees, in addition to the engagement of suppliers and service providers. The conduct guidelines are widely disseminated in internal communication channels (such as intranet and newsletters) and on the institutional website, covering 100% of our employees and stakeholders. In 2022, we held two internal webinars dedicated to the topic of combating harassment and corruption, which strengthened employee awareness.

The trainings for the internal public are available on our e-learning platform and mandatory for the integration of new employees. In the last year, 527 people (equivalent to 65.3% of the workforce at the end of 2022) completed the online course. The members

of the Board of Directors are communicated and trained in the conduct guidelines, in addition to following the evolution of the Compliance and Integrity Program. Specific training can also be applied to certain departments of the Company and to suppliers, on demand.

We also continued the evolution and adaptation of internal processes and systems to ensure compliance with the guidelines of the LGPD (General Data Protection Law). We have completed the assessment of risks related to the processing of personal data, considering the low impact related to the processing of personal data in our business model.

Still, we keep on working in the structuring of systems and procedures to avoid any type of leakage or inadequacy. In this sense, we have implemented the Commission on Information Security and Cybersecurity. Its objective is to guide and support, in an advisory manner, the planning, execution and monitoring of actions related to the subject, in order to ensure the availability, integrity, confidentiality and authenticity of the information produced or guarded by the Company.



527  
employees completed  
compliance training  
in 2022



## Commitment to and respect for human rights

The responsible conduct of our business and in line with the principles of sustainable development is guided by a set of corporate policies. These normative instruments, approved by the Board of Directors or the CEO, formalize the Company's guidelines and commitments and define mechanisms, roles and responsibilities for their implementation, referencing external parameters whenever relevant.

Among the main corporate policies, the Sustainability Policy and the Code of Ethics, Conduct & Compliance (for employees and third parties), which

explicitly address our commitment to respect for the Universal Declaration of Human Rights, deserve to be highlighted.

The documents are widely disseminated on our institutional website and on the intranet. From them, the areas responsible for each theme develop training for employee engagement and manuals and procedures that complement and detail the practices adopted to ensure compliance with the established guidelines. Periodic internal audits verify the adherence of management processes to the requirements established by policies, manuals and procedures.

Learn  
more

**Click here** to access our main corporate policies

- Code of Ethics, Conduct & Compliance
- Code of Ethics, Conduct & Third Parties Compliance
- Internal Audit Policy
- Corporate Governance Policy
- Integrity Policy
- Environmental Policy
- Human Resources Policy
- Relationship with the Community Policy
- Occupational Health and Safety Policy
- Sustainability Policy



# Innovation and project management



Within our growth strategy, innovation is a lever to drive value generation through the development of new technologies, processes and new businesses. Therefore, in 2022, we strengthened governance with the structuring of the Corporate Innovation Policy and an area dedicated to the theme, aimed at strengthening the culture of innovation throughout our value chain.

One of the main innovation fronts in our Company is the investments in the Research and Development (R&D) Program, which we conduct in accordance with ANEEL regulations. Since 2002, we have invested more than R\$ 65 million in initiatives and projects conducted in partnership with universities and research centers.

Open innovation is another front on which we work to identify potential solutions that lead to

the incorporation of more efficient technologies and new business models.

Together with this interaction with external players, we promote the culture of innovation and development of new projects among our employees. We apply agile methodologies (OKR, Scrum and Kanban, for example) to identify, prioritize and structure strategic projects with high potential to generate value for the Company.

In 2022, we developed our own methodology for the ideation, prioritization, definition and action of these projects. Using design thinking tools, we engaged our teams to generate and prototype new ideas, which led to the selection of three innovative projects. One of them, already delivered, was the structuring of the new Dividend Policy, disclosed to shareholders and other stakeholders at the end of last year.



**In 2022, we became partners of Cubo Itaú,** a community recognized for promoting interaction between large companies and the startup ecosystem

## Green hydrogen

Touted as a promising substitute for fossil fuels, green hydrogen is one of the most prominent innovation themes in the electricity sector. Therefore, in 2022, we signed a memorandum of understanding (MoU) with the government of the state of Ceará, which intends to create a hub for the production of the new energy in the industrial and port complex of Pecém.

This move is in line with our strategic interest in seeking to operate in new markets and also in valuing the synergy with the renewable generation assets we have in the state. In addition, we may have the opportunity to interact with other companies, startups and research institutions focused on creating sustainable solutions for the global energy matrix.

Green hydrogen is still an innovation with major challenges for large-scale production, storage and transportation. In order to stay up-to-date on the state of the art of the latest technologies on this front, we participated in the latest edition of the World Hydrogen Congress, held in October 2022 in Rotterdam, the Netherlands.



# ESG management

In our strategy of growth and development of new businesses, the generation of value also considers tangible and intangible benefits related to the social and environmental impacts provided by our activities. Thus, in the definition of investments and in the execution of action plans, we always consider the risks and opportunities of the ESG (Environmental, Social and Governance) agenda.

To strengthen this commitment and further integrate sustainability management into decision-making processes, we have continuously evolved and given greater robustness to the ESG management structure in our Company. In 2022, in addition to the installation of the Sustainability Committee, we advanced in the structuring of corporate goals to promote the improvement of our performance on the main fronts of socio-environmental management.

These goals have been structured to boost the contribution that our businesses can make to sustainable development, considering the Sustainable Development Goals (SDGs),

proposed by the UN under the 2030 Agenda. Last year, we conducted a benchmarking study and an internal evaluation of the assets and projects we have already carried out to identify which SDGs are most connected to our strategy and how we can leverage the generation of value for the whole society.

Based on this assessment, we identified six priority SDGs for our Company. This prioritization is aligned with best practices and sectoral studies, following the guidelines of the Global Compact Brazil Network, an initiative promoted by the UN to which we joined in 2021.

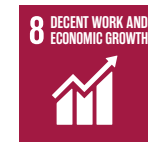
The Global Compact encourages companies to plan their strategies including the promotion and guarantee of the Ten Universal Principles for respect for human rights and decent work, environmental preservation and the fight against corruption. It is one of the largest global initiatives to foster corporate sustainability and contributes to the continued evolution of our ESG management model.



**Social and environmental education projects**  
**Opportunities for new training fronts**



**Core business: generation and transmission**



**Labor intensive**  
**Job creation**  
**Mitigation of accident risks**



**Sustainable suppliers and procurement**  
**Waste management**  
**ESG management**



**Protagonism in discussions on climate change**  
**Climate-related risks and opportunities management**



**Management of the impacts of generation and transmission assets in the stages of operation and deployment**



Alupar

Our people



At Alupar, we believe that business growth, innovation and commitment to sustainability are the outcome of the performance of the team of employees who practice the values of our corporate culture. All our teams work guided by the guidelines of the Code of Ethics, Conduct & Compliance, always observing respect for human rights, the fight against fraud and unethical behavior and the search for maximum efficiency in the management of our portfolio.

In this sense, valuing people and building long-term relationships with professionals are premises that we adopt in the management of human capital. Therefore, in 2022, we revised the performance evaluation process to

structure a methodology aimed at promoting the development and technical, behavioral and leadership training of employees.

With this configuration, the performance evaluation process also becomes a tool to subsidize the mapping of potential successors to leadership positions. Given these changes, the performance evaluation cycle will be conducted again in 2023.

In addition to the training and development fronts, we continue to evolve our compensation model and offer benefits, through market studies and support from external consultancies. The capillarity of our operations, including the management of assets abroad, demands this continuous alignment to maintain the Company's competitiveness.



Our culture promotes the **appreciation of people**, in an environment of broad respect, inclusion, development and evolution for our employees



## Recognition of employees

Our human capital management was recognized, in 2022, with the achievement of the FEEx certificate – FIA Employee Experience and the selection for the Incredible Places to Work ranking, released by FIA (Fundação Instituto de Administração) and the UOL portal.



The methodology applied by FIA evaluates the perception of employees about the organizational climate and practices to promote the development of our professionals.



**99%** of employees consider that Alupar’s products and services are **very important for society**

**96%** of employees are proud to say where they work and would recommend the Company as an **excellent company to work for**

**96%** of employees say they **like the work they do**

# Diversity and inclusion

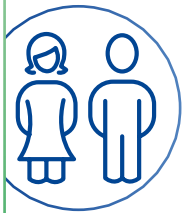
Creating an inclusive work environment with equal opportunities for everyone to develop is part of our commitment to generating value in a sustainable way. In 2022, in order to improve our management and support the realization of affirmative actions, we structured the Alento Program – Diversity & Inclusion.

The structuring of this program aims, through a continuous work of engagement and training of leaders and employees, to encourage in our Company the greater participation of women, blacks, people with disabilities, LGBTs and other social groups generally underrepresented professionally. Therefore, the Alento Program has been developed in partnership with a specialized consultancy, which contributes to the definition of training and communication tools.

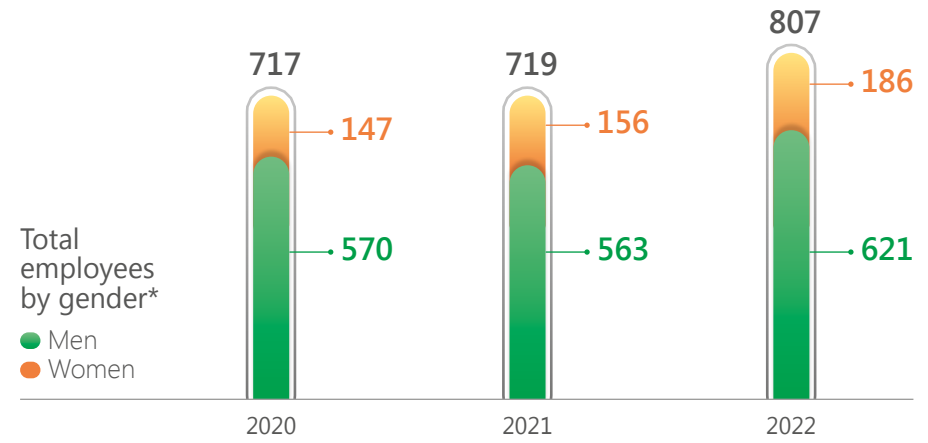
One of the main results of the Alento Program was the creation of the Diversity and Inclusion Commission, which supports the performance of the Executive Board in relation to the theme. The group has the participation of leaders from different areas and will be responsible for coordinating the activities to be carried out in the coming years.

Currently, out of the 807 employees who work in our Company, 23% are women. The Alento Program, among other benefits, will contribute to direct our improvement actions in relation to this theme.



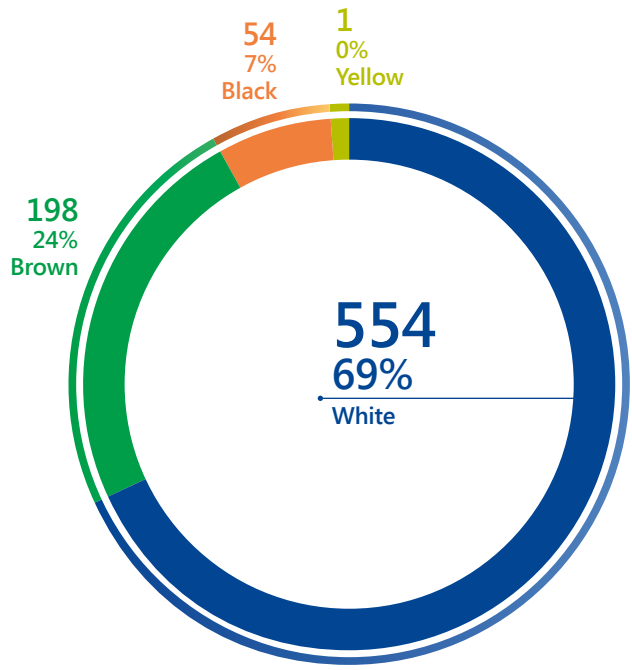


As of the creation of the **Alento Program**, we intend to expand diversity in our workforce, with initiatives aimed at the inclusion of minorities and the promotion of an increasingly diverse environment

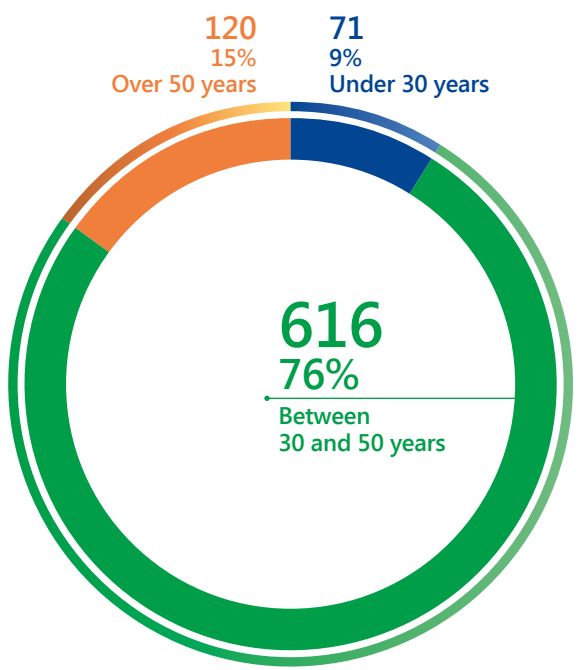


\*All employees are covered by collective bargaining agreements, work full-time and have an indefinite employment contract.

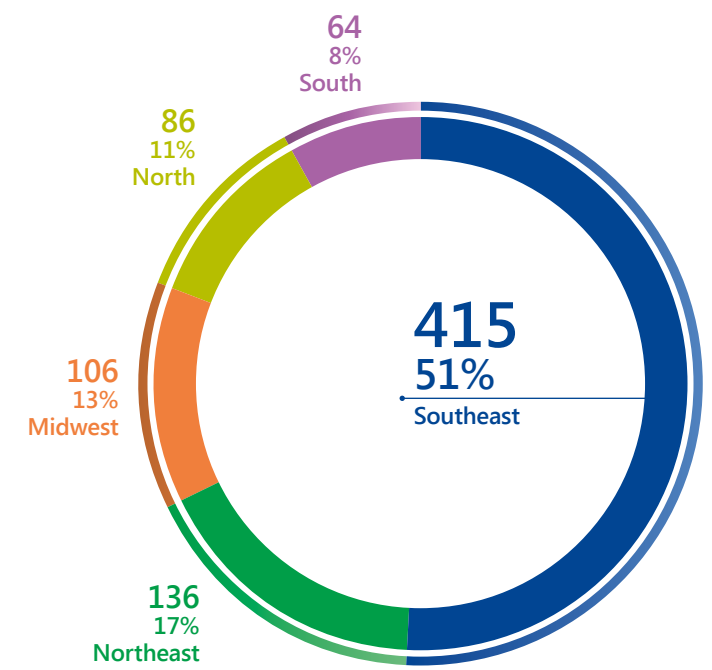
Employees in 2022 by race



Employees in 2022 by age group



Employees in 2022 by region





**Staff in 2022 by gender and functional level**

	Men	Women
Executive Board	100.0%	0.0%
Superintendence	60.0%	40.0%
Management	68.8%	31.3%
Coordination/Supervision/Specialists	69.5%	30.5%
Auxiliary Services	76.2%	23.8%
Administrative/Technical-Operational	77.6%	22.4%
<b>Total</b>	<b>77.0%</b>	<b>23.0%</b>

**Staff in 2022 by age group and functional level**

	Under 30	Between 30 and 50 years	Over 50 years
Executive Board	0.0%	18.8%	81.3%
Superintendence	0.0%	80.0%	20.0%
Management	0.0%	65.6%	34.4%
Coordination/Supervision/Specialists	0.0%	70.1%	29.9%
Auxiliary Services	7.5%	70.0%	22.5%
Administrative/Technical-Operational	10.7%	79.4%	9.9%
<b>Total</b>	<b>8.8%</b>	<b>76.3%</b>	<b>14.9%</b>



Women represent **23% of our staff**, with emphasis on intermediate leadership positions, where they account for about **30%** of management, coordination, supervision and specialist positions

# Safety, health and well-being



As a value of our Company and non-negotiable condition for conducting our business, the safety of people always comes first in the activities and projects we conduct. The management of this theme and the continuous improvement of performance are strategic for growth and value generation in the long term.

The governance we have established to promote and strengthen security throughout our value chain is guided by the Security Policy, which establishes guidelines and commitments that we follow in 100% of the assets, both for administrative and operational activities. The Policy

is unfolded in a series of procedures and programs, with the objective of mitigating risks, standardizing processes and ensuring alignment with legislation and guiding standards (NRs).

The main risk to which employees and third parties are exposed in our business is to suffer accidents with electricity when they work in areas where there may be contact with energized equipment and networks. In addition, work at height and in confined spaces, displacement of loads and traffic accidents are other types of situations of greater risk, highly controlled in our Company.



Our Safety Policy covers **100% of employees and third parties** who work in administrative and operational activities in our assets

Thereby, we have several tools applied daily in our activities. Work Procedures, Preliminary Risk Analyses and Work Orders are instruments that both employees and third parties must use before starting the planned activities. The application of each of them is foreseen according to the type of activity and the technical qualification of the professional.

Through training and qualification in OHS (Occupational Health and Safety), we instruct our professionals to make the best use of these operational tools, safety equipment and barriers to mitigate accident risks. For third parties, in addition to the guidelines, we require the contracted companies to align with our OHS Master Plan, with guidelines and standards to be met by their professionals.

In the training sessions, we detail and instruct employees and third parties to practice the right of refusal. We guarantee 100% of the workforce the right not to perform an activity if there is an unplanned situation or condition that could create a safety risk.



In 2022, we conducted almost **18,000** hours of training on safety aspects for our employees





The improvement of management and safety conditions is continuous and directed to increase risk mitigation in all activities. The strengthening of the awareness of leaders and employees is also fundamental for the evolution of performance in the theme.

In 2022, we recorded the occurrence of 5 accidents in our activities (2 involving employees and 3 with third-party professionals). There were no fatal accidents.

All incidents with the potential to cause injury to people are investigated. The research meetings have the participation of the areas involved, managers and representatives of CIPA (Internal Commission for Accident Prevention), as well as occupational health and safety professionals. The objective is to identify the causes that led to the risk situation, establish action plans to neutralize possible recurrences and structure the communication of lessons learned to the related areas.

### Occupational safety indicators in 2022<sup>1</sup>

	Employees	Third parties
Total man-hours worked	1,590,191	1,744,790
Number of recordable accidents	2	3
Number of days lost or debited	4	29
Frequency rate of recordable accidents <sup>2</sup>	1.26	1.72
Accident severity rate <sup>2</sup>	2.52	16.62

1. No accident with a leave of absence of more than 15 days (serious consequence) was recorded, nor was there a fatal accident. In 2021 we did not record any accidents, and in 2020 there was an accident involving an employee.

2. Rates calculated with the factor of 1 million man-hours worked.

## Wellness and health

The adoption of healthy habits and the care of physical and mental health contribute to our teams to perform their activities with more focus, attention and health care. Therefore, we adopt practices that encourage the improvement of quality of life and the prevention of diseases.

With the support of a company specialized in occupational medicine, we conduct our PCMSO (Occupational Health Medical Control Program) that covers 100% of employees. The PCMSO includes periodic clinical examinations and specific evaluations for professionals who perform higher-risk activities. Based on the evaluation of the results, the occupational physicians guide our people on how to improve their health and well-being conditions. We also monitor the health conditions of third parties, requiring contractors to develop and present their PCMSOs.



Created in 2022, the **Maternity Reception Program** contributes to adapting employees when they return to work after the leave period



For the female public, in 2022, we created the Maternity Reception Program, aimed at employees who have recently become mothers. The actions include the structuring of an individual process of return to work and flexibilization of the days of face-to-face work, as well as a closer monitoring of the psychological conditions in the return to activities.

From 2023, we will also offer all employees with newborn children a maternity kit, as a way to celebrate the arrival of the baby.

We also have the Reception Program for Critical Situations, which offers psychological support to employees who are going through moments of crisis or with a high level of stress resulting from situations in their daily lives.

## Dam safety

In the generation segment, we build and operate HPPs (Hydroelectric Power Plants) and SHPPs (Small Hydroelectric Power Plants) that take advantage of the strength of rivers for the production of clean and renewable energy. These assets have impounding dams to favor the best use of water power in the propelling of the turbines.

We continuously monitor, within the scope of operation and maintenance activities, the safety conditions of our dams, to ensure the proper operation of the structures and mitigate risks. We carry out regular inspections, periodic reviews and analysis of the auscultation system, in addition to regularly checking the adherence of the projects to the criteria provided for in the legislation.



Aside from that, pursuant to the National Dam Safety Policy, we have established for all units the DSPs (Dam Safety Plans), with all the updated technical documentation, instrumentation manuals, maintenance, operation with records and controls of the activities.

One of the main documents is the EAPs (Emergency Action Plans), with guidelines and measures to be taken in response to emergencies. The EAPs include definitions of early warnings and actions within the Self-Rescue Zone, in addition to subsidizing the planning of preventive actions and contingencies, involving the competent bodies, such as municipal secretariats and civil defense. The content of the EAPs has been the subject of constant regulatory evolutions.



## Firefighting

The fires pose a risk to the integrity of our assets and to the safety of the populations surrounding our transmission lines. Therefore, we act preventively through annual awareness campaigns, within the scope of the environmental and social communication programs of the enterprises.

We also continuously promote swidden activities, which prevent the spread of fire, and we have contingency plans for all substations and transmission lines, which establish procedures for action and communication in case of emergencies.



# Supplier management

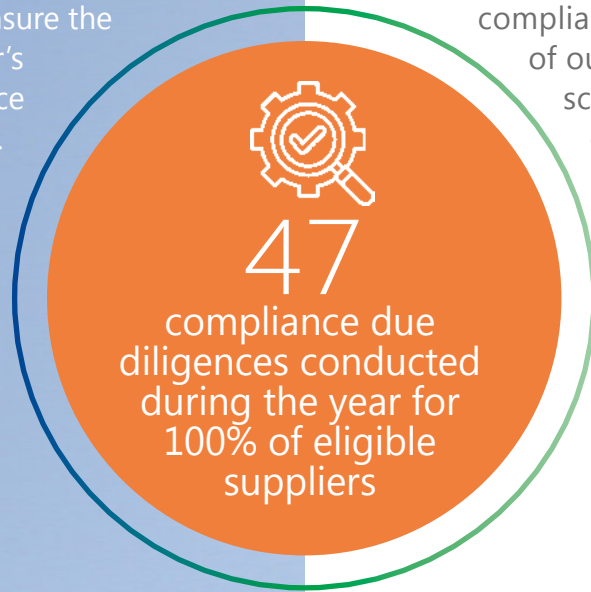
Our supply chain is mainly composed of companies supplying materials and equipment for energy generation and transmission facilities and service partners in the implementation of new assets, civil works, electromechanical and maintenance.

The practices for the selection and monitoring of suppliers in our activities are defined according to the demands and specificities of each business segment and aim to ensure the alignment of our partners with Alupar's guidelines and policies and compliance with all applicable legal requirements.

The procedures for hiring companies include evaluations of negative certificates of tax and labor debts, as well as the verification of environmental licenses and other technical documents when applicable by the nature of the contract.

In addition, all contracts have clauses related to human rights, in particular the defense of fundamental labor rights, and the fight against corruption. In 2022, 599 suppliers were selected by the Company, 100% of them considering tax and labor (social) compliance criteria.

Moreover, we have a structured process for assessing corruption risks through the submission of significant contracts for compliance due diligence, covering 100% of our operations. These hires, whose scope of approval involves the Board of Directors, undergo an extensive documentary analysis before being effective, with the support of a specialized platform. On-demand assessments are also conducted whenever requested by senior leadership. In 2022, 47 due diligences were performed.







All suppliers are **monitored during the contract period** by the respective contracting areas, in addition to being submitted to documentary verification of labor and tax compliance

The monitoring of current contracts is the responsibility of the respective contracting areas, which must monitor compliance with the requirements established for each contract in relation to various aspects, such as quality, term, health and safety and environment. When a problem is identified, the contract manager activates the other internal teams for treatment.

Corporately, the Contracts, Supplies and Financial areas monitor the labor regularity of suppliers whose contract involves the provision of services. Monthly, or whenever there is issuance of a measurement slip for payment of the supplier, the negative certificates of labor and tax debts are verified. This process is accompanied in a specific and mandatory system for the release of payment to suppliers. In this way, we ensure the absence of significant risk of child, forced or slave-like labor and violation of the right to freedom of union association and collective bargaining in our supply chain.





# Environment

In managing our assets and developing new projects, the assessment of the environmental impacts generated by our activities is always a guide for decision-making on the investments and projects to be executed. We operate guided by the guidelines of the Environmental Policy, approved by the Board of Directors and which covers 100% of operations.

In addition to ensuring full compliance with environmental legislation and the conditions established in the environmental licensing processes, our management model ensures compliance with the main trends and demands of society in relation to a sustainable performance in the segments of transmission and generation of energy. Thus, we work mainly to maximize the benefits added by a greater supply of renewable energies by the implementation of an infrastructure that contributes to the socio-environmental and economic development of local communities.

With this vision, we have developed methodologies and programs that have provided greater environmental efficiency in the implementation of the new projects we have executed in recent years. Through new construction methods and other solutions adopted, we achieved, for example, a 25% reduction in the need for plant suppression in the implementation of the eight transmission assets



acquired in the 2016 and 2017 auctions – which represents about 210 hectares of preserved native forest.

Each asset has unique characteristics, according to the region and the type of biome in which it is inserted. Therefore, the assessment of impacts and mitigating measures is always carried out individually, adapting the actions provided for in our environmental programs to obtain the best result.



In all the projects we develop, we carry out the evaluation and mitigation of impacts through different socio-environmental programs

**Forest Replacement Program**

**Preservation and Recovery of Environmental Protection Areas**

**Monitoring and Management of Fauna and Flora**

**Environmental Compensation Plan**

# Biodiversity

The protection and conservation of biodiversity in the regions in which we operate are some of the main benefits related to the development of transmission and energy generation projects. Through partnerships with NGOs and universities, we carry out different actions that contribute to the expansion of scientific knowledge and the preservation of Brazilian fauna and flora.

In 2022, two programs we carried out were enrolled in the Forum of Fauna Programs of the Federal Environmental Licensing, promoted by IBAMA. The initiative certifies the mitigation and compensation measures of the impacts that were highlighted in projects licensed by the federal authority.

The Forum certified the protection program for the Cherry-throated Tanager, an endangered bird that only occurs in areas of Atlantic Forest of altitude in the state of Espírito Santo. The project, started in 2020 in partnership with the Marcos Daniel Institute, promoted the identification of the places of occurrence, the protection of the nests and the growth of the population of the Cherry-throated Tanager, which still remains in a critical state of threat of extinction.



The other project we have registered is aimed at the protection of the Bahian enufado, an endemic bird of the Atlantic Forest and one of the most endangered species. The program is run by TPE.

The fauna monitoring and conservation programs we carry out contribute to the identification and follow-up of endangered species.

The potential impacts to biodiversity differ between generation and transmission assets. To direct mitigating and compensatory actions, all our enterprises prepare EIAs (Environmental Impact Studies) during the environmental licensing processes. When we detect significant risks, EIAs give rise to environmental and community relations programs developed by the units.

These actions are consolidated in the Basic Environmental Plan of each unit and promote the mitigation and compensation of negative impacts, in addition to boosting positive impacts. Examples of actions we carry out are social communication programs, environmental education, conservation of the surroundings of hydroelectric reservoirs, monitoring of fauna and flora, control of water and effluent discharges, repopulation of rivers and maintenance of ecological corridors.



Our transmission lines and substations are not located in or near protected areas. In the generation segment, only the Lavrinhas and Queluz SHPPs are close (up to 10 km away) to the APAs (Environmental Preservation Areas) Silveiras, Serra da Mantiqueira and the Paraíba do Sul River Basin.



Fauna and flora monitoring programs and actions for preserving biodiversity are provided for in the **Basic Environmental Plan** of our units

Number of species identified in the monitoring by level of extinction risk*	2022		2021		2020
	Generation	Transmission	Generation	Transmission	Generation and Transmission
Critically endangered	0	1	0	4	3
Threatened	3	0	3	3	3
Vulnerable	15	0	15	3	3
Almost threatened	14	0	14	3	3
Of little concern	1	0	1	3	0

\*It considers the IUCN Red List and national conservation lists, and covers the monitoring of fauna and flora, as applicable in each unit.

## Generation

In the surroundings of our HPPs and SHPPs, we manage a total of 3,806 hectares of environmental preservation areas. The quality of these areas is monitored periodically by internal inspections and, in the case of the São José HPP, by an external audit every two years.

We also actively participate in basin committees in the regions where we are present, dialoguing with other actors for the development of actions in favor of the conservation of local water resources and biodiversity.

In this context, the participation of the Lavrinhas SHPP as a full member of CEIVAP (Committee for the Integration of the Paraíba do Sul River Basin) stands out.

One of the main topics addressed is the management of reservoirs and the prevention of impacts on the quality of the rivers where the HPPs and SHPPs are located. To respond to this demand, we have Limnological Monitoring Programs, which include the collection of water samples upstream and downstream of our units every quarter or semester (depending on the applicable licensing condition) for evaluation of quality parameters.

Among the potential environmental impacts of the generators, for which the Environmental Plans establish mitigating and compensatory plans, are: suppression of vegetation, flow of machinery and vehicles in the construction phase, generation of waste and leaks and risk of death of fish (in hydroelectric assets) and birds (wind).



  
**3,806**  
 hectares of  
 environmental  
 preservation areas  
 are managed around  
 our assets

## Transmission

In transmission lines and substations, the suppression of vegetation for installation of assets and maintenance of easement strips is the main impact to be managed. To minimize it, we have adopted the practice of selective cutting, in which only tree individuals who pose a risk to the integrity and safety of the facilities are suppressed. Besides, all cuts are duly compensated by reforestation plantations.

In 2022, we promoted restoration actions on 77.9 hectares in the states of Bahia, Espírito Santo, Minas Gerais, Santa Catarina and Rio Grande do Sul. Among the activities developed are the planting of seedlings for selective cutting compensation and the management of forest replacement areas. In addition, we maintain 175.1 hectares of preserved areas, located in Bahia, Minas Gerais and Santa Catarina. The quality of the restored and protected areas is periodically checked by the competent licensing bodies.

Another impact is related to the local fauna, which can be affected by incidents involving the transmission network or have their habitat altered by plant suppression. Through programs to scare away and monitor animal species in the areas of influence of the assets, we identify the biodiversity of each region and the presence of endangered species, triggering specific conservation programs.

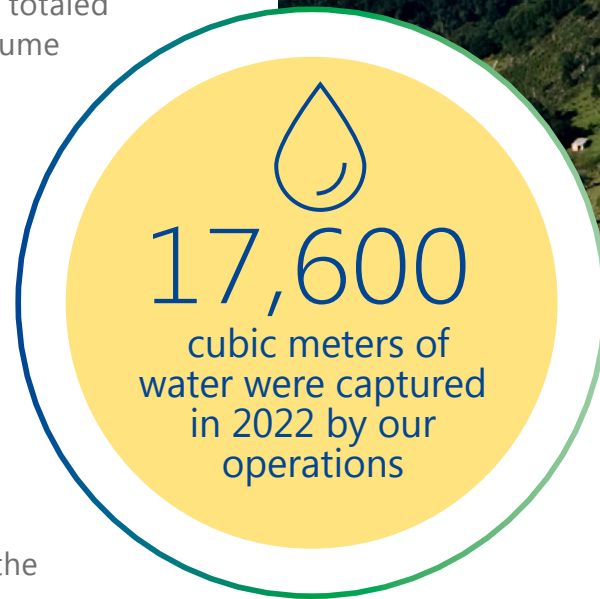


## Water

In both generation and transmission assets, water abstraction occurs only for human consumption and administrative activities. All the water flow of the rivers used to move the generation turbines passes directly through the plants without alteration of quality and temperature, following its natural course. Thus, water consumption is not an environmental impact of our activities.

The measurement of the captured volumes occurs by means of hydrometers in part of the units. Where we do not have such equipment, we estimate the average consumption taking as a reference similar facilities of our asset park. In 2022, the catchment totaled 17,600 cubic meters, with 89% of this volume coming from wells.

The effluents are treated in septic tanks and analyzed according to the requirements of Resolution No. 430/2011 of Conama (National Council of the Environment) and the applicable state legislation. Several parameters are evaluated, such as temperature, pH, BOD (Biochemical Oxygen Demand) and concentration of sedimentable materials, oil, grease and fat. At the end of the treatment, the volumes are discarded in the rivers or in sinkholes.



### Water abstraction by source in 2022 (megaliters)\*

	Generation	Transmission	Total
Surface sources	0.84	0.00	0.84
Underground sources	0.02	15.62	15.64
Supply of third parties	0.05	1.12	1.17
<b>Total</b>	<b>0.90</b>	<b>16.74</b>	<b>17.64</b>

\*All the volume captured has a concentration of total dissolved solids of less than 1 g/l. We do not have the evaluation of the water stress level of our units. Consumption is estimated at 20% of the volume captured (3.5 megaliters in 2022), taking as a reference the return coefficient of 80% of NBR 9649.



# Climate change



The growing demand for renewable energies and solutions for the decarbonization of the energy matrix generates opportunities for the growth and development of new businesses in the electricity sector, while requiring targeted action to reduce our GHG emissions (greenhouse gases).

In 2021, we began measuring our carbon footprint through the annual GHG emissions inventory. The second edition<sup>1</sup> of the document, referring to the year 2022, evolved to also incorporate indirect emissions of scope 3 and be aligned with the guidelines of the Brazilian GHG Protocol Program. The maturation of our inventory is fundamental so that we have an adequate mapping of the emitting sources in our operations and, from this, we can develop initiatives that reduce the carbon footprint in our activities.

In 2023, we plan to further enhance our management of climate change by building a climate risk matrix. This analysis will allow us to develop new actions to reduce our emissions, capture business opportunities and strengthen the climate efficiency of our assets.

Among the existing opportunities is the emission of carbon credits, which can be traded to other organizations interested in offsetting their CO<sub>2</sub> emissions. Five projects in our portfolio have already been approved for the issuance of credits under the CDM (Clean Development Mechanism), promoted by the UN.

In 2022, we sold 86,500 certificates (CERs) issued by the Risaralda SHPP, which we operate in Colombia. In addition to this asset, the Ferreira Gomes HPP, the Lavrinhas and Queluz SHPPs and the Energia dos Ventos Wind Complex are able to emit CERs, totaling a potential reduction of 4.2 million tons of CO<sub>2</sub>.

We are also authorized to market I-RECs, which are Energy Certificates issued through a global traceability system of their renewable origin. The Green 8 SHPP, located in Goiás, is authorized to issue up to 243,800 of these certificates.

1. The GHG emissions inventory for 2022 was still in preparation as of the closing date of this Report. **Click here** and see the next inventory, to be published in 2023, to have full access to the information.

# Emissions inventory

Our first GHG emissions inventory, drawn up in 2021, covered scopes 1 (direct emissions) and 2 (electricity purchase). For the second edition, considering the data for the year 2022, we made measurement improvements, based on mapping the emitting sources in all business units and the subsequent parameterization of the system.

In addition to improved controls, inventory enhancement will provide identification of opportunities to reduce GHG emissions in our activities.

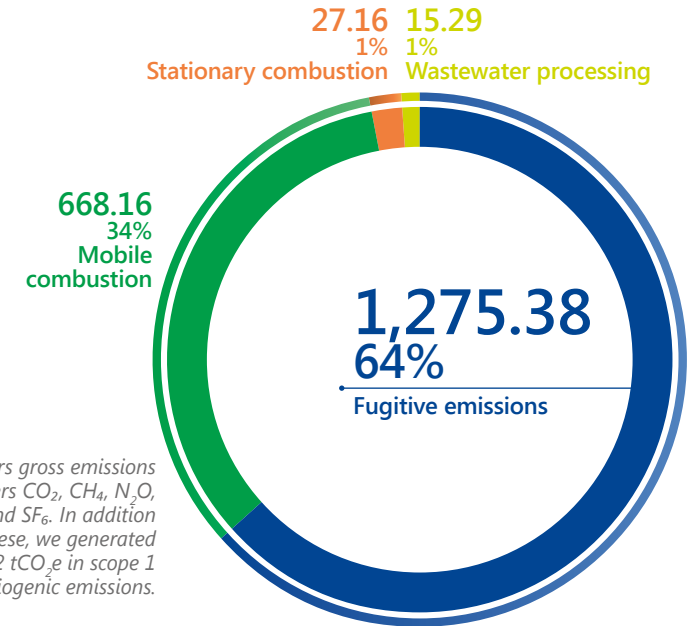
The main emitting sources mapped in 2021 were fugitive SF6 emissions and fuel consumption (scope 1) and electricity acquisition (scope 2). With regard to fuels, diesel is the most widely used, for the movement of trucks and large equipment. The electricity we use in our offices and units is 100% purchased from local distributors and is not used in operational processes.



**1,986 tCO<sub>2</sub>e** was the total gross emissions in scope 1

**226 tCO<sub>2</sub>e** was the total emissions in scope 2

Scope 1 emissions per emitting source (tCO<sub>2</sub>e)\*



*\*It considers gross emissions and covers CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, R-410A and SF<sub>6</sub>. In addition to these, we generated 147.72 tCO<sub>2</sub>e in scope 1 biogenic emissions.*

Energy consumption (GJ)	2021	2020
<b>Generated by fuel consumption<sup>1</sup></b>		
Petrol	5.7	494.2
Diesel	15,923.4	1,107.0
Ethanol	524.0	43.0
<b>Total energy generated by fuel consumption</b>	<b>16,453.1</b>	<b>1,644.2</b>
<b>Acquired from third parties<sup>2</sup></b>		
<b>Purchased electricity</b>	<b>12,027.7</b>	<b>8,746.1</b>

1. Only ethanol is considered a renewable fuel.

2. Electric energy purchased from distributors for administrative consumption.

# Waste

Throughout 2022, we strengthened our waste control and monitoring practices with the disclosure of the Waste Book – Work Instructions on generation assets and the approval of the Solid Waste Management Procedure in transmission projects. These materials detail and present in a didactic way the steps to be followed by the teams responsible for waste management, contributing to the qualification of the teams and the standardization of the processes. The two documents are aligned with the Company's SWMP (Solid Waste Management Plan), which establishes the guidelines for the subject in accordance with all applicable legal requirements.

Our teams are responsible for the proper management of waste in the units in operation and have partner companies duly qualified for transport, treatment and disposal of the waste generated. The control is done through the WTM (Waste Transport Manifests) and FDCs (Final Destination Certificates). In the assets under construction, this management is the responsibility of the contractors and governed by specific clauses in the contracts.

Two main groups of waste are generated in operational activities: administrative ones, such as recyclable materials and organic waste; and those arising from the maintenance and modernization of equipment, mostly classified as hazardous. In 2022, our operations disposed of 2,100 tons of waste.

## Waste destined in 2022 by type and method (tons)

	Generation	Transmission	Total
<b>Hazardous</b>			
Treatment and reuse <sup>1</sup>	0.0	96.0	96.0
<b>Non-hazardous</b>			
Composting <sup>1</sup>	0.3	0.0	0.3
Co-processing <sup>1</sup>	1.2	0.0	1.2
Recycling <sup>1</sup>	120.4	62.2	182.6
Treatment and reuse <sup>1</sup>	0.5	2.8	3.3
Landfill <sup>2</sup>	1,756.7	0.0	1,756.7
Other final disposal methods <sup>2</sup>	0.0	31.3	31.3
<b>Total non-hazardous waste destined</b>	<b>1,879.0</b>	<b>96.3</b>	<b>1,975.3</b>
<b>Total hazardous and non-hazardous waste destined</b>	<b>1,879.0</b>	<b>192.3</b>	<b>2,071.3</b>

1. MethSDG by which waste is diverted from final disposal (GRI 306-4).

2. MethSDG by which waste is disposed of for final disposal (GRI 306-5).



Society

Along with the growth and implementation of new transmission and energy generation projects, we seek to promote sustainable development in the states and municipalities in which we are present through our assets. We build lasting relationships with local communities, enhancing initiatives that respond to specific demands and present solutions to socio-environmental challenges in each region.

This contribution occurs through the investments in social projects that we carry out, guided by the Social Communication and Environmental Education Programs associated with each project, covering 100% of the operational units. We also support different initiatives with resources contributed from the different incentive laws applicable to our business model.

To promote the generation of sustainable and long-term value, we lead the construction of social solutions always in partnership and close proximity to the benefited communities. Before defining the projects, we carry out a socio-environmental diagnosis to identify the main demands and needs existing in each locality.



After this initial phase, we seek partners who can propose and execute initiatives that generate perennial benefits for populations and are connected to our goal of fostering education and self-development of communities.

act in a strategic and integrated way on this front. The BEQP covers socio-environmental compensation actions directed to six quilombola communities existing in the area of influence of the transmitter.

The BEQP (Basic Environmental Plan Quilombola), developed by ETB in Bahia, is an example of how we

Social investment (R\$ million)	2022	2021	2020
Own resources	0.6	0.0	0.0
Incentivized resources	2.9	2.7	3.9
<b>Total</b>	<b>3.5</b>	<b>2.7</b>	<b>3.9</b>



In 2022, the resources invested in social programs totaled **R\$ 3.5 million**



In 2022, we supported the Community of Alagoinhas with the carrying out of its first cultural fair, an event that received a thousand visitors from 21 neighboring villages and provided income generation through the commercialization of traditional products (cassava flour, handicrafts, artisanal cachaça, organic products, etc.).

In the municipality of Aracati (Ceará), where we are building PPP Pitombeira, we promote environmental education campaigns for students of municipal schools with the participation of our employees. The children were also invited to participate in the action "Garbage Hunting", a cleaning contest of the beaches of Canoa

Quebrada, Fontainha and Quixaba. The event brought together 112 children and collected 252.3 kilograms of waste in the sands.

One of the main projects that materialize our way of management is Aqualuz, which benefits families in the Brazilian semi-arid region with an innovation for the treatment of water from cisterns. The equipment uses solar radiation and, for up to 20 years, contributes to increasing water security and access to drinking water in one of the regions with the lowest development rate in Brazil. Aqualuz is a project conceived by the NGO SDW for All and was recognized by the UN for its positive impact in favor of sustainable development.



## Our social projects

**Aqualuz Project**

**Sanuseco Project**

**Artisans of Monteiro Lobato**

**Winter Solidarity Campaign**

**Donation of Cleaning Material Kits**

**Toy Collection Campaign**



## Other investments

Through tax incentive laws, we support and encourage various institutions that foster social projects for the benefit of communities in the regions in which we operate.

### Culture Incentive Law

- São Paulo Biennial Foundation
- Association of Ballet of the Blind Fernanda Bianchini
- Claro Theater
- Tomie Ohtake Institute
- Storm Group
- Vaga Lume Association
- FGM Productions (Mundoteca)

### Sports Incentive Law

- Sports Institute
- Tennis Institute
- Brazilian Rugby Confederation

### Municipal Fund for the Rights of Children and Adolescents

- Manduri Community Center
- Verdescola Institute (São Sebastião)
- Santa Fé Association (São Paulo)
- Pequeno Príncipe - Saúde Integral (Curitiba)
- Despertar Community Association
- Casa São José Association
- Futuro Brasil Foundation
- Dorina Nowill Foundation

### Elderly Support Fund




- Hospital do Amor (Barretos-SP)
- São José Hospital
- Irmã Dulce Association

## Communication and engagement

Potential negative impacts on local communities are identified in asset licensing processes, prior to their implementation, and through the engagement of these audiences in public hearings. The most common aspects mapped are related to land use (by safety rules in the easement range of transmission lines), the expectation of economic development and job creation by the enterprises, the risk of accidents involving the facilities and the emission of electromagnetic waves associated with the use of radio equipment.

The mitigation of these impacts occurs through the actions provided for in the social and environmental programs. Among the practices we have adopted, we highlight the availability of Ombudsman Offices in Generation and Transmission, to receive doubts, complaints and demands from communities, and the Social Communication and Environmental Education Programs.

### ALUPAR OMBUDSMAN

 <p><b>Channels or mechanisms for complaints, grievances and redress demands</b></p>	<p><b>Alupar Transmission Ombudsman</b> Toll-free phone (0800) and ombudsman e-mail</p>	<p><b>Alupar Generation Ombudsman</b> Toll-free phone (0800), ombudsman email and service channel through the WhatsApp application</p>
 <p><b>Internal or managed by a third party?</b></p>	<p>Internal</p>	<p>Internal</p>
 <p><b>How it can be accessed (languages, time, website, phone, etc.)</b></p>	<p>Business hours – It is disseminated through social education and environmental education campaigns. The distribution of pamphlets and information is a moment of contact with the population, in which our employees can receive and direct complaints.</p>	<p>Business hours – The distribution of pamphlets and newsletters is a moment of contact with the population, in which our employees can receive and direct complaints. The websites of the companies also have the “Contact” field that can be filled in.</p>

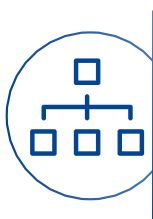


The use and occupation of territories are some of the most relevant themes from a social perspective in the implementation of energy generation and transmission projects. In this perspective, we conduct the management with a multidisciplinary team from the areas of Engineering, Environment and Land.

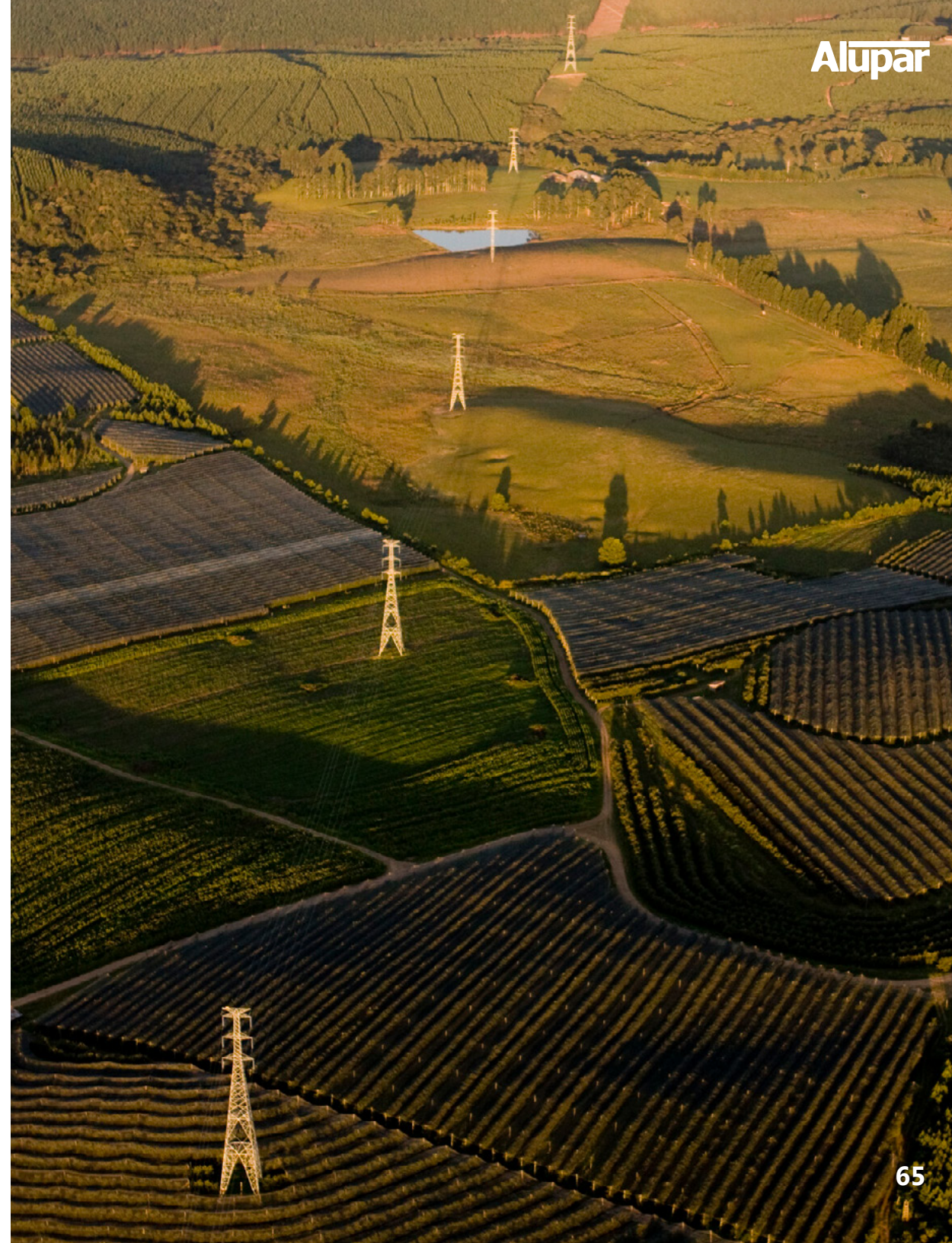
In the planning of the projects, we map potential impacts and optimize the layout of transmission lines. Our goal is to avoid areas that require excessive plant suppression or that interfere with forest reserves, densely populated areas and areas with indigenous or quilombola settlement. Always observing the best relationship between costs and benefits, we also seek to avoid inaccessible land and crossings over hydrographies, among other factors that affect the competitiveness of projects.

Before the start of the works, we evaluate the properties crossed by the transmission lines or impacted by the installation of substations and energy generation units. Our own team leads the negotiation process for the use of the easement strip and land regularization of the properties, with the support of a specialized consultancy. Eventually, the projects may also require the resettlement of communities, especially for generation assets.

In 2022, we completed the land regularization of 47 properties associated with the new transmission assets, totaling R\$ 6.5 million in compensation for the use of the easement strip. No assets under implementation required the resettlement of communities.



A multidisciplinary team is responsible for **identifying and managing impacts** of the installation of the projects on the use and occupation of the land, **integrating technical, environmental and relationship perspectives** with the communities



## Archaeological rescue in Colombia

In Colombia, the development of the TCE (Transmissora Colombiana de Energia S.A.S.E.S.P.) project has promoted an important work of research and preservation of archaeological sites in partnership with ICANH (Colombian Institute of Anthropology and History). The excavations carried out made possible the discovery of relevant artifacts and archaeological bones in the areas of the two substations and the installation of the transmission towers.

The Preventive Archaeology Program is a demand of the Energy Mining Planning Unit, the authority responsible for the concession. Carried out in two phases, the project has already enabled the rescue of approximately 16 tons of archaeological material at the historic site located at the Nueva Esperanza Substation.

Through research, Colombian archaeologists have expanded knowledge about the customs, ways of life, construction systems and funeral rituals of the populations that occupied the place for about 2,000 years (between 400 BC and 1600 AD), before the arrival of Europeans on the continent.

In February 2022, TCE inaugurated MANE (Museo Arqueológico Nueva Esperanza), in which the collection of historical finds is exposed to the whole society. Located within the Sabio Mutis agropark, MANE was donated to the UNIMINUTO university.

The inauguration ceremony was attended by the Colombian Minister of Culture and the director of ICANH, the ECA team and representatives of all partner institutions.



### Nueva Esperanza archaeological site

- **6,500 m<sup>2</sup>** of excavations
- **2,835** archaeological evidence or contexts found
  - 107** complete ceramic pieces
  - 608** human skeletons
  - 1,700** lithic tools and artifacts
  - 49** pieces of goldsmithery
- **16 tons** of archaeological material
- **182 people** hired for the research
- **34%** of the team lives in the area of influence of the archaeological site



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**Annexes**

# Entities included in the Report

**ETEP** – Empresa Paranaense de Transmissão de Energia S.A.

**ENTE** – Empresa Norte de Transmissão de Energia S.A.

**ERTE** – Empresa Regional de Transmissão de Energia S.A.

**EATE** – Empresa Amazonense de Transmissão de Energia S.A.

**ECTE** – Empresa Catarinense de Transmissão de Energia S.A.

**STN** – Sistema de Transmissão Nordeste S.A.

**Transleste** – Companhia Transleste de Transmissão

**Transudeste** – Companhia Transudeste de Transmissão

**Transirapé** – Companhia Transirapé de Transmissão

**STC** – Sistema de Transmissão Catarinense S.A.

**Lumitrans** – Companhia Transmissora de Energia Elétrica

**ETES** – Empresa de Transmissão do Espírito Santo S.A.

**EBTE** – Empresa Brasileira de Transmissão de Energia S.A.

**ESDE** – Empresa Santos Dumont de Energia S.A.

**ETEM** – Empresa de Transmissão de Energia do Mato Grosso S.A.

**ETVG** – Empresa de Transmissão de Várzea Grande S.A.

**ETSE** – Empresa de Transmissão Serrana S.A.

**ELTE** – Empresa Litorânea de Transmissão de Energia S.A.

**ETAP** – Empresa Transmissora Agreste Potiguar S.A.

**ETC** – Empresa Transmissora Capixaba S.A.

**TCC** – Transmissora Caminho do Café S.A.

**TPE** – Transmissora Paraíso de Energia S.A.

**ESTE** – Empresa Sudeste de Transmissão de Energia S.A.

**TSM** – Transmissora Serra da Mantiqueira S.A.

**TCE** – Transmissora Colombiana de Energia S.A.S.E.S.P.

**EDTE** – Empresa Diamantina de Transmissão de Energia S.A.

**AETE** – Amazônia – Eletronorte Transmissora de Energia S.A.

**TME** – Transmissora Matogrossense de Energia S.A.

**ETB** – Empresa de Transmissão Baiana S.A.

**Foz** – Foz do Rio Claro Energia S.A.

**Ijuí** – Ijuí Energia S.A.

**Lavrinhas** – Usina Paulista Lavrinhas de Energia S.A.

**Queluz** – Usina Paulista Queluz de Energia S.A.

**Ferreira Gomes** – Ferreira Gomes Energia S.A.

**EDVI** – Energia dos Ventos I S.A.

**EDVII** – Energia dos Ventos II S.A.

**EDV III** – Energia dos Ventos III S.A.

**EDV IV** – Energia dos Ventos IV S.A.

**EDV X** – Energia dos Ventos X S.A.

**GET** – Generation de Energia Termoelétrica e Participações S.A.

**Risaralda** – Risaralda Energia S.A.S.E.S.P.

**Verde 8** – Verde 8 Energia S.A.

**Água Limpa** – Água Limpa S.A.

**La Virgen** – La Virgen S.A.C.

**EAP I** – Eólica do Agreste Potiguar I S.A.

**EAP II** – Eólica do Agreste Potiguar II S.A.

**EAP III** – Eólica do Agreste Potiguar III S.A.

**EAP IV** – Eólica do Agreste Potiguar IV S.A.

**EAP V** – Eólica do Agreste Potiguar V S.A.

**EAP VI** – Eólica do Agreste Potiguar VI S.A.

**EAP VII** – Eólica do Agreste Potiguar VII S.A.

**Alupar Chile** – Alupar Chile Inversiones SpA

**Alupar Colômbia** – Alupar Colômbia S.A.S.

**Alupar Peru** – Alupar Inversiones Peru S.A.C.

**Apaete** – Apaete Participações em Transmissão S.A.

**Transminas** – Transminas Holding S.A.

**UFV Pitombeira** – UFV Pitombeira S.A.

**Windepar** – Windepar Holding S.A.

**AF** – AF Energia S.A.

**ACE** – ACE Comercializadora Ltda.

# Complement to GRI and SASB disclosures

## GRI 2-7 and 2-30 | Employees and Collective bargaining agreements

Staff in 2022 by gender and region*	Men	Women	Total
North	68	18	<b>86</b>
Northeast	121	15	<b>136</b>
Midwest	96	10	<b>106</b>
Southeast	272	143	<b>415</b>
South	64	0	<b>64</b>
<b>Total</b>	<b>621</b>	<b>186</b>	<b>807</b>

\*All employees are covered by collective bargaining agreements, work full-time and have an indefinite employment contract.

Staff by gender, contract and working hours	2022			2021			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>By contract type</b>									
Indefinite term	621	186	<b>807</b>	563	156	<b>719</b>	523	146	<b>669</b>
Definite term	0	0	<b>0</b>	0	0	<b>0</b>	47	1	<b>48</b>
<b>By working day</b>									
Full-time	621	186	<b>807</b>	559	156	<b>715</b>	570	147	<b>717</b>
Part-time	0	0	<b>0</b>	4	0	<b>4</b>	0	0	<b>0</b>
<b>Total</b>	<b>621</b>	<b>186</b>	<b>807</b>	<b>563</b>	<b>156</b>	<b>719</b>	<b>570</b>	<b>147</b>	<b>717</b>

### **GRI 2-8 | Workers who are not employees**

At the close of 2022, we had 57 third parties in our operations, 44 men and 13 women. These professionals work mainly in the activities of cleaning, reception, concierge and administrative services.

### **GRI 2-11 | Chair of the highest governance body**

The Chairman of the Board of Directors holds the executive positions of Vice President Officer, Chief Financial Officer and Investor Relations Officer. This accumulation of functions is due to the formatting of Alupar's corporate governance structure, privileging the technical knowledge and leadership skills of the members that make up the leadership bodies. In accordance with the Brazilian Corporation Law, the Chairman of the Board of Directors does not accumulate the function of CEO.

### **GRI 2-15 | Conflicts of interest**

As provided for in the Brazilian Corporation Law and in Alupar's Bylaws, any member of the Board of Directors who is in a condition of conflict of interest for the resolution of issues must declare himself conflicted and abstain from the vote. This situation should be recorded in the minutes of the meeting.

### **GRI 2-16 | Communication of critical concerns**

In 2022, no communications and critical concerns were identified in the Company's engagement channels that had to be brought to the attention of the Board of Directors because they represented some type of risk to Alupar. Current and strategic issues are discussed by the Advisory Committees and brought to the attention of the Board of Directors. In this sense, it is worth mentioning the creation of the Information Security and Sustainability Commission, whose internal bylaws determine that any and all critical issues must be reported to the Governance, Audit and Sustainability Committee, for further analysis by the Board of Directors.

### **GRI 2-18 | Evaluation of the performance of the highest governance body**

We do not have a performance evaluation process of the Board of Directors.

### **GRI 2-19 and 2-20 | Remuneration policies and Process to determine remuneration**

Our compensation policy for senior management is supported by the best market practices, ensuring competitiveness in the market. The members of the Board of Directors receive fixed monthly compensation and are not eligible for benefits and bonuses. This condition also applies to the members of the Fiscal Council, when it is installed. The members of the Executive Board, on the other hand, have their compensation defined by the Board of Directors, including a fixed installment, benefits package and a variable compensation portion linked to the achievement of annual goals. Such goals contribute to the alignment of interests in the short, medium and long term, since they are related, among other aspects, to investments in the development of assets and new businesses. The process for determining the compensation parameters of senior management and staff is supported by specialized consulting, which conducts biannual market research to support decision making.

**GRI 2-21 | Annual total compensation ratio**

In 2022, the proportion of the total annual compensation of the highest-paid individual in relation to the average of the Company's other employees was 10.9 times. In comparison with the previous period, the increase in the total annual compensation of the highest-paid individual was equivalent to 16.1 times the increase in the average total annual compensation of the other employees.

**GRI 2-27 | Compliance with laws and regulations**

There were no situations with suspicion or allegation of non-compliance with the laws and regulations applicable to the Company's business, in the environmental, tax, tax, labor, compliance and governance aspects, which generated fines or the opening of civil, criminal or administrative proceedings, during the 2022 fiscal year, whose costs individually exceed the amount of significant cases, according to the amount of relevance adopted by the Company in its statements financial (R\$ 10 million for processes involving Alupar and R\$ 5 million for those involving subsidiaries).

**GRI 2-28 | Membership associations**

Through a participation in associations and professional associations, we contribute to the development of public policies and the planning of the electricity sector. This engagement also favors the identification of trends and expectations of civil society and the articulation of efforts in favor of the sustainable growth of the Brazilian energy infrastructure.

Among the entities we are part of, we highlight Apine (Brazilian Association of Independent Producers of Electric Energy), Abdib (Brazilian Association of Infrastructure and Base Industries), Abragel (Brazilian Association of Clean Energy Generation), ABEEólica (Brazilian Association of Wind Energy), Abrate (Brazilian Association of Electricity Transmission Companies) and Abrace (Brazilian Association of Electricity Generating Companies). At Abrate, we have a representative on the association's board of directors. In addition to these, we participate as signatories of the UN Global Compact (United Nations) of four Platforms of Action, focused on the themes of climate change, human rights, combating corruption and communication/engagement.

## GRI 401-1 | New employee hires and employee turnover

Hiring and dismissing	2022		2021	
	Number of hires	Number of dismissals	Number of hires	Number of dismissals
<b>By gender</b>				
Men	107	72	82	86
Women	30	16	31	26
<b>Total</b>	<b>137</b>	<b>88</b>	<b>113</b>	<b>112</b>
<b>By age group</b>				
Under 30 years of age	37	19	36	19
Between 30 and 50 years of age	93	55	65	80
Over 50 years of age	7	14	12	13
<b>By region</b>				
North	6	2	NA	NA
Northeast	24	11	NA	NA
Midwest	22	13	NA	NA
Southeast	83	60	NA	NA
South	2	2	NA	NA

Hiring and turnover rates	2022		2021	
	Hiring rate <sup>1</sup>	Turnover rate <sup>2</sup>	Hiring rate <sup>1</sup>	Turnover rate <sup>2</sup>
<b>By gender</b>				
Men	17.5%	14.6%	14.6%	14.9%
Women	15.5%	11.9%	19.9%	18.3%
<b>Total</b>	<b>17.0%</b>	<b>13.9%</b>	<b>15.7%</b>	<b>15.6%</b>
<b>By age group</b>				
Under 30 years of age	52.1%	39.4%	43.4%	33.1%
Between 30 and 50 years of age	15.1%	12.0%	12.5%	13.9%
Over 50 years of age	5.8%	8.8%	10.5%	11.0%
<b>By region</b>				
North	7.0%	4.7%	NA	NA
Northeast	17.6%	12.9%	NA	NA
Midwest	20.8%	16.5%	NA	NA
Southeast	20.0%	17.2%	NA	NA
South	3.1%	3.1%	NA	NA

1. Calculated as the number of hires divided by the headcount on 12/31.

2. Calculated as the average between hires and layoffs divided by the headcount at 12/31.



### GRI 404-1 and 404-2 | Average hours of training per year per employee and Programs for upgrading employee skills and transition assistance programs

Our employee qualification and training programs contribute to the continuous improvement of competencies and skills (learn more on page 36). In 2022, we achieved an average of 26.07 hours of training per employee, a 97% increase over the 13.23 hours per employee

applied in 2021. This variation is due to a change in data consolidation, to include, in 2022, the online training conducted by employees.

In order to support the preparation of these people for the career transition and retirement, we make available in the Company's benefits package a private pension plan, with voluntary adhesion and Alupar's counterpart of the same amount contributed by the employee monthly.

### GRI 405-1 | Diversity of governance bodies and employees

The seven members of the Board of Directors are men, one of them under 30 years of age and the others in the age group above 50 years of age. For information on staff diversity, see page 39.

Training indicators in 2022	Health and safety training	Other training	Total training hours	Average per employee
<b>By gender</b>				
Men	17,778	2,216	19,994	32.62
Women	204	841	1,045	5.39
<b>Total</b>	<b>17,982</b>	<b>3,057</b>	<b>21,039</b>	<b>26.07</b>
<b>By functional level</b>				
Executive Board	0	6	6	0.38
Superintendence	0	26	26	5.20
Management	0	103	103	3.22
Coordination/Supervision/Specialists	624	233	857	14.53
Auxiliary Services	0	10	10	0.24
Administrative/Technical-Operational	17,358	2,679	20,037	30.68

## GRI EU1 | Installed capacity, broken down by primary energy source and by regulatory regime

### Installed capacity by regulatory regime in 2022 (MW)\*

ACR (Regulated Contracting Environment)	368.9
ACL (Free Contracting Environment)	191.2
<b>Total</b>	<b>560.1</b>

\*It considers only the assets in operation in Brazil; another 113.7 MW of installed capacity in the Peru and Colombia assets are not subject to the segmentation of the contracting environments applicable to Brazil. Data estimated from the assumption of allocation of the physical guarantee of our generating units.

### 2022 installed capacity per asset (MW)

In operation	
HPP Foz do Rio Claro	68.4
HPP São José (Ijuí)	51.0
HPP Ferreira Gomes	252.0
HPP La Virgen	93.8
SHPP Queluz	30.0
SHPP Lavrinhas	30.0
SHPP Morro Azul	19.9
SHPP Verde 8	30.0
Energia dos Ventos Wind Complex	98.7
<b>Total in operation</b>	<b>673.8</b>
Pre-operational	
SHPP Água Limpa	23.0
Agreste Potiguar Wind Complex – AW Santa Régia	37.8
Agreste Potiguar Wind Complex – AW São João	25.2
Pitombeira Photovoltaic Power Plant (MWpeak)	61.7
<b>Total in pre-operational</b>	<b>147.7</b>

## GRI EU2 | Net energy output broken down by primary energy source and by regulatory regime

### Net energy production by regulatory regime in 2022 (GWh)\*

ACR (Regulated Contracting Environment)	1,573.5
ACL (Free Contracting Environment)	766.2
<b>Total</b>	<b>2,339.7</b>

\*Data estimated from the assumption of allocation of the physical guarantee of our generating units.

### Net energy production per asset

	2022	2021	2020
HPP São José (Ijuí)	220.2	218.9	183.2
HPP Foz do Rio Claro	284.4	261.3	290.2
HPP Ferreira Gomes	1,154.7	1,258.2	1,071.4
SHPP Queluz	142.1	127.1	128.9
SHPP Lavrinhas	88.7	117.4	114.3
SHPP Verde 8	92.7	81.2	86.9
Energia dos Ventos Wind Complex	356.9	434.6	295.3

### GRI EU4 and SASB IF-EU-000.C | Length of above and underground transmission and distribution lines by regulatory regime and Length of transmission and distribution lines

#### Extension of transmission lines in 2022 by voltage level (km)\*

	230 kV	345 kV	500 kV
<b>By status</b>			
In operation	1,934	290	4,915
In deployment	40	0	950
<b>Total</b>	<b>1,974</b>	<b>290</b>	<b>5,865</b>

\*100% of the lines are airline.

#### Extension of transmission lines in 2022 by asset (km)

In operation			
ETEM	235	Lumitrans	51
ECTE	252.5	ETES	107
ETSE*	0	TME	348
ETEP	323	ETVG*	0
ESDE*	0	ETAP	20
EATE	924	ETC*	0
ERTE	179	TPE	541
ENTE	464	TCC	288
EBTE	940	ESTE	236
STN	541	TSM	330
Transleste	150	ETB	446
Transirapé	65	EDTE	170
Transudeste	140	AETE	193
STC	195	<b>Total in operation</b>	<b>7,139</b>

In deployment	
TNE	715
TCE	235
ELTE	40
<b>Total in deployment</b>	<b>990</b>

\*Assets without transmission lines.

### GRI EU17 | Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities

#### Number of days worked by third parties per type of activity in 2022

Construction	1,089,090
Operation	655,700
<b>Total</b>	<b>1,744,790</b>

### GRI EU18 | Percentage of contractor and subcontractor employees that have undergone relevant health and safety training

Alupar checks, for 100% of the third parties that carry out activities in the Company, compliance with training required by Brazilian legislation on health and safety aspects, such as those required to comply with the Regulatory Standards (NRs). These trainings are provided and carried out directly by the companies contracted for their employees, without direct management of Alupar. The Company requires the presentation of certificates of completion of third teams at the time of integration.

### GRI EU25 | Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases

We have not recorded any accidents involving our assets and the people from the communities.

## GRI EU30 | Average plant availability factor by energy source and by regulatory regime

Availability of generation assets	2022			2021			2020		
	Duration of scheduled stops (hours)	Duration of unscheduled stops (hours)	Average availability factor (%)	Duration of scheduled stops (hours)	Duration of unscheduled stops (hours)	Average availability factor (%)	Duration of scheduled stops (hours)	Duration of unscheduled stops (hours)	Average availability factor (%)
HPP São José (Ijuí)	244.9	14.7	98.5%	797.1	125.8	94.7%	434.1	56.1	97.1%
HPP Foz do Rio Claro	613.8	66.5	96.1%	445.8	2.1	97.4%	628.2	25.8	96.3%
HPP Ferreira Gomes	401.1	1,783.1	91.7%	200.2	4,025.2	88.3%	434.2	1,596.9	92.3%
<b>Consolidated hydroelectric</b>	<b>1,259.8</b>	<b>1,864.3</b>	<b>93.4%</b>	<b>1,443.0</b>	<b>4,153.2</b>	<b>86.8%</b>	<b>1,496.5</b>	<b>1,678.8</b>	<b>93.7%</b>
SHPP Queluz	648.1	1,960.4	97.0%	2,006.4	5,243.7	79.0%	986.0	4,507.9	80.9%
SHPP Lavrinhas	3,314.1	447.2	78.7%	130.5	231.9	98.5%	1,553.9	1,000.9	94.3%
SHPP Verde 8	7,528.4	2,214.1	87.2%	4,386.8	3,839.2	88.9%	4,387.3	8,028.2	76.5%
<b>Consolidated SHPP</b>	<b>11,490.6</b>	<b>4,621.7</b>	<b>87.6%</b>	<b>6,523.7</b>	<b>9,314.8</b>	<b>88.8%</b>	<b>6,927.2</b>	<b>13,536.9</b>	<b>83.9%</b>
<b>Energia dos Ventos Wind Complex</b>	<b>1,807.7</b>	<b>317.6</b>	<b>97.6%</b>	<b>293.6</b>	<b>91.3</b>	<b>99.6%</b>	<b>1,263.1</b>	<b>513.7</b>	<b>98.0%</b>

## SASB IF-EU-320a.1 | (1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)

## Consolidated accident indicators according to SASB – OSHA requirements in 2022 (employees + third parties)

Total man-hours worked	3,334,981
Number of near misses	NA
Number of recordable incidents	5
Number of accidents with death	0
Near-miss frequency rate	NA
Recordable incident frequency rate (TRIR)	0.30
Fatality frequency rate	0.00

## SASB IF-EU-140a.2 | Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations

No incidents were recorded in transmission and generation operations throughout 2022.

## SASB IF-EU-550a.1 | Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations

No incidents were recorded in the period. The management of the aspects related to the theme is guided by the Information and Cyber Security Policy, with the performance of Alupar's Information Security Commission and a set of preventive actions to identify and correct vulnerabilities.

# GRI content index

Statement of use | Alupar Investimento S.A. has reported in accordance with the GRI Standards for the period 1 January to 31 December, 2022.

GRI 1 used | GRI 1: Foundation 2021

Applicable GRI Sector Standard(s) | Not applicable

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>General disclosures</b>							
GRI 2   General Disclosures 2021	2-1   Organizational details	13, 28 and 29	-	-	-	-	-
	2-2   Entities included in the organization's sustainability reporting	4 and 14	-	-	-	-	-
	2-3   Reporting period, frequency and contact point	3 and 4	-	-	-	-	-
	2-4   Restatements of information	4	-	-	-	-	-
	2-5   External assurance	4	-	-	-	-	-
	2-6   Activities, value chain and other business relationships	13 and 15	-	-	-	-	-
	2-7   Employees	39, 40 and 69	-	-	-	6	8 and 10
	2-8   Workers who are not employees	70	-	-	-	6	8 and 10
	2-9   Governance structure and composition	28 and 29	-	-	-	-	-
	2-10   Nomination and selection of the highest governance body	28	-	-	-	-	5 and 16
	2-11   Chair of the highest governance body	70	-	-	-	-	16
	2-12   Role of the highest governance body in overseeing the management of impacts	29	-	-	-	-	16
	2-13   Delegation of responsibility for managing impacts	29	-	-	-	-	-
	2-14   Role of the highest governance body in sustainability reporting	4	-	-	-	-	-
	2-15   Conflicts of interest	70	-	-	-	-	16
	2-16   Communication of critical concerns	70	-	-	-	-	-
	2-17   Collective knowledge of the highest governance body	28 and 29	-	-	-	-	-

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>General disclosures</b>							
GRI 2   General Disclosures 2021	2-18   Evaluation of the performance of the highest governance body	70	-	-	-	-	-
	2-19   Remuneration policies	70	-	-	-	-	-
	2-20   Process to determine remuneration	70	-	-	-	-	-
	2-21   Annual total compensation ratio	71	-	-	-	-	-
	2-22   Statement on sustainable development strategy	10 and 11	-	-	-	-	-
	2-23   Policy commitments	30 and 32	-	-	-	-	-
	2-24   Embedding policy commitments	30 and 32	-	-	-	-	-
	2-25   Processes to remediate negative impacts	64	-	-	-	-	-
	2-26   Mechanisms for seeking advice and raising concerns	30 and 31	-	-	-	10	16
	2-27   Compliance with laws and regulations	71	-	-	-	-	16
	2-28   Membership associations	71	-	-	-	-	16
	2-29   Approach to stakeholder engagement	5 and 6	-	-	-	-	-
	2-30   Collective bargaining agreements	40 and 69	-	-	-	3	8
GRI sector supplement for energy 2013	EU1   Installed capacity, broken down by primary energy source and by regulatory regime	15 and 74	-	-	-	-	-
	EU2   Net energy output broken down by primary energy source and by regulatory regime	18 and 74	-	-	-	-	-
	EU4   Length of above and underground transmission and distribution lines by regulatory regime	15 and 75	-	-	-	-	-
	EU5   Allocation of CO <sub>2</sub> e emissions allowances or equivalent, broken down by carbon trading framework	57	-	-	-	-	-
<b>Material topics</b>							
GRI 3   Material topics 2021	3-1   Process to determine material topics	5 and 6	-	-	-	-	-
	3-2   List of material topics	8	-	-	-	-	-

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>Material topic   Biodiversity and environmental management</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 51, 52, 53, 54, 55 and 56	-	-	-	-	-
GRI 303   Water and effluents 2018	303-1   Interactions with water as a shared resource	54 and 56	-	-	-	8	6 and 12
	303-2   Management of water discharge-related impacts	56	-	-	-	8	6
	303-3   Water withdrawal	56	Item "b" (uptake in areas with water stress)	Information unavailable	We do not assess the location of our operations in relation to the level of water stress. We will make this analysis throughout 2023 to present the information from the next Report.	7 and 8	6
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	53	-	-	-	8	6, 14 and 15
	304-2   Significant impacts of activities, products, and services on biodiversity	52, 53, 54 and 55	-	-	-	8	6, 14 and 15
	304-3   Habitats protected or restored	54 and 55	-	-	-	8	6, 14 and 15
	304-4   IUCN Red List species and national conservation list species with habitats in areas affected by operations	53	-	-	-	8	6, 14 and 15
GRI sector supplement for energy 2013	EU13   Biodiversity of offset habitats compared to the biodiversity of the affected areas	52, 53, 54 and 55	-	-	-	8	6, 14 and 15

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>Material topic   Climate change</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 57 and 58	-	-	-	-	-
GRI 201   Economic performance 2016	201-2   Financial implications and other risks and opportunities due to climate change	57	-	-	-	7	13
GRI 302   Energy 2016	302-1   Energy consumption within the organization	58	-	-	-	7 and 8	7, 8, 12 and 13
GRI 305   Emissions 2016	305-1   Direct (Scope 1) GHG emissions	58	-	-	-	7 and 8	3, 12, 13, 14 and 15
	305-2   Energy indirect (Scope 2) GHG emissions	58	-	-	-	7 and 8	3, 12, 13, 14 and 15
	305-3   Other indirect (Scope 3) GHG emissions	-	Disclosure omitted	Information unavailable	Our inventory published in 2022 covers only scopes 1 and 2. We are enhancing the development of the inventory to present the information in the next reporting cycles.	7 and 8	3, 12, 13, 14 and 15
	305-5   Reduction of GHG emissions	57	-	-	-	8 and 9	13, 14 and 15
<b>Material topic   Waste management</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 51 and 59	-	-	-	-	-
GRI 306   Waste 2020	306-1   Waste generation and significant waste-related impacts	59	-	-	-	8	3, 6, 11 and 12
	306-2   Management of significant waste-related impacts	59	-	-	-	8	3, 6, 11 and 12
	306-4   Waste diverted from disposal	59	-	-	-	8	3, 11 and 12
	306-5   Waste directed to disposal	59	-	-	-	8	3, 11 and 12



GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>Material topic   Relationship with communities</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	23, 24, 35, 61, 62, 63, 64, 65 and 66	-	-	-	-	-
GRI 410   Security practices 2016	410-1   Security personnel trained in human rights policies or procedures	-	Disclosure omitted	Information unavailable	The property security teams are outsourced and, therefore, we depend on the sending of information about the training of these professionals in human rights by the contractors. We are improving our oversight procedures so that this data is available from the next Report.	1	16
GRI 411   Rights of indigenous peoples 2016	411-1   Incidents of violations involving rights of indigenous peoples	23	-	-	-	1	2
GRI 413   Local communities 2016	413-1   Operations with local community engagement, impact assessments, and development programs	61, 62 and 63	-	-	-	1	-
	413-2   Operations with significant actual and potential negative impacts on local communities	64 and 65	-	-	-	1	1 and 2
GRI sector supplement for energy 2013	EU20   Approach to managing the impacts of displacement	65	-	-	-	-	-
	EU22   Number of people physically or economically displaced and compensation, broken down by type of project	65	-	-	-	-	-
	EU25   Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	75	-	-	-	-	-

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>Material topic   Diversity and inclusion</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 39, 40 and 41	-	-	-	-	-
GRI 405   Diversity and equal opportunity 2016	405-1   Diversity of governance bodies and employees	39, 40, 41 and 73	-	-	-	6	5 and 8
	405-2   Ratio of basic salary and remuneration of women to men						
GRI 406   Non-discrimination 2016	406-1   Incidents of discrimination and corrective actions taken	30	-	-	-	6	5 and 8
<b>Material topic   Health and safety of workers</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 42, 43, 44 and 45	-	-	-	-	-
GRI 403   Occupational health and safety 2018	403-1   Occupational health and safety management system	42	-	-	-	-	8
	403-2   Hazard identification, risk assessment, and incident investigation	42 and 43	-	-	-	-	8
	403-3   Occupational health services	45	-	-	-	-	8
	403-4   Worker participation, consultation, and communication on occupational health and safety	43	-	-	-	-	8 and 16
	403-5   Worker training on occupational health and safety	43	-	-	-	-	8
	403-6   Promotion of worker health	45	-	-	-	-	3
	403-7   Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	42	-	-	-	-	8
	403-8   Workers covered by an occupational health and safety management system	42	-	-	-	-	8
	403-9   Work-related injuries	44	-	-	-	-	3, 8 and 16
GRI sector supplement for energy 2013	EU16   Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	42, 43 and 44	-	-	-	-	3, 8 and 16
	EU17   Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	75	-	-	-	-	-
	EU18   Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	75	-	-	-	-	8

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>Material topic   Talent management</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 37 and 38	-	-	-	-	-
GRI 401   Employment 2016	401-1   New employee hires and employee turnover	72	-	-	-	6	5, 8 and 10
GRI 404   Training and education 2016	404-1   Average hours of training per year per employee	73	-	-	-	6	4, 5, 8 and 10
	404-2   Programs for upgrading employee skills and transition assistance programs	73	-	-	-	-	8
	404-3   Percentage of employees receiving regular performance and career development reviews	37	-	-	-	6	5, 8 and 10
<b>Material topic   Ethical conduct</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	30, 31, 32 and 35	-	-	-	-	-
GRI 205   Anti-corruption 2016	205-1   Operations assessed for risks related to corruption	31 and 48	-	-	-	10	16
	205-2   Communication and training about anti-corruption policies and procedures	31	Item "e" (employees trained by functional level)	Information unavailable	We do not have the segmentation of trained employees by functional level and region. We are improving our internal controls so that this data is available from the next Report.	10	16
	205-3   Confirmed incidents of corruption and actions taken	30	-	-	-	10	16
<b>Material topic   Asset management</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	17, 18, 19, 20, 21, 22, 25, 26, 27, 35, 46 and 47	-	-	-	-	-
GRI 201   Economic performance 2016	201-1   Direct economic value generated and distributed	26	-	-	-	-	8 and 9
GRI sector supplement for energy 2013	EU6   Management approach to ensure short and long-term electricity availability and reliability	17, 18, 19, 20, 21 and 22	-	-	-	-	-
	EU21   Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	46 and 47	-	-	-	-	-
	EU30   Average plant availability factor by energy source and by regulatory regime	17, 18 and 76	-	-	-	-	-

GRI Standard/ Other source	Disclosure	Page	Omission			Global Compact	SDG
			Requirement(s) omitted	Reason	Explanation		
<b>Material topic   Supplier management</b>							
GRI 3   Material topics 2021	3-3   Management of material topics	35, 48 and 49	-	-	-	-	-
GRI 308   Supplier environmental assessment 2016	308-1   New suppliers that were screened using environmental criteria	-	Disclosure omitted	Information unavailable	We do not have centralized control to determine the percentage of suppliers evaluated. We are enhancing our internal controls so that this data is available in the coming reporting cycles.	8	-
	308-2   Negative environmental impacts in the supply chain and actions taken	-	Disclosure omitted	Information unavailable	The decentralized monitoring of suppliers by their contract managers prevents the calculation of quantitative information. We are improving our practices so that this data is available in the coming reporting cycles.	8	-
GRI 407   Freedom 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	49	-	-	-	3	8
GRI 408   Child labor 2016	408-1   Operations and suppliers at significant risk for incidents of child labor	49	-	-	-	5	8 and 16
GRI 409   Forced or compulsory labor 2016	409-1   Operations and suppliers at significant risk for incidents of forced or compulsory labor	49	-	-	-	4	8
GRI 414   Supplier social assessment 2016	414-1   New suppliers that were screened using social criteria	48	-	-	-	2	5, 8 and 16
	414-2   Negative social impacts in the supply chain and actions take	-	Disclosure omitted	Information unavailable	The decentralized monitoring of suppliers by their contract managers prevents the calculation of quantitative information. We are improving our practices so that this data is available in the coming reporting cycles.	2	5, 8 and 16

# SASB content index

SASB topic	SASB code	Metrics requested by SASB	Page/Answer
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.1	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	58
	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries	58
	IF-EU-110a.3	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	57
	IF-EU-110a.4	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market	It does not apply, as Brazil does not have renewable portfolio standards established by regulatory bodies.
Air Quality	IF-EU-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) particulate matter (PM10), (4) lead (Pb), and (5) mercury (Hg); percentage of each in or near areas of dense population	It does not apply as we do not emit air pollutants (NOx, SOx, particulate, lead or mercury) in our operations.
Water Management	IF-EU-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	56
	IF-EU-140a.2	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	76
	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	56
Coal Ash Management	IF-EU-150a.1	Amount of coal combustion residuals (CCR) generated, percentage recycled	It does not apply, as Alupar does not operate coal-fired power plants.
	IF-EU-150a.2	Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	It does not apply, as Alupar does not operate coal-fired power plants.
Energy Affordability	IF-EU-240a.1	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	It does not apply, as Alupar does not act in Distribution.
	IF-EU-240a.2	Typical monthly electric bill for residential customers for (1) 500 kWh and (2) 1,000 kWh of electricity delivered per month	It does not apply, as Alupar does not act in Distribution.
	IF-EU-240a.3	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	It does not apply, as Alupar does not act in Distribution.
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	It does not apply, as Alupar does not act in Distribution.

SASB topic	SASB code	Metrics requested by SASB	Page/Answer
Workforce Health & Safety	IF-EU-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	76
End-Use Efficiency & Demand	IF-EU-420a.1	Percentage of electric utility revenues from rate structures that (1) are decoupled and (2) contain a lost revenue adjustment mechanism (LRAM)	It does not apply, as Alupar does not act in Distribution.
	IF-EU-420a.2	Percentage of electric load served by smart grid technology	It does not apply, as Alupar does not act in Distribution.
	IF-EU-420a.3	Customer electricity savings from efficiency measures, by market	It does not apply, as Alupar does not act in Distribution.
Nuclear Safety & Emergency Management	IF-EU-540a.1	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column	It does not apply, as Alupar does not operate nuclear power plants.
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	It does not apply, as Alupar does not operate nuclear power plants.
Grid Resiliency	IF-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	76
	IF-EU-550a.2	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	It does not apply, as Alupar does not act in Distribution.
Activity Metrics	IF-EU-000.A	Number of: (1) residential, (2) commercial, and (3) industrial customers served	19
	IF-EU-000.B	Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers	19
	IF-EU-000.C	Length of transmission and distribution lines	15 and 75
	IF-EU-000.D	Total electricity generated, percentage by major energy source, percentage in regulated markets	18
	IF-EU-000.E	Total wholesale electricity purchased	19

# Credits

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## **Alupar Coordination**

Areas of Sustainability, Environment, Investor Relations, Finance, People Management, Legal and Communication.

## **Consulting, content and design**

usina82

## **Photos**

Nevertton Frey (page 17), Eros Bonilha (page 19), João Greco (page 22), Silas Soares Oliveira (page 57), Jhonatas Martins (page 62) and André Prietsch (other pages).

## **Our employees in the Report photos**

Antonio Gustavo Pinheiros (page 36)

Francisco Sebastião Alves de Oliveira (page 37)

Juliana Salvadori, Lucas Hanzawa and Thamiris Azevedo (page 38)

Eduardo Sannomiya Sakamoto and Ana Carolina Siqueira (page 39)

Francisco Sebastião Alves de Oliveira and Antonio Gustavo Pinheiros (page 43)

Eduardo José Almeida Alves and Jéssica Pádua de Oliveira (page 48)

Francisco Vitor Leôncio Neto and Francisco Sebastião Alves de Oliveira (page 49)

