

ENGIE Brasil Energia

SUSTAINABILITY REPORT



2022

Salto Santiago
Hydroelectric Plant

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Message From the Management

[GRI 2-22]

To act in order to accelerate. It is on the basis of these two verbs that ENGIE Brasil Energia's purpose drives our work every day. And while the focus of this purpose is the energy transition – ever more necessary to confront the challenges of climate change – our commitment is to ensure that this movement also contributes to the quality of lives of people in a just and truly sustainable society.

In 2022, we acted, accelerated, and advanced, reaping the rewards that reflect the consistency of the strategy, resilience of the business model, efficacy in the management of the Company's risks and solid structure of governance, with roles and responsibilities defined and processes evaluated and audited annually through both internal and independent structures. For the year 2022 as a whole, net operating revenue exceeded BRL 11.9 billion, 5.1% down against the same item reported for 2021. This reflected the reduction in construction revenue from the transmission systems due to the stage reached of work in progress, and lower revenue from trading operations. These

effects were attenuated by the increase in energy sales and higher average selling price.

Adjusted Ebitda fell 3.8% to reach BRL 6.9 billion in 2022, reflecting the effects already mentioned, in addition to the booking in 2021 of recovery of past costs in the amount of BRL 1.6 billion, relating to the renegotiation of hydrological risks. Excluding this effect, Ebitda would have risen by 23.4%. Finally, ENGIE Brasil Energia posted an increase of BRL 1.1 billion (70.3%) in net income compared to 2021, **totaling BRL 2.7 billion for the calendar year of 2022.**



BRL 2.7 billion
of net income



Our Purpose:

Act to accelerate the transition to a carbon-neutral society by means of reduced energy consumption and more environmentally friendly solutions.

The favorable hydrological scenario in 2022, different from that reported over the last few years, was very positive for the electric energy sector, allowing hydroelectric generation to continue supporting the growth of wind and solar, as the basis of the National Electric Grid. In parallel, the more favorable energy scenario led to a fall in the energy settlement prices in the short-term, little affecting the Company's revenues, our larger exposure to regulated businesses such as transmission, gas transportation and energy contracts in the Regulated Contracting Environment (ACR), lending stability to results.

Such condition has permitted the Company to remunerate investors and continue growing in a responsible, disciplined, and competitive manner. **As part of this trajectory, the implementation of the Santo Agostinho Wind Complex in Rio Grande do Norte had reached an advanced stage of implementation by the end of 2022.** Despite the challenges posed by problems in the global supply chain – caused by imbalances resulting from the pandemic and the conflict in Ukraine -, **we acted** to minimize the effects on the work schedule and ensure gradual entry into operation as from 1Q23. Once fully operational, this asset will add 434 MW to our installed capacity.

Still in the generation segment, growth in renewables was ramped up with the approval of two heavy duty projects in the Northeast of Brazil and expected to be implemented in 2023 and 2024, **accelerating** our growth in renewable generation. One of them is the Serra do Assuruá Wind Complex in Gentio do Ouro (BA) with 846 MW of installed capacity and an investment of the order of BRL 6 billion. The other is the Assú Sol Photovoltaic Complex in Assú (RN) with a 752 MW capacity and located adjacent to photovoltaic plants the Company is already operating in the same municipality.

These two new projects represent the largest wind and photovoltaic projects, respectively, ever to be implemented by the ENGIE Group in Brazil. The dimensions reflect the evolution of our skills and absolute confidence in the capacity of our teams to execute such projects with excellence, combining technical qualification with good socio-environmental practices.

This is the way we conduct the entire Company's operations including our first transmission assets. Operational for about a year now, the Gralha Azul Transmission System has recorded elevated levels of efficiency, reinforcing our contribution to the social-economic devel-

opment of the state of Paraná. In the North, the Novo Estado Transmission System has **advanced** to the final phase of construction, becoming fully operational in 1Q23, reached through the complete energization of 1.8 thousand kilometers of power lines and the operation of substations in the states of Tocantins and Pará.

Expansion also reflects our commitment to the decarbonization of the generator complex, which had as its recent development the signature in September 2022 of the agreement for the sale of the Pampa Sul Thermolectric Power Plant, the only remaining coal-fired operation in our Brazilian power complex. On the conclusion of the transaction in 2023, this movement will elevate ENGIE Brasil Energia to the position of the largest renewable electric energy generator in the country.

Rigorously planned since 2015, our decarbonization journey provides for strategic actions for compensating the loss of fossil sourced capacity. Hence, **between 2016 and 2022, more than BRL 20 billion was allocated to the transition – which has translated into an increase of annual investment in this period**

by a multiple of four compared with previous periods. An undeniable acceleration has been made possible thanks to the unconditional support of our Controlling Company, the ENGIE Group, as well as by the solid financial and operational condition of the Company throughout its trajectory.

We have maintained ENGIE Brasil Energia's outstanding position in generation as well as strengthening our footprint in the segments of transmission and gas transportation in the way we always operate: with total respect for the environment and people both in and outside the Company.

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We acted intensely in 2022 to strengthen our occupational safety culture among our own employees and also those of our service providers at our installations, recording a year without serious or fatal accidents as well as a significant reduction (-52.5%) in workplace accidents requiring time off work.

To ensure an increasingly safe, attractive, and prosperous workplace environment, we have also taken initiatives for promoting diversity, equity, and inclusion. **Continuing the plan of expanding the presence of women in positions of leadership and operating functions, we advanced in actions** such as measures for filling affirmative vacancies for women engineers and through training programs for women in operations and maintenance.

Aware that gender equality is an essential factor, but it is not enough to create a more just and egalitarian society, we have expanded our actions in favor of diversity in order to create accessible opportunities for other underrepresented groups. **To this end, in 2022, we launched the Diversity and Inclusion Policy, the LGBTQ+ Guide and the Diversity and Inclusion Program, directed towards people with special needs.**

In addition to these initiatives, there are several others developed and supported by ENGIE Brasil Energia focused on the sustainable development of the territories of which we are a part. Based on the demands identified in each community, we allocated more than BRL21 million in 2022 to projects - local and corporate - that promote access to culture, education, sports, and health, among other topics relevant to society.

The scale of relevance and urgency of our social actions is based on dialog with local stakeholders. **In 2022, we resumed the process of actively listening to the communities, promoting sustainability panels in municipalities which headquarter plants operated by ENGIE Brasil Energia.** In these meetings, which brought together around 300 people, we are able to better understand their perceptions on the impacts of our operations, as well as the possibilities for the Company to support local development - strategically directing plans for engagement and social investment.

Among the themes revealed as a result of dialog is the major concern of the communities with the environment, a concern shared by the Company. In addition to ensuring compliance of all our activities

with the environmental legislation, we are developing various voluntary initiatives for conservation, with a focus on biodiversity, water, waste, and climate. Climate gained special attention in the year, with the deepening of the studies of our Net Zero Journey, **which generated a broad action plan focused on the decarbonization of our activities, with strategy, risk management, review of metrics and establishment of goals that include the engagement of our value chain.** Our evolution in the subject can be monitored through the CDP, a platform that provides transparency to the climate performance and commitments of organizations around the world, and to which we made our first report in 2022.

The movement for both a better present and future for people and the planet has won over important allies: our clients.

Through the Parcerias do Bem Program, we propose joint investments and social responsibility initiatives on the part of different organizations, bringing together companies of different sizes and from various sectors and regions of Brazil sharing the desire to expand the positive impact of their businesses. At the end of 2022, more than 20 organizations were active in the Program, comprising a transformational network, intent on leaving a significant legacy to the communities.

For many of our customers, ENGIE Brasil Energia's commitment to the socio-environmental agenda constitutes a decisive competitive differential, which adds to other essentials in a relationship that goes far beyond contracting energy. In readiness for the opportunities expected to arise in a scenario which involves the expansion of the Free Contracting Environment (ACL) – following publication of Ordinance 50/2022 by the Ministry of Mines and Energy (MME) in September – the Company has intensified digitalization initiatives in client service, notably through the Energy Place, an innovative energy acquisition and management platform. **In parallel, we have restructured our commercial teams, formatting a series of solutions for serving with agility and reliability the different profiles of clients qualifying for the Free Energy Market.**

We are in no doubt that in addition to this, other regulatory changes anticipated for the modernization of the Brazilian electric energy sector will bring benefits to the economy and society. **To cooperate in these advances, ENGIE Brasil Energia maintains dialog and cooperation with agents both from the public and private sectors for the strategic guidance of the market,** debating themes such as the end to subsidies which prejudice the competitiveness of the sector and the recognition of the essential role hydropower plants play in the insertion of intermittent energy in the National Interconnected System (SIN) – currently, without the attributes of this energy source being adequately rewarded. In this context, we are optimistic as to the outcome of discussions set to occupy space in the regulatory environment of the Brazilian Electric Energy Sector in 2023.

Confident in the capacity of the country to grow, the Company continues attentive to the opportunities for contributing so that the full potential of Brazil can be realized, generating economic development, environmental conservation, and social justice. Our thanks go to those that share this optimism, believe in our commitments, and support our achievements. **Together, we act and accelerate the transition that will lead us to the desired future.**



Maurício Stolle Bähr

Chairman of the Board of Directors



Eduardo Antonio Gori Sattamini

Chief Executive and Investor Relations Officer

AWARDS AND RECOGNITIONS



Recognized among the **Best of ESG Awards 2022**, promoted by Exame/Ibmec.



Member of B3's **2023 Corporate Sustainability Index (ISE)** – for the **18th** consecutive year since the advent of the ISE.



Member of B3's **Carbon Efficient Index (ICO2)** Portfolio for the **third** time – since the qualification for the assessment, as a participant in the IBRX 100.



Presence in the **Institutional Investor Magazine's Ranking** (Electric & Other Utilities - Latin America), with the following classifications:

Best CEO:
3rd place overall and 1st sell-side.

Best CFO:
1st place sell-side

Best IR Program:
2nd place sell-side

Best IR Professional:
3rd position overall and 2nd sell-side.

Best IR Team:
3rd position sell-side

Best Analyst Day:
2nd position sell-side

Best ESG Disclosures:
2nd position sell-side.



For the **13th** time, winner of the **2022 Transparency Trophy**

in the category "Companies with net revenue of BRL 5 up to 20 billion", granted by the National Association of Finance, Administration and Accounting Executives (Anefac).



Best reputation in the country

energy segment – Caliber Reputation Index.

Highlights

2022

Performance evolution [GRI 2-7; 201-1] [SASB IF-EU-240A.1]

Indicators	2020	2021	2022	Change 2022 x 2021	Change 2022 x 2020
Operational and commercial					
Plants in operation	60	68	76	8	16
Installed capacity in operation (MW)	10,431.2	9,939.4	10,174.0	2.4%	-2.5%
Proprietary installed capacity (MW)	8,710.5	8,218.7	8,453.3	2.9%	-3.0%
Proprietary installed capacity from renewable sources (%)	86.2%	95.8%	95.9%	0.1 p.p.	9.7 p.p.
Energy sales (GWh)	37,957	36,365	37,932	4.3%	-0.1%
Energy sales (MWh)	4,321	4,151	4,330	4.3%	0.2%
Net average selling price (BRL/MWh)	193.4	199.8	222.9	11.6%	15.3%
Number of clients attended (ACL)	930	877	982	12.0%	5.6%
Economic-financial (BRL million)					
Net operating revenue	12,259	12,541	11,907	-5.1%	-2.9%
Ebitda	6,484	5,941	6,790	14.3%	4.7%
Adjusted Ebitda	6,427	7,217	6,941	-3.8%	8.0%
Net income	2,797	1,565	2,665	70.3%	-4.7%
Adjusted net income	2,686	2,369	2,764	16.7%	2.9%
Total debt (Debt instruments, net of hedge effects)	16,672	20,587	18,150	-11.8%	8.9%
Investments (BRL million)	4,013	3,407	3,150	-7.5%	-21.5%
Adjusted ROE ¹ (%)	36.1	29.9	32.8	2.9 p.p.	-3.3 p.p.
Adjusted ROIC ² (%)	22.7	20.2	20.8	0.6 p.p.	-1.9 p.p.
Earnings per share (BRL)	2.47	2.50	3.32	32.8%	34.4%
Average price per share ³ (BRL)	37.78	36.46	39.32	7.8%	4.1%
Environmental (operational assets)					
Seedlings donated and planted (thousands)	360	475	266	-44.0%	-26.1%
Conexão participants – program of visits and environmental education (thousands)	33	133	195	46.6%	490.9%

Indicators	2020	2021	2022	Change 2022 x 2021	Change 2022 x 2020
Environmental (operational assets)					
Water withdrawal (thousands of megaliters)	459.3	488.0	6.0	-98.8%	-98.7%
Waste generated (millions of tons)	2.527	2.532	0.927	-63.4%	-63.3%
Percentage of recovered waste (%)	82.9	82.2	99.9	17.7 p.p.	17.0 p.p.
Total emissions – Corporate Participation (millions of t of CO ₂)	5.9	5.5	1.1	-80.0%	-81.4%
Intensity of CO ₂ (KgCO ₂ /MWh) emissions – Corporate Participation	211.4	183.9	33.9	-81.6%	-84.0%
Social responsibility					
Own resources investments (Non-incentivized) (BRL thousand) ⁴	8,954	11,679	4,888	-58.1%	-45.4%
Incentivized resources (via tax incentive mechanisms) (BRL thousand)	15,130	11,105	16,486	48.5%	9.0%
Human capital					
Number of employees (as of December 31)	1,538	1,201	1,215	1.2%	-21.0%
Percentage of women in the labor force	19.9%	24.4%	26.7%	2.3 p.p.	6.8 p.p.
Investment in training and development (BRL million)	3.8	4.6	5.7	23.9%	50.0%
Total number of training hours	66,062	59,682	70,243	17.7%	6.3%
Total employee work and travel related accidents	5	2	7	↑	↑
Frequency Rate (FR): operation and maintenance ⁵	1.203	0.568	1.320	↑	↑
Frequency Rate (FR): works/implementation ⁵	0.561	1.649	1.010	↓	↑
Severity Rate (SR) own employees ⁶	0.006	0.000	0.000	-	↓

¹ ROE: net income over the last four quarters /shareholders equity.

² ROIC: effective rate x EBIT / invested capital (invested capital: debt – cash and cash equivalents – deposits linked to debt service + SE).

³ Average price of the average daily transactions.

⁴ –Values adjusted in relation to those published in the 2020 and 2021 reports, since the values injected voluntarily in social responsibility projects in the regions where assets are being implemented have been added to the total amount of investments.

⁵ FR = number of accidents in every million hours of exposure to risk.

⁶ SR = number of days lost with work related accidents in every thousand hours of exposure to risk.

1 Our Company

- » Who we are
- » Our assets
- » Our governance
- » Fundamental commitments

24 years of presence in Brazil

21 Brazilian states

2 Transmission Systems
aprox. 2,700 km of line

76 generation plants

- 11 hydroelectrics
- 1 thermoelectric
- 64 complementaries (biomass, SHP, wind and solar plants)

Equity stake in natural gas transportation
4,500 km of pipelines - TAG

Miranda Hidroelectric Power Plant

Who we are

[GRI 2-1; 2-6]

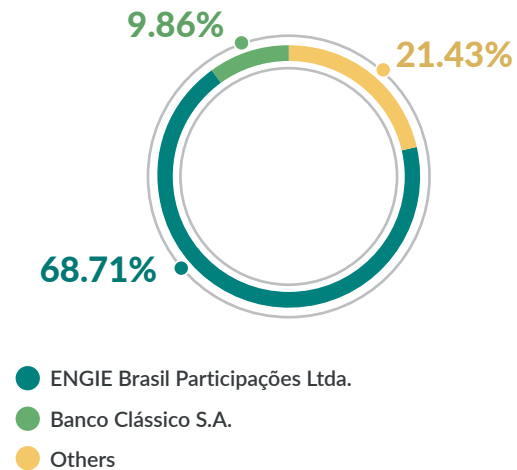
[2030 Agenda Goal: 16.6]

With operations in the **generation, commercialization, trading, and transmission of electricity**, ENGIE Brasil Energia is present in all regions of the country. Additionally, since 2019, it has had a stake in Transportadora Associada de Gás (TAG).

A publicly held corporation with common shares listed on B3 under the code EGIE3. It is also part of the North American Over-the-Counter market, trading Level I American Depositary Receipts (ADRs), identified as EGIEY – at the ratio of one ADR per common share.

Shareholder structure

(as at 12.31.2022)



MISSION

Provide innovative and sustainable solutions in energy.

VISION

Transform people's relationship with energy aiming at a sustainable world.

VALUES

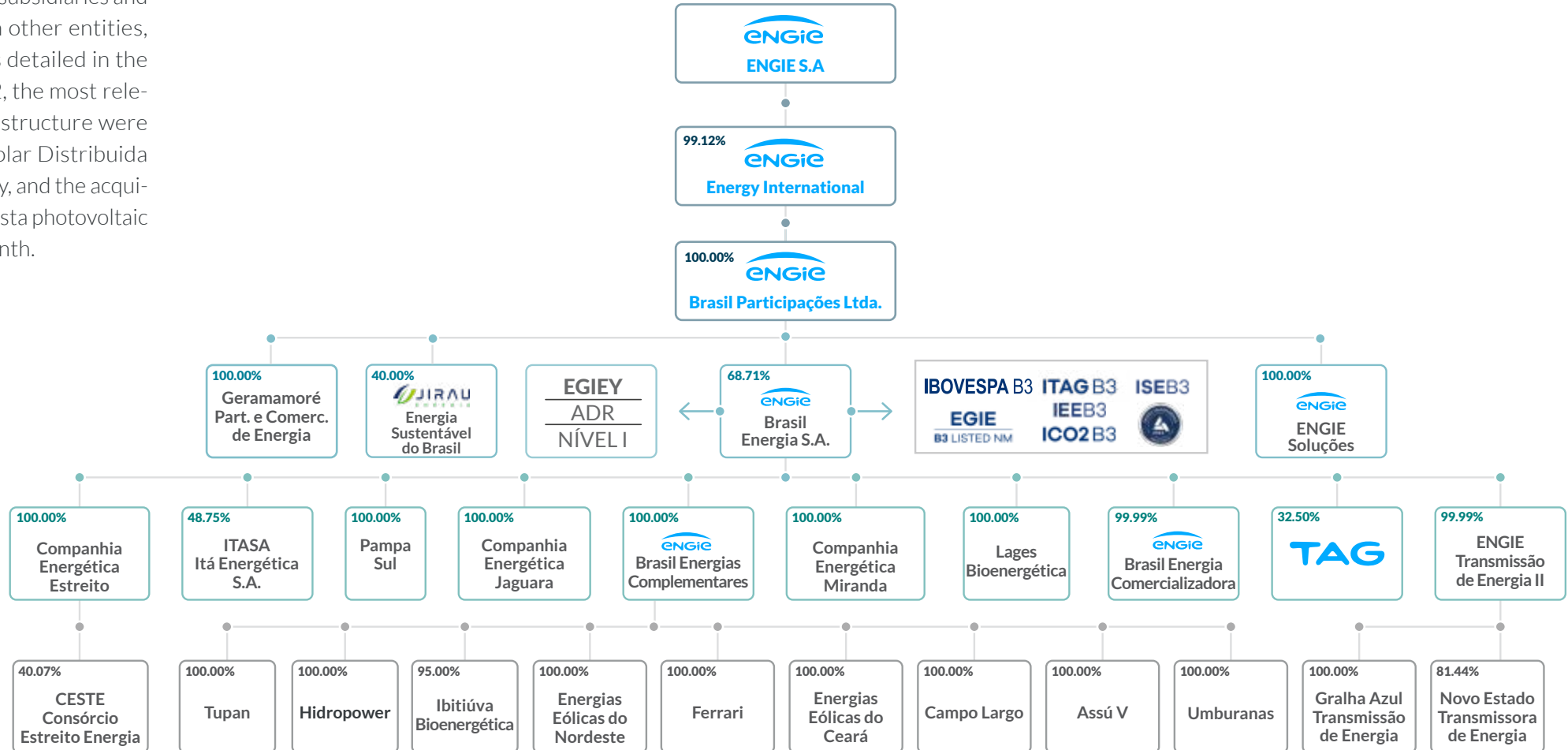
Professionalism, sense of partnership, teamwork, creation of value, respect for the environment, ethics.

¹ At the end of 2022, there were 815,927,740 common shares listed on B3, with share capital totaling BRL 4,903 million.

Corporate structure

ENGIE Brasil Energia controls subsidiaries and participates in consortia with other entities, and business partnerships, as detailed in the following infographic. In 2022, the most relevant changes in its corporate structure were the sale of ENGIE Geração Solar Distribuída (EGSD), announced in February, and the acquisition of the Paracatu and Floresta photovoltaic complexes in the following month.

Corporate structure* (as at 12.31.2022)



* Simplified structure.

Our assets

[GRI 2-4; 2-6; G4-EU1]

[SASB IF-EU-000.C; IF-EU-000.D]

[2030 Agenda Goals: 7.2; 7.3; 9.4]

With operations exclusively in Brazil, ENGIE Brasil Energia is headquartered in Florianópolis (SC), and operations cover 21 Federative Units.

Operating segments of ENGIE Brasil Energia

GENERATION

76 operated plants

8,453.3 MV

Proprietary installed capacity



GAS TRANSPORTATION

32.5% equity stake in TAG, acquired in 2019

4,500 km

of gas pipelines in operation in three regions of Brazil

TRANSMISSION

2 Transmission systems totalling

~ 2,700 km

of lines

- 1,800 km in operation
- 900 km under construction.

6 proprietary substations

TRADING

3,676 GWh

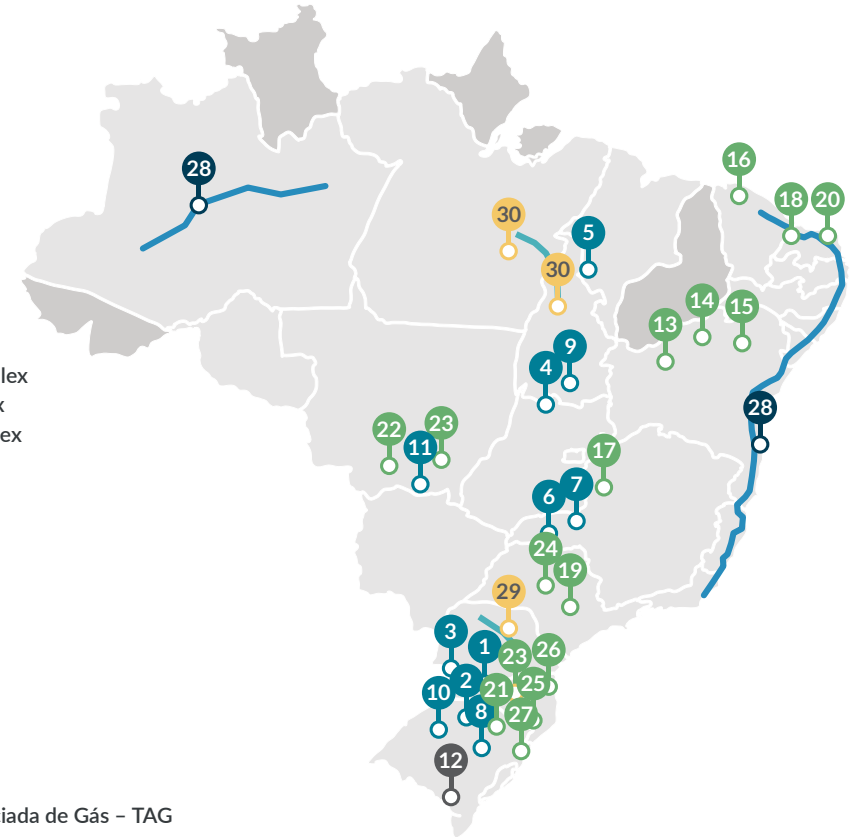
of energy sold

8.8%

of the total commercialized

Portfolio and asset location* (em 12.31.2022)

- 1 Salto Santiago
- 2 Itá
- 3 Salto Osório
- 4 Cana Brava
- 5 Estreito
- 6 Jaguará
- 7 Miranda
- 8 Machadinho
- 9 São Salvador
- 10 Passo Fundo
- 11 Ponte da Pedra
- 12 Pampa Sul
- 13 Campo Largo II Complex
- 14 Umbranas I Complex
- 15 Campo Largo I Complex
- 16 Trairi Complex
- 17 Paracatu
- 18 Floresta
- 19 Ferrari
- 20 Assu V
- 21 Lages
- 22 Rondonópolis
- 23 José G. da Rocha
- 24 Ibitiúva
- 25 Tubarão 2
- 26 Nova Aurora
- 27 Tubarão
- 28 Transportadora Associada de Gás – TAG
- 29 Galha Azul
- 30 Novo Estado



* Some of the assets indicated on the map comprise more than one plant. For details, see the table on page 14.



Cana Brava Hydroelectric Plant

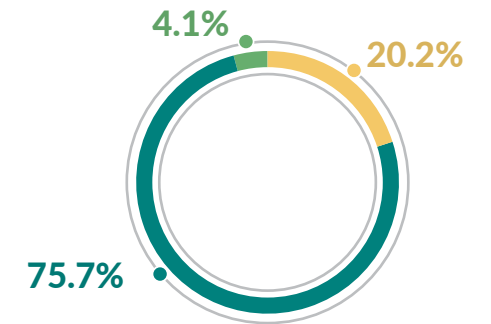
Generation

At the end of 2022, the installed capacity of the generator park operated by the Company totaled **10,174.0 MW, distributed among 76 plants**, of which 11 were hydroelectric, one thermoelectric and 64 complementary — biomass plants, small hydropower plants (PCHs), wind and photovoltaic solar plants. Of this total, 72 belonged to ENGIE Brasil Energia and 4 are operated on a shared ownership basis with other companies – namely the Itá, Machadinho and Estreito hydropower plants, and the Ibitiúva Bioenergética Cogeneration Plant (biomass). Disregarding the participation of partners in these undertakings, the Company's own installed capacity was 8,453.3 MW.

As a result of its decarbonization strategy, in 2022, ENGIE Brasil Energia had 95.9% of its proprietary capacity fired from renewable sources. Expected to take place in the first half of 2023, the closing of the sale of the Pampa Sul Plant - the only asset fired from non-renewable sources still part of the generating complex - will make the Company the largest clean energy corporation in the national electricity sector, generating 100% renewable energy. More information about this milestone can be found [here](#).

At the end of the year, own installed renewable capacity was 95.9%, expected to reach 100% in 2023 – from the closing of the sale of the Pampa Sul Thermoelectric.

ENGIE Brasil Energia energy matrix – own installed capacity (at as 12.31.2022)



● Hydroelectrics
 ● Thermoelectrics
 ● Complementary

Operational generation assets (as at 12.31.2022)

	Hydroelectric power plants	Total installed capacity (MW)	Total physical guarantee (aMW)	Ownership	Own installed capacity (MW)	Own physical guarantee (aMW)	Expiration of concession/ authorization
1	Salto Santiago	1,420.0	733.3	100%	1,420.0	733.3	20.11.2030
2	Itá	1,450.0	720.0	69.0%	1,126.9	564.7	30.12.2032
3	Salto Osório	1,090.4	502.6	100%	1,090.4	502.6	04.10.2031
4	Cana Brava	450.0	260.8	100%	450.0	260.8	01.15.2036
5	Estreito	1,087.0	584.9	40.1%	435.6	256.9	01.15.2043
6	Jaguara	424.0	341.0	100%	424.0	341.0	06.22.2048
7	Miranda	408.0	198.2	100%	408.0	198.2	06.24.2048
8	Machadinho	1,140.0	547.1	19.3%	403.9	165.3	10.07.2035
9	São Salvador	243.2	148.2	100%	243.2	148.2	06.01.2040
10	Passo Fundo	226.0	113.1	100%	226.0	113.1	04.10.2031
11	Ponte de Pedra	176.1	133.6	100%	176.1	133.6	03.12.2037
	Total	8,114.7	4,282.8		6,404.1	3,417.7	
	Thermoelectric power plants	Total installed capacity (MW)	Total physical guarantee (aMW)	Ownership	Own installed capacity (MW)	Own physical guarantee (aMW)	Expiration of concession/ authorization
12	Pampa Sul	345.0	323.5	100%	345.0	323.5	03.30.2050
	Total	345.0	323.5		345.0	323.5	

¹ Complex made up of 11 wind farms.

² Complex made up of 18 wind farms.

³ Complex made up of eight wind farms.

⁴ Complex made up of four photovoltaic plants.

⁵ Complex made up of three photovoltaic plants.

	Complementary power plants	Total installed capacity (MW)	Total physical guarantee (aMW)	Ownership	Own installed capacity (MW)	Own physical guarantee (aMW)	Expiration of concession/ authorization
13 ¹	Campo Largo II Complex (Wind)	361.2	192.5	100%	361.2	192.5	10.12.2054
14 ²	Uburanas Complex - Phase I (Wind)	360.0	213.3	100%	360.0	213.3	08.03.2050
15 ¹	Campo Largo Complex (Wind)	326.7	166.5	100%	326.7	166.5	08.03.2050
16 ³	Trairi Complex (Wind)	212.6	97.2	100%	212.6	97.2	02.04.2045
17 ⁴	Paracatu (Solar)	132.0	34.0	100%	132.0	34.0	06.17.2051
18 ⁵	Floresta (Solar)	86.0	25.1	100%	86.0	25.1	06.17.2051
19	Ferrari (Biomass)	80.5	35.6	100%	80.5	35.6	07.26.2042
20	Assú V (Solar)	34.0	9.2	100%	34.0	9.2	07.06.2051
21	Lages (Biomass)	28.0	1.8	100%	28.0	1.8	10.28.2032
22	Rondonópolis (SHP)	26.6	14.0	100%	26.6	14.0	12.18.2032
23	José G. da Rocha (SHP)	24.4	11.9	100%	24.4	11.9	12.18.2032
24	Ibitiúva (Biomass)	33.0	17.3	69.3%	22.9	13.6	04.05.2030
25	Tubarão 2 (Wind)	4.2	0.0	100%	4.2	0.0	not applicable
26	Nova Aurora (Solar)	3.0	0.3	100%	3.0	0.3	not applicable
27	Tubarão (Wind)	2.1	0.3	100%	2.1	0.3	not applicable
	Total	1,714.3	819.0		1,704.2	815.3	
	General total	10,174.0	5,425.3		8,453.3	4,556.5	



Transmission

At the end of 2022, ENGIE Brasil Energia had two transmission systems in partial operation, together adding up to around 2,700 kilometers of lines and 14 substations – six proprietary and nine connected to the System and operated by other companies.

In Paraná, the Gralha Azul Transmission System expanded its operation in May, with the energization of the Castro Substation – one of the 10 included in the project. Thus, the works under the responsibility of ENGIE Brasil Energia were concluded, leaving only the Irati Substation and its connection to the Ponta Grossa Substation, in addition to its associated power lines, to be terminated by other companies.

In the North of the country, the implementation of the Novo Estado Transmission System linking the states of Pará and Tocantins, has entered its final phase. With 1,800 kilometers in length, the lines cross 24 municipalities between the Amazon and the Cerrado. The project began commercial operations on a partial basis in December 2021 – and by the end of 2022, it was generating 49% of the expected RAP.

In a material fact postdating the period covered by this Report, the Company announced to the market – on February 28, 2023 – the initiation of full operations of the Novo Estado and Gralha Azul transmission systems. Further information may be found on this event elsewhere in this Report [here](#).

Transmission assets

(as at 12.31.2022)

System	Extension	Owned Substations	Ownership	% completion of the work as at 12.31.2022	% of RAP being received as at 12.31.2022	Concession maturity
1 Gralha Azul	909 km	5	100%	99%	94%	03.2048
2 Novo Estado	1,800 km	1	100%	99%	49%	03.2048

Gas transportation

The largest natural gas transportation operation in Brazil, **Transportadora Associada de Gás – TAG**, has an infrastructure of **4,500 km of high-pressure gas pipelines extending along** the country’s southeastern and northeastern seaboards as well as a further section of line between Urucu and Manaus, in the state of Amazonas, in all traversing 10 Brazilian states and almost 200 municipalities.

The gas pipeline network has several interconnection points, with 14 active gas entry points (including three Liquefied Natural Gas - LNG terminals), and 91 gas exit points, in addition to 11 compressor stations. **It thus serves 10 gas distributors, three refineries, eight thermoelectric plants and two fertilizer units, among other customers.** Assets are operated through the Supervision and Control Center (CSC), located at the company’s headquarters in the city of Rio de Janeiro (RJ), where it has more than 80,000 historical data recording points and 380 flow computers, controlling around 1.6 instruments.

The company is fully contracted with Petróleo Brasileiro S.A. (Petrobras), the weighted average term of the current contracts being approximately eight years, regulated by the National Agency of Petroleum, Natural Gas and Biofuels (ANP).

In 2022, TAG intensified the development of solutions aimed at expanding access for new agents to the natural gas transportation system, in the context of unbundling the sector

Corporate structure – TAG (as at 12.31.2022)



and opening up the gas market in Brazil. Since December 2021, the signing of the Flexibility Reduction Agreement for the use of the TAG network by Petrobras allowed the company to offer network capacity to further interested agents. As a result, 52 extraordinary contracts were signed during 2022, with 15 shippers – from 11 different economic groups –, in addition to Petrobras, which totaled a volume of 12.8 million m³ of transportation capacity, in entry and exit contracts, maturing on 12.31.2022.

Continuing with this strategic move, in 2023 the company launched new capacity offers for contracts with maturities ranging from one month to one year and plans to issue a public notice calling for firm long-term contracts.

Among the contracts signed by TAG in 2022, the one signed with Centrais Elétricas de Sergipe S.A (Celse), for linking the interconnection of an LNG storage and regasification terminal to TAG's network is of particular importance.



200

municipalities and 10 Brazilian states crossed by the TAG network.

The project represents a milestone in the resumption of investments in expansion of TAG's network and includes the construction of a gas pipeline approximately 25 kilometers long, as well as the implementation of the necessary infrastructure to make this connection viable. **The company plans to invest around BRL 340 million in the construction, strengthening the gas pipeline infrastructure in the Northeast region.** By connecting a new LNG terminal to TAG's network, the project also generates greater competitiveness, liquidity, and flexibility in the management of agents, incrementing company revenue.

Added to this are several others that make up TAG's projected pipeline network, to be carried out over the next five years and exceeding BRL 3 billion in investments. About half of this amount will be allocated to expanding TAG's transportation capacity or expanding its network, in line with the ENGIE Group's positive perspectives for the natural gas industry in Brazil.

At the end of 2022, Gasfor II was under construction in Ceará, an 84-kilometer-long pipeline designed to optimize the network and expected to start operating in July 2023. Additionally, the interconnection between the Catu-Pilar Gas Pipeline to the Terminal de Sergipe, connecting the Regas-

ification Terminal with the TAG network, with 25 kilometers of extension, was still under construction, with estimated startup set for April 2024. In the state of Bahia, a new delivery point was also under construction to serve the local distribution company, in the northern section of the Southeast-Northeast Integration Gas Pipeline (Gasene), with startup of the operation expected for July 2023. **Together, these projects have a forecasted investment of close to BRL 660 million.**

In the pipeline of projects under development are the Itajuípe compression station, located on Gasene's northern section with an installed capacity of 20 million m³/day, and the connection of the Porto do Açú Regasification Terminal to the Cabiúnas-Vitória Gas Pipeline, with 45 kilometers long and 10 million m³/day of transportation capacity. The commitment term for the conceptual design of the asset was approved at the end of 2022.

Breakdown of contracts with Petrobras (as at 12.31.2022)

Gas pipeline	Extension (km)	Contract maturity ¹	Volumes Contracted (MM m ³ /day)	% of Net operating revenue ²	Readjustment index
Gasene	1,400	nov-33	30.3	40.0%	46% basket IGP*; 54% US PPI
Malha Nordeste	2,000	dez-25	21.6	23.8%	IGP-M
Pilar-Ipojuca	200	nov-31	15.0	6.5%	IGP-M
Urucu-Manaus	800	nov-30	6.7	29.4%	50% IGP-M; 50% IPCA
Lagoa Parda-Vitória ³	100	dez-22	0.7	0.3%	IGP-M
Total	4,500		74.3	100.0%	

¹ Following the expiry of the agreements, a five-year tariff revision cycle will be triggered, which will decide the revised maximum RAP.

² Variations in revenue representativeness between GTAs may occur.

³ Start of billing on 01/01/2022.

* 1/3 IGP-M, 1/3 IPA-DI; 1/3 IGP-DI.





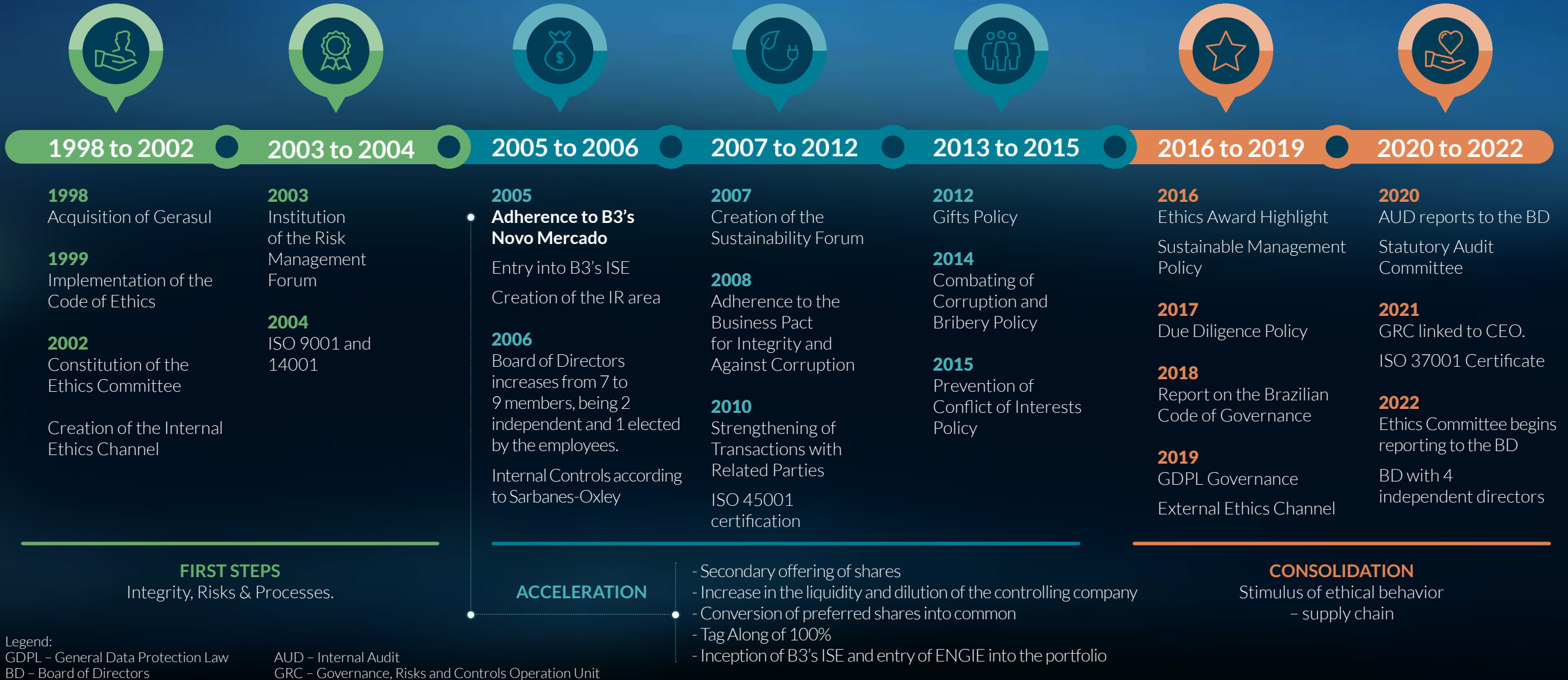
Our governance

[GRI 2-9; 2-10; 2-11; 2-13; 2-15; 2-16; 2-17; 2-18; 2-19; 2-20; 2-23; 2-24; 2-28]
 [2030 Agenda Goals: 16.6; 16.7]

Aware that corporate governance significantly contributes to the sustainable performance of the businesses, in addition to guiding the relationship with the various stakeholders, ENGIE Brasil Energia seeks to maintain its organizational structure, policies and practices in line with market recommendations. **Thus, the Company has management, inspection, control, and compliance bodies, to which it provides the necessary resources, independence, and transparency for performance.** The functions and responsibilities of each body of the governance structure are defined in the Company's bylaws and guided by the respective [Internal Regulations](#).

A member of the Novo Mercado, the listing segment for companies with the highest level of corporate governance at B3 – the São Paulo Stock Exchange, since 2005, the Company has been among the companies that make up B3's Corporate Sustainability Index (ISE) portfolio and is a member of the Brazilian Institute of Corporate Governance (IBGC). The alignment with the practices recommended by these and other dedicated organizations, drives the constant evolution in ENGIE Brasil Energia's corporate governance, based on three pillars: integrated management, risk management and ethics and integrity. The main milestones of this evolution are highlighted in the following infographic.

Evolution in Corporate Governance



Legend:
GDPL – General Data Protection Law
BD – Board of Directors

AUD – Internal Audit
GRC – Governance, Risks and Controls Operation Unit

Integrated management

Engaging with stakeholders and through the in-depth analysis of future drivers and trends, ENGIE Brasil Energia seeks to articulate a corporate purpose that generates value, sustains capital, and guides its operating strategy. In 2021, to ensure the integrated management of corporate governance and related topics, the Company installed the Governance, Risks and Controls Unit.

Among the recommended practices adopted is the use of the Integrated Management Sys-

tem (SIG), a platform that consolidates the Company's information and performance indicators. The standardization of documents, the management of legal requirements and compliance with other mandatory, norms, or voluntarily applied conditions are among the main benefits of this tool.

Thus, the SIG seeks to guarantee the efficiency and continuous improvement of the Quality, Environment and Occupational Health and Safety processes, in accordance with the

NBR ISO 9001, 14001, 45001 standards, respectively. In addition, regular audits are carried out by internal teams – manned by ENGIE Brasil Energia employees duly trained for the function – and external teams from hired independent companies.



Solid corporate governance

- Statutory Audit Committee.
- Internal Audit linked to the Board of Directors.
- Risk Management, Internal Controls and Compliance.
- High degree of transparency in disclosure and communications to the market and to society in Brazil as a whole.





Current policies

Approved by the Board of Directors, the **Company's corporate guidelines** express the intentions and commitments in relation to various aspects involved in corporate management. Applicable to the entire organizational structure, including controlled companies, these documents are shared by stakeholders with emphasis on:

- Code of Ethics and Practical Guide to Ethics
 - Policy for Combating Corruption and Bribery
 - Sustainable Management Policy
 - Human Rights Policy
 - Investments and Derivatives Policy
 - Trading and Disclosure Policy
 - Risk and Opportunity Management Policy
 - Policies for the Appointment, Remuneration and Evaluation of Directors, Officers, and Committee Members
 - Personal Data Privacy and Protection Policy
- All these documents are available for public access on the Company's [website](#).

General Meeting

The General Shareholders' Meeting is the Company's most senior deliberative body comprising all shareholders, in which strategic issues for the business are examined, discussed, and voted on.

In order to encourage shareholder participation, engaging them in conscious voting, the Company publishes the Call Notice for the Meeting at least 30 days in advance, detailing the agenda, together with the Management Proposal and the Participation Manual. Voting and participation may be in person or electronically (via a dedicated digital platform). The documents relating to the General Meeting are made available to shareholders on the Company's website, as well as on the [CVM](#) and [B3](#).

In 2022, a single Shareholders' Meeting was

held, with participation of 86.74% of the share capital with voting rights – corresponding to 707,726,506 shares. Details on past and future meetings and other information, including participation and voting, are available in the [Investors area of the Company's website](#).

The documents related to the General Shareholders' Meetings can be accessed by the shareholders from the Company's website.

Board of Directors

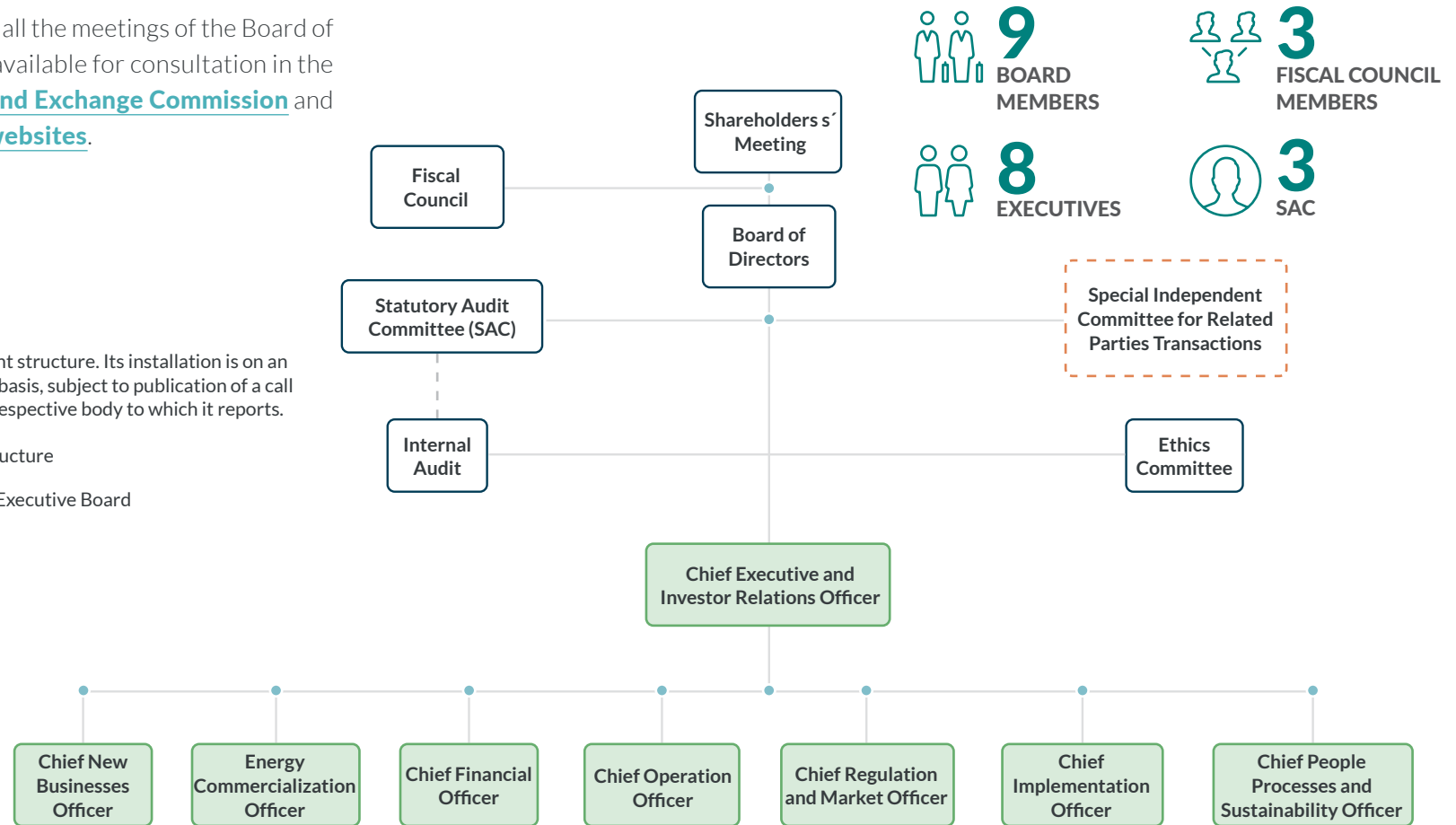
The Board of Directors is responsible for general business guidance, including competitive strategy and socio-environmental aspects as well as the electing, removing, guiding, evaluating and oversight of members of the Executive Board, among other functions. **As contained in the [Nomination of Directors Policy](#), members are chosen based on professional qualification, ethical values and principles of diversity, covering experience, gender and training, in such a way that decision-making processes start out from different points of view so that final decisions can be more effective.**

The entity comprises nine members and an equal number of alternates: six representatives of the controlling shareholder, two of the minority shareholders (independent members) and one elected by the employees. The position of Chairman of the Board and Chief Executive Officer of the Company may not be accumulated by the same person as established in the Internal Charter of the Board of Directors. Term of office runs for two years with reelection permitted. The Board, effective at the end of 2022, took office on April 28 of the same year.

The minutes of all the meetings of the Board of Directors are available for consultation in the [Securities and Exchange Commission](#) and [Company websites](#).

- Non-permanent structure. Its installation is on an extraordinary basis, subject to publication of a call notice by the respective body to which it reports.
- Permanent structure
- Comprise the Executive Board
- Supervision

Management organizational chart (as at 12.31.2022)



² The chairman of the Board of Directors is not permitted to occupy any other position in the Company.

Characteristics and dynamic

The criteria adopted for consideration of a Director as independent adhere closely to the provisions in B3's Novo Mercado Charter, the final decision being taken by the General Shareholders' Meeting. Confirmation of classification is based on the analysis of a range of different situations – details shown [here](#) – in this Report – with the purpose of verifying if they imply loss of independence on the part of the nominated director due to the characteristics, magnitude and extent of the relationship.

In 2022, the members of the Board of Directors participated in special training, promoted by the IBGC. With the theme “Climate Change and the Role of the Board”, the training reinforced the relevance of the climate agenda and the body's responsibilities in managing the issue.

In 2022, the Board of Directors held 12 meetings, the average frequency of attendance of effective members being approximately 91%. **As in the case of previous years, the organ was evaluated on a collegiate basis together with an individual self-assessment by each member.** This process conducted annually is set forth in the [Performance Evaluation of Directors Policy](#) and is designed to contribute to the effectiveness of the organ as well as improving the Company's governance.

Similarly, with a focus on the continuous development of management, the directors regularly evaluate the degree of adherence of ENGIE Brasil Energia to the recommendations of the Brazilian Code of Corporate Governance, proposed by the IBGC. An annual report published [in the website](#), shows the results of this evaluation indicating the principles and practices set forth in the document and applied in management, justifying those principles and practices eventually not adopted.

The detailing of the main competences of the Company's directors can be found on page 151 of the [Attached Booklet](#).

Remuneration

The remuneration of the Board of Directors is designed to attract and retain professionals aligned to corporate guidelines, to the values and culture of the Company with a focus on the longevity of the businesses and on the creation of value. The amount and form of remuneration are the result of meticulous analysis, which includes labor market practices, the knowledge required for exercising the function, the complexity of the activities and the expected results.

The General Shareholders Meeting is responsible for approving the maximum value for directors' remuneration, representing the total of the following items:

Fixed remuneration (pro-labore)

Comprising 13 monthly installments, the objective of which is direct remuneration for services rendered, in line with market practices.

Variable remuneration

The Chairman of the Board of Directors receives a variable amount calculated on the basis of results achieved by the Company, considering the financial (EBIT, Free Cash Flow and General and Administrative Expenses) and operational indicators – among them, strategic ESG objectives (greenhouse gas emissions, occupational health and safety and gender diversity in the work force). This remuneration is linked directly to collective and individual performance, its aim being to reward the executive for results achieved, alignment to business guidelines, values, and culture of the Company. This remuneration is carried out annually via payroll.

Fiscal Council and Committees

For support and oversight of the management, the Company operates with advisory organs which maintain different lines of reporting, rendering support to decision makers in relation to specific areas. Such are:



Fiscal Council

Represents the shareholders through the oversight function, ensuring the Company's prosperity and continuity, and compliance with the legal and statutory duties within the principles of ethics, equity, and transparency.



Statutory Audit Committee

Statutory organ made up of three members – of which two are independent directors of the Company – their function to advise the Board of Directors, on an autonomous basis, evaluating the actions of the Management and fostering the adoption of best market practices in aspects relating to accounting issues, management of risks, ethical compliance, internal controls, and auditing.



Ethics Committee

Made up of members of the Executive Board and Managers, the Committee is responsible for ensuring compliance with corporate guidelines and execution of goals related to ethical conduct, instituting initiatives of sensitivity, awareness and promotion of good professional practices according to the Company's commitments.



Special Independent Committee for Valuation of Transactions with Related Parties

A committee of a non-permanent character, it is made up of between three and five members, in their majority, independent board members, when the analysis of any transaction between parties directly or indirectly related to ENGIE Brasil Energia is required. In this way, the Committee endeavors to guarantee that the transactions analyzed are conducted strictly under arm's length conditions, independently, through a transparent and secure process.



Paracatu Photovoltaic Complex

Executive Board

Nominated by the Board of Directors and elected by the General Meeting, the Executive Board is responsible for conducting the effective application of corporate strategy. Coordinated by the Chief Executive Officer, eight executive directors' areas worked on a collegiate basis in 2022, employing a matrix approach to themes involving the businesses. In the month of November, the Chief Administrative Officer's area was renamed the Chief People, Processes and Sustainability Officer's area. The change in nomenclature is designed to reflect more adequately the functions and responsibilities of the area which centralizes the management of people and culture, IT, supplies, social responsibility, communication, and the environment.



Nomenclature update

In November, the Administrative Office was renamed People, Processes and Sustainability Office.

Characterization and diversity of the Executive Board (as at 12.31.2022)

Executive	Role	Age range			Years in office	Training / Background	Sex
		Up to 50 years	From 51 to 59	Over 60 years			
Eduardo Antonio Gori Sattamini	Chief Executive and Investors Relation Officer		●		6	Economist	M
Gabriel Mann dos Santos	Chief Commercialization Officer	●			4	Mechanical Engineering	M
Guilherme Slovinski Ferrari	Chief New Business Officer	●			3	Mechanical Engineering	M
José Luiz Jansson Laydner	Chief Operation Officer			●	6	Mechanical Engineering	M
Luciana Moura Nabarrete	Chief People, Processes and Sustainability Officer	●			2	Data Processing / IT	F
Marcelo Cardoso Malta	Chief Financial Officer		●		3	Accounting	M
Márcio Daian Neves	Chief Implementation Officer	●			2	Electrical engineering	M
Marcos Keller Amboni	Chief Regulation and Market Officer	●			3	Electrical engineering	M
Synthesis		Average age: 51.5			Average: 3.6 years		12.5% women



Remuneration

With an annual ceiling approved by the General Shareholders Meeting, remuneration of the members of the Executive Board is distributed as follows:

Fixed remuneration (pro-labore)

Comprises 13.33 monthly installments, representing direct payment for services rendered. As added attractiveness to the package offered – aligned with market practices – in addition to fixed remuneration are benefits such as a health insurance plan (covering physical and mental aspects), food vouchers and life insurance.

Share-based remuneration

The direct controller of the Company, ENGIE Brasil Participações Ltda., offers a Long-Term Incentive Plan (ILP) linked to Phantom Shares and corporate indicators at the end of four years as well as Performance Shares and to the Group's Stock Option Policy.

Variable remuneration

With a combined value between bonus and participation in results, variable remuneration can oscillate between 40% and 90% of fixed annual remuneration in accordance with the position of the executive, their challenges and established targets – various of which are related to ESG aspects – see chart below. In this context, the executives are rewarded for the Company's results over the short and medium term. Payment is made in the first half of the year following the close of the preceding fiscal year based on collective and individual results.

Post-employment benefit

The Company is sponsor of a complementary retirement plan, Defined Contribution model, managed by Previn, in which benefits are supported by contributions from members and the sponsor. Also applicable to the remaining employees of the Company, this benefit offers an attractive long-term incentive.



Variable remuneration – Executive Board

The methodology applicable to short-term variable remuneration (annual) of the Executive Board, which includes the Chief Executive Officer (CEO), adopts the ENGIE Group methodology:

- **65% financial objectives** (EBIT, Free Cash Flow and General and Administrative Expenses).
- **15% ESG objectives** (extra-financial), in 3 themes of equal weighting: climate change, occupational health and safety and gender diversity.
- **20% individual** management targets.



A penalty of up to **20%** may be applied in the event of a:

- Significant decline in Occupational Health and Safety results.
- Non-compliance with the values of the Group with respect to Ethics and Compliance and/or inappropriate managerial behavior.



Thematic forums

As support for the Executive Board on themes of a transversal character, the Company runs thematic forums made up of a multi-disciplinary team which includes as well as the officers themselves, middle management, and technical professionals. In 2022, the active forums were:

- Energy Forum
- Risk Management Forum
- Tax Governance Forum
- Innovation Forum
- Human Performance Forum
- Processes Forum
- Products Forum
- Dam Safety Forum
- Industrial Control Systems Safety Forum
- Insurance Forum
- Sustainability Forum
- Energy Transmission Forum
- Financial Forum

Fundamental commitments

Ethics and integrity

[GRI 2-23; 2-26; 2-27; 205-1; 205-2; 205-3; 406-1]

[2030 Agenda Goals: 16.5; 16.6]

A fundamental value of ENGIE Brasil Energia and as part of its ethical commitment, since 2002 the Company has included an Ethics Committee in its organizational structure. Pursuing the best practices of corporate governance and Securities and Exchange Commission recommendations, this Committee reports directly to the Board of Directors, which is made cognizant of the Program's activities as well as incidents registered in the period through quarterly reports – also copied to the Statutory Audit Committee.

In addition, the Company has signed up to various organized movements for ethics such as the Business Pact for Integrity and Against Corruption, an initiative of the Ethos Institute which promotes the compliance of companies with integral market practices. In the same context, ENGIE Brasil Energia is one of the official

supporters of the Santa Catarina SDG Movement for contributing to the 2030 Agenda for Sustainable Development and contemplating ethical principles.

Among the main activities of the Ethics Committee in 2022 conducted within the scope of the Integrity Program, highlights were:

Special event

In commemoration of the Ethics Committee twentieth anniversary, an online event for employees from various regions of the country examined the development of the ethical concept and its intersection with themes such as diversity, equity, and inclusion. The high point of the programming was a talk from philosopher and writer Jamila Ribeiro, recognized for combating racial and gender discrimination.

Awareness campaigns

Over the year, several communication campaigns were run for internal audiences on moral and sexual harassment, Whistleblowing Channel, gifts, and hospitality, combatting corruption and appropriate conduct during election periods.

Ethical training

In addition to ethical integration, held for all employees joining the Company, obligatory modules are provided on the theme in the corporate learning platform – in 2022, involving more than 90% of the workforce. Additionally, for those groups of employees more exposed to ethical risks, specific training sessions were held for a more detailed examination of certain aspects. Worthy of note also is that five members of the Board of Directors also took part in the training – two of them receiving an additional two hours of training on corruption.

Revision of policies

In addition to the revision of the Gifts and Hospitality Policy, two new guidelines were approved: the Relationship with Government Officials Policy and Procedure for Handling Complaints. While the first provides guidance to employees as to the recommended conduct for interaction with public sector representatives, the second establishes modus operandi for handling complaints on ethical violations received for solution.

Monitoring of political exposure and compliance

In order to track political exposure and compliance of the members of Senior Management, the Ethics Committee monitors the integrity statement of the Company's fiscal councilors and Board directors.

ISO 37001 vigilance audit

As part of the certification process for ISO 37001 (Anti-Bribery Management Systems), the Company underwent a surveillance audit, in which no non-compliance with the standard was identified.

Further guidance on governance

-  Code of Ethics
-  Anticorruption Policy
-  Gifts and Hospitality Policy
-  Policy for Relations with Government Agents
-  Procedures for Handling Complaints
-  Counterparty Due Diligence





Ethics risk

The analysis of risk relative to ethics considers among the possible causes of risk, the emerging of influences not compatible to the best practices for business development due to pressure for obtaining satisfactory operational results combined with growing socio-environmental demands. Also, to be considered are risks relative to the decentralization of activities given the Company's footprint in different regions of Brazil as well as the national context – historically impacted by episodes of fraud and corruption.

Specifically in relation to corruption, potential risks are non-compliance, internally or aided by external collusion, with values and principles in the Code of Ethics – corruption, fraudulent use of the Company's property, interference in competitive processes, disrespect for human rights including working conditions and workplace relationships.

In the event that such situations should materialize, the potential effects include reputational impacts, significant financial loss, legal action and, in extreme cases, interruption of the business.

Dedicated Channel

In 2019, the Company instituted a [Whistleblowing Channel](#), accessible via website or telephone, to receive reports and manifestations related to ethical questions. **Managed by a specialized company, the Channel guarantees absolute confidentiality for all manifestations received with assurances of non-retaliation.**



Ethical communication channel - commitment to correct conduct

<https://www.canalintegro.com.br/EngieBrasilEng>
0800 580 2566

- Widely spread
- Assured anonymity
- Confidential verification
- No retaliation
- Exempt investigation
- Results reported to interested parties
- Sanctions for ethical violations

Once registered, all complaints are addressed to the Ethics Committee pursuant to the Policy for Treatment of Complaints, among other related procedures. The Committee is responsible for deciding whether each case should be investigated by an outside or inhouse agent. The principal aim of the investigations is to confirm the veracity and exactness of the facts reported in the body of the complaint as well as identifying other facts and circumstances relevant to the analysis of the case. Upon the conclusion of this stage, the Ethics Committee forwards its recommendations to the Officer of the related organization so that he/she can adopt the necessary measures based on internal standards and legal aspects.

With the termination of investigations, the Ethics Committee updates the complaints system so that the complainant is duly advised on the way the complaint has been handled. All information on the complaint (the registration of the initial manifestation, the report of the investigation, the Committee's minutes, and the conclusive decision) are stored in the system with data confidentiality and protection guaranteed.



Usina Hidrelétrica Salto Santiago

Additional details on procedure can be checked from the [Ethics Channel site](#), widely disseminated by the Company to various stakeholders, ensuring the channel is recognized as a reliable medium to receive and handle complaints. **In 2022, 92 complaints were received, of which 47% relate to potential ethical violations – the remaining complaints being deemed as inappropriate, complaints in duplicate or unrelated to matters under the Ethics Committee aegis.** One of the allegations judged as well-founded involved a case of discrimination and moral harassment - the complaint being handled appropriately. No cases of corruption were confirmed during the year.

Of the total received, 6.5% (six complaints) relate exclusively to suppliers without any direct involvement on the part of the Company. With these cases, the Committee submits the report to the representative indicated by the supplier – preferably having a structure suitable for handling the allegation similar to that of ENGIE -, accompanying the entire investigative process conducted by the company in question through to conclusion.



Compliance and internal controls

The INCOME Program, in place since 2006, systematized the Company’s internal controls based on the self-assessment technique. All areas – operational and administrative – have manpower trained to annually evaluate the appropriate processes and controls related to own activities.

Aligned to the ENGIE Group’s Internal Controls, in 2022, INCOME covered, 12 processes and 41 sub-processes, which are audited by an independent third party. The annual results of the Program are presented

to the Executive Directors, the Audit Committee and to the Board of Directors, these analyzing and validating the activities executed.

Any deviation identified in any of the established controls is quickly handled through action plans managed by the areas involved as well as the internal controls team. In 2022, the Program was certified for the 17th consecutive time with no registration of any notable faults which could cause significant losses to the Company.

ESG Commitment

ENGIE Brasil Energia acts in unison with the **ENGIE Group’s purpose: to accelerate the transition to a carbon-neutral society through reduced consumption of energy and through more sustainable solutions.** Shared with employees, shareholders, clients and other stakeholders, this purpose drives the Company’s ESG agenda, seeking to reconcile economic development and the positive impact on people and the planet – see the commitments, initiatives, and results in [🔗 chapters 4, 5 and 6.](#)

This principle is reflected in the [🔗 Sustainable Management Policy](#), updated in 2022, in which ENGIE Brasil Energia proposes to seek a continuous improvement in its performance through

an approach which considers the life cycle and circular economy; participation, consultation and engagement of interested parties; and compliance with the legislation and other voluntary commitments adopted.

The corporate guidelines related to sustainability support the transversal management of the theme divided into non-financial objectives of the ENGIE Group, to be achieved on a global scale by 2030. Adopted publicly in 2020, these objectives include aspects linked especially to the generation of renewable energy, the promotion of gender equity and the tackling of climate change, as shown in the following infographic.



2030 ENGIE Group's Non-Financial Objectives

Aspect	2022	2030
Aspect	Result until 2022	Goal 2030
Greenhouse Gas Emissions	60 MtCO ₂ e	To reduce by at least 43 MtCO₂e the total greenhouse gas emissions from the generation of the Group's electric energy – in 2017, this total was 106 MtCO₂e (goal certified by the Science Based Target – SBTi).
Diversity	30%	Expand the participation of women in the Group's management to 50% – in 2019, the percentage was 24% of all leadership positions.
Renewable energy	38%	Increase to 58% , the participation of renewable sources in the energy production capacity mix worldwide – against 28% reported in 2019.
Supply chain	38%	By 2030, reach 100% of the responsible purchasing index (excluding energy purchases) that involve socio-environmental assessments and including purchases; and by 2030, reach 100% of the 250 preferred suppliers certified by Science Based Targets (SBTi) commitments.
Water	0.301 m ³ /MWh	Reduction of 70% in the intensity rate (consumption/energy produced) of water consumption for industrial activities by 2030 – from 0.331m³/MWh in 2019 to 0.100m³/MWh in 2030.



To bolster [its commitment to tackling climate change](#), in 2022, the Company signed the **Action Declaration on Climate Policy Engagement** which outlines how industry leaders in the movement to decarbonize the economy will support ambitious action to close the “say-do” gap on countries’ emission reductions by:

- **Supporting climate action** aligned with the Paris Agreement when engaging with policymakers;
- **Working with major** industry/trade associations to advance alignment with the Paris Agreement;
- **Monitoring and disclosing** climate policy alignment for their companies and their major industry/trade associations.

The document was launched on November 8, during the 27th Conference of the Parties to the United Nations Convention on Climate Change (COP 27) held in Egypt. ENGIE was invited to sign the declaration by the Corporate Knights, being one of the components of the Corporate Knights’ Global 100 Most Sustainable Companies 2021 – a ranking which encompasses the 100 most sustainable companies in the world.

In line with these commitments, ENGIE Brasil Energia has been working with the leading entities in the electric energy sector, contributing to discussions and the formulation of public policies for combating climate change and on the implementation of a regulated carbon market as for example through the medium of the Carbon Market Working Group to the Electric Sector Environment Forum (FMASE) and the Brazilian Wind Energy Association (Abeeólica) as well as the Carbon Credits Working Party of the Accounting Pronouncements Committee. The latter comprises representatives from the Brazilian Association of Publicly Listed Companies (Abrasca), the Association of Capital Market Investors (AMEC), the National Development Bank (BNDES), the Central Bank of Brazil (Bacen), the Brazilian Securities and Exchange Commission (CVM), the Federal Accounting Council (CFC), the Independent Auditor Institute of Brazil (Ibracon) and the Brazilian Electric Energy Sector Accountants Association (Abracone).

2 Competitive Strategy

- » Driving the energy transition
- » Sustainable expansion
- » Commercialization and portfolio management
- » Innovation



Energy commercialization

Opening of the free energy market: potential for more than **100,000 NEW CUSTOMERES**

Portfolio diversification: **MORE THAN SECTORS SERVED 15**

Innovation

BRL 57 mi destined to **R&D Program**

BRL 16 mi on projects chosen by **ENGIE Brasil Energia**

107 initiatives registered in the Inove Program for internal innovation

Sustainable expansion

BRL 12 billion investments budgeted

Assú Sol Photovoltaic Complex - **752 MW**

Gavião Real Transmission System

Assuruá Wind Complex - **846 MW**

Santo Agostinho Wind Complex - **434 MW**

Novo Estado Transmission System

Driving the energy transition

[GRI 3-3]

[2030 Agenda Goals: 7.2; 13.2]

To generate and sell renewable energy, offer the necessary infrastructure for the offtake of this energy, and support the gradual substitution of fossil fuels in the country's energy matrix. Based on these three macro-objectives, **ENGIE Brasil Energia's business model contributes to accelerating the energy transition**, positioning the Company in different and synergetic segments in such a way as to make it increasingly more resilient to risks and prepared for the capture of opportunities resulting from the global movement towards decarbonization.

In this context, the Company structures its corporate strategy around three fundamental axes: expansion and diversification, commercial dynamism and portfolio management, and innovation and transition to net-zero carbon. Below, we present the coverage of each axis as well as information relative to the evolution of the results in relation to 2022.



Sector protagonism

The United Nations 27th Conference on Climate Change (COP 27) in November 2022 reaffirmed the urgent need for a drastic reduction in Greenhouse Gas Emissions (GHG), parallel to establishing goals for adapting to current risks caused by climate change. While the participating countries failed to assume more ambitious commitments for reducing emissions, the Conference reiterated its target of 1.5°C as the maximum limit for the increase in global temperatures by the end of this century compared with the pre-industrial ones.

A survey by scientists shortly before COP27 showed that countries had progressed substantially below what had been expected from national mitigatory plans. **This situation will require the decarbonization movement to be accelerated over the next few years in a drive that will principally involve entrepreneurial initiatives for expanding the use of renewable energy - thus imposing significant additional demands on electric energy players.**

The Sharm el-Sheikh Implementation Plan, the outcome of discussions at COP27, concludes that the global transformation to a low carbon economy will require investments of at least US\$ 4 to 6 trillion annually. **More than 50% of these resources would have to be used for the development of renewable energy sources as part of a package for reducing GHG emissions and to adapt to the impacts of climate change.**

In Brazil, compliance with nationwide targets – as part of its Nationally Determined Contribution (NDC) – is dependent on aggressive decarbonization in all sectors of the economy based on defined sectoral strategies. In this context, the electric sector has been playing a fundamental role since technologies considered as core to the transition are based on the generation of energy from renewable sources – an example being green hydrogen and seen as a promising alternative despite the associated technological challenges.



50%

of the resources contemplated for the transition would have to be allocated to the development of renewable energy sources.

Sustainable expansion

[GRI 3-3; 201-2]

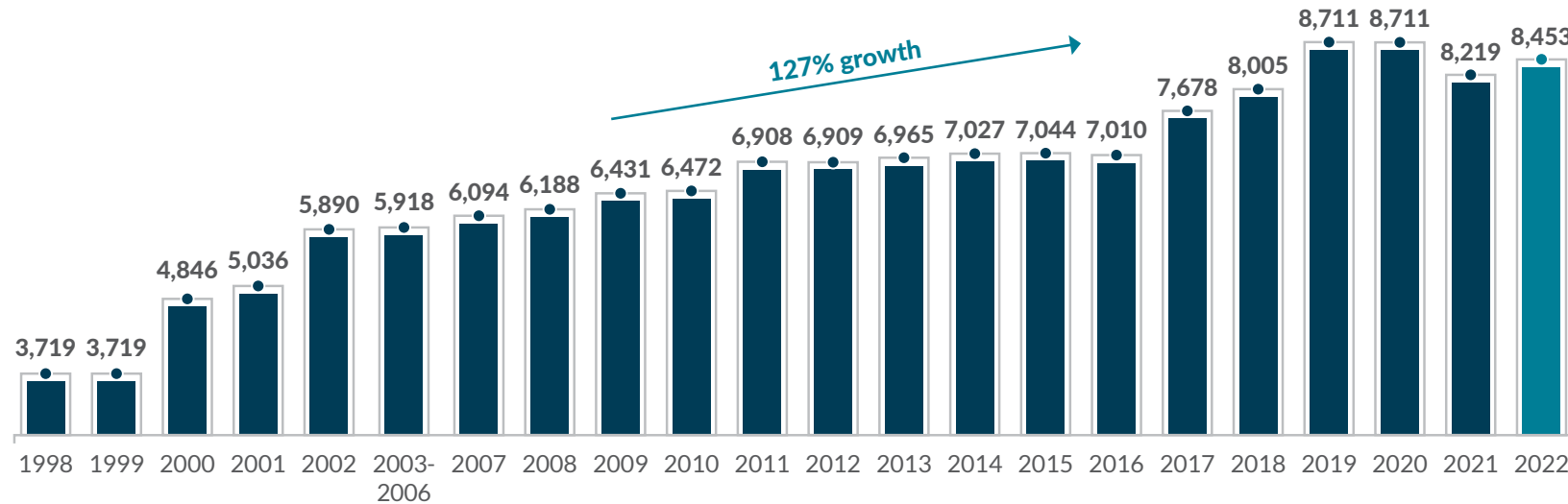
[SASB IF-EU-000.D]

[2030 Agenda Goal: 12.2]

To guarantee the assets are expanded in a sustainable manner with adequate risks and return, **ENGIE Brasil Energia uses criteria which are rigorously analyzed in the decision-making process for new investments such as economic, operational, and socio-environmental viability.** This practice has been

instrumental in the Company **growing securely** and consistently both through an enlarged capacity in renewable energy generation as well as entry into complementary segments as in the case of transmission and the transportation of natural gas.

Trend in proprietary installed capacity (in MW)

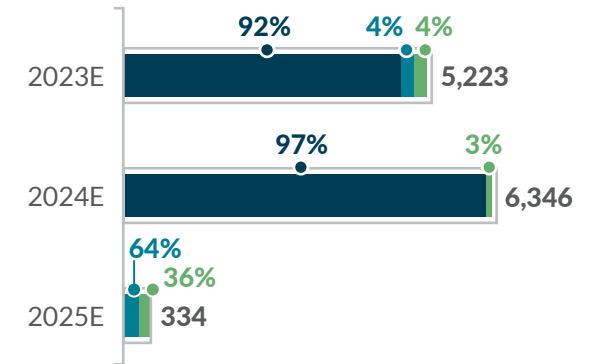


Overall, investments budgeted for the next few years in the projects shown below are close to

BRL 12 billion

Budgeted investments*

(BRL million; % of total)



- Renewable energy
- Energy transmission
- Maintenance and modernization

* Estimated

Expansion in generation



Santo Agostinho Wind Complex – Phase I

With a total installed capacity of 434 MW, which will be reached with the implementation of 70 Siemens Gamesa wind turbines at 6.2 MW each, the first phase of the complex will be located in the municipalities of Lajes and Pedro Avelino, about 120 km from the city of Natal, the capital of the state of Rio Grande do Norte. This phase will require BRL 2.3 billion in investment (as of December 2020) and generate more than one thousand direct jobs in the region. Project feasibility was assured by energy sales to free-market customers.

At the end of 2022, overall completion of the work had reached 32.5% while progress in BoP (Balance of Plant, that is, the entire scope of the project excluding the wind turbines) work had reached 98.5%. Together with the issue of the necessary operational licenses, the collector/ elevator substation, the 500kV transmission line and the connection bay at the Monte Verde Substation, have been concluded and energized.

The wind turbines supplied by Siemens Gamesa continue to be manufactured, 31% of the metallic towers having already been received on site together with 13% of the nacelles. Subsequent to the period covered by this Report, the first generator unit went into commercial operations in March 2023 with gradual ramp up to full operations expected by the end of the same year.

BRL 2.3 billion should be invested in the first phase of the project, generating around 1,000 direct jobs in the region.





Serra do Assuruá Wind Complex

Comprising 24 wind farms, to be installed in a single phase in the municipality of Gentio do Ouro, state of Bahia, the project's authorization grant has been issued by Aneel, the complex to have an estimated installed capacity of 846 MW. **Energy generated will be entirely directed to the Free Contracting Environment, the wind complex also able to meet demand from clients in the energy self-production market.** The estimated investment is approximately BRL 6 billion with the creation of around 3,000 direct and indirect jobs in the region.

The project already has an issued access opinion and a signed agreement for hook-up to the grid, regulatory authorization issued by Aneel, surface usage rights agreements signed, and wind data raised. The issue of environmental licensing for installation is scheduled for early 2023, allowing a start to be made on construction with gradual entry into commercial operations to begin as from the second half of 2024.

The project will require an investment of around BRL 6 billion and should start operating in 2024.

All the necessary agreements for the installation of the project have been signed, including those for the supply and assembly of the wind turbines, civil construction work, substation and internal networks and the transmission line. **In December 2022, a financing agreement - worth BRL 1,5 billion - for financing the project was signed with the National Bank for Economic and Social Development (BNDES).**



Assú Sol Photovoltaic Complex

The project is located in the municipality of Assú (RN) and is to have an installed capacity of approximately 752 MW and an estimated commercial capacity of 234 average MW. With energy entirely to be fed into the Free Contracting Environment, the project was acquired in December 2021 at an advanced stage of development, with Preliminary License and land use agreements already

signed. **At an investment worth approximately BRL 3.3 billion, full operations are expected to start by the second half of 2025.** The contract for Use of the Transmission System (CUST) was signed in November 2022. The Company is currently at the phase of contracting the main supplies and services with construction forecasted to begin in the second quarter 2023.



Jirau Energia

Energia Sustentável do Brasil S.A. (Jirau Energia) is responsible for the maintenance, operation and sale of energy generated by the Jirau Hydroelectric Power Plant, located on the Madeira River in the city of Porto Velho, state of Rondônia.

ENGIE Brasil Participações Ltda., ENGIE Brasil Energia's parent company, was awaiting more favorable conditions to resume the economic-financial study for the preparation of a proposal for the transfer to ENGIE Brasil Energia

of the ENGIE Brasil Participações stake of 40% in Energia Sustentável do Brasil- and the 100% participation in Geramamoré Participações e Comercializadora de Energia Ltda. – a transaction that will be assessed, in due course, by the Special Independent Committee for the Valuation of Transactions with Related Parties.

In 2022, the power plant generated 1,601.4 average MW, 15.6% lower than the 1,898.5 average MW in 2021, with an FID (uptime factor) of 99.1%.

Expansion in transmission



Gavião Real Transmission System

On June 30, 2022, the Company placed the winning bid for Block 7, (later named as Gavião Real Transmission System), of the Aneel Transmission Auction 01/2022. This involves the expansion of the Itacaiúnas Substation with the implementation of two 230/138kV transformers and a new 138kV switchyard for supplying the energy distribution network in the state of Pará. **The operation, located in the same region, will be integrated into the Novo Estado Transmission System, thus capturing inter-project synergies.** The agreement for the public service concession including licensing, construction and operation and maintenance of the transmission line is for a period of 30 years as from the signature date of the concession agreement, occurred on September 30, 2022. The agreements for the supply of equipment and construction of the project have already been signed with WEG and Abengoa, respectively.

The cut-off date for the transmission line to become operational is March 30, 2026, although ENGIE visualizes anticipating this term by at least 24 months. The Company also estimates an approximate 30% reduction in capex compared to Aneel's estimated investment for the project.

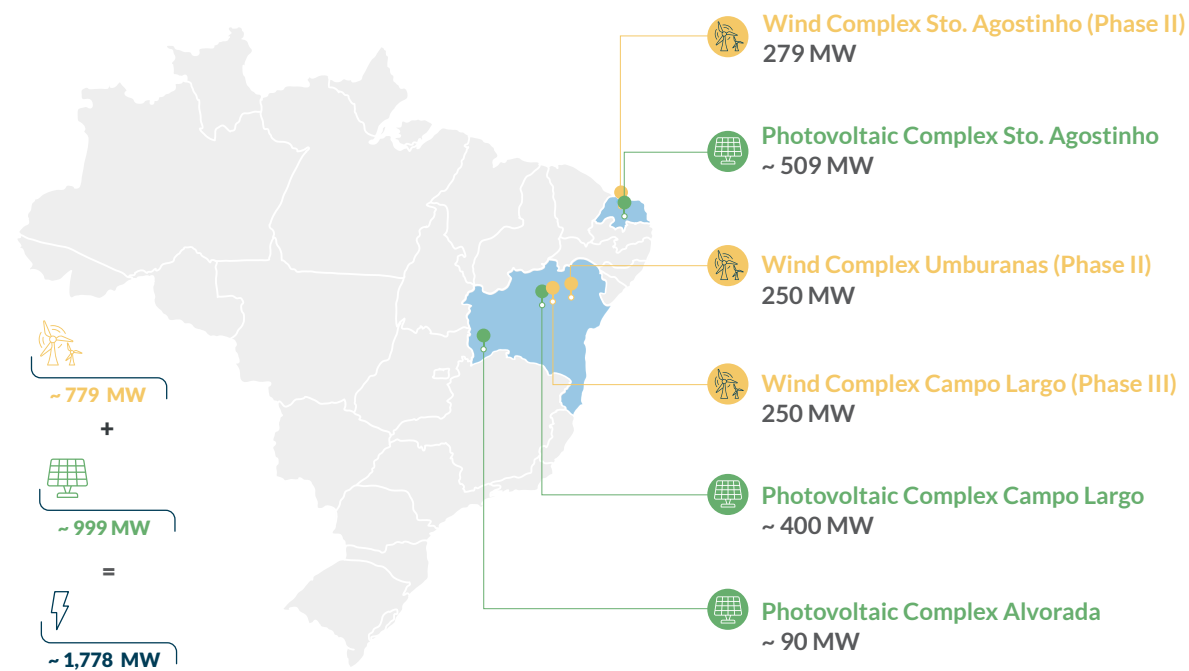
By the end of 2022, good progress had been made in the development and delivery of the transmission system's basic project to Aneel in addition to the definition of the main project's equipment characteristics. The application for the installation license was also filed and environmental technical inspections were carried out in readiness to obtain the necessary licenses for project implementation during the first quarter of 2023.

Projects under development

ENGIE Brasil Energia maintains various projects at a development stage where studies are already advanced. Depending on their feasibility, these projects may or may not be implemented over the coming years. **In the development pipeline are photovoltaic plants and**

wind complexes potentially adding nearly 1.8 GW to the generator park –, in addition to energy transmission systems. In this context, the Company evaluates both greenfield projects and also the acquisition of projects already in operation.

Projects under development - generation (at as 12.31.2022)



Commercialization and portfolio management

Energy in the Regulated Contracting Environment (ACR) accounts for an important part of the Company's sales, for attending expected demand of the auctions regularly organized by Aneel. On another front, ENGIE operated in the Free Contracting Environment (ACL), through agreements signed with companies, either consumers or traders. In 2022, this segment was subject to an important landmark decision for expansion of access over the short-term: **Normative Ordinance 50 of September 27 granted the right of migration to the ACL of all high voltage electric energy consumers (as from January 1, 2024).**

The change will allow an additional group of about 100 thousand consumers to enjoy the advantages of the free contracting environment such as flexibility of contracting, predictability, and cost reductions. In 2022, the Free Energy Market accounted for 38% of Brazilian electric energy consumption serving nearly 30 thousand consumers. **With this market liberalization set for 2024, the ACL could poten-**

tially account for as much as 48% of national electric energy consumption according to a study by the Brazilian Energy Traders Association (Abraceel).

In line with the outlook for expansion in ACL – which has already been reporting growth in consumer numbers in the last few years – for this environment ENGIE Brasil Energia adopts a commercialization strategy which combines portfolio management and commercial dynamism. Portfolio management is a tool for minimizing the risk of short-term exposure, thus avoiding payment of high prices for energy when there is a deficit in hydropower generation.

The Company's commercial dynamism permits the offer of competitive conditions over the short- and long-term. With its advantage as a private and global agent, ENGIE Brasil Energia's experience in the Free Contracting Environment – where it was one of the pioneers – assures agility in the identification of market demands as well as the capture of opportunities.

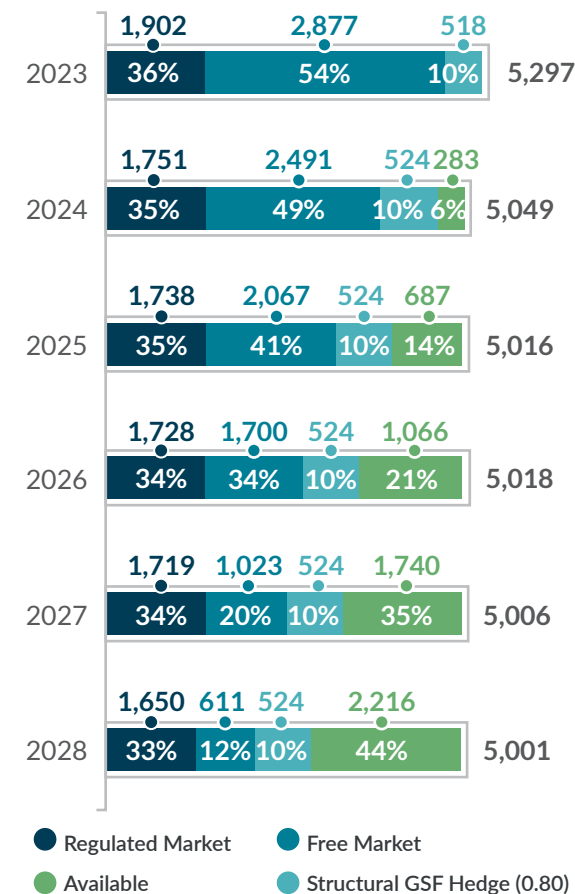
In addition, we have applied a commercial dynamic which is driven by diversification of the portfolio, composed of customers of different sizes and sectors in order to compensate the impacts of negative scenarios in certain segments and in this way reduce the excessive risks of sectorial exposure.

In 2022, the share of free consumers in the Company's portfolio (except for CCEE and other revenues) represented 41.0% of the physical sales, an increase of 0.2 p.p., and 37.4% of net operating revenue, 0.4 p.p. lower than 2021.

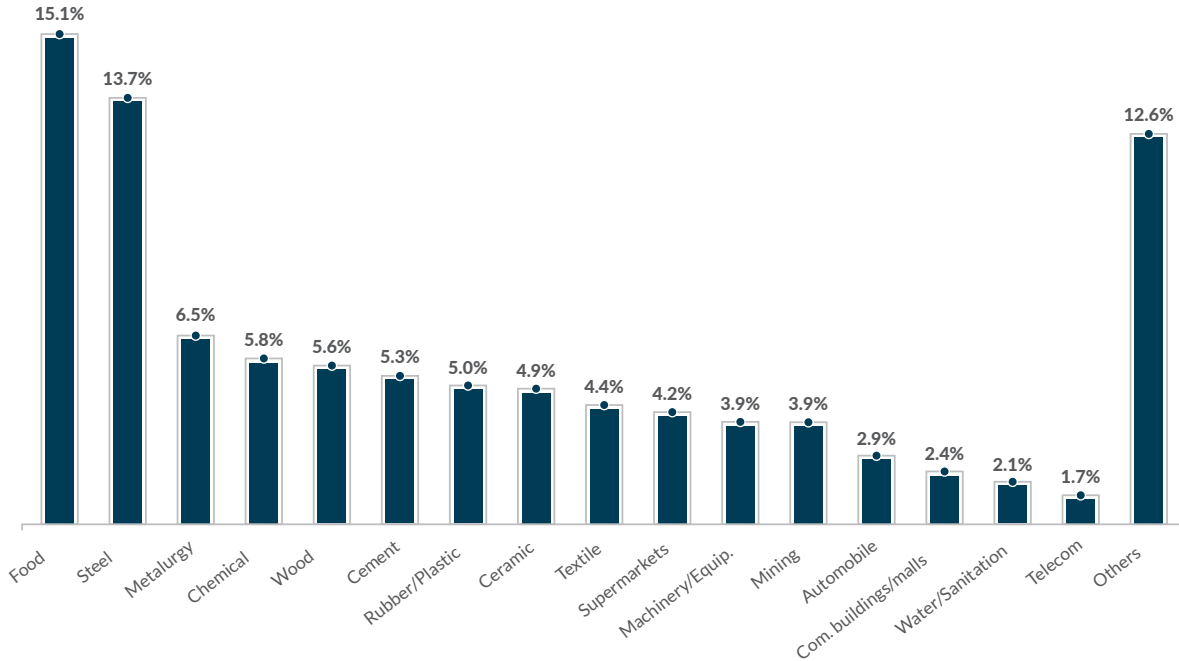
The new regulation will allow, as of 2024, a group of more than 100 thousand consumers to enjoy the advantages of the free contracting environment, a milestone for the sector.

Energy balance

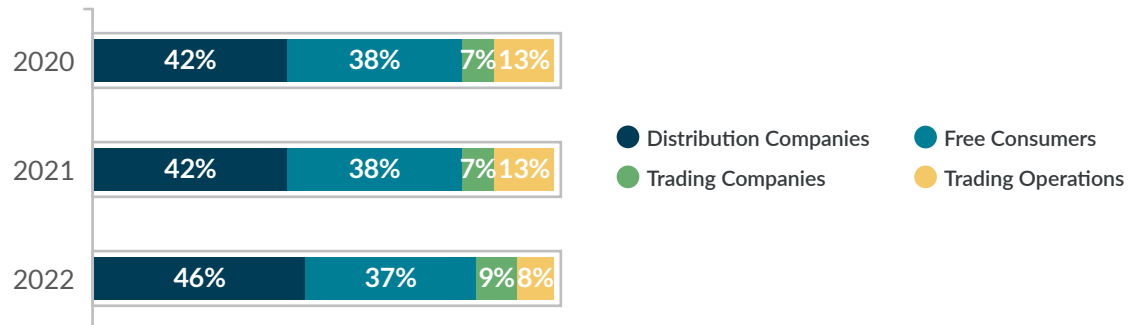
(% of total; average MW)



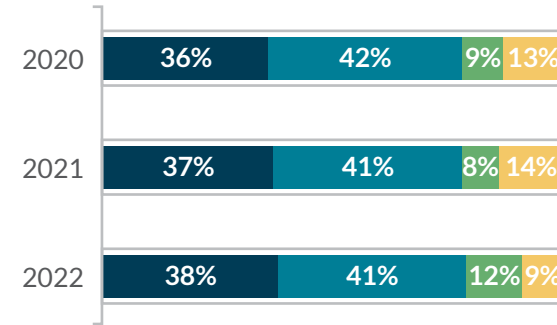
Diversification of the customer portfolio (as at 12.31.2022)



Breakdown of customers in contracted sales by net operating revenue from the generation segment (%)



Breakdown of customers by physical sales (%)



Focus on customers

Already prepared for gains in scale with the opening of the Free Market, in the last few years, the Company has been making consistent investments in its commercial structure, focusing on the continuous improvement of the customer experience.

In this context, the offer of innovative digital solutions has been a major ally. Particular mention should be made of the Energy Place, a platform for short- and long-term energy purchases extended to all ACL agents on a 100% digital basis in the form of an energy e-commerce.

In addition, it acts as a digital relationship and service channel, enabling direct interaction of the client with the specialists at ENGIE Brasil Energia. The Energy Place provides managers and consumers with relevant information for the management of contracts: consumption records, data segmented by consumer units and financial guarantees, among others.

The development of solutions for smaller companies is also part of the Company's preparation to expand in this market. An example is E-conomize, established to facilitate the migration of small- and medium- size companies (with consumption of up to 1 MWh) from the captive to the free market, providing among other advantages, the acquisition of energy based on renewable sources.

In support of ACL client decarbonization, ENGIE offers complementary solutions such as carbon credits, certificates of electric energy consumption from renewable sources (I-RECs) or special contracts for guaranteeing emission-free electricity (ENGIE-REC) and used to reduce or compensate/offset customer Greenhouse Gas emissions (GHG).

Innovation

[GRI 3-3; G4 EU8]

[2030 Agenda Goals: 8.3; 9.4; 9.5]

For ENGIE Brasil Energia, innovation represents a critical competitive factor, driving the search for solutions for the challenges inherent to the businesses and to the sustainable development of society. In 2022, the Company updated its strategy on the theme, focusing on the application and development of technology with the focus on the operational performance of the assets as well as the continuous improvement in socio-environmental performance and government.

In 2022, the Company updated its strategy on the theme, focusing on the application and development of technology with the focus on the operational performance of the assets.

Internally, the management of innovation is conducted on two fronts:

- **Innovation Forum:** responsible for the strategic planning of innovation including the definition of the investment priorities in strategic Research, Development, and Innovation projects (RD&I);
- **Tactical Innovation Area:** has the function of approving investments in incremental innovation and monitoring the innovation contexts, including new technologies, market information, potential clients, and regulatory updates.

One of the most important mechanisms for the practice of innovation in the Company is Aneel's Research and Development Program (R&D), executed through partnerships with companies, universities, and research institutions, fostering the open innovation model. The program adheres to the dictates of Law 9.991/2000, whereby 1% of annual net operating revenue must be allocated by companies in the electric energy sector to RD&I activities.

In 2022, we allocated more than BRL 57.0 million to the program as follows:

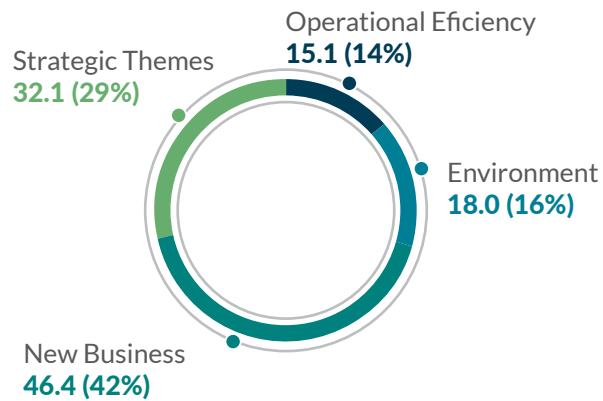
- **BRL 22.8 million** to the National Technological and Scientific Development Fund (FNDCT);
- **BRL 11.4 million** to the Ministry of Mines and Energy for supporting EPE costs;
- **BRL 6.8 million** to the Energy Development Account (CDE) for supporting tariff modicity;
- **BRL 16.0 million** to be injected into projects by ENGIE Brasil Energia.



The project portfolio in 2022 totaled 14 projects, with investments that amounted to BRL 111.7 million excluding costs relating to the management of the programs. The following graph gives an overview of investments in the Program according to the focal areas of research.

Total investments in ongoing projects until 2022

(BRL million; % of total)



The project portfolio in 2022 included 14 projects, with investments that amounted to BRL 111.7 million.

Among the projects underway, of particular note are:

- Valorization of hydropower plant services and commercial propositions:** This R&D project endeavors to quantify the volume of services rendered by the hydropower plants operated by the Company, valorizing them adequately. Among the aspects researched are safety, stability, and quality of electric power supply.
- Oil leakage barrier:** reinforcing the commitment to innovation with sustainability and the elimination of the environmental impact of our processes, in 2022, we developed a sustainable protection barrier reinforcing the safety system of our hydropower plants against oil leakage.



In 2022, the Company added:

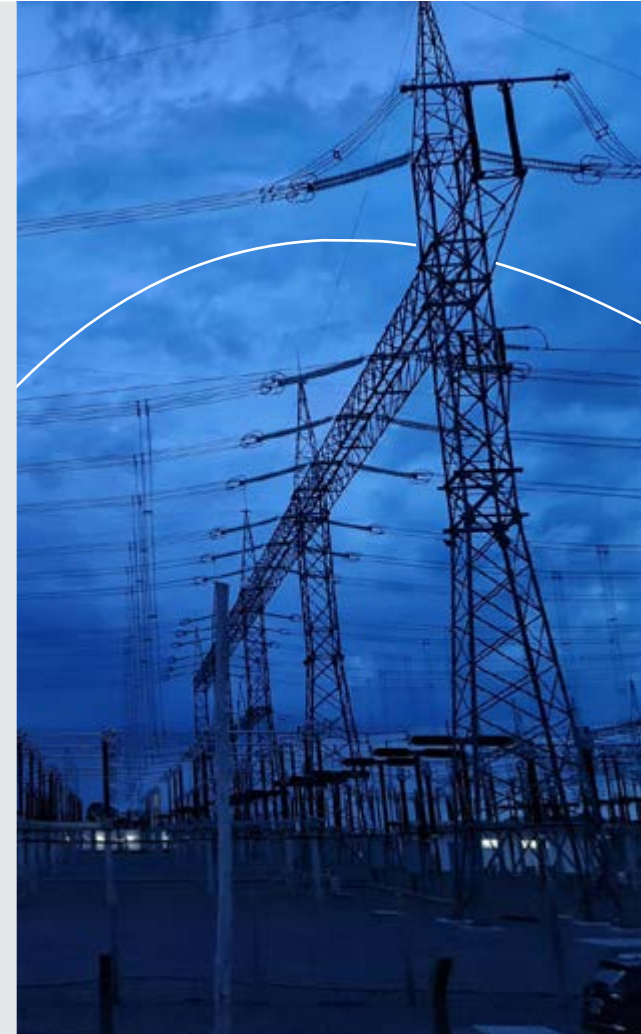
6 new research institutions as partners

4 new startup partners

7 projects under development in 7 Brazilian states

Invention Patent

In June 2022, ENGIE Brasil Energia in conjunction with Power Optics, successfully registered the patent for the “Optical Current Transformer with Redundant Measurement and Temperature Compensation Hybrid Circuit” (TECO-MR). The equipment expands the reliability of transformers in energy substations, also bringing benefits in terms of economy, metrology as well as safety when compared to conventional analogic models.





Innovative culture

Internally, the Company invests in initiatives of intrapreneurship, the highlight being Inove, a program which encourages innovative suggestions from employees for operational and processual improvements, including the use of new technologies and the development of projects related to ESG aspects. The culture of innovation was also strengthened through actions which extend to units of several regions of the country – including the training of 140 employees in technical aspects related to the theme.



Innovation Hub

Since the processes of innovation are continuous and transversal, covering all areas of the Company, a virtual space was created dedicated to concentrating information relative to projects, actions, and activities of an innovative nature. As well as disclosing information on the theme in the internal context, the so-called Innovation Hub disseminates extra-Company news and promotes training executed through the RD&I ecosystems.



INOVE IN NUMBERS 2022

69 employees directly involved

107 registered initiatives

BRL 5.4 million
in investments

BRL 66.5 million
of estimated return and/or avoided costs

Integration to the ecosystem

ENGIE Brasil Energia is part of Link Lab, an Associação Catarinense de Tecnologia (Acate) program which connects large and small companies, facilitating the timely contracting of services and solutions of the ecosystem startups throughout Brazil. The program permits the implementation of projects of short duration and low cost, developing Proof of Concept – POC – which, if validated, can develop into solutions for application in the businesses.

3 Risks and Opportunities

- » Mapping and control
- » Monitored Risks

Assu V Photovoltaic Plant



Specific policy guides
IDENTIFICATION, MONITORING AND MITIGATION OF RISKS

Evolution of the
RISKS AND OPPORTUNITIES MATRIX is monitored by the Board of Directors



12

RISK GROUPS
mapped and mitigated

Include



INFORMATION SECURITY



CLIMATE RISK

Mapping and control

[GRI 2-12; 3-3; 418-1]

[SASB IF-EU-550A.1]

[2030 Agenda Goals: 16.6; 16.7]

Risk analysis is a permanent exercise at the Company involving in addition to directors and executive officers, also employees, especially those dedicated to management functions. The Risks Management Forum, transversal and multidisciplinary, contributes to the reinforcing of this dynamic. Underlying the analysis is the [Opportunities and Risks Management Policy](#), approved by the Board of Directors, and encompassing the identification and classification of the risks in terms of probability of occurrence and significance relative to financial, strategic, and operational impact as well as mitigatory actions.

This evaluation is undertaken on a systematic basis, permeating all the activities, orientated by three main objectives:

- **Creation and maintenance** of results and reputation;

- **Encouraging** a given level of exposure to risk, deemed reasonable in relation to legal, economic, and socio-environmental aspects; and
- **Assurance** of compliance of the actions with legal and regulatory obligations, as well as in relation to the values of ENGIE Brasil Energia.

The results of this analysis are recorded in the **Corporate Opportunities and Risks Matrix**, an internal document which provides guidance for the activities of the Company, approved by the Executive Board and monitored by the Board of Directors with the support of the Statutory Audit Committee.

Since 2021, the activities of the second line of defense are concentrated in a single area, the Governance, Risks and Controls Managerial Unit, which among other functions, is now responsible for the preparation of the Matrix.

For every cycle, the Internal Audit Unit uses the results shown in the Risks Matrix as guidance in preparing the Internal Audit's Annual Plan (PAAI), verifying the efficiency and efficacy of the mitigatory plans and other relevant aspects for the continuous improvement of the management.



Salto Osório Hydroelectric Plant

Monitored risks

The main risks monitored by the Company are presented below, highlighting some of the mechanisms used to identify, assess and manage them.



Ethical risk and compliance

Synthesis:

Non-compliance, internally or through external collusion, with values and principles of the Code of Ethics: corruption, fraudulent use of the Company's property, interference in competitive processes, disrespect for human rights, including labor conditions and relationships in the workplace. Non-compliance with the norms and regulations applicable to the Company's activities.

Impacts in the event that risk should become reality:

Potential losses relating to reputation, final results and to the discontinuation of the Company's operations.

Means of mitigation:

- Ethics Committee Actions;
- Structured training program and awareness campaign focusing on questions of ethics and compliance;
- Regular audits and annual compliance tests in the Ethics Principles Compliance Process of the Internal Controls Program (INCOME);
- The presence of an external confidential channel for lodging complaints, available to both internal and external stakeholders, 24 hours a day.

Performance metrics:

- Number of justified complaints in the Whistleblowing Channel.
- Total training hours offered on the theme.



Taxation risk

Synthesis:

Eventual change in the tax legislation which impacts the business plan of projects in development.

Impacts in the event that risk should become reality:

Financial impacts due to losses of processes in the judicial or administrative spheres.

Means of mitigation:

- The Company provides an exclusive area dedicated to the systematic monitoring of proposals or effective changes in the tax legislation (potentially affecting its activities), be it on a corporate basis or through representative entities;

- Adoption of a "restoration of economic-financial equilibrium" clause in agreements with clients, permitting the revisiting of prices in the event of a change and increase in tax costs, the result of a legally sanctioned alteration or a new law.

Performance metric:

- Variations in relation to financial base case.



Regulatory and country risk

Synthesis:

Adverse evolution in the regulation of the electric or energy sector.

Impacts in the event that risk should become a reality:

Principally due to changes in market design, altering modalities, the terms or conditions of the existing power purchasing agreements, levels of production, sectorial charges or the relationship between sector agents with temporary or permanent financial impacts.

Means of mitigation:

- Active participation in debates on changes in the sector's regulations, through representative entities, combined with a strategic process that allows the Company to anticipate any changes;
- Reduction in the credit position on the CCEE, mitigating credit risk;
- In relation to regulation of the carbon

market in Brazil, the Company operates in a proactive manner in discussions with the entities involved in the construction of a model which expands the opportunities of the electric energy sector, positioning ENGIE Brasil Energia as an important player in the offer of solutions such as [carbon credits, I-RECs and ENGIE-RECs](#).

Performance metric:

- Variation in relation to financial base case.



Market risk

Synthesis:

The offer of and demand for electric energy may react differently from forecast.

Impacts in the event that risk should become a reality:

Impact on energy volumes and prices, with a consequent impact on results.

Means of mitigation:

- Permanent control of the portfolio, with maintenance and continuous management of the strategic energy reserve [\(see page 41\)](#).
- Credit policy;
- Inclusion of flexibility clauses in energy sales agreements.

Performance metric:

- Exposure limits.



Commercial counterparty risk

Synthesis:

Linked to the liquidity of the players with which the Company has commercial relations and to market conditions, principally the short-term market (spot), where price volatility can lead to insolvency of some agents, preventing them from honoring their commitments.

Impacts in the event that risk should become a reality:

Impacts on the commercial portfolio with consequent exposure to market prices for repurchasing to honor commitments with a direct impact on costs.

Means of mitigation:

- Daily management of the operations and realizing what is determined in the credit and counterparty policies in relation to exposure and guarantees.

Performance metric:

- Exposure limit and diversification of energy customers and suppliers.



Operationality of the strategy risk

Synthesis:

Difficulty in operationalizing the new strategic positioning of the ENGIE Group (accelerating the transition to a carbon neutral economy; accelerated growth in renewables and infrastructure).

Impacts in the event that risk should become a reality:

Reduced competitiveness and negative impact on results and the valuation of the Company.

Means of mitigation:

- Clear communication with respect to the developments in the decarbonization strategy;
- Planning and management of changes;
- Development and improved actions and initiatives for attracting, retention and engagement of professionals;
- Strategic plan for digital transformation projects;
- Strategic Plan for business transformation projects.

Performance metrics:

- Financial indicators and monitoring of Strategic Plans for business and digital transformation (planning and management of change).

Implementation of projects risk

Synthesis:

Occurrence of events in the development or in the implementation of projects which may result in a delay in construction schedule, additional implementation costs, conflicts with stakeholders and inefficiencies in the operation of the project.

Impacts in the event that risk should become a reality:

Non-compliance with commercial contracts, exposing the Company to the need to restore gaps in the portfolio (in the case of generation) or payment of a penalty fee in the case of transmission – both with temporary financial impacts.

Means of mitigation:

- Action of teams qualified and experienced in the implementation of projects;
- Management of agreements together with contractors and other suppliers involved, including technical, financial, environmental, and social questions, always on the basis of permanent dialog with all interested parties;
- Maintenance of an optimum level of uncontracted energy in the portfolio to honor eventual commitments, reducing exposure to the short-term energy market.

Performance metrics:

- Variation in relation to the Business Plan (date of entry into operation, investment, among other installation indicators).
- Occupational Health and Safety indicators.



Industrial safety

Synthesis:

Composed of various factors such as the integrity of the assets; personal, patrimonial, and corporate safety; socio-environmental aspects – considering all the possible impacts caused by the Company’s operational activities; industrial control systems; occupational [health and safety](#).

Impacts in the event that risk should become a reality:

The occurrence of these factors may have an impact on the Company both in the financial and reputational areas.

Means of mitigation:

- Constant monitoring of the Company’s operational activities with the adoption of best practices and Integrated Management System (SIG) certification as per NBR ISO 9001 (Quality); 14001 (Environment) and 45000 (Occupational Health and Safety) norms;

- Contracting asset insurance, covering loss on profits, operational risk, energy deficit, civil liability related to damages to third parties and the environment;
- Emergency Attendance Plans covered in the Integrated Management System of each plant, including the realization of periodic simulations of anticipated identified emergency scenarios;
- Dam Safety Plan and permanent action on the part of the Dam Monitoring Committee;
- Application, communication and monitoring of legal obligations and the guidelines of the Company relating to occupational health and safety [\(see page 66\)](#);
- Normative procedures that determine criteria for assessing supplier performance and adjustment to occupational health and safety at the Company;
- Definition and implementation of the requirements of the Data Security Policy;
- Adoption of an Industrial Control Systems Safety Program;

- Monitoring and assessment of environmental risks;
- Assessment of climate vulnerability and resilience and definition of adaptation plans.

Performance indicators:

- Socio-environmental and operational performance indicators, such as uptime factor, capacity factor, frequency and severity of accidents, among others.





Cyber security risk

Synthesis:

Lack or failure of planning, management, monitoring or of the security of Information Technology and Communication (TIC), Automation Technology (TA) and the Internet of Things (IoT).

Impacts in the event that risk should become a reality:

Potential loss to the continuity of the operations, negatively impacting the results and image of the Company.

Means of mitigation:

- Deciding policies, management processes, controls and awareness of the employees on the correct use of digital technologies.

Performance metrics:

- Technical indicators of safety and performance.



Privacy of Personal Data

Synthesis:

Absence or fault in planning, management or security of personal information which could lead to improper disclosure.

Impacts in the event that risk should become a reality:

In addition to the impact on the reputation of the Company, there may be implications in terms of fines and penalties in the legal sphere.

Means of mitigation:

- Use of a specific program for management of requirements under the General Data Protection Law (LGPD).

Performance metric:

- Number of occasions of leakages of personal data.



Data security

ENGIE Brasil Energia’s Data Protection Law covers the main actions, assumptions, and coverage (business assets and industrial systems), as well as the associated governance structure. This governance includes the activities of the Industrial Control Systems Security Forum as well as organs related to the area in ENGIE Brasil Energia and the ENGIE Group, their purpose to maintain alignment of guidelines and practices.

Digital security risks are evaluated periodically through systemic analyses and verification, which generate action plans, an integral part of Enterprise Risk Management (ERM) – periodically monitored and reported to the Board of Directors in addition to corporate goals. In this way, technical/operational risks are managed through several specialized tools which verify the

virtual environment for threats in conjunction with those dedicated to digital security (firewalls, antimalware, and vulnerability scans, among others).

In 2022, ENGIE Brasil Energia also invests in the development and contracting of a local Security Operations Center (SOC) for improving the visibility of technological risks in the digital business environment (IT) and industrial automation/operation (TO), with the acquisition of specific services and systems for the management of technological risks in industrial environments.

As a result of the Company’s efforts, in 2022, no cases of data violation were recorded, or complaints received from the regulatory organs on data security issues.

Operational safety – area of influence of hydropower plants

The operational safety activities involve the efficient management of risks and common emergencies relative to natural floods and adverse events. With a view to building a preventionist culture, ENGIE and the Itá, Machadinho and Estreito consortia operate jointly with the Civil Defense areas of the communities where the projects have an influence, operationalizing actions in accordance with the National Protection and Civil Defense Policy– PNPDEC (Law 12.608/2012) and the National Dam Safety Policy (laws 12.334/2010 and 14.066/2020).

During the Covid-19 pandemic in 2022, the Company consolidated its strategies, established a communication plan, contracted services, and the institutional coordination with Municipal and State Civil Defenses. With the aim of establishing the area of risk subject to flooding and the existing buildings in the Self-Rescue Zone and adjacent areas, aerial surveys of 20.8 hectares in a 10-kilometer radius downstream from each operation were executed using drones.

Subsequently in 2022, in partnership with the Municipal Civil Defenses, the Company undertook a population census of the areas in question with 8518 registrations involving 24,010 people based on the geo-processed aerial surveys and identified edifications. In the final quarter of 2022, ENGIE began the installation of alarm systems at the Itá, Machadinho and Passo Fundo hydropower plants, these systems to be extended to the remaining assets during 2023.



8,518

edifications were identified following aerial surveys during 2022.

4 Our Team

- » Employee profile
- » Remuneration and benefits
- » Diversity, equity, and inclusion
- » Professional development
- » Occupational health, safety, and well-being



1,215 EMPLOYEES

+ 1.2% in comparison with 2021

24.4% of women > + 2.3 p.p in comparison with 2021

Trainee program for female engineers
2,858 candidates | 13 selected

92% of attendance on organizational climate survey > 95% would recommend ENGIE as a good place to work

66.6 THOUSAND HOURS dedicated to training

+ 11% in relation to 2021

1,591 hours of training in Human Rights (78.8% of employees trained)

ZERO fatal or severe work accident recorded in the year

Employee profile

[GRI 2-7; 2-8; 2-30; 401-1]

[2030 Agenda Goal: 8.5]

Aware that its human capital constitutes the base for the remaining competitive differentials, **ENGIE Brasil Energia endeavors to build and maintain a secure, respectful, and inclusive workplace environment, offering to all, opportunities for realizing their potential and in this way, prosper.** At the end of 2022, the Company's workforce was made up of 1,215³ direct employees – virtually stable in relation to 2021 –, the majority concentrated to the South Region of the country (see charts below). This data includes those members of the Company's headcount working in assets in which ENGIE Brasil Energia holds 100% control.

³ All have full time employment and 95.2% were contracted for an indeterminant period – 58 have temporary contracts.

⁴ During the course of the year, the average number of apprentices hired was 10.5.

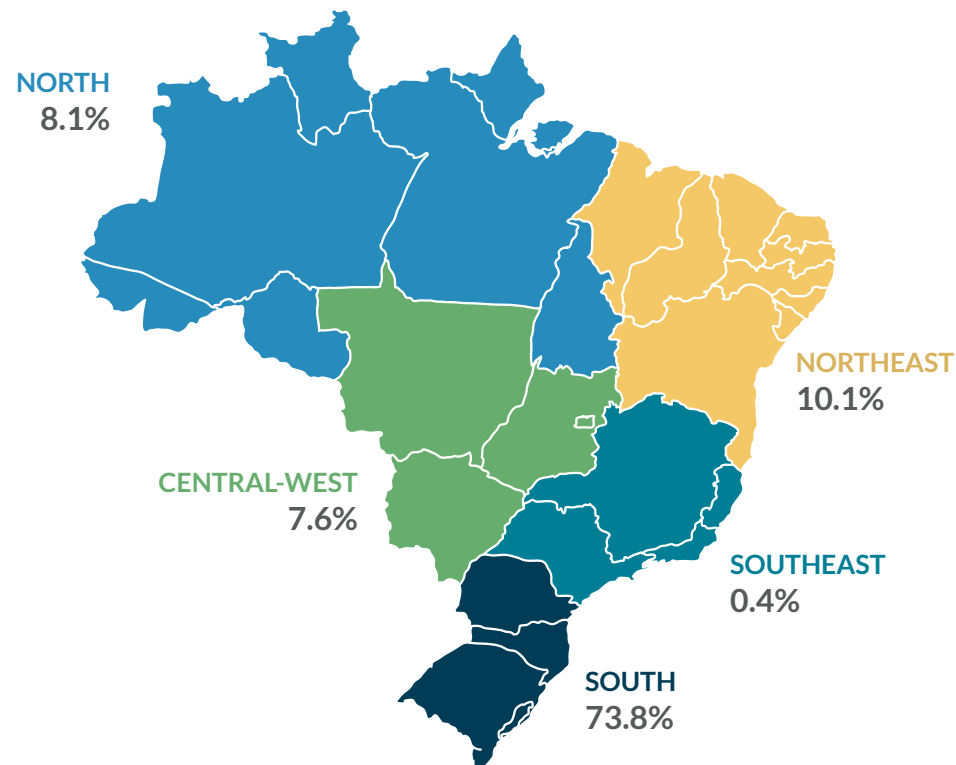
In addition to this group, a further 224 are employed at jointly-owned subsidiaries – 189 at TAG, 31, Companhia Energética Estreito and four, Itá Energética –, as well as 73 interns, and three apprentices⁴.

Complementing these numbers, the number of long-term providers of services inside the installations of the Company or projects in which it is involved (both in operating assets as well as those in the process of installation), during 2022, amounted to approximately and average of 6.6 thousand professionals.

Total direct employee



Employees by region



Over the year, there were 201 admissions, 23% more than reported in 2021. In turn, terminations fell 20%, totaling 156 at the end of the period. About 85% of the new hires were made in the South Region, predominantly in the 30 to 50 age group (61.5% of the total).

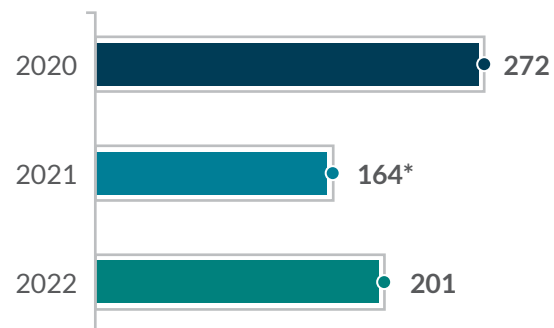
Turnover was 14.7%. Contributing to this result was the execution of the Voluntary Termination Program (PDV), launched in 2021. Of the total number of voluntary terminations reported in 2022, 25% corresponded to employees that adhered to the Program – which also justified in part, the large number of terminations of employees over 50 (30.1% of the total), an age group where there is a greater adhesion to the PDV.



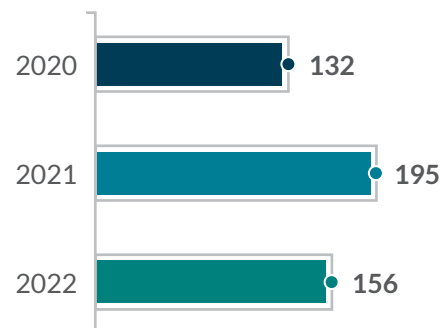
23%

increase in the number of new hires compared to 2021.

Number of admissions



Number of terminations



* The number for 2021 was corrected since in the Report for that year, two adjustments were mistakenly made to the register as admissions.



Free association and collective bargaining

All the Company's employees are guaranteed freedom of association, collective bargaining, and internal representation according to the guidelines of the International Labor Organization (ITO).

In 2022, all hired employees (100%) were covered by agreements, negotiated, and discussed collectively and established together with the following representative entities:


- The National Engineers Federation (covers the Engineers Labor Union);
- National Industrial Technicians Federation (covers the Industrial Technicians Labor Union);
- National Federation of Workers in Urban Industries;
- State of Santa Catarina Administrators Union;
- Union of salaried workers, retirees and pensioners in generating, transmission, or distributor companies, or similar of electric energy in the State of Rio Grande do Sul and supported by private pension foundations originating in the electricity sector;
- The Greater Florianópolis Accounting Workers Labor Union;
- The Santa Catarina Economists Labor Union;
- The Florianópolis Electric Energy Industry Workers Union;
- The South Santa Catarina Electric Energy Industry Workers Union;
- The Minas Gerais Energy Industry Workers Union;
- The Lages Electric Energy Industries Union.



Remuneration and benefits

[GRI 401-2]

The Company offers a fair remuneration compatible with the salary practices for the segments and regions where it conducts its activities, made up of fixed and variable components in order to attract and retain employees. The variable component is divided into Profits and/or Results (PLR) Sharing together with a Management Bonus. Both are described below and are designed to stimulate the achievement of results as well as overcoming new and growing challenges, incentivizing productivity:

 **PLR:** covers all employees and is negotiated annually with the labor unions;

 **Management bonus:** short-term remuneration for managerial career employees.

ENGIE Brasil Energia conducts market surveys annually with an independent consultancy for evaluating the competitiveness and attractiveness of its remuneration package. The last survey

conducted in 2021, revealed that the Company's salary package was above the third quartile for the energy market.

Additionally, employees are awarded a benefits package to provide more security and comfort to the members of the team and their families.

The remuneration offered by the Company consists of fixed and variable components including an attractive benefits package.



BENEFITS PACKAGE,
applicable to all employees with a permanent labor contract:



Vacation pay (1/3 in addition to what is required by law) *.



Medical and dental insurance Plan extensive to children and partners.



Daycare for employees' children of pre-school age.



Subsidized purchases from pharmacies, extensive to children and partners.



Flexitime and hybrid working with the possibility of working two days every week on a remote basis, conditional on the activities undertaken by the employee.



Extension of maternity (6 months) and paternity leave (28 days).



Private pension with matching contribution from the Company.



Psychological Support Program extensive to children and partners.



Quality of Life Programs with a focus on a range of sporting activities.



Meal and/or food vouchers.



Life insurance.



Travel vouchers.

* Brazilian labor legislation mandates the following benefits: paid vacation of 30 days, an additional 1/3 of monthly salary as vacation pay and a 13th month salary.

Diversity, equity, and inclusion

[GRI 3-3; 405-1]

[2030 Agenda Goals: 5.1; 5.5; 8.5; 10.2; 10.3; 10.4]

To foster diversity, equity, and inclusion reflects the ENGIE Group’s commitment to promoting Human Rights in order to combat discrimination and contribute to the reduction in social inequalities. **In addition to the effective social impact, this effort is viewed as essential to the sustainable growth of the Company** by bringing to bear in the day-to-day operations, different experiences, and perspectives, driving the sustainability of long-term results.

In 2022, the year of the ENGIE Group’s Inclusion & Diversity Policy, the Company accelerated its journey towards gender equity, as well as taking some important steps towards the consolidation of a broad-based culture of diversity. For this purpose, opportunities for

instruction on the theme were intensified – the Company offering all employees training in Diversity and Inclusion, covering unconscious biases and attitudes to ensure a more inclusive working environment. At the end of the year, 85% of the labor force had undertaken the training.

A further initiative of note in this context was the trial run of the Diversity Census at the Uruguay River Regional Office combining three hydropower plants. The idea was to map on an experimental basis information on ENGIE’s population in terms of aspects of race and gender identification among others. Approximately 100 employees took part on a voluntary basis with the results obtained supporting the planning and execution of the general Census to be run for all operational units during 2023.



Inclusion of people with disabilities (PwDs)

On November 16, 2022, the Company’s headquarters received the first group in the PwD Training Program, designed to foster the technical and behavioral development of professionals with disabilities. The group is made up of 15 college students, selected from among 305 candidates, with educational backgrounds compatible with the opportunities ENGIE Brasil Energia offers.

Additional vacancies for the program were introduced with the objective of developing and giving this group their first work opportunity.

Acting as assistants, group members were allocated to areas most suited to their existing knowledge and Company requirements, without the need for past experience.

The development path has a 15-month duration, focused on career protagonism, actions of self-awareness and instruments of success. There is also a six-month mentoring program.

The Program also includes various initiatives designed by the Company for inclusion of PwDs. At the end of 2022, there were 54 employees in this group.



15

professionals joined the PwD Training Program.

Gender equity

In 2022, there was an increase of 2.3 p.p. in the total number of women on the Company's staff – from 24.4% of total headcount in 2021, to 26.7% in 2022. As a means of further expanding the positive impact of the initiatives for gender equity, ENGIE Brasil Energia is developing a structured program with its actions directed to both internal and external audiences.

A further requirement of the Company is to expand the diversity of its employees as a means of guaranteeing the sustainability of long-term results. **With this in mind, #geraDiversidade has been set up, a program which proposes initiatives for the creation of an increasingly inclusive environment through the sensibilization, attraction of diverse talents and the development of men and women.**

The technical intern, graduate and junior apprentice programs ensured 50% of vacancies for women, with emphasis on the affirmative trainee program for female engineers.

All #geraDiversidade actions are supported by three pillars: culture, development and attraction. The proposal is to promote respect and wellbeing in the workplace through education and training for all, supporting the development of under-represented groups within and outside ENGIE as well as attracting to the Company these professionals and effectively increase numbers drawn from diverse groups. In 2022, the emphasis was on projects related to gender and people with special needs through affirmative actions for attracting both groups.

On the gender front, the **Female Careers Path**, was structured with the aim of influencing and developing women at different stages of building their careers. In this context, technical and graduate students were given technical training as well

as more specific training in the electric sector in addition to study grants. In this way, ENGIE is positioning itself as an inclusive employer brand for women and promoter of professional training, fostering access to the labor market for the female public in Operations and Maintenance (O&M) careers. Steps were also taken to implement actions of attracting this audience through such measures as ensuring that there was at least one woman candidate on the short list for the selection processes as well as proactively mapping future opportunities for women in the market. In this context, the technical intern, graduate and junior apprentice programs have ensured that 50% of the vacancies go to women, more particularly in the affirmative trainee program for engineers.

For female employees already effectively part of the Company's workforce, the initiatives are designed to develop competences and accelerate careers through internal and external mentoring programs. In addition, the Company offered ancillary initiatives in inclusive leadership management as well as one-off programs in sensibilization and literacy.





Global highlight

In 2022, the Company structured the Diversity & Inclusion network, launching an all-encompassing view of the ENGIE Group's D&I initiatives in Brazil. The D&I Network serves as guidance and an incentive to the Company's initiatives in Diversity and well as influencing people, gathering perceptions and promoting related ideas. Throughout the year, the initiatives developed by ENGIE Brasil Energia contributed to the recognition obtained, at the Group's global level, regarding efforts towards gender equality – highlighted by the increase in the number of women in leadership and the percentage of women recruited in 2022.

By virtue of initiatives developed in Brazil, these will be replicated worldwide by the Group, raising the profile of the Diversity & Inclusion theme at ENGIE even further.

As a component part of the Female Careers Paths, in May 2022, the Company launched the Trainee Program for Engineers. This is an affirmative action for accelerating gender equity, more especially through the incentivizing and generation of opportunities for women pursuing careers in Sciences, Technology and Engineering. Out of the 2,858 candidates enrolled, 13 were selected for the Program with a duration of 12 months. In the period the women are posted to the various company assets where they receive training and spend periods in a range of different areas – operations, maintenance, environment, occupational health and safety and administration.

On another front, ENGIE Brasil Energia has continued to invest in the training of women for operational functions. In partnership with Head Energia, it offered an extracurricular course for female engi-

neering students with the aim of a closer proximity to the professionals of the future in the sector and presenting possibilities for a career in O&M. Held in the months of October and November 2022, 59 students completed the course.

In the municipality of Lajes (RN), a region where the Santo Agostinho Wind Complex is being implemented, the Company offered free professionalization courses in the technical area for training the local community in the complementary energy area. Priority was given to offering vacancies to women who occupied 31 of the 41 places on the course during the year, distributed in two groups: Technology in Wind Generation and Introduction to Photovoltaic Generation Technologies.

During the year, ENGIE Brasil Energia also offered study grants for increasing and stimulating the interest of students from technical schools with backgrounds correlated to Operations and Maintenance in cities close to the plants. In providing financial support, the Company is endeavoring to expand the number of women qualifying for opportunities as interns and eventual hiring as employees. In all, 10 grants were awarded to technical schools in the Southeast and Northeast regions of Brazil – and a further 15 are confirmed for 2023.



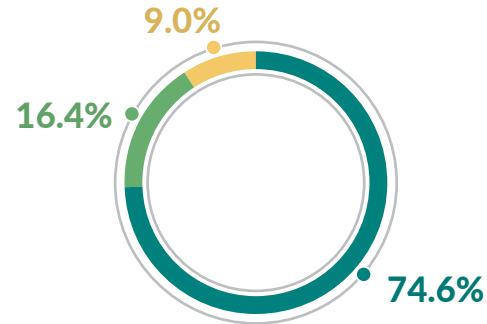
2.858

candidates in the Trainee Program for female engineers.

Total employees, by gender

	MEN	WOMEN	TOTAL
2020	1,232	306	1,538
2021	908	293	1,201
2022	891	324	1,215

Employee by age group



Number of employees, by functional category and gender

	MEN	WOMEN	TOTAL
Executives	7	1	8
Managers	45	9	54
Analysts, engineers and specialists	490	218	708
Operators and technicians	349	96	445

Training about Human Rights



Total number of hours

1,591.5



Percentage of employees trained

78.8%



Initiative recognized

ENGIE Brasil Energia has been recognized by Gerdau, a customer, in Gerdau's Inspire Program, good Diversity Practices category, being highlighted among the 203 evaluated companies.

The accolade examined the level of maturity of a broad portfolio of Gerdau's suppliers in relation to the theme in accordance with four stages:

- (i) public commitment;
- (ii) initiative and capacity of response;
- (iii) active coherence and responsibility;
- (iv) systemic efficiency and protagonism.

The largest Brazilian company producing steel and one of the main sector companies in the global environment, Gerdau has long-term agreements with ENGIE Brasil Energia since 2013. In addition to the commercial partnership, both have operations converging towards sustainability, committed to the transition to a low carbon economy, promotion of social wellbeing and the achievement of gender equity.

Professional development

[GRI 3-3; 404-1; 404-2; 404-3]
 [2030 Agenda Goal: 4.3]

In 2022, the Company invested BRL 5.7 million in training and skills upgrading, an increase of 24% in relation to 2021. **In all, approximately 66 thousand classroom hours were dedicated to learning, an increase of 11% when compared to 2021.** The increase, both of investment and also classroom hours is due essentially to the greater number of training events of the immersion type bringing the teams together onsite – an initiative which had not been possible due to sanitary restrictions in place during the Covid-19 pandemic.



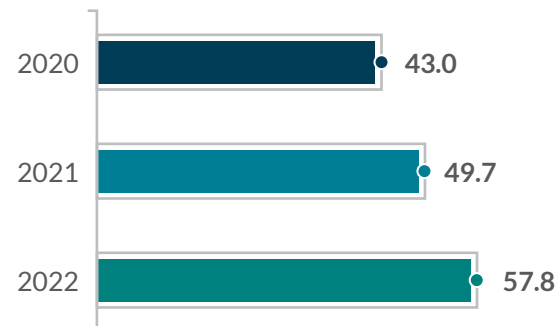
57.8

Average hours of training by employee.

Total hours of training



Average number of training hours per employee



With focus on professional development, performance assessment is conducted annually by the Company. In 2022, only temporary (outsourced) employees, apprentices and interns are not included in this process. The assessment considers technical and behavioral skills as analyzed by the employees themselves and in some cases other team members. **The result of the process is an indication of opportunities for improvement in performance in the current function as well as pointing to development paths for career advancement.**

At the end of the assessment cycle, the employee records his/her Individual Development Plan (IDP), validated by their direct manager and subsequently, evaluated by the Culture and People Management area. In the case of various IDPs, whenever recurring needs are identified for formation/training, collective formation initiatives are proposed.





U.camp SouthAm

Team development is a pillar of the ENGIE Group’s corporate strategy. In this respect, training, exchanges of experiences and collaboration set the tone to the U.camp SouthAm 2022 meeting of ENGIE’s employees from different regions of Latin America and Europe and held in Rio de Janeiro.

Promoted by ENGIE South America, in partnership with the ENGIE University, the event was held for the third time in Brazil from August 29 to September 2.

Almost 450 professionals took part including members of the Latin American teams and invitees from other regions in the world where the Company has operations. ENGIE Brasil Energia was represented by 64 employees. In line with Group participants, made up of leadership and talents drawn from

throughout the region, the programming was a diverse one. During the five days of the event, 16 development programs were on offer with themes ranging from decarbonization technologies to management of industrial projects, occupational health and safety, and executive communication to inclusive leadership, among others.



16

development programs were offered over the course of the five-day event.

To bolster this process, ENGIE Brasil Energia has created **Career Dialogs**, an IDP support platform, in which the employee reflects with his manager on the evolution of his professional trajectory and the result of his work during the year. **IDP’s also give guidance on the formative offers freely available to employees from the educational platform.** Complementary development programs are provided through the ENGIE University, the ENGIE Group’s corporate university. Additionally, a training program gives employees the opportunity to receive financial assistance from the Company for postgraduation and language courses.



Talents Management Program – Geração.E

So that the Company has a pool of prepared professionals with diverse profiles for assuming key management positions, **ENGIE Brasil Energia maps and develops potential successors, mitigating risks arising from the inability to retain talents.** The Geração.E Program, part of the employee Career Dialogs and Individ-

Complementary development programs are offered at ENGIE University, the ENGIE Group's corporate university.

ual Development Programs, has been set up to meet these challenges by providing fast-track career development for professionals mapped as potential successors and includes financial incentives and training as well as opportunities for networking and engagement.



Leadership in focus

The year was also characterized by enhanced training of the Company leadership. In May, the **Leadership Experience** was held, a two-day formative event of immersion, connection, exchange of ideas and knowledge, delving into greater depth on current questions relating to leadership.

During the event, such themes as vulnerability, emotional health, assertive communication, active listening and “learnability” a concept which represents various forms of learning over a lifetime were covered, with the participation of an audience of managers and officers.

Held in June, the leadership also formed the principal audience of the **Sustainable Management Meeting**. The event brought together the socio-environmental teams and managers of the generation and transmission assets from different regions

of the country as well as professionals operating in activities involving the development and installation of projects, investor relations, the environment, social responsibility, supplies, communication and corporate strategy, among others.

The programming was divided into two parts: Net Zero journey and the relationship with stakeholders. In the first, socio-economic and environmental impacts of climate change as well as entrepreneurial initiatives for reversing the scenario, were discussed. The discussions opened with a lecture from Prof. Dr. Carlos Nobre, one of the leading global and national references on the theme and a member of the United Nations Panel on Global Sustainability. The second part focused on the bolstering of dialog with stakeholders and on fostering sustainable development of the communities of which the Company is a part.

Organizational climate

To assess the effectiveness of the programs dedicated to people management, the Company regularly runs organizational climate surveys. **In 2022, 92% of the employees took part in the initiative – 7% more than 2021.** The key highlights were:

-  I believe fully in ENGIE’s targets and objectives – **96%**
-  I would recommend ENGIE as a good place to work – **95%**
-  I am proud to be associated with ENGIE – **97%**
-  I firmly believe in ENGIE’s capacity to advance in the direction of a carbon neutral economy – **97%**
-  ENGIE is a socially responsible company – **97%**
-  I understand how my work contributes to the business objectives of my company – **96%**

Occupational health, safety, and well-being

[GRI 3-3; 403-1; 403-2; 403-3; 403-4; 403-5; 403-6; 403-7; 403-8; 403-9; 403-10]

[SASB IF-EU-320A.1]

[2030 Agenda Goals: 8.5; 8.8]

The priority guidelines on ENGIE Brasil Energia's sustainability agenda are guaranteeing the safety and preservation of the health of the people working for the Company (whether direct or outsourced employees). **Reflecting this commitment, in 2022 no fatal accidents or accidents classified as severe, were recorded involving direct or outsourced employees.** In the period, there was an overall decline of 52.5% in all accidents in relation to 2021.

These results strengthen the Company's occupational health and safety culture, anchored in shared responsibility and in individual and collective care. Among the factors contributing to the positive performance in 2022, of particular importance are:

- An increase in the number of occupational health and safety professionals working in the field as well as the continuous training of these teams;

- Fostering the analysis of occurrences in greater depth for identifying root and contributory causes;
- Training, communication campaigns and events dedicated to raising awareness of the internal public, including third parties, on secure processes and behavior;
- Implementation of actions for emotional health with a focus on reducing psycho-social risks, incorporating physical and mental health.



Zero severe or fatal accident

In 2022, there were no severe or fatal accidents involving direct or outsourced employees.



To assure and monitor compliance with Occupational Health and Safety (SST) guidelines, the Company has a management system which is dedicated to the theme, focused on preventing, controlling, eliminating, or reducing risks to employees. The system covers all activities, assets and employees of the Company. In addition, the system establishes guidelines for legal and normative compliance, clearly demarcating the duties and responsibilities in different spheres: Senior Management, Managerial Units, Corporate SST Nucleus, the SST asset and employee teams in general.

The stages of identification and control of hazards and risks are component parts of all the processes managed by the SST Management System, including the preparation of projects and the implementation of new physical and technological installations. A module of the System is dedicated to the identification of hazards and risks, also setting out measures for their elimination and mitigation.

The **Risks Management Program (PGR)** establishes a set of measures and guidance for continuous, multi-disciplinary and systematized actions on what should be done in relation to the extent of employee exposure to occupational risk so that existing risks in all areas of the Company are suitably managed. The PGR is composed of two basic guidelines:

Occupational Risk Inventory

Establishes stages in the identification of Dangers and Evaluation of Risks as well as preventive measures.

Action Plan

Includes preventive measures to be elaborated, refined, or maintained with the purpose of mitigating or eliminating these risks.

The Company encourages all employees to record situations they have identified for promoting the continual improvement in the workplace environment and strengthen the culture of safety. All employee communications are analyzed, qualified and eventually validated by the workplace safety officer, responsible for the area in which an incident has occurred – or otherwise by an appointed representative.

All reports of risk situations and near accidents as well as accidents themselves, are analyzed in an attempt to identify their root cause and establish a corrective action plan, spelling out measures for preventing and correcting faults and avoiding reoccurrences.

The SST Management System lists the channels for participation and consultation by employees on the theme and periodically defines performance indicators which are monitored and handled strategically by Senior Management. In 2022, 2,497 incidents were reported to the system, 50% down on 2021 (5,023⁵) – of which 54 were classed as HIPOs (High Potential Events), a category which is given special attention, involving detailed action plans. The significant drop is due principally to the conclusion of implemen-

The Risks Management Program (PGR) establishes a set of measures and guidance for continuous, multi-disciplinary and systematized actions.

tation work on the Gralha Azul Transmission System and the disposal of the Jorge Lacerda Thermoelectric Complex.

In the year, 74.3% of the employees worked on units certified as ISO 45001 compliant – the remaining units, although not certified, follow the same policies and procedures covered by the Integrated Management System.

⁵ Data for 2021 shown in the Sustainability Report for that year has been corrected due to the erroneous recording of figures for the Jorge Lacerda Thermoelectric Complex through to the end of the year when they should have been shown only to October 31, 2021, the date of the asset's sale.



Indicators related to direct employees

	2020	2021	2022
Number of hours exposed to risk	2,420,548	2,680,926	2,219,779
Number of work-related and commuting accidents to and from work with and without time off work	5	2	7
Number of fatal accidents (deaths)	0	0	0
Number of lost days – work-related accidents with time off work	15	0	0
Work-related ill health	0	0	0

Indicators related to contracted companies

	2020	2021	2022
Number of hours exposed to risk	17,510,414	33,455,292	13,822,341
Number of work-related and commuting accidents to and from work with and without time off work	102	223	107
Number of fatal accidents (deaths)	0	9	0
Number of lost days – work related accidents with time off work	221	959	269

Frequency and severity rates

	2020	2021	2022	Targets 2022	Targets 2023
Frequency Rate (FR) direct employees*	0.41	0.00	0.00		
Frequency Rate (FR) operations and maintenance (direct employees and suppliers) *	1.203	0.568	1.32	≤ 1.40	≤ 1.40
Severity Rate (SR) direct employees**	0.000	0.000	0	≤ 0.02	≤ 0.02
Frequency Rate (FR) – constructions (direct employees and suppliers) *	0.561	1.649	1.01	≤ 2.30	≤ 2.30
Severity Rate (SR) direct and indirect employees**	0.012	0.027	0.017		≤ 0.02

*FR = number of occupational accidents in every million hours of exposure to risk.

**SR = number of days lost as a result of work-related accidents in every thousand hours of exposure to risk

Frequency Rate (FR) operation & maintenance: direct & indirect employees linked to operations & maintenance (with the exception of constructions).

Frequency Rate (FR) constructions considers direct and indirect employees linked to constructions and those hired for projects

Among the **main workplace risks identified** in the activities of the Company, which may lead to serious accidents are:

- **Hazardous energy** risk (electric, fluid under pressure);
- **High level working** risk;
- Risk of **falling objects**;
- Risk of **compression/crushing**; and
- **Traffic** risk.

For the mitigation of these and other risks, the Company ran sensibilization campaigns, verification of dangers in the installations and activities, review of procedures and training of teams.

Reinforcing the dissemination of the culture of safety, ENGIE Brasil Energia establishes performance goals on the theme for compliance by the managers such as the conducting of Managerial

Safety Visits (VGS). This practice includes inspections in the field for verifying SST procedures, the manager being responsible for checking adopted controls and multiplying guidance in this respect with the employees.

In 2022, the Company conducted 1,001 VGS, 32% less than 2021, the reduction largely a reflection of the completion of the Gralha Azul Transmission System and the disposal of the Jorge Lacerda Thermoelectric Complex. **The Company also has 17 Internal Accident Prevention Commissions (CIPA) comprising 108 members elected and appointed in line with the NR5 norm and representing 100% of the employees.** In addition, a dedicated system supports the management of risk and near-accident situations, consolidating records and incorporating the area's indicators with other aspects of corporate management.

Evolution of VGS and registers

	2020	2021	2022
Managerial Safety Visits (VGS)	1,403	1,474	1,001
Registers - GSR System (Risk and Near-Accident Situations)	5,664	5,023	2,497
Registers - HIPOs	79	100	54



Training Programs

Just as with events dedicated to the theme and the sensibilization campaigns, training has proved fundamental to employee engagement for the continuous improvement in the Company's SST. The following chart summarizes the main training initiatives in 2022.



38

employees from the Health and Safety area gathered for the Safety Meeting.

Training offered

Initiative	Number of participants	Description
No life at Risk	724	Objective is to encourage reflection prior to taking decisions and adoption of preventive actions in workplace safety, reducing risks and, consequently, eliminating accidents. During training sessions, important concepts for safety are presented, especially on rules which save lives.
Human Performance Program	145	The objective is to reduce human errors and faults through the use of 13 instruments contributing to operational excellence on questions of safety, procedures and behavior.
Induction in Occupational Health and Safety	14,248	Presents new hires and service providers with the Company's SST guidelines, main instruments for employees in the field, risks inherent to activities and/or installations with the respective control measures as well as emergency procedures.
Commitments for Quality of Life at Work	150	For managers: to present the commitments to be followed for reducing psycho-social risks, promoting wellbeing in the workplace and contributing to the emotional health of all.
Mandatory Training	1,243	Covers training required by the Brazilian legislation and correlated norms such as: Services with Electricity (NR 10); Operation with Forklift Loader Trucks (NR 11); Inflammable Materials and Fuels (NR 20); Confined Space (NR 33); and High-Level Working (NR 35), among others.



Aligned teams

In July, 38 employees from the Occupational Health and Safety area of the Company's different operational units met in Florianópolis (SC) for the Safety Meeting, an event for evaluating results, achievements and challenges in the area.

Organized by the Dupont consultancy, a world benchmark for training in the area, on the second and third day, technicians, and engineers from ENGIE Brasil Energia undertook intensive training for analyzing root causes. On the final day, a workshop examined ideal scenarios for the future, interpretation of creative tensions and definition of challenges to be overcome in the creation of new procedures.

Promotion of health

ENGIE Brasil Energia seeks to promote the all-round health of its employees through preventive and protective measures – individual and collective –, which respect social and cultural aspects. In this respect, the Company has teams specialized in integrated workplace healthcare which provide guidance on protocols and monitors the health status of each employee based on occupational and complementary examinations and clinical consultations.

Health indicators are generated annually. Among these are the number of occupational examinations performed, epidemiological controls and the workforce health profile. Preventive and corrective conduct is established on the basis of the qualitative analysis of this information in conjunction with statistical surveys.

This entire process is conducted in an ethical manner, guaranteeing due confidentiality on individual health issues. In the same way, patients are attended in private locations and outcomes are never reported to any other employee, including managers and leaders. Worthy of note is that access by an employee

to any healthcare attendance is facilitated with no requirement for prior approval or forwarding by a manager so that all feel secure.

At Company headquarters, a first aid post is available to employees for specialized attendance – provided by workplace physicians, nurses and psychologists. These professionals are available onsite and/or online for occupational and free on-demand attendance. The team at corporate headquarters also performs a support role for the remaining units with the capacity to offer remote consultations and healthcare.

In 2022, emotional health initiatives were implemented including general guidance on the issue, conducting of diagnostics, surgical interventions, mediations, and referrals. Such actions are designed to promote mental health through programs covering retirement, emergencies, and disasters, grieving and the psycho-social analysis of occupational examinations.

All employees and their dependents have two healthcare plans covering various medical and

Access to any healthcare attendance is facilitated with no requirement for prior approval or forwarding by the manager so that all feel secure.

non-medical specialties, surgeries, hospitalization, and transportation. Benefits also include a dental plan, subsidized pharmacy purchases with the partial underwriting of the cost of acquiring eyeglasses, ophthalmological lenses, hearing aids and orthopedic replacements. A further facility offered to all employees and their dependents is unlimited access to a telemedicine platform with specialists, psychologists, and nutritionists.



5


Environment and climate

- » Conservation guidelines and strategies
- » Environmental management
- » Climate



UPDATE of ENGIE Brasil Energia's Environmental Conservation Strategy

Acceleration of the **Company's Journey** for the Climate, ensuring climate mitigation, adaptation and resilience



ENGIE Group commitment: **59%** reduction in emissions (scopes 1 and 3) by 2030 and **NetZero** by 2045



63.4% Reduction in the total volume of waste dispatched for disposal


68% reduction in total energy consumption

99% reduction of water withdrawal and **39%** in consumption






444 THOUSAND seedlings of native species produced per year in our own forest gardens



37 CONSERVATION UNITS surrounding the operations



Conservation guidelines and strategies

[GRI 2-25; 2-27; 3-3]

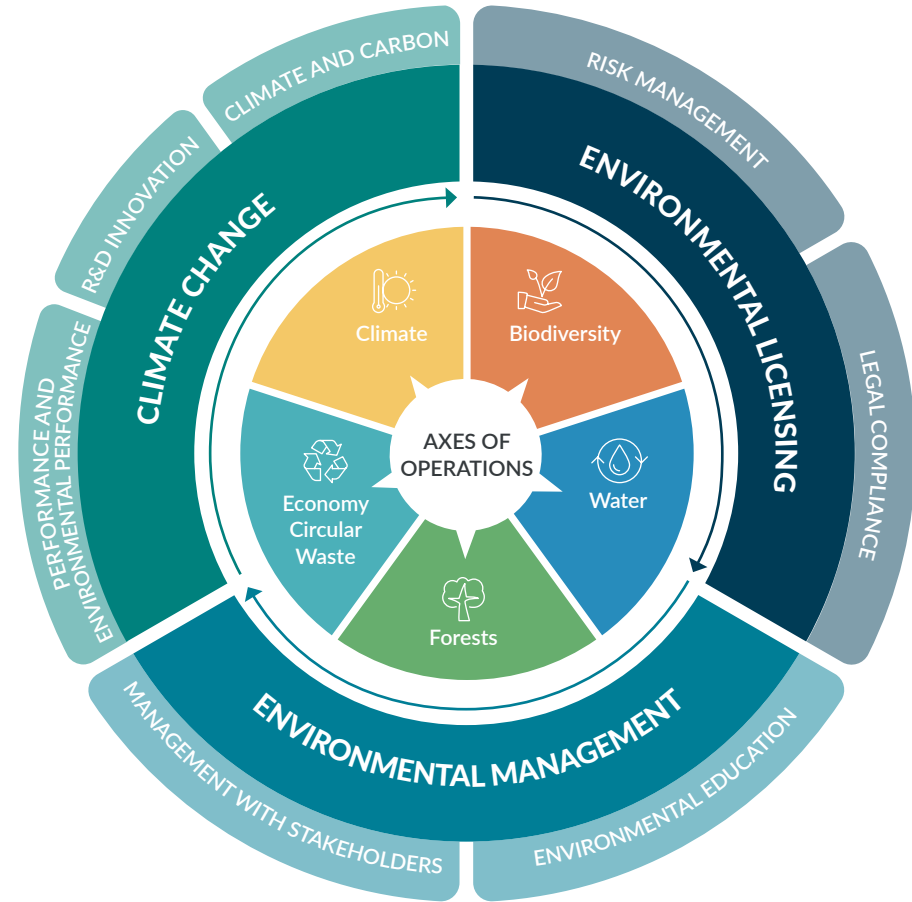
[2030 Agenda Goals: 12.2; 13.2]

Conservation of the natural resources and the climate of the planet constitute one of the fundamental commitments anchoring ENGIE Brasil Energia's purpose and business model. This is reflected in policies and practices adopted in the segments in which the Company operates – both with operational assets as well as those assets in the process of implementation. **Thus, in addition to assuring compliance with the legislation, our environmental management has as its focus, the mitigation of risks and impacts of the operations on the ecosystem, the monitoring of the environmental conditions and stakeholder engagement, in order to maximize the positive impact on the territories of which ENGIE Brasil Energia is a part, and to generate value based on environmental initiatives.**

These drivers underscore our **Environmental Conservation Strategy**, constructed on the basis of the [Sustainable Management Policy](#) and the [Environmental Policy](#) – both updated in 2022. Divided into five axes, this strategy incorporates the priority themes, considering the principal impacts – positive and negative – of our activities on the environment: Biodiversity; Water; Forests; Circular Economy/Waste; and Climate. Transversal to these topics, as well as others relevant to the operations are aspects related to risk management, to legal compliance, to the stakeholder relationship, to innovation, to environmental performance and environmental education, as shown in the infographic.

Divided into five axes, this strategy incorporates the priority themes, considering the principal impacts – positive and negative – of our activities on the environment.

Environmental Conservation Strategy



Together with corporate guidelines and voluntary commitments assumed by the Company, the Strategy of Environmental Conservation orientates management, adapted to the reality of the areas in which the assets are operated. Thus, it is that the development of programs, environmental projects and initiatives stem from detailed studies and diagnosis on local conditions and demands, these initiatives being developed by specialists and shared with various stakeholders.

The development of programs, projects and environmental initiatives stems from in-depth studies and diagnoses of local conditions and characteristics, considering the vocations and demands of each region.

Strategic environmental drivers



Promote initiatives for the conservation of the biodiversity.



Ensure legal compliance of our assets and projects.



Avoid, reduce, compensate environmental impacts and mitigate socio-environmental risks.



Control and monitor environmental conditions in our assets.



Incentivize forestry and regeneration of the ecosystems.



Engage stakeholders for conservation of the natural resources.



Potentialize the positive impact on territories where we operate.



Develop partnerships and contribute to public policies in the sector.



Respect the culture of Traditional Communities.



Valorize ecosystemic services and incentivize solutions based on nature.



Accelerate the journey for climate ensuring climate mitigation, adaptation and resilience.



Create value based on environmental initiatives.



Renewal of operating licenses

During 2022, respective environmental licensing bodies renewed the Operating Licenses for the following assets:

5 Wind Farms in the Trairi Complex (CE) -Flexeiras, Guajiru, Trairi, Estrela and Ouro Verde

Assú V Photovoltaic Plant (RN)

Nova Aurora Photovoltaic Plant (SC)

Miranda Hydropower Plant (MG)

Among the principal stakeholders are the environmental authorities to which ENGIE Brasil Energia reports the legal compliance of its activities including compliance with more than 2.8 thousand conditioning factors for the obtaining and maintenance of the 114 operating and 14 installation licenses which the Company manages. In 2022, eight Operating Licenses (LOs) were renewed (see box to the left). Consequently, at the year-end 100% of the operations were in compliance with existing licenses.

For projects in the process of implementation, the Company's environmental programs are an integral part of the licensing process for mitigating risks and impacts of construction work on the environment and local communities. **The two projects in implementation during 2022 together corresponded to 39 socio-environmental programs – 18 Environmental Programs pertaining to the Santo Agostinho Wind Complex and 21 in the case of the Novo Estado Transmission System.** In addition to these initiatives, the Company undertakes a series of voluntary socio-environmental actions independent of the licensing process. During the

year, more than BRL 1.2 million were invested in socio-environmental projects for the benefit of the communities and regions where the projects are being installed.

As a result of the Company's efforts to ensure the compliance of its operations, ENGIE Brasil

Environmental management

[GRI 3-3]

In 2022, the Company invested about BRL 29.5 million for maintaining positive impact initiatives in line with socio-environmental standards determined by the ENGIE Group, as well as meeting the conditioning factors underlying the Operational Licenses of the operating assets.

For assets already in operation, performance indicators are monitored via the Integrated Management System (SIG), which is certified under NBR ISO 14001 – Environmental; NBR ISO 9001 – Management of Quality; and ISO 45001 – Occupational Health and Safety Management norms.

Energia has not been subject to any significant monetary sanctions⁶ in the period or in the preceding three fiscal years due to non-compliance with legal requisites or related to environmental impacts.

SIG is certified at 11 hydropower plants corresponding to 79.8% of the installed operating capacity in the generation segment in addition to the Company's head office. Assets still not certified adhere to the same management and performance requisites.

The Company establishes annual targets for ensuring continual improvement in environmental performance. These consider the most relevant aspects and impacts of each asset and territory. The applicable targets and indicators will be mentioned in this chapter as part of the discussion on the reported material themes.

⁶ The Company considers significant monetary sanctions as those with values higher than US\$ 10 thousand.

Management of Socio-environmental Risks

The management of socio-environmental risks related to ENGIE Brasil Energia's assets involves a structured process of mapping and monitoring as well as actions dedicated to prevention and mitigation – these initiatives spread over short-, medium- and long-terms. Categorized in the Environmental Risks

Matrix, the risks are periodically revised and reported to different managerial levels. The entire management process, from mapping to execution of the plans adopts a multidisciplinary approach involving teams drawn from several areas such as Environment, Legal, Operations and Maintenance.

Socioenvironmental Risk Management Flow



Aligned with the ENGIE Group's guidelines, the methodology adopted for socio-environmental risk management assesses the probability and impact of the risks applicable to each business. Thus, the matrix defines eight categories of direct risk as described in the infographic below.

Direct socio-environmental risks

<p>Environmental Licensing Situations which can impact the licensing process, such as divergences in the context or scope of conditioning factors and major alterations in these same factors in the license renewal process.</p>	<p>Ichthyofauna Adverse situations linked principally to periods of drought and/or other environmental conditions potentially prejudicial to fauna (notably fish) in the vicinity of the hydropower plants.</p>	<p>Traditional Communities Situations linked to the licensing processes and how they relate to traditional communities present in the region, such as indigenous tribes, riparian settlements and quilombos.</p>	<p>Environmental Plan for Conservation and Use of the Reservoir Margin Situations linked to management and use of the margins of reservoirs backing hydropower plants operated by the Company, guided by their respective Environmental Plans for Conservation and Use of the Reservoir Margin (Pacuera).</p>
<p>Environmental Compensation Situations arising from the process of environmental compensation linked to the National Conservation Units System (SNUC).</p>	<p>Archaeology Pending archaeological regularization, notably with respect to environmental licensing.</p>	<p>Protected Areas Situations of impact in conservation areas such as those of permanent preservation.</p>	<p>Avifauna Situations adverse to environmental conditions potentially prejudicial to bird life in the region of the wind farms and transmission systems in operation.</p>

Biodiversity

[GRI 3-3; 304-1; 304-2; 304-3; 304-4]
[2030 Agenda Goals: 2.5, 6.6; 15.1; 15.5, 15.8]

For ENGIE, conservation of the biodiversity is not only part of its fundamental commitment to the environment but also its business strategy with a focus on risks and opportunities and on the creation of value for its various stakeholders. Thus, the management of the theme is executed through socio-environmental programs incorporated in the licensing processes as well as through the Company's voluntary initiatives.

With a disposition to contribute to the protection and valorization of the rich Brazilian biodiversity, the Company prioritizes actions dedicated to the conservation of the biomass in which it is inserted. **In this context, the Biodiversity Matrix Program – in its sixth year in 2022 – proposes the mapping of opportunities for the preservation of these biomes. In this way, it is possible to identify threatened species, conservation units and areas where priority must be given to their protection close to the assets, as well as stakeholders and partners which pro-**

vide additional support to these environmental initiatives over the long-term. This information provides assistance in guiding ENGIE Brasil Energia's actions and investments for ensuring:

- **Capture of synergies** between factors which are conditions of licensing and prioritized conservation initiatives;
- **Improvement** of biodiversity performance indicators; and
- **Potentializing** of the positive impact on eventual threatened environmental aspects.

The theme is managed through the socio-environmental programs included in the licensing processes, as well as voluntary initiatives by the Company.



Protection of fauna

In 2020, ENGIE Brasil Energia signed a partnership agreement with the Minas Gerais State Institute for Forests (IEF) for development of the Wild Animals Release Areas Project (ASAS) to receive in the Jacob RPPN, animals released from the state's Wild Animals Rehabilitation Center (Cetras). These animals are usually victims of accidents, traffic or mistreatment and are rescued by the environmental protection agencies and after receiving the necessary care, are returned to nature.

In 2022, there was an important addition to the partnership for conservation of fauna through the medium of the TamanduAsas Project. The Reserve has a special enclosure for receiving giant and tamandua anteaters, both species threatened with extinction. Based on the partnership with the IEF, the enclosure installed at

the RPPN in October received its first guests, three anteaters in the process of rehabilitation.

While set up to initially receive birds and anteaters, the area and the enclosures therein are also able to house other animals requiring assisted release – the example of a female maned wolf rescued close by an example.

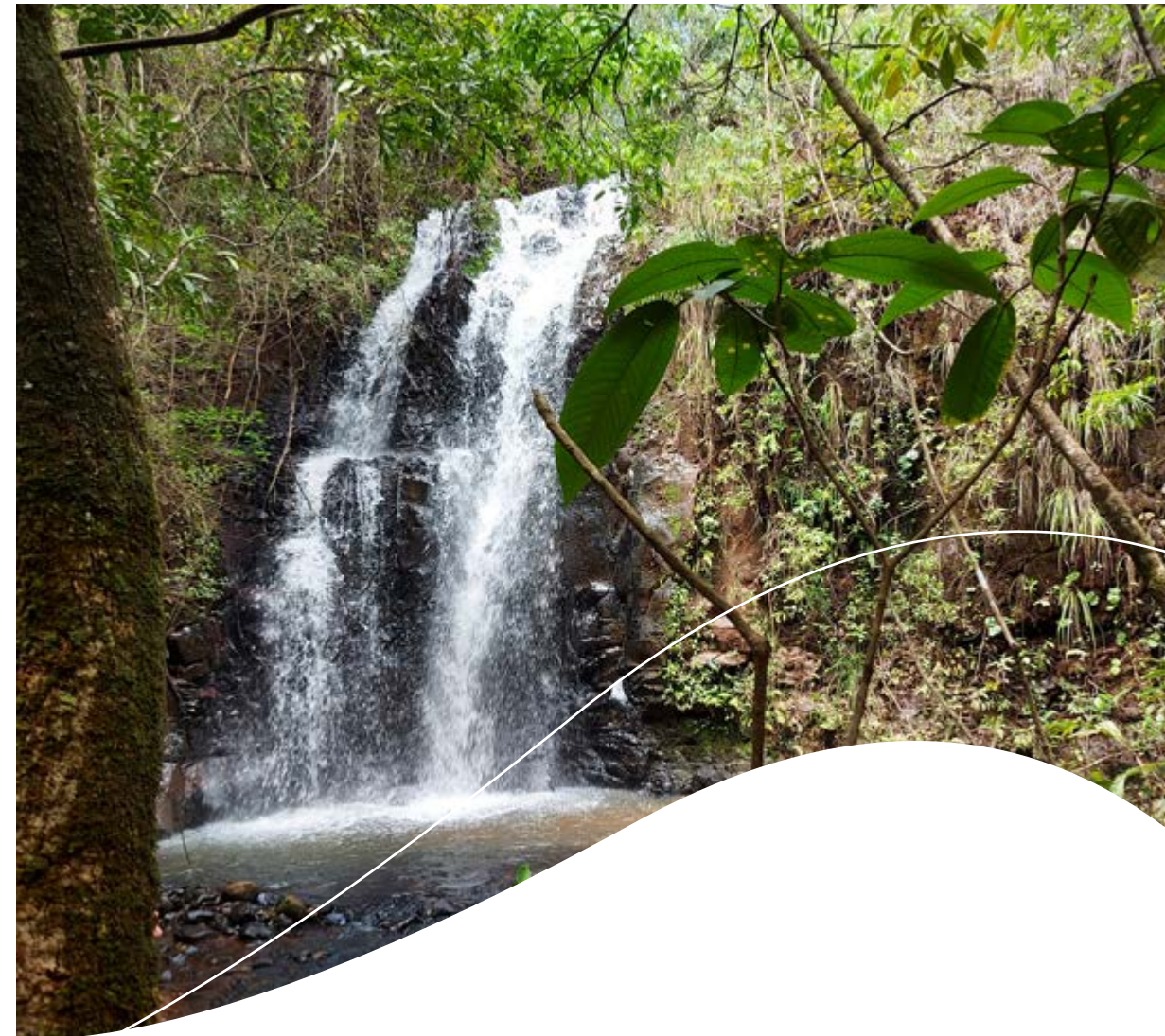


For the territorial delimitation covered by the studies, the Program considers a 15-kilometer radius from the assets in operation⁷. In these mapped areas, certain criteria and parameters are used for the classification and prioritization of the biodiversity, such as Important Bird and Biodiversity Areas (IBAs); migratory bird concentrations and routes; Wetlands of International Importance (RAMSAR Sites); and Natural Heritage Sites of Humanity, defined by the United Nations Organization for Education, Science and Culture (Unesco), for verifying superimposition with the areas within the scope of the Company's operations. **The existence of habitats for endangered species on the International Union for Conservation of Nature (IUCN) Red List is also monitored within a radius of 50 kilometers** - see detailed information in the [Attached Booklet](#).

Developed in phases, in 2016, the Biodiversity Matrix Program began by diagnosing all the assets in operation at ENGIE Brasil Energia at the time. A subsequent complementary study for structuring a priority plan of action was undertaken for the

Campo Largo I Wind Complex (BA), and the Salto Osório Hydropower Plant (PR). Following in-depth studies, these assets were deemed as strategic for prioritizing actions for the development of the conservation of the biodiversity and eco-systemic services in these regions. In 2021, the focus was on the area of Miranda Hydropower Plant (MG) for planning priority actions, above all in the light of the Jacob Private Natural Heritage Reserve (RPPN), an area under the Company's responsibility.

In addition to improving knowledge of the region's hydrographic basins – covering more than 2 million hectares in an area of the Cerrado with an influence on the Atlantic Rainforest biome –, the Program has been instrumental in the Company intensifying conservation activities in the Triângulo Mineiro region. **An example is the unveiling on October 6, 2022, of the installations sheltering wild animals, victims of accidents and subsequently rescued in the region for nursing back to health and release in the Jacob Private Natural Heritage Reserve (RPPN), situated in the region of the Miranda Hydropower Plant and maintained by ENGIE Brasil Energia.**



⁷ The spatial reference is part of a management guideline of ENGIE Group's biodiversity, established in partnership with the International Union for Conservation of Nature (IUCN). The same distance is applied in the identification of priority locations for monitoring based on the proximity between protected areas and different Group assets.

Part of the Araguari River micro-basin, the RPPN has an area of 358 hectares and includes wellsprings that contribute to the region's water resources as well as a wide variety of fauna and flora typical of the Cerrado. The Company has been investing both in the revitalization of the infrastructure of the area as well as in the consolidation of partnerships for maximization of the Reserve's positive impact (see box).

In 2023 and the following years within the scope of the Biodiversity Matrix Program, the Company plans to expand mapping to all the new assets, including those projects still in implementation. New initiatives are envisaged for the regions of the Campos Largo and Umburanas wind complexes as well as the Miranda, Salto Osório and Salto Santiago hydropower plants.

In the case of the projects being implemented, fauna and flora are monitored throughout the construction period in an effort to understand and monitor the behavior of various species present in the area during this phase. In addition to generating relevant scientific data, monitoring permits

an analysis of the extent of the construction work on the dynamics of the local fauna. Through the Habitat Disturbance, Rescue and Monitoring of Fauna programs permitted by the licensing agency, a specialized team of biologists monitors activities on a daily basis, the rescue and/or dispersal of individual species of fauna discovered on work fronts and their transfer to safety. The information gathered by the programs contributes to initiatives for conserving the species.

Committed to combating losses in the biodiversity and aligned to the commitment of **Act4nature International e Entreprises Engagées pour la Nature**, through its Environmental Policy, ENGIE defines objectives and targets for conservation, the most important being:

- **To install ecological management** in its industrial areas avoiding the use of chemical phytosanitary products for the control of vegetation;
- **Developing action plans** for operations located in priority areas for conservation; and
- **Installing projects** focused on Nature-based Solutions (SBN).



Fighting forest fires

The Campo Largo and Umburanas wind complexes are located in the Boqueirão da Onça Environmental Preservation Area (APA) which plays an important role in the conservation of the local fauna and flora and is particularly notable for the initiatives for prevention and fighting of forest fires (clearance by burning).

In partnership with the Chico Mendes Institute for Biodiversity Conservation (ICMBio), in 2022 the Company ran the "Training service for developing skills in the integrated handling of fires", for local firefighters including nine company employees. The training prepared participants for combating fires which affect the region during the dry season as well as the result of lightning strikes – events which if not tackled on a timely basis, can cause losses to native species, the communities, and the physical structure of the assets.



Management of areas

One of the principal functions of the Company's environmental agenda is the management of the social equity of the areas under its responsibility – including energy concession agreements, as well as proprietary areas, areas leased from third parties and/or on the basis of an administrative easement regime. **At the end of 2022, these areas corresponded to 264,227 hectares, on which actions are taken for inspecting and disciplining use and occupation.**⁸

Structured in a corporate environment of shared information, the environmental and land ownership cartographic database is managed by the Geoprocessing Center, permitting access to spatialized information, and multitemporal analysis of the alterations in soil use and the monitoring of irregular occupation.

The use of the Permanent Preservation Areas (APPs) along the hydropower reservoir margins totaling 30,657.9 hectares is governed by the Environmental Plans for Conservation and Use of the Reservoir Margins (Pacuera) dictating the legal and technical rules which ensure sustainable use. **Plans are prepared in compliance with the environmental legislation and after a broad-based discussion with the stakeholders involved, such as riverside communities, municipal governments, associations, and owners residing along reservoir margins.** Following public consultation and discussions in technical committees, documents are approved by the licensing body.

In the areas pertaining to third parties managed by the Company – such as rights of way for transmission lines and areas leased for the operation of wind and solar generation assets – minimum rules on use are set forth in the socio-environmental management plans.



Indigenous communities

In May 2022, activities aiming at complementing studies on the impact of the Cana Brava Hydropower Plant on the Avá-Canoeiro Indigenous Land were begun as set out in the Work Plan proposed by ENGIE Brasil Energia and validated in 2021 by the National Indian Foundation (Funai). During the year, eight campaigns were run in the field with a focus on socio-economic, physical and biotic mediums. The first studies were dedicated to ichthyofauna, the visual monitoring of river dolphins, water quality and to macrophytes as well as verification of embankments and erosion surrounding, and in the interior of, the Indigenous Land. In all, 23 campaigns

are planned for collecting data, considering the samples in both the dry and rainy season.

In addition, the indigenous people themselves together with non-indigenous professionals active in the territory were interviewed by anthropologists specialized in ethnicity and who speak the native Avá tongue. Following conclusion of the complementary studies forecasted for 2024, the expectation is that eventual impacts still not mitigated in relation to the Avá-Canoeiro, can be resolved, fully respecting the indigenous rights and the guidelines of the Internal Labor Organization's Convention 169.

⁸ Instruments are used for permission of use, limits authorization processes, land regularization of Company property, as well as sale of property which no longer serves for the operation of the projects.

Possible risks relating to the APPs or Conservation Units (UCs) are evaluated for inclusion in the Socio-environmental Risks Matrix in accordance with the Environmental and Forestry policies. These documents establish as a principle the sequence of avoiding, reducing, offsetting – presupposing intervention in forest areas through rigorous locational analyses and action plans for mitigation and/or compensation.

Located in the area of the Itá Hydroelectric Plant, the Fritz Plaumann State Park covers 741 hectares and preserves a remnant area of the Deciduous Seasonal Forest, one of the most threatened in the Atlantic Forest Biome.

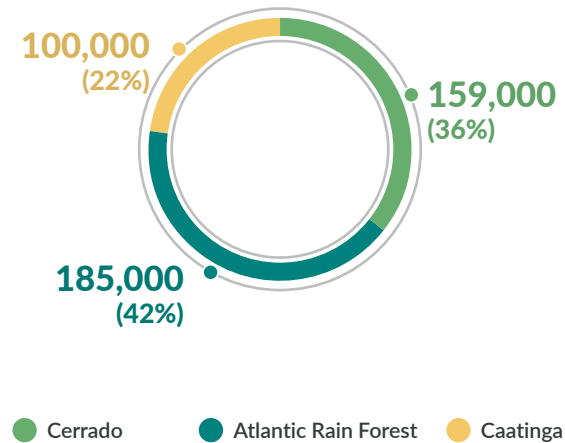
Within the scope of the Biodiversity Matrix, **37 Conservation Units were mapped surrounding the Company's operating assets.** In addition to those where ENGIE Brasil Energia has full management responsibility – the case of the Jacob RPPN mentioned on pages 77 and 78 – the Company also supports through the Itá Consortium, the maintenance of the conservation initiatives of the Fritz Plaumann State Park. Located in Concórdia (SC), in the area of the Itá Hydropower Plant, this Conservation Unit (UC) has an area of 741 hectares and preserves a remaining stand of the Deciduous Seasonal Forest, one of the most threatened in the Atlantic Rainforest Biome. Since 2003, the Itá Consortium, of which ENGIE Brasil Energia is a component part, maintains a cooperation agreement with the Santa Catarina Environment Institute (IMA/SC), which transfers financial resources for the execution of the Park Husbandry Plan – and managed by the members of the local community through a Public Interest Civil Society Organization (Oscip).

To check the list of Permanent Preservation Areas, close to the assets, please see 157 of the [Attached booklet](#).

Native vegetation

Among its assets, ENGIE Brasil Energia operates eight forestry nurseries in seven Brazilian states, contributing to the conservation of the local biomes through the production of seedlings of native species. Annual production capacity of these nurseries is approximately 444 thousand seedlings of species present in three of the six Brazilian biomes.

Annual production capacity of forestry nurseries



The forestry nurseries supply seedlings of native species for planting in areas both pertaining to the Company as well as third parties through donations to the local communities.

These donations are generally undertaken in parallel with activities of an educative character such as events promoted in schools or community spaces. The seedlings are also used for protecting wellsprings as well as for restoring APPs and Conservation Units in regions close to the assets.

Seedlings donated and/or planted by biome (2022)

Amazonia	1,671
Caatinga	24,170
Cerrado	148,511
Atlantic Rain Forest	84,769
Pampa	8,660

For projects in the process of implementation, the demand for native species for restoring degraded areas and forestry replanting is satisfied from proprietary nurseries and also from local partners. In 2022, donations realized for these projects included communities in the municipal districts of Lajes and Pedro Avelino, state of Rio Grande do Norte at events held to commemorate the Day of the Tree and the Day of the Caatinga.

In 2022, within the scope of the licensing process, the highlight was the conclusion to the planting of native species at Fazenda Vargedo, an area acquired by the Company in the municipality of Castro (PR), for compensating brush clearance during the implementation of the Gralha Azul Transmission System. Begun in 2021, the planting stage involved approximately 132.4 thousand seedlings planted over an area of 228.6 hectares – equivalent to double the authorized area cleared during the transmission project. Among the species cultivated are araucaria, imbuia, pau-marfim, cedro rosa and canella. In 2023, the Company is planning actions for consolidating forestry restoration, monitoring and maintaining the reforested area.



Conservation of araucarias

A partnership signed between **Embrapa Florestas** (the federal agricultural research corporation) and ENGIE Brasil Energia is designed to foster the planting of araucarias (*Araucaria angustifolia*) – popularly, the Paraná Pine, as well as the structuring of a genetic bank for conservation of the species. The project also includes the installation of 11 Technological Reference Units (URTs) for planting the legal-required forest reserves on properties.

The URTs serve as a model for rural producers to learn how to plant this species of tree, nurturing it and, as a result, eventually generating income – participants are remunerated for these initiatives on their properties. In parallel, the project acts as an incentive for meliponiculture (beekeeping), with

the inclusion of stingless bee colonies in the same units. The units also used for planting other species for generating income such as yerba mate, or species which make up the URT’s ecosystemic cycle, such as bracatinga. In addition to generating revenues for families through the production of honey and its derivatives, bees represent an important natural indicator of environmental quality in the region.

Begun during the construction of the Gralha Azul Transmission System, the first stage of the projects was concluded in 2022. The activities will continue with initiatives for disseminating methods adopted by Embrapa at the Reference Units as well as emphasizing the importance of conservation of the araucarias.



Sustainable partnerships

ENGIE Brasil Energia encourages projects which combine income creation with environmental conservation as part of their contribution to the sustainable development of rural communities in the regions where it runs its businesses. The highlight here is **Regenera+**, in partnership with the **Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (Sebrae RS)** in the region of the Passo Fundo Hydropower Plant (RS). Focused on the dissemination of regenerative agricultural practices among local producers, the project includes technical assistance for the sustainable use of agricultural areas, incorporating the biological control of pests and disease.

As well as reducing production costs and enhancing the participants income, **Regenera+** promotes the increase in the biodiversity of the agroecosystems. In addition, it reinforces ecosystemic services relative to

the production of grains, soil improvement, pollination, and food interactions with predatory insects in agriculture. The first stage of **Regenera+** - prospection of properties and diagnostics, was completed in 2022, with the signing up of 17 rural holdings.

Through a partnership with **The Nature Conservancy (TNC)**, ENGIE Brasil Energia supported the **Cacau Floresta**, action in the state of Pará and part of the **Restaura Brasil** initiative, a movement for planting/restoring 1 billion trees in Brazil by 2030, ramping up the increase in scale of reforestation in Brazil as part of the effort towards combating climate change. The Company was instrumental in the planting of 1,671 native seedlings in the Amazonian biome as part of the **Cacau Floresta** project, of which 471 were allocated to **Agroforestry Systems (SAFs)** and the remainder used for ecological restoration.

Again, in the Amazonian biome through a partnership with **IALA Amazônico**, the

Company **implemented SAFs** in the region of the **Novo Estado** project. The initiative combines the recovery of degraded well-springs areas and riparian forest in rural lots, installation of sustainable and medicinal vegetable gardens, training in agroecology, solidarity economy, territorial development and cooperativism.

The support for the **implementation of SAFs** also includes a project developed by the **São Salvador Hydropower Plant** in the state of Tocantins. Families associated with the local cooperative, founded with the support of the Company, have received technical assistance for combining arable agriculture with the preservation of the forest – which can include both native forest as well as the planting of trees of economic interest such as fruit trees or species used for woodworking or firewood compatible with the local biodiversity. The **SAF** model also envisages rotation of soil occupation through the alternation of different crops together with animal husbandry.

Fauna programs

With nearly 80% of its energy generation capacity from hydropower plants, fish figure largely in the Company's environmental management. **Ichthyofauna programs are developed in different hydrographic basins of the country incorporating plant reservoirs for preventing or mitigating the impact on operations in the aquatic environment.**

Environmental teams comprising specialists in their field are responsible for these Programs, combining campaigns of monitoring, prospection and execution of projects for conservation of native fish species. The majority of these prospects are being developed in partnership with academic and research institutes, such as local universities, ensuring that there is due scientific rigor in the adoption of methodologies and identification of innovative solutions.

Among the highlights of 2022 is the development of the project in partnership with the Biology and Fresh Water Fish Cultivation Laboratory of the Universidade Federal de Santa

Catarina (LAPAD/UFSC), for monitoring the tiger fish species (*Pimelodus maculatus*) in the vicinity of the Machadinho Hydropower Plant.

Research and Development activities are focused on technological alternatives and in-depth studies for monitoring and avoiding the injection of fish in turbine suction pipes. In the light of this, the dedicated Piscis software has been developed for autonomous operation, integrating computational techniques, machine learning and artificial intelligence and integrated in the plant operation's supervisory system with a focus on monitoring, counting, analysis of activity and volume of fish biomass inside suction tubes. At the end of 2022, such technology and available in the market was unknown.

On a different front, at the São Salvador Hydroelectric Power Plant, continuity was given to the "e-DNA" Research and Development Project – aimed at testing and validating molecular tools for monitoring local fish species and their respective conservation. Using



Golden mussel (*Limniperna fortunei*)

Considered an invading species, the Golden mussel presents operating risks for the hydro power plants – attaching themselves to protective grating, piping and cooling systems – as well as environmental risks in the way they establish their habitats in rivers and reservoirs, causing disequilibrium in these ecosystems. Once established in power plant structures, the species procreate rapidly into dense colonies, requiring corrective interventions for cleaning with greater frequency and replacement of components prior to regular servicing periods. In addition to the financial cost of maintaining adequate operation of these structures, Golden mussel infestation is a threat to ecosystems by altering the environmental equilibrium as a whole.

To improve the understanding of the species and to propose effective actions for combating infestations, the Machadinho and Itá consortia, of which ENGIE Brasil Energia is a part, have formed a partnership with LAPAD/UFSC and a further three hydropower plants on the Upper Uruguay River. Through the medium of a Research and Development project, the impacts caused by the Golden mussel to local biodiversity are being enumerated based on biological and abiotic analyses at 25 points along the margins of the region's reservoirs. Unique in Brazil, the studies include the use of molecular detection tools as well as the elaboration of the first report on the microbiota in the Golden mussel's digestive tract, proposing biological control measures for mitigation.



new generation genetic sequencing, 362 species of registered fish have already been found in the Araguaia-Tocantins basin. Of these, 90, including some rare species, were sequenced for comprising a genetic database. The results will enable ichthyological monitoring tools to be improved in the São Salvador Hydropower Plant region with the potential for replication in other reservoirs.

During the year, 133,250 fish fry were released experimentally in the region of the Itá and Machadinho hydropower plants on the Uruguay River and the Salto Santiago and Salto Osório plants on the Iguazu River. The initiative is designed to enrich the local fauna and evaluate the development of the species over time.

In the wind farms and in the transmission systems, the monitoring of the bird fauna is carried out through campaigns dedicated to the identification of the different species that circulate in the region.

Birds are also the focus of attention at plants under construction and as well as those which are fully operational. In the case of the wind complexes and the transmission systems, monitoring of bird life is conducted on the basis of campaigns dedicated to the identification of different species circulating in the region. In addition, the environmental teams operating at the assets systematically evaluate possible collisions or bird remains found close to wind-farm infrastructure.

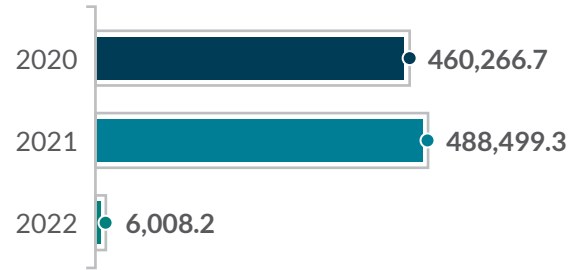
Water and effluents

[GRI 3-3; 303-1; 303-2; 303-3; 303-4; 303-5]
 [SASB IF-EU-140A.1; IF-EU-140A.2; IF-EU-140A.3]
 [2030 Agenda Goals: 6.3; 6.4; 12.2]

Aware that this is a resource which is essential not only to the continuity of industrial activities, including the production of energy, but also the life of all species, the ENGIE Group has the management of water as one of the pillars of its Environmental Policy. Aligned to the guidelines of the Controlling Company, ENGIE Brasil Energia monitors the hydric footprint of its activities and develops initiatives for reducing consumption at the same time that it identifies opportunities to contribute to water conservation, ensuring both quality and availability.

The demand for water capture for the Company's operations is concentrated on the generation segment. At the hydropower plants, the entire volume captured for the purposes of generation is returned to the water body with the same characteristics as when captured.⁹

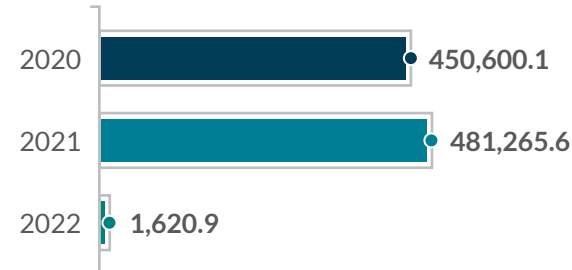
Total water withdrawal (in ML)



The Company seeks to be increasingly efficient in its use of water resources in line with the 2030 ENGIE Group's Non-Financial Objectives, the objective being to reduce freshwater consumption 70% in relation to energy produced by 2030, against the baseline year of 2019.

Worthy of note that with the Jorge Lacerda Thermoelectric Complex's exit from the portfolio in 2021, the company's water footprint has been significantly reduced both in terms of withdrawal and consumption. Considering the indicator established for the Group, the rate of freshwater consumption fell from

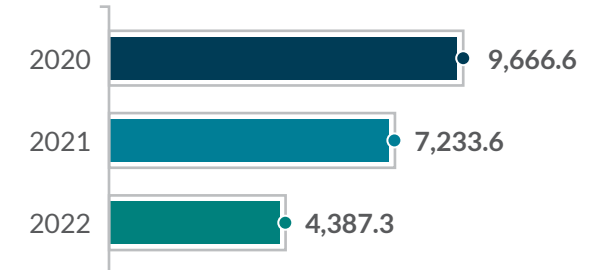
Total volume of water disposed (in ML)



0.19m³/MWh in 2019 to 0.10m³/MWh in 2022, representing about a 50% decrease.

In 2022, thermoelectric generation, represented by the Pampa Sul plant – disposal of which was announced in September of the same year – was responsible for the lion's share of the Company's industrial water consumption. It is estimated that about 80% of water captured – from the purpose-built Jaguarão River¹⁰ reservoir – is used in the plant's cooling tower (volume which evaporates almost completely) in the thermoelectric generation process.

Water consumption (in ML)



Effluents

All effluent generated from operations, including wastewater, is treated prior to disposal or release. To ensure compliance, standards for disposal are set according to the characteristics of the receptor water body and the strictest limits in the prevailing legislation.

⁹ With the exception of temperature which increases in the process of cooling but continues within the parameters established by the legislation.

¹⁰ Worthy of note is the socioeconomic function of the reservoir used for supplying the Hulha Negro (RS) community. Engie Brasil Energia was responsible for the installation of the Water Treatment Plant and a water main to the municipality, work on which at the end of 2022 was nearing completion..



Estreito Hydroelectric Plant

Main risks related to water management

Risk Potential	Strategy and practices for mitigation
Risk of oil leaks from the generation plants, more particularly the hydropower plants, potentially causing water contamination	Environmental Management System certified according to NBR ISO 14001, with procedures for preventive maintenance, tests and inspections of the operation, fire-fighting systems, containment basin, oil-water separator systems and in the case of accident, an Emergency Response Plan. Monitoring quality of the surface water.
Water pollution of reservoirs backing the hydroelectric plants due to illegal use and occupation of their margins.	Activity of the Environmental and Socio-Equity Surveillance in the reservoirs and margins as well as periodic monitoring of surface water quality.
Discharge of effluent in disaccord with established standards under the prevailing legislation.	Monitoring of effluent and surface water quality.

Quality control

In the reservoirs managed by the Company—including those backing the hydropower plants and that supplying the Pampa Sul plant – **programs are responsible for monitoring the quality of surface water, results for which are reported regularly to the environmental control agencies.** The purpose is to ensure standards superior to those required by the legislation, identifying any negative impacts on quality.

The consolidated results of monitoring in 2022 generally classified water quality in the reservoirs as “Excellent” or “Good”, using the Environmental Agency for the State of São Paulo’s (Cetesb) Water Quality Index methodology.

And supporting quality management programs are the **Emergency Response Plans** of each asset which take into account risks of

accidents or incidents with potential impacts on water resources. Adapted to local reality, the Plans include compliance with all legal requisites and equips the operating units with materials for emergency use such as leakage containments and oil and water separators.

Committed to the conservation of water resources, ENGIE Brasil Energia is a member of the hydrographic basins' committees in several regions where the Company has operations, an example being the Santa Catarina and Paraná state water resources councils. **Also on a voluntary basis, since 2010 the Company has been developing the Head Water Springs Conservation Program in various regions of Brazil. In 2022, 152 wellsprings were protected with the support of the local communities.**

The success of this initiative led ENGIE Brasil Energia to sign up to the Regional Development Ministry's Brazilian Waters Program, which among other objectives, is the revitalization of hydrographic basins such as the São Francisco, Parnaíba and Tocantins-Araguaia rivers. Association with the program was the result of the "Recuperation of the Brejo da Brasília Community Wellsprings" project in Sento Sé (BA) and undertaken through an agreement between the Company and the Campo Largo II Consortium and the Brejo da Brasília Residents Association (AMBB). The project has made a contribution to protecting several wellsprings surrounding the Campo Largo and Umburanas wind complexes through environmental education initiatives, research and production of catalogs of plants and herbs from the caatinga, planting of native seedlings, collection of seeds and production of seedlings in a proprietary nursery, among other actions. In 2022, the initiative was awarded the Alliance for Brazilian Waters Seal, a program which encourages the revitalization of hydrographic basins with a focus on water security.



Wellsprings Conservation Program

2,325
wellsprings protected up to 2022

7
Brazilian states



Innovations in the use of water in construction work

Since 2021, construction work for installing the Santo Agostinho Wind Complex has been using a system for collecting and reusing water from the air conditioners in some of the offices of the contractors working at the site. For this purpose, devices for capturing and storing water from air conditioning units have been installed, the water being used to clean offices, works site restaurants and other administrative spaces as well as irrigating the gardens at the construction site. A further interesting aspect is the reuse of effluent from the Treatment Plant at the

site for watering seedlings planted in degraded areas subject to restoration, reducing the demand for water capture from wells or springs.

Again, at the main works site, effluent from the daily washing of concrete mixer trucks used for concreting the bases of the wind turbine towers is delivered to a settling tank. From these tanks, following sedimentation of the concrete residue, the effluent is withdrawn for reuse in settling the dust in areas undergoing earthmoving and in the crushed stone storage area.



RECONHECIMENTO PELO APOIO À PROTEÇÃO DAS ÁGUAS BRASILEIRAS

In 2022, the Spring Conservation Program received the Alliance for Brazilian Waters Seal, an initiative that encourages projects to revitalize hydrographic basins with a focus on water security.



Water stress

The ENGIE Group has mapped the vulnerability of its assets to the risk of water stress in accordance with the levels cited in the Aqueduct Water Risk Atlas, which classifies this risk in five categories: very high, high, average, low and very low. In this evaluation, ENGIE Brasil Energia's assets were classified in the region of very low to average¹¹, with the exception of the Floresta Photovoltaic Complex (RN), in a region classified as subject to high water stress.

Acquired in 2022, this generation asset does not use water for generation, representing approximately 0.003% of the total water consumed by the Company during the year. This risk is classified and managed based on the requisites present in the ENGIE Group's Environmental Plan which considers in addition to location, the annual consumption of water of the asset.

¹¹ The average level relates to the Trairi (CE), Umburanas I (BA) and Campo Largo I and II (BA) wind complexes.

Waste

[GRI 3-3; 306-1; 306-2; 306-3; 306-4; 306-5]
 [SASB IF-EU-150A.1; IF-EU-150A.2]
 [2030 Agenda Goal: 11.6; 12.5]

Guided by the Company's Sustainable Management Policy – and in accordance with the National Solid Waste Policy (Law 12.305/2010) – ENGIE Brasil Energia's waste management adheres to rigorous criteria and guidelines applied to all operational units and designed principally to eliminate or reduce generation to the maximum possible. When not possible, the priority shifts to reuse and recycling, treatment, and eventual final adequate disposal (in that order).

All the business units have a Solid Waste Management Plan (PGRS), compatible with their own activities, duly updated and in accordance with the current legislation. From generation to final disposal, **waste control and tracking occur through a digitalized process via integrated software.** As part of this process,

automated scales are used at some assets for weighing waste permitting automatic booking to the database, adding greater reliability in the registration process.

Waste under the responsibility of the Company is stored in appropriate conditions, segregated according to physical state, degree of hazardousness and chemical incompatibility, to ensure complete compliance with the legislation and good environmental practices. Control continues during transportation through verification of the pertinent documentation and other applicable legal requirements, so as to mitigate risks related to movement through to adequate eventual disposal.

Performance indicators related to waste management are regularly monitored based on monthly reports, permitting the evaluation of generation parameters, disposal and recovery of materials. In 2022, the Company established a

target for recoveries of 76% of waste. The result at the end of the period was 84%, 8 p.p more than established

For the year, there was a reduction of 63.4% in total volume of waste dispatched for disposal, a decline which is justified by the exclusion of ash generated in the Jorge Lacerda Thermoelectric Complex due to the sale of this asset in 2021.



-63.4%

in the total volume of waste dispatched for disposal.

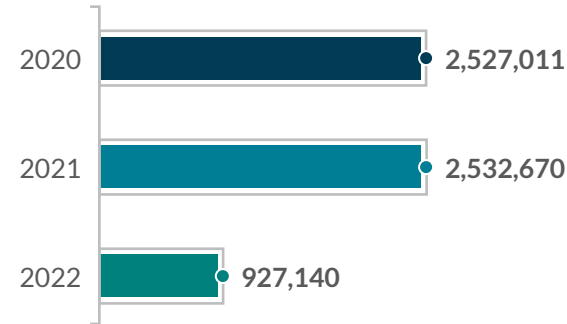


Reuse in construction works

The reuse of materials has been a constant in the projects under implementation. At the Santo Agostinho Wind Complex, for example, materials such as wood, metals, plastic structures and concrete residues have gained new applications, such as making furniture, construction site structures, drainage systems, paving base, access backfilling and recovery of loan areas.

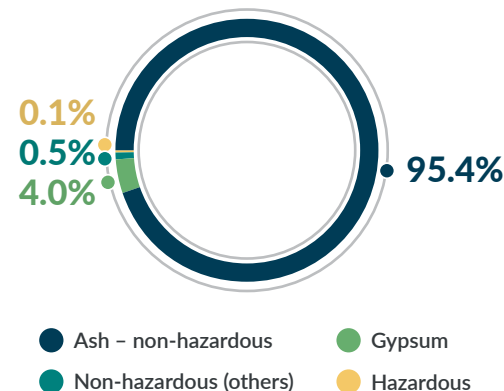
In addition, wood residues were donated for reuse by the local community, which was guided on the correct way to use the residue and properly dispose of any leftovers.

Total volume of waste generated* (in tons)



*Considers waste for disposal and also stored in situ.

Percentage of waste generated by type



Impulse to the circular economy

The ENGIE Group's Environmental Policy, updated in 2022, reiterates the Company's commitments to the circular economy – which proposes the sustainable production of goods and services, limiting consumption, dissipation and production of waste. In response to this challenge, ENGIE Brasil Energia includes the theme in its Environmental Conservation Strategy to intensify initiatives for:

- **Increasing** the level of recycling and reuse of waste generated by industrial activities;
- **Identifying** alternatives and recycling platforms;
- **Reducing** the use of fossil fuels; and
- **Developing** sustainable gases such as green hydrogen.



Recycling has been shown to be a viable solution for one of the challenges of the energy transition: the appropriate disposal of replaced photovoltaic panels at solar energy plants. **Alert to the theme, the Company has sought partners with the capacity for the complete recycling of this waste. In 2022, more than 100 tons of solar panels were destined to be transformed into three main components: glass, copper cables and metals.**

Parallel to initiatives pursued internally, ENGIE Brasil Energia engages local communities for adopting the circular economy model. In Santa Catarina, for example, the Lages Cogeneration Plant donates biomass ash – waste from energy generation – for use in agriculture such as fertilizer and in the composting of domestic organic rejects.

In Trairi, in the state of Ceará, the municipality where the wind complex of the same name operates¹², the Company has built a **Waste Screening Center**, where, in 2022, the Company began the “Reconectando Sujeitos, Reciclando Atitudes”, for

training recycling agents. During the year, some 4.4 tons of waste was processed at the site.

Again, in the Northeast, the Company supported the **RN+Clean** project, in the region of Santo Agostinho Wind Complex (RN), currently under construction. The initiative, which involves several public and private institutions, includes educational activities in state schools in the municipalities of Lajes, Pedro Avelino and Angicos, in Rio Grande do Norte, with gymkhanas and campaigns for furthering the correct collection and disposal of electronic waste and sponges.



100 ton

of solar panels were destined for recycling.

¹² The Screening Center was built using a social sub-credit from the Brazilian Development Bank (BNDES) and its installation was made possible through an agreement with Trairi city government, the Sol Nascente Trairi Recycled Materials Scavengers' Association and ENGIE Brasil Energia.

Atmospheric emissions

Atmospheric emissions resulting from the Company's operations are concentrated largely in three thermoelectric plants fired by biomass (sugarcane and wood), as well as the coal-fired Pampa Sul Thermoelectric Plant¹³. The coal- and biomass-fired thermal operations have efficient atmospheric pollution control systems where emission limits or targets are set at the legal and/or established limits stipulated in the operating licenses.

The emission control system includes combustion gas treatment.

The emissions control system at the Pampa Sul Thermoelectric Plant uses a gas combustion technique with the injection of limestone into a fluidized bed boiler for capturing sulfur dioxide and thereafter, electrostatic precipitator and bag filters operating in parallel for reducing particulate material. Efficiency percentages are high and have been shown to be sufficient for meeting established emissions requirements.

Data with respect to other significant atmospheric emissions (NOx, SOx, Particulate Material) are shown on page 164 of the [attached booklet](#).

Greenhouse gas emissions are detailed in [the Climate heading](#).



¹³ Since the start of operations at the Plant in 2019, the quality of the surrounding air is regularly monitored, being classified as "Good" according to the index established by Conama Resolution 491/2018.

Environmental engagement and education in the communities

[GRI 2-29]



conexão
PROGRAMA DE EDUCAÇÃO AMBIENTAL ENGIE

The local communities are great allies of ENGIE Brasil Energia in initiatives for conserving the environment. **To maximize the sense of shared responsibility, the Company maintains a transparent and ethical dialog on the environmental challenges in all the areas in which it conducts its business.** in parallel developing actions for effectively engaging local stakeholders.

Among these actions, most notably are the **Conexão Program**, for community visits to the assets, and Environmental Education initiatives. An important platform for community engagement and dissemination of the sustainability culture, the Program offers structured routines for public visitation to the plants in the Company's generator park in different regions of Brazil. Visitors are shown how the operations work along with the socio-environmental projects undertaken by the Company in the region.

The Environmental Education Program promotes instruction on the environment through presentations in schools and other community spaces, involving students, rural farmers, and educators, among others. Competitions in schools are also held for promoting themes relating to sustainable development. Examples are Composition Writing Contests sponsored by Machadinho (SC), São Salvador (TO) and Estreito (MA) hydropower plants as well as TransformAction, a project inspired by the Salto Osório and Salto Santiago hydropower plants in the state of Paraná, which fosters initiatives on the part of both students and teachers aligned with the 2030 Agenda Goals – with 80 schools enrolled for the 2022 edition.

Over the year, more than 190 thousand took part in the Connection Program, a higher number than reported for 2021, when sanitary restrictions due to the Covid-19 pandemic suspended the Program's activities at several plants.

At the assets under construction, the Environmental Education Programs, developed as part of the licensing process, also represent an important channel of approximation with the local community.

The Conexão Program represents an important platform for community engagement and the dissemination of sustainability culture.

In 2022, lectures, presentations and campaigns on environmental and income creation themes were held together with the communities in the vicinity of the ongoing implementation work at the Santo Agostinho Wind Complex. In addition, workshops on agroecological practices, conscious use of water and practices for producing honey with native bees were offered combined with campaigns for raising awareness among the local population as to the valorization of the Caatinga biome and the incentives for sustainable development in the region.

In the North Region, the Environmental Education Program was responsible for monitoring all phases of the installation of the Novo Estado Transmission System. At the end of 2022, 100% of the targets related to the theme had been met, more particularly for:

- **Production and distribution** of 3 thousand pocket guides, 3.5 thousand folders and 600 wall posters for disseminating good environmental practices;
- **Realization** of courses on environmental themes in eight local communities with the formation of multipliers; and
- **Involvement** of 10,315 employees in Environmental Education initiatives.

Climate

Strategy context

[GRI 3-3]

[2030 Agenda Goals: 7.2; 9.4; 13.1; 13.2; 13.3]

Engaged in combating climate change – the result of the increase in the concentration of Greenhouse Gases (GHG) in the atmosphere – the ENGIE Group has been fulfilling its purpose of acting to accelerate the transition to a carbon neutral economy. Aligned to the principles of the Paris Agreement, signed in 2015 for nations throughout the world, the Company acts to limit global warming to 1.5°C in comparison with pre-industrial levels.

This commitment is enshrined in its Sustainable Management Policy as well as its Environmental Policy and in the other corporate guidelines which involve the theme and applicable to all the Company’s business units – [which include the ENGIE Group’s Non-Financial Objectives shown on page 32](#). These guidelines are based on public commitments assumed by the Controlling Company, which aims to reach:

> NetZero in 2045, on the basis of the decarbonization of proprietary operations as well as value chain operations, drastically reducing company emissions and compensating residual emissions;

> In the short-term, a trajectory to 2030 well below 2°C, certified by SBTi. For this certification, various Science-based indicators were established as a means of accompanying the evolution of performance. The main ones are:

To reach a maximum of 43MtCO₂e in 2030 (compared with 106 MtCO₂e in 2017) associated to the production of energy.

To reduce the carbon intensity of energy production (Scope 1) and consumption (Scope 2) by 66% in relation to 2017.

To reduce the carbon intensity of energy sales (produced by ENGIE or purchased in the market) by 56% in 2030, against a baseline year of 2017.

In the Brazilian context, ENGIE Brasil Energia has been operating for more than a decade to accelerate the energy transition to a low carbon system and in its own Journey for the Climate, understood as an essential part of its business

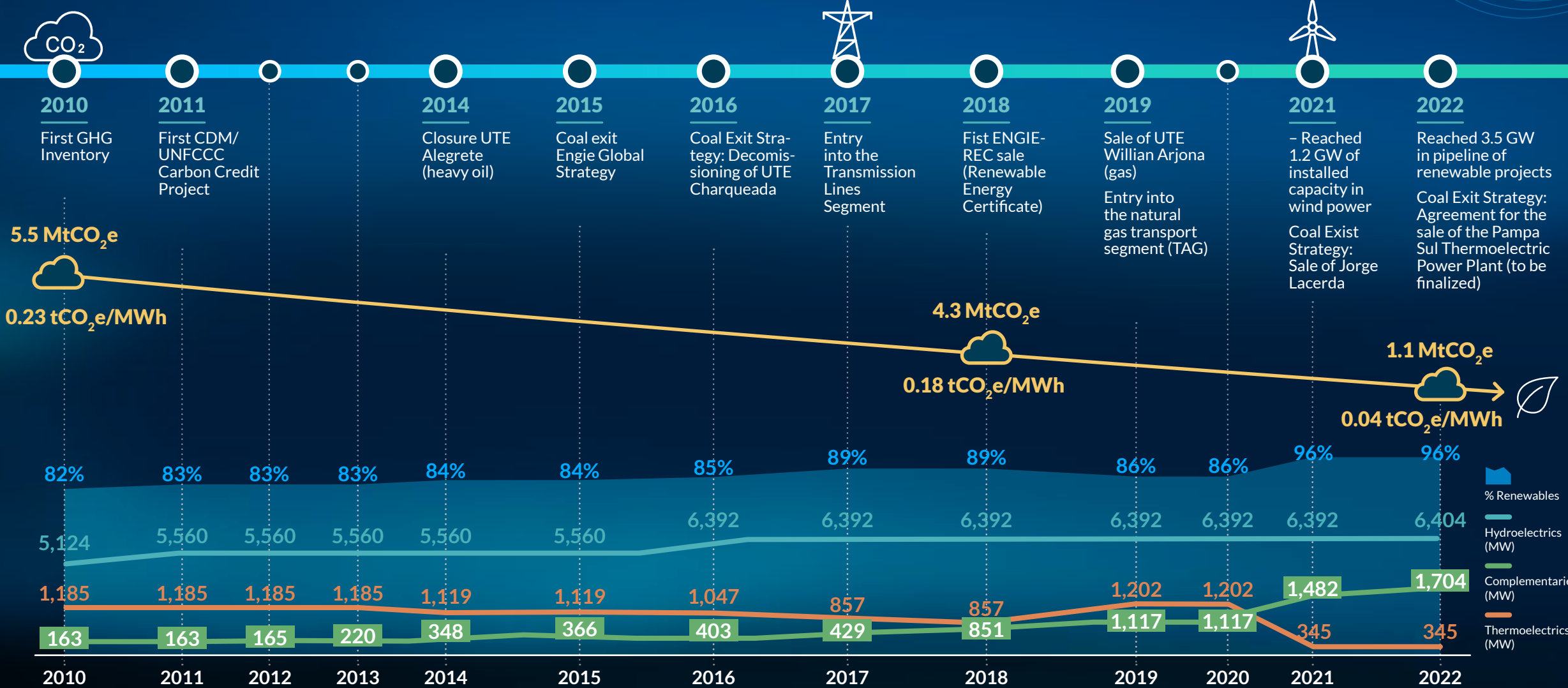
strategy as shown in the following infographic. Between 2016 and 2022 alone, more than BRL 20 billion were allocated to the rotation of assets towards portfolio decarbonization with the prioritization of investments in renewable energy. Complementing initiatives in this direction, the Company entered the electricity transmission segment as well as gas transportation through a stake in TAG and, more recently, has been prospecting investments in green hydrogen.



Transparency

In 2022, for the first time, the Company responded to the CDP Climate questionnaire on an individual basis – rather than consolidating information with the Controlling Company –, detailing policies, practices and performance indicators related to the theme – to access, click [here](#). ENGIE Brasil Energia’s questionnaire was given a “B” classification.

Timeline - Climate strategy



ENGIE Brasil Energia's climate journey is guided by the key strategic drivers:

- **Decarbonization** of the assets;
- **Expansion** in renewable energy;
- **Constant search** for the reduction in carbon footprint;
- **Engagement** of the value chain (clients and suppliers);
- **Environmental Conservation and Biodiversity Initiatives**;
- **Compensation** of residual emissions.

The rigorous control of its own emissions is part of the Company's environmental management system, allowing the identification of the carbon footprint in its activities and the development of solutions to reduce it. Additional to the internal effort to ensure that the energy transition gains momentum to the required velocity, other organizations must engage likewise. For this reason, support for the decarbonization of other companies, especially customers, represents an important part of the climate strategy via solutions which go beyond commercialization of energy such as through the medium of carbon credits and renewable energy certificates [\(see more on page 112\)](#).

Journey for the Climate

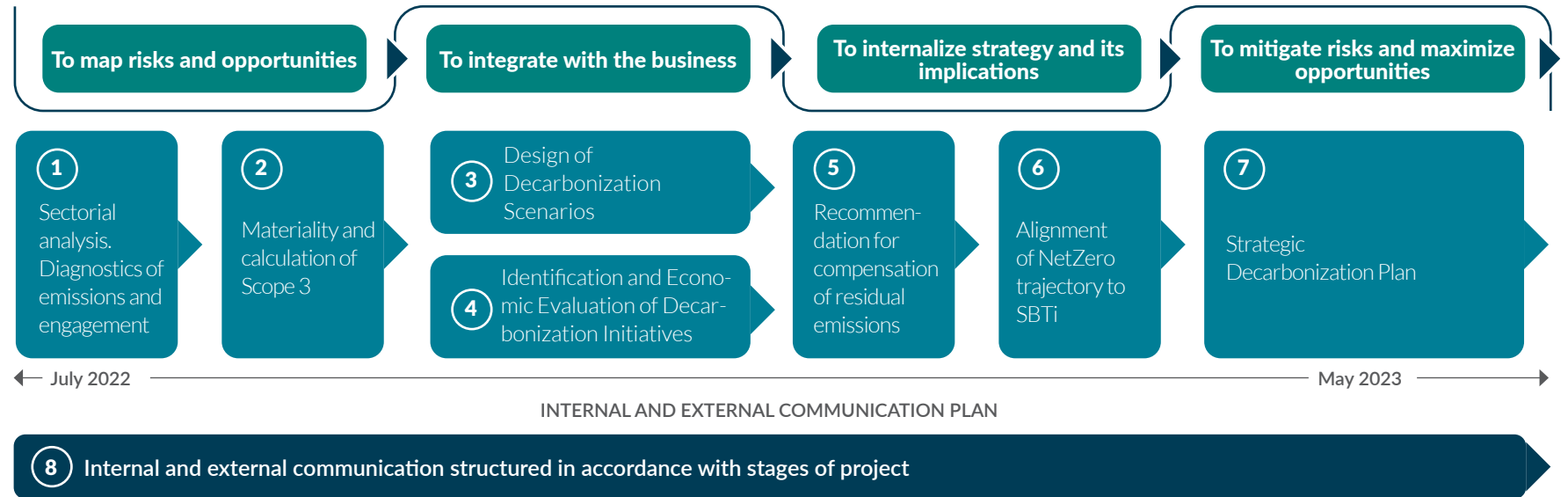
As part of this movement, in 2022, the Company invested in the structuring of its Journey for the Climate in a science-based and consistent and transparent way for prioritizing the reduction in emissions along the entire value chain, identifying opportunities for remuneration and carbon sequestering and combining forces

with the ENGIE Global Program. In this way, the Company approximates to the principles established and disclosed by the United Nations during COP27¹⁴, held in Egypt in November 2022, with the purpose of engaging employees, suppliers and customers in identifying potential opportunities for the decarbonization of their activities.

The Journey is structured and executed in a multidisciplinary and transversal manner, based on eight key principles described in the following infographic.



Decarbonization strategy



¹⁴ Report available in: <https://www.un.org/sites/un2.un.org/files/high-level-expert-group-update7.pdf>

The first stages of the program were designed for a diagnosis of all the Company's direct and indirect emissions, considering the exit of coal-fired operations from the portfolio, as well as an analysis of materiality of Scope 3 emissions with a view to covering all emissions along its value chain.

Based on this new context, various initiatives are being evaluated for reducing and eliminating emissions and simulation of combinations of scenarios for establishing ambitions and action plans, science-based, through parameters established by the SBTi, also contemplating the structuring stages for compensation of the emissions.

In addition to the consistent direction of its greenhouse gas inventory and science-based trajectory, the Journey for the Climate program is based on three pillars:

- **Management:** Focus on inventorying, engaging, and raising awareness;
- **Mitigate:** Focus on reducing, eliminating, compensating, and innovating;
- **Adapt:** Focus on mapping and addressing risks and, opportunities.

Climate governance

Given the strategic character for the businesses and the impact for the economy and society, climate change is a recurrent theme on the agenda of the Company's senior management. **It is incumbent on the chairman of the Board of Directors to interface with the Controlling Company for specifying the global commitments assumed by the ENGIE Group in its operations in Brazil in such a way as to reflect in the different areas and segments of business.** It is also the responsibility of the Board of Directors to analyze and guide the Executive Board on strategic matters related to questions of climate such as analysis of climate-related risks; the annual contracting of risk insurance within the scope of the strategy for adapting to climate change; and validation of strategic, operational and performance aspects related to climate change.

In addition, all transactions above BRL 50 million are subject to Board of Directors resolution based on the Environmental and Social Responsibility Score (ESR Score), a document which summarizes socio-environmental questions and the

impacts of the operation analyzed through the prism of 12 criteria including climate mitigation and adaptation.

The Company's Variable Remuneration Program includes requisites linked to the management of climate questions for all directors as well as those in non-executive managerial positions, contingent to meeting strategic corporate goals. In addition, the operational teams have targets to meet for the specific areas of activity. These targets and objectives include portfolio decarbonization, sustainable growth, consumption of fuels from renewable sources, waste recuperation, production and planting of seedlings of native vegetation and recognition of the Company in relation to ESG themes in Brazil, both through sustainability indices and the improvement of risk scores, among others.

For detailed information on the structure of governance and aspects of management relating to the theme, please see the ENGIE Brasil Energia's replies to the [CDP Questionnaire \(item C1\)](#).




Learning journey

In 2022, the Company intensified tuition activities for its inhouse audience in relation to climate change. In all, more than 400 hours were dedicated to training both onsite and remotely with respect to the theme. In addition to employees, members of the Board of Directors and Executive Board have enhanced their training in this area through special courses administered by the Brazilian Corporate Governance Institute (IBGC). Another highlight during the year was the participation of Prof. Dr. Carlos Nobre, a renowned global authority on the theme, at the Company's Sustainable Management Meeting, with a lecture open to all employees.


Management of risks and climatic opportunities

[GRI 201-2]

Climate change constitutes a central theme  [to ENGIE Brasil Energia's management of risk](#) given the extent to which the Company's supply chains, infrastructure and activities may be affected by the greater incidence of extreme weather events such as drought, fire, storms, excessive rainfall and floods. In the same way, risks arising from the transition to a low carbon economy are mapped, requiring changes in technological and social structures.

Risks arising from the transition to a low-carbon economy are mapped, which will require changes in technological and social structures.

Aligned to the guidelines of the ENGIE Group, **climate-related risks are included in the Company's, Enterprise Risk Management (ERM) process**, which is gearing up to adapt to climate change, reinforcing the resilience of corporate infrastructures and services as well as capacity for innovation.

Also, with the focus on transparency, the recommendations of the Task Force on Climate-related Financial Disclosure  [TCFD](#), are also gradually being incorporated into management. The Task Force is linked to the Financial Stability Board (FSB) for orientating financial disclosure related mainly to the management of risks and opportunities with respect to climate change.

In this context, the Company classifies its risks in accordance with the methodology proposed by the TCFD and CDP, structuring its climate governance as follows.



Research and Development – Climate Change

At the end of 2021, ENGIE Brasil Energia launched a public Research and Development call for financing projects with the theme “Impacts of changes in climate and land use on the Brazilian electricity sector”. The areas related to the program were: (i) paleoclimatology; (ii) future changes in South American oceanic and atmospheric standards (with an impact on renewable energy sources); (iii) quantification of humidity sources for hydrographic regions of significance for energy production; (iv) regional climate modeling with

application in the predicting of significant events (drought); and (v) quantification of the effects of changes in soil cover in the components of the regional hydrological cycle. During the course of 2022, five federal universities and two startups began 8 projects selected from the five lines of research. The research is slated to finish between December/23 and June/24, permitting the dissemination and expansion of knowhow on the impacts of climate change to the Brazilian electric energy sector as a whole.

Climate Risks

CATEGORY	RISKS INVOLVED	RISK MANAGEMENT	
Risk transition	Legal and Political	Evolution of rules and regulations relative to climate change or to the energy transition.	Regulatory surveillance, managed through engagement with policy formulators.
	Technological	Risks of a technological lag in acquiring and accompanying the rhythm proposed for innovative solutions.	Activity of the area of Innovation and Performance Management for stimulating participation of the ecosystems of innovation and employees in different initiatives.
	Market	Risk of not accompanying the regulatory and market-related evolution allowing the development of offers to customers seeking to ramp up the energy transition.	Application of a proactive commercial strategy and intelligent management of the energy portfolio. Proximity and partnership with customers, permitting creation of innovative solutions.
	Reputational	Associated with the perception of the Company's value to society and the confidence of its stakeholders in its business model and strategies.	Application of transparent conduct, presenting data which confirms the results, as well as engaging stakeholders, suppliers and partners in climate related initiatives.
Physical risks	Chronic and Acute	Risks involving the physical exposure of the assets, which can affect energy generation, intensified by climate change, based on the occurrence of chronic and extreme events.	Development of studies with specific and regionalized data, providing a robust scientific base for the elaboration of plans for management and adaptation.

Opportunities

International advances in the climate change agenda are generating opportunities for companies, governments and society. According to the TCFD, opportunities are classified in five groups: Efficiency of Resources, Source of Energy, Products and Services, Market and Resilience.

These themes are covered over the course of this Report, reflecting in the creation of value through the transformation of human, intellectual, natural, and manufactured capital.

Highlight for the Impulse to the Energy Transition in the [Competitive Strategy Chapter](#).





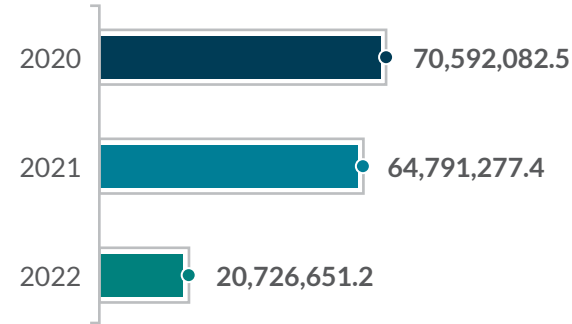
Metrics and targets

Energy

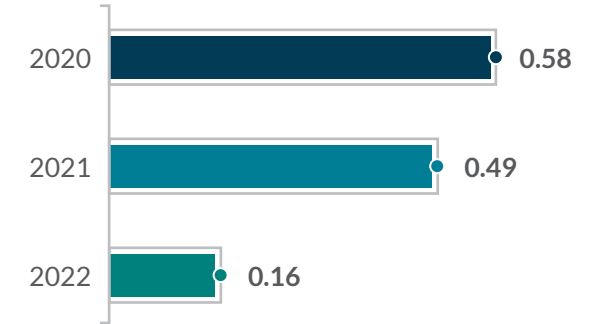
[GRI 3-3; 302-1; 302-3]
 [2030 Agenda Goals: 7.3; 8.4; 12.2]

Energy consumption (direct and indirect) relates to the operations of ENGIE Brasil Energia's assets, notably coal and biomass for electricity generation at the thermoelectric plants. Consequently, the quest for efficiency in usage represents a fundamental axis in the decarbonization strategy. In 2022, there was a **68% reduction in total consumption of energy** compared with 2021 – related in particular to the exclusion of consumption by the Jorge Lacerda Thermoelectric Plant, an asset which was sold in 2021.

Total energy consumption (in GJ)



Energy intensity (GJ consumed/GJ produced)



Energy Goal – ENGIE Group

ENGIE's Objective	Reference value (2019)	Result until 2022	2030 objective
Percentage of renewable energy capacity, in line with the Science Based Targets (SBTi) trajectory.	27.8%	38%	≥ 58%

In establishing a renewable capacity target, ENGIE Brasil Energia has consequently reduced consumption of energy from non-renewable sources. In this way it contributes significantly to enabling the ENGIE Group to comply with

this commitment – in 2022, maintaining 95.9% of energy from renewable sources with the outlook to reach 100% before the end of the first half of 2023, as described [here](#).

Greenhouse Gas Emissions (GHG)

[GRI 3-3; 305-1; 305-2; 305-3; 305-4]

[SASB IF-EU-110A.1; IF-EU-110A.2; IF-EU-110A.3]

[2030 Agenda Goals: 7.2; 9.4; 13.1; 13.2, 13.3]

Since 2010, ENGIE Brasil Energia has been rigorously controlling its own emissions, evaluating the carbon footprint of its activities and implementing actions to reduce it. The corporate Greenhouse Gas Emissions (GHG) inventory is prepared on the basis of concepts, principles and guidelines as established by the GHG Protocol methodology, disclosed by the Brazilian GHG Protocol Program

(PBGHGP), using its specifications for accounting, quantifying and publishing Corporate Greenhouse Gas Inventories. Mathematical equations supplied by the Intergovernmental Panel on Climate Change (IPCC) are also used for calculation of emissions from certain sources and sinks.

The report's structure adheres to the specifications of norm ISO 14.064:2007 – Greenhouse Gas Management System – International Organization for Standardization. ENGIE Brasil Energia's total GHG emissions were calculated and classified under Scope 1 (direct emissions), Scope 2 (indirect emissions from acquired energy) and Scope 3 (other indirect emissions) and the Inventory is verified by an external independent party, consolidating data based on two approaches used by the program: operating control and corporate stake.



To access out Greenhouse Gas Emissions inventory 2022 in full [click here](#).

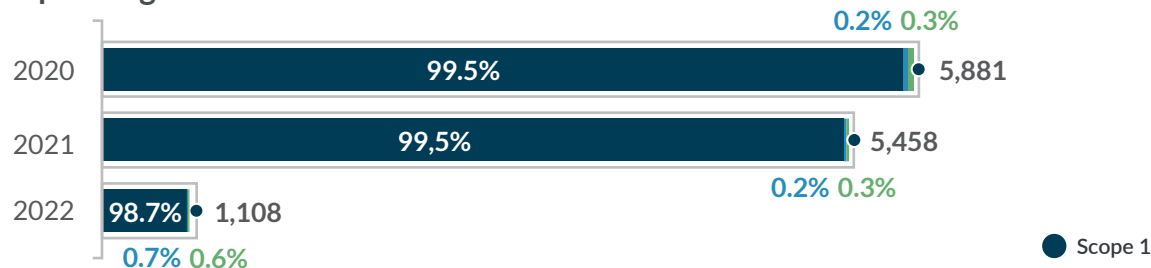
Performance

In 2022, the Company emitted 1,108,148,29 tCO₂e according to the operating control approach, and 1,106,841.71 tCO₂e in case of the corporate stake approach as shown in the following chart – a reduction of 79.7% in relation to the preceding year, in the case of both approaches.

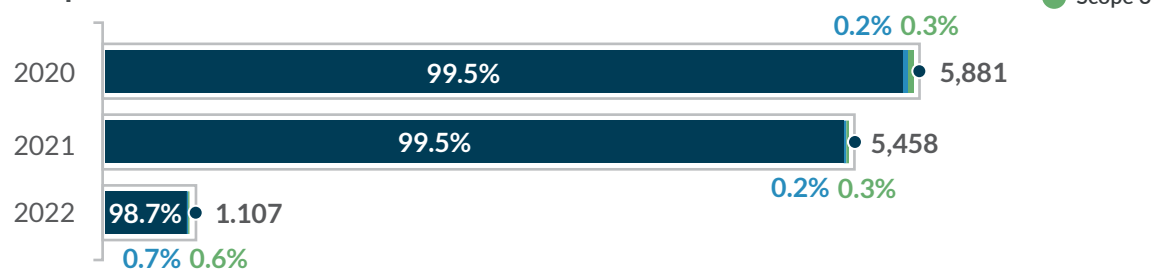
The decrease is largely a reflection of the sale of the Jorge Lacerda Thermoelectric Complex where data was booked until disposal date (October 2021).

Total emissions (thousands of tCO₂e; % of representativity of each scope)

Operating control



Corporate Stake





Recognition in Paraná

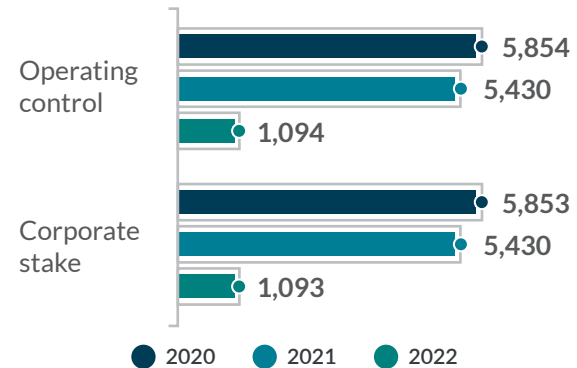
In 2022, ENGIE Brasil Energia, with its hydroelectric plants Salto Osório and Salto Santiago, located on the Iguaçu River, was awarded the Selo Clima Paraná certificate for the fifth consecutive time. The Company was awarded the highest ranking, in Category A: External Market – a modality included in the edition to strengthen and recognize organizations that are aligned with practices associated with the ESG pillars.

The Selo Clima Paraná aims to recognize companies and entities that operate in the state in line with the preservation of natural resources.

Direct emissions (Scope 1)

The company's direct emissions in 2022 were 1,093,909.41. tCO₂e using the operating control approach and 1,092,626.20 tCO₂e using the corporate stake approach – a reduction of 79.9% compared with 2021. The reduction is largely due to the sale of the Jorge Lacerda Thermoelectric Complex, data for which was booked up to disposal (October 2021).

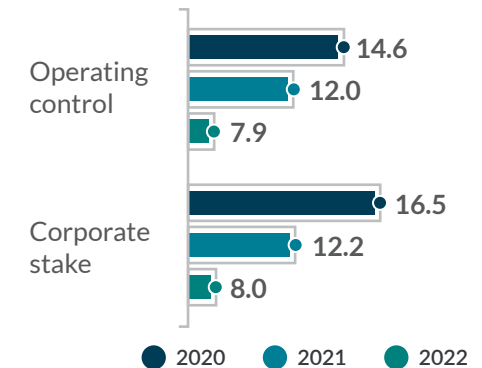
Direct emissions – Scope 1 (thousands of tCO₂e)



Indirect emissions (Scope 2)

Indirect emissions in 2022 totaled 7,937.57 tCO₂e using the operating control approach and 7,973.87 tCO₂e with the corporate stake approach – reduction of 33.8% and 34.5% respectively, compared with 2021. In 2022, the Company began booking the emissions from its Gralha Azul and Novo Estado transmission systems which gradually entered commercial operations during 2021 and 2022, considering among other sources, expected losses of energy in Scope 2.

Indirect emissions – Scope 2 (thousands of tCO₂e)



Emissions from other sources (Scope 3)

Scope 3 emissions represent a global challenge for preparing the Greenhouse Gas Inventory since they are indirect and over which the companies have no direct control.

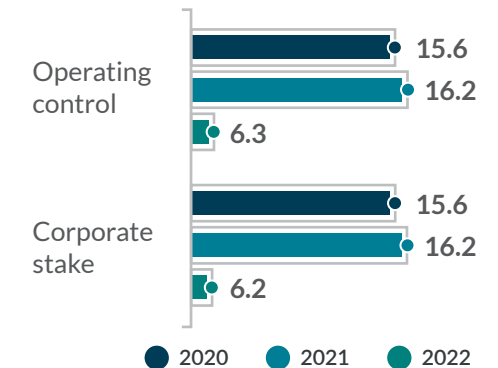
However, aware that the transition to carbon neutrality, when science-based, necessarily must incorporate the entire value chain, ENGIE Brasil Energia, in its [Journey for the Climate](#), is consistently finetuning its metrics relating to Scope 3. Hence, in 2022 it realized a new diagnosis of materiality for Scope 3 in an attempt to understand how the decarbonization of its generation assets will transform its emissions make-up.

In this context, the result shown for Scope 3 includes the categories in the table which will see alterations after recalculation and inclusion of the categories indicated for ensuring complete coverage of the value chain.

Scope 3		Inventory 2022
Upstream	1 Goods and Services purchased	Recalculating
	2 Capital goods	Recalculating
	3 Activities related to fuel and energy not included under Scopes 1 and 2*	Recalculating
	4 Transportation and distribution (upstream)	Already booked
	5 Waste generated from the operations	Already booked
	6 Travel and business	Already booked
	7 Commuting by employees (home-work-home)	Already booked
	8 Leased goods (organization as a lessee)	Not applicable
Downstream	9 Transportation and distribution (downstream)	Already booked
	10 Processing of sold products	Not applicable
	11 Use of goods and services sold	Not applicable
	12 End of life treatment of the products sold	Not applicable
	13 Leased goods (organization as a lessor)	Not applicable
	14 Franchises	Not applicable
	15 Investments	Recalculating

The total Scope 3 emissions of the Company in 2022 amounted to 6,301.30 tCO₂e according to the operating control approach and 6,241.64 tCO₂e reflecting the corporate stake approach, a reduction of 61%, when compared to 2021.

Emissions from other sources – Scope 3 (thousands tCO₂e)

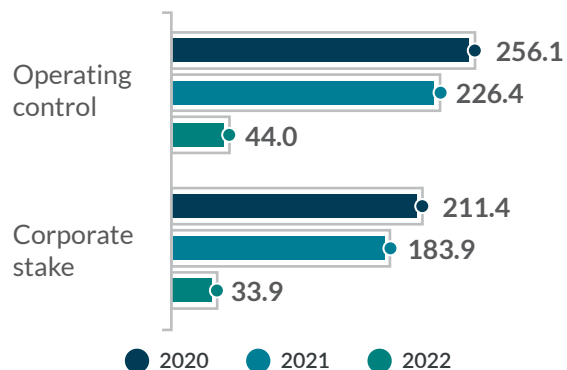


Intensity of emissions

In 2022, the emissions indicator per net generation – amount of carbon emitted in generating 1 MWh - reached 44.0 kgCO₂e/MWh according to the operating control approach and 33.9 kgCO₂e/MWh in the corporate stake approach, a reduction in relation to 2021 of 81% and 82%, respectively. The improvement relates to the already mentioned decarbonization of the generator park.

Intensity of Emissions

(kgCO₂e/MWh)



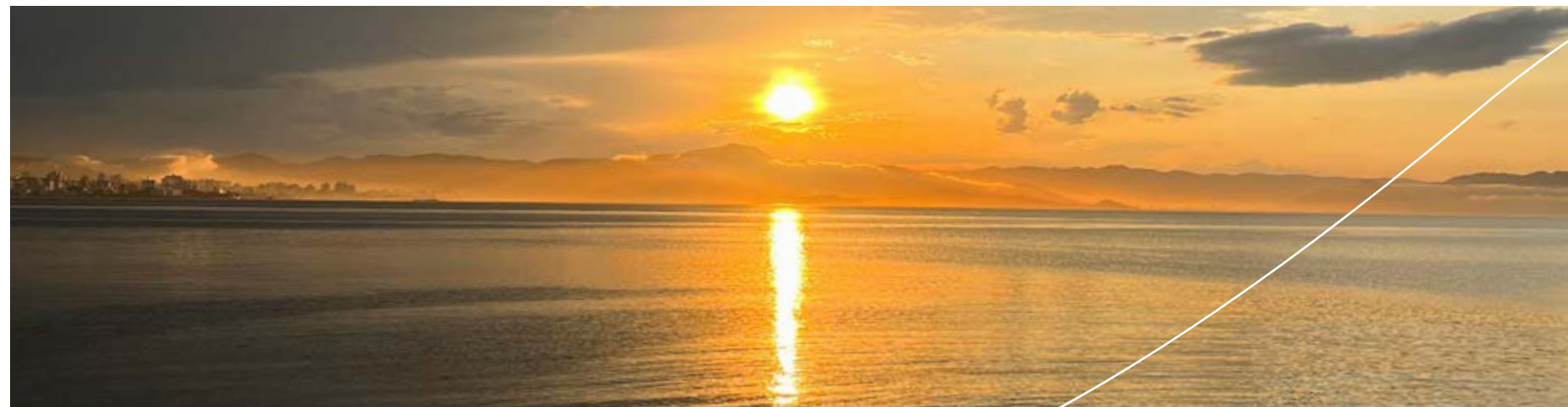
Emissions target – ENGIE Group

ENGIE - Objective	Reference Value (2017)	Result up to 2022	Objective 2030
Emissions of greenhouse gases Related to the production of energy (scope 1 and 3), in line with the Science Based Targets (SBT) trajectory.	106 MtCO ₂ e	60 MtCO ₂ e	43 MtCO ₂ e

Just as with the energy target, ENGIE Brasil Energia makes a strong contribution to reaching its commitments on a global scale. ENGIE Brasil

Energia’s emissions fell from 4.4 million tons in 2017 to 1,1 in 2022, with a tendency to decline further in 2023 with the sale of Pampa Sul.

ENGIE Brasil Energia’s emissions fell from 4.4 million tons in 2017 to 1.1 in 2022, with a tendency to further decline in 2023.



6 Sustainable Relations

- » Communities
- » Clients
- » Suppliers
- » Investors
- » Stakeholder Management



BRL 21.4 MILLION

IN SOCIAL PRIVATE INVESTMENT among proprietary and incentivized resources



ENERGY TO EDUCATION PROGRAM

BRL 240 thousand donated
30 projects
14.5 children and adolescents benefited

3rd public notice of **Mulheres do Nosso Bairro Program**

BRL 570 thousand in resources

36 supported entrepreneurs

20 PARTNERSHIPS established in Parcerias do Bem Program

25 supported projects

+30% in incentivized resources mobilized

4,876 ACTIVE SUPPLIERS

100% of those registered in 2022 underwent a socio-environmental and ethical assessment



982 CUSTOMERS SERVED

+ 12% of growth compared with 2021

Communities

[GRI 3-3; 413-1]

[Agenda Goals 2030: 4.7; 8.3; 10.2; 11.3; 11.A; 12.8; 17.17]

Driving sustainable development and combating inequalities lies at the heart of ENGIE Brasil Energia’s social action strategy, prioritizing a focus on the communities in which the Company is inserted and where it operates its assets – both at the operational and the implementation phases.

To identify the socio-environmental challenges of each territory and as its potential for contributing to overcome them, the Company maintains systematic relationship practices. ([see table on page 118](#)). These are implemented together with active listening events – undertaken by local teams during the day-to-day activities – specially dedicated to dialogue with representatives of the communities, and a continuous exchange with social partners.

These interactions allow the Company to design social responsibility initiatives with a local reach, tailor-made for supporting the demands of specific territories or on a nationwide basis –

focused on supporting social causes shared by the communities of different regions of Brazil. In this way, resources allocated to social responsibility-related purposes are distributed among structured programs and one-off projects which seek to expand the positive impact of the Company’s presence.

In 2022, ENGIE Brasil Energia invested BRL 21.4 million in socio-environmental projects – including voluntary investments, unrelated to the licensing process, in the regions of the projects being implemented. This includes proprietary and incentivized resources as shown in the table below.

Resources earmarked for social responsibility are distributed between structuring programs and specific projects.

Investments in social responsibility (in BRL thousand)

Source	2020	2021	2022	Change 2022 x 2021
Non-incentivized investments related to operating assets or corporate programs	7,504.2	7,078.0	3,499.5	-50.6%
Non-incentivized and voluntary investments related to projects under implementation	1,449.9	4,601.5	1,388.8	-69.8%
Investments through the Infancy and Adolescence Fund – FIA	1,868.4	1,262.8	2,352.0	86.3%
Investments under the Culture Incentive Law – Rouanet and Audiovisual Law	7,264.6	5,052.0	9,443.8	86.9%
Investments under the Sport Incentive Law	1,418.5	1,262.5	2,349.7	86.1%
Investments under the National Support Program for Oncological Care – PRONON	1,661.0	1,140.5	0*	-100%*
Investments under the National Care Support Program for People with Special Needs – PRONAS/PCD	1,436.3	1,147.5	0*	-100%*
Investments under the Municipal Fund for the Elderly	1,480.9	1,239.6	2,341.0	88.9%
TOTAL	• 24,083.8	• 22,784.4	• 21,374.8	• -6.2%

* There were no further investments in the National Oncological Attention Support Program – PRONON and the National Health Attention Support Program for People with Special Needs – PRONAS/PCD in 2022 since the incentive laws expired and were not renewed by the Federal Government.

Below we describe some of the Company’s main initiatives with a focus on support for the communities.



Mulheres do Nosso Bairro

The [Mulheres do Nosso Bairro Program](#) involves initiatives along four major axes critical for the promotion of gender equity: income generation, education, health and combatting domestic violence.

In 2022, the third edition in support of enterprises managed by women (both cis- and transgender) was launched in 2022, including financial incentives, business training and physical and mental health support. An amount of BRL 570 thousand will be distributed among 36 projects selected from three categories: small projects, social businesses, and community kitchens – the latter an appendage to the Program in response to the worsening food insecurity conditions reported in recent years. Integrated with the actions of the *Parcerias do Bem Program* ([see page 110](#)), this public notice was launched with the support of partner institutions such as Instituto *Consulado da Mulher* (a Social Action initiative of appliances manufacturer Consul), the companies Portonave, Fort Atacadista and Social Good Brazil.



3RD EDITION OF MULHERES DO NOSSO BAIRRO IN NUMBERS:

315 applicant projects

36 selected

27 projects

6 community kitchens

3 social impact businesses

BRL 570
thousand invested

The chosen initiatives are distributed across 25 municipalities in 13 states where ENGIE Brasil Energia has operations. The criteria examined for the selection of the winners included economic feasibility – considering business going concern viability post-investment –, the potential for contributing to improvements in environmental conditions, alignment with the Sustainable Development Goals (SDGs), and possible positive impacts as regards community development.

To ensure the initiatives' long-term sustainability, the Program invests in monitoring the supported projects and in entrepreneurial training, together with the assistance of partners with extensive experience in social responsibility. In 2022, 29 leaders of small businesses headed by women completed skills-building courses provided by the Brazilian Service for Support to Micro and Small Companies (Sebrae), while 73 nano-entrepreneurs received instruction from the *Consulado da Mulher* Institute [Watch the video](#).



As in the two preceding years, the Program’s results were positive. A survey of supported entrepreneurs undertaken in August 2022 revealed that:

- The average increase in sales already exceeds **100%**;
- **92%** women’s happiness index with their businesses;
- **100%** of female entrepreneurs feel more confident and better prepared for running their businesses;
- **40%** of the supported projects represent the main source of household income.

In addition to income generation initiatives, the Company maintained partnerships with the Maria da Penha Institute for combatting violence against women and girls, and with the EduK education platform.

Support for education

The year also saw a strengthening of the Energy to Education Program, providing educational, innovative, and inclusive experiences for Elementary and High School students. Through a call for proposals – the Program’s second – the Company selected 30 projects out of 170 proposals received. These initiatives will benefit from a total contribution of BRL 240,000.

Held in 22 municipalities of 11 states, the selected initiatives focus on improving student performance in the instrumental subjects (Portuguese and mathematics); reinforcing the use of technologies, creative thinking, and innovation; environmental education or critical social thinking; and the mitigation of school evasion, failure rates, or age/grade mismatch.

The winners will be monitored for 12 months. Based on the 2021 and 2022 editions, the Program is expected to impact approximately 14.5 thousand children and teenagers.



Digital inclusion

To support the inclusion of people over the age of 50 in the jobs market, ENGIE Brasil Energia funded the ninth class of the *Cidadão de Dados* project, promoted by Social Good Brasil (SGB) in partnership with Maturi. With participants from all over Brazil, the initiative aims to promote education in data and, thus, impact the personal and professional reality of the participants. The course was held between November and December 2022 and includes mentorships with experts and online classes.

Culture and Sustainability Centers

Designed, implemented, and supported with sponsorship from ENGIE Brasil Energia since 2011, the Sustainability and Culture Centers **promote cultural and educative activities** in different regions of the country, increasing the population's access to a range of different artistic manifestations such as music, theater and cinema. Mostly installed with incentivized resources, the Centers are managed autonomously – independent from government and the Company – by members of the local communities through Public-Interest Civil Society Organizations (Oscip).

At year-end 2022, five centers were operating (see map) and a further three were under construction – Trairi (CE) – with opening forecast for 2023 –, Saudade do Iguaçu (PR), and Itá (SC). With the 2021 sale of the Jorge Lacerda Thermolectric Complex, the Capivari de Baixo Culture Center ceased to be supported regularly by the Company as from 2022.

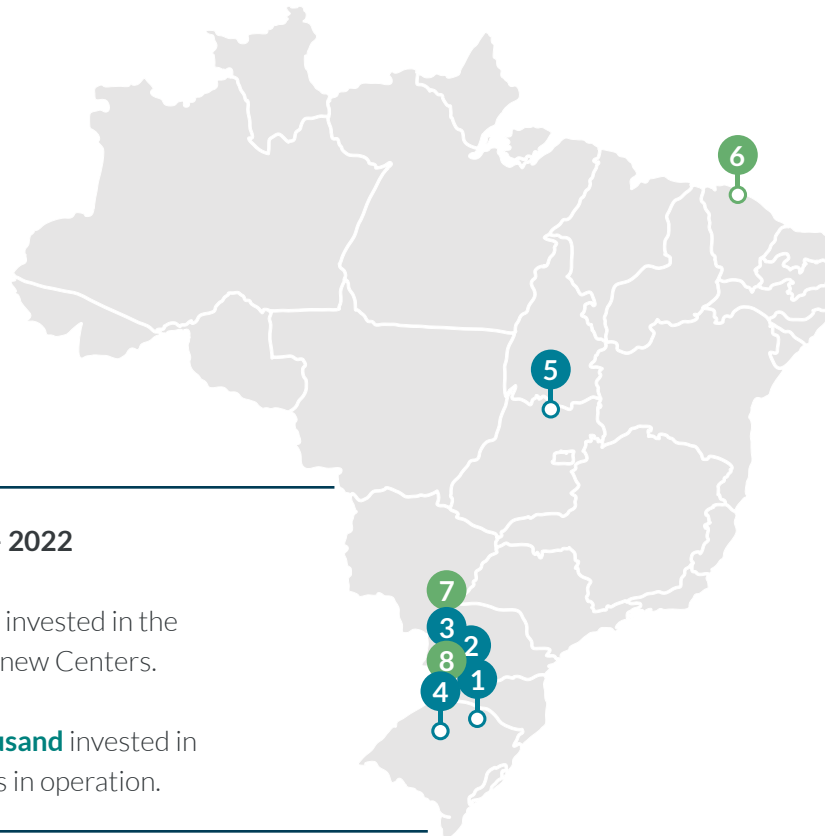
Location – Sustainability and Culture Centers

Implemented

- 1 Alto Bela Vista (SC)
- 2 Concórdia (SC)
- 3 Quedas do Iguaçu (PR)
- 4 Entre Rios do Sul (RS)
- 5 Minaçu (GO)

Under construction

- 6 Trairi (CE)
- 7 Saudade do Iguaçu (PR)
- 8 Itá (SC)



Support for Centers – 2022

BRL 4.5 million invested in the construction of new Centers.

BRL 696.8 thousand invested in Culture Centers in operation.



Voluntary energy

Held for the first time in 2018, the Voluntary Energy (*Energia Voluntária*) campaign provides an incentive to ENGIE Brasil Energia's employees to donate part of their Income Tax liability to socio-cultural entities such as daycare centers, orphanages, hospitals or rest homes. The Company provides consultations for making donations and stimulating engagement of donors to the supported causes.

Impact 2022

62 donations

to Infancy and Adolescence Funds

BRL 100.8 thousand

27 donations

to Funds for the Elderly

BRL 55.3 thousand

Parcerias do Bem

Launched in 2021, the Parcerias do Bem Program invites clients and partners of different sizes and in different sectors to engage in social responsibility initiatives structured by ENGIE Brasil Energia. Sharing the Company's experience over more than two decades of activities in social causes aligns with the Sustainable Development Goal (SDG) #17 of the 2030 Agenda, which aims to strengthen the means of implementation and to revitalize the global partnership for sustainable development.

In a year of activity, the Program struck more than 20 partnerships, some of them at the implementation phase – with an impact on the lives of people in 16 Brazilian states. In 2022, 25 projects were executed in partnership with clients and other stakeholders, generating, among other results, a 30% increase from 2021 in incentivized resources mobilized for partnership projects.

\$ PROGRAM NUMBERS

over **20**
partnerships established

over BRL **1.7** million
invested in income
generation programs

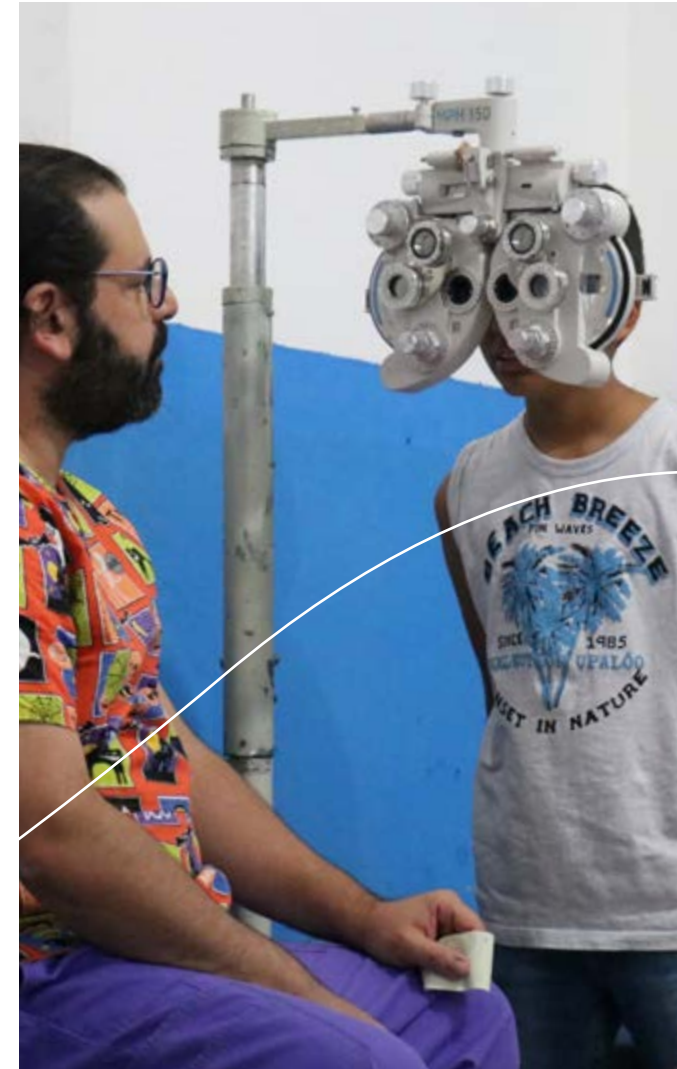
over BRL **600** thousand
invested in educational projects

over BRL **600** thousand
invested in culture projects

In 2022, 25 projects were carried out in partnership with clients and other stakeholders, generating, among other results, a 30% increase in mobilized incentive resources.

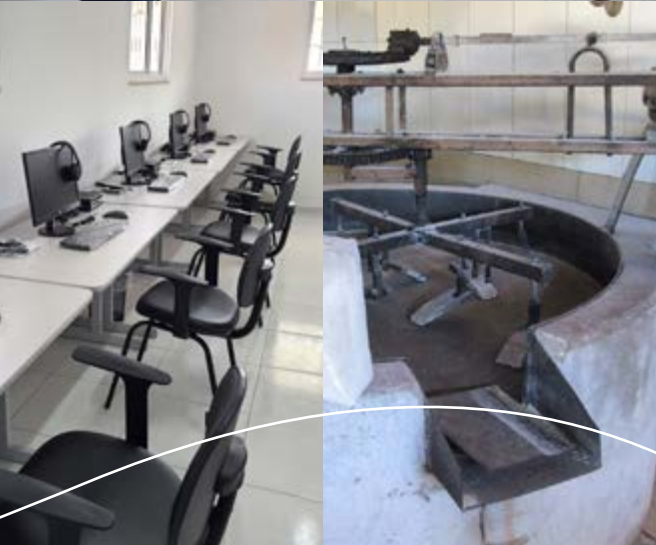
Among the highest impact actions developed within the Program's scope in 2022 was the partnership with EssilorLuxottica, a global leader in prescription lenses, to promote eye health in the community surrounding the Campo Largo Wind Complex, in Bahia. In Umburanas, all 3.2 thousand students in the public-school network received medical appointments and examinations, while in Sento Sé, the 150 residents of the Campo Largo Community were seen by ophthalmologists. Following due screening, the action promoted the donation of prescription glasses to 674 people who needed corrective lenses.

[Watch the video.](#)





Social action in the implementation phase



Within the scope of project implementation phase, some initiatives stood out in 2022, such as the partnership with the National Rural Learning Service (SENAR), which promoted goat and sheep husbandry training for the PA Boa Vista community, in Lajes (RN), located in the Santo Agostinho wind farm region. Renovations were also carried out at community centers in the District of Firmamento and in the PA 03 de Agosto community, including the construction of a computer lab, donation of equipment, air conditioning units and solar ovens.

In the region investments were made in music and sports, through the donation of musical instruments for after-hours classes and materials for the practice of

futsal, soccer and taekwondo. Education was also a priority, with emphasis on the donation of school materials and 133 tablets in municipal schools in Rio Grande do Norte, in addition to the implementation of vegetable gardens and training courses held in schools for students, teachers, family members and employees.

In the Novo Estado Project, the Company's investments in social impact actions reached BRL 5 million – including voluntary initiatives and those related to environmental licensing conditions. Of this total, approximately BRL 580,000 were invested in initiatives to combat the Covid-19 pandemic, between 2020 and 2022. Another BRL 560,000 were

allocated to the revitalization of the Bela Vista District School, completed in 2022, in the municipality of Floresta do Araguaia, state of Pará. In addition to improving the facilities for students and educators, the project included the acquisition of IT equipment to promote digital inclusion – also a focus of ENGIE Brasil Energia's support to other public institutions in the region.

Various local productive arrangements in 2022. Thus, resources were allocated to encourage the implementation of agroforestry systems and community gardens, sheep husbandry and fish farming (in net pens), flour production and furniture manufacturing, among other activities with the potential to boost the local economy.

Clients

[GRI 2-6; 2-29; 3-3; G4 EU3]

[SASB IF-EU-000.A; IF-EU-000.B]

With a commercial portfolio distributed among different sectors of the economy, ENGIE values the building of long-term partnerships, offering solutions that provide effective competitiveness gain for clients. The Company's support for the decarbonization of other companies includes offering solutions to offset emissions identified in GHG Emissions Inventories, in the three scopes: direct (Scope 1); indirect from the purchase of electricity (Scope 2); and indirect from sources over which the company has no control (Scope 3). The main solutions offered are:

I-RECs: Equivalent to a certificate that the Company generates the electricity consumed by the client from renewable sources, with no direct GHG emissions. These internationally recognized certificates can be used to offset Scope 2 emissions (purchase of electricity), without actual emissions reduction.

ENGIE-REC: Allows free-market consumers, mainly large industrial or commercial entities, to execute agreements with ENGIE to guarantee that the energy consumed in their operations is being generated from a renewable source free from greenhouse gas (GHG) emissions. This enables consumer companies to achieve zero Scope 2 emissions in their Emissions Inventories.

Carbon credits: Allows the effective reduction in both direct and indirect GHG emissions. Thus, CERs can be used to offset Scope 1, 2 and 3 emissions, including for years prior to the GHG inventory's as-of period.

BIG NUMBERS

***982** free-market clients served
91.0% of satisfied or very satisfied customers, according to a survey conducted in 2022.

12% growth from 2021

2,734 consumer units served

9.7% market share

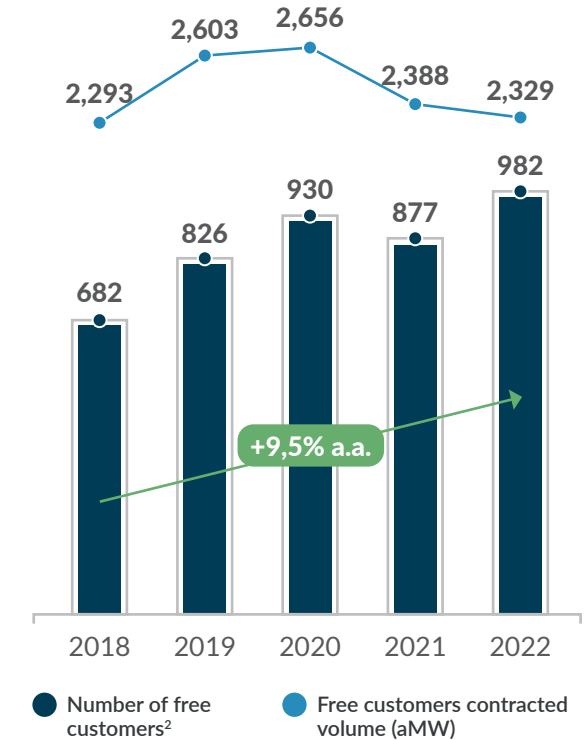
216 thousand tCO₂
RCEs sold in 2022 (Certified Emissions Reduction - carbon credits)

2 thousand GWh

CERs traded in 2022 (Renewable Energy Certificates - I-REC and ENGIE-REC)

*According to a survey carried out with a sample of customers in the last quarter of 2022.

Evolution of free customers¹



¹ Disregarding trading operations.

² As from 2022, the number of free customers takes into account the total number of companies attended, the entire historical series having been adjusted accordingly.

Suppliers

[GRI 2-6; 3-3; 205-1; 308-1; 308-2; 414-1; 414-2]
[2030 Agenda Goals: 8.7, 8.8]

The Code of Ethics and the Sustainable Management and Human Rights policies provide the basis for the Company's relationship with its value chain's components, including the 4,876 suppliers with which the Company maintained commercial relationships in 2022.

The Company adopts the ENGIE Group's Due Diligence policy, which provides for effective measures for mitigating risks of corruption as well as impacts on the environment, public health, and human rights. In the previous ethical analysis where socio-environmental and ethical aspects are verified, the Company annually evaluates all registered suppliers, through an automated platform, which uses big data resources.

More in-depth requirements apply to the 50 suppliers to which the Company directs the most resources, corresponding to 26% of the Company's total expenses, and cover compliance, operational, financial, reputational, and

socio-environmental risks. This analysis is carried out by an external, independent company, which observes the following criteria – related to the company and its partners:

- **Non-compliance** with governance standards and regulations;
- **Registration** in the Brazilian Register of Civil-Law Convictions for Malfeasance and Ineligibility;
- **Association** with slave labor;
- **Registration** in the National Register of Ineligible and Suspended Companies and/or the National National Register of Convicted Companies (CNEP);
- **Existence** of legal proceedings in connection with environmental violations;
- **Regular** status before environmental authorities (when necessary);
- **Negative** media coverage of socio-environmental or governance issues.



2030 Non-Financial Objectives

Two of the pledges that the ENGIE Group has made to attain by 2030 concern the supply chain:

- 100% attainment by 2030 of the responsible procurement index (except for energy purchases), which includes socio-environmental assessments and inclusive procurement.
- 100% attainment, by 2030, of the top 250 preferred suppliers certified according to Science Based Targets (SBT).



In addition to the analysis of mandatory requirements for suppliers or service providers deemed critical, all long-term activities carried out within the Company's facilities undergo prior assessment by the occupational health and safety and environmental areas to verify the associated risks, and are subject to specific document analysis. Suppliers are informed of the documents that must be submitted for the provision of services or goods during the negotiation process – failure to accept the applicable requirements prevents execution of the relevant contracts.

If retained¹⁵, a supplier is subject to periodic performance reviews. These include quality, occupational health and safety, workplace hygiene; the environment; social responsibility; improvements/innovations applied or suggested during the services, and administrative and legal aspects. Should they fail to reach the levels agreed in any such respect, contract adjustment are enshrined in the action plans prepared by the Company in conjunction with the contracted parties. Where execution of an action plan is deemed ineffective, contracts may be terminated.

In 2022, 100% of the 1,818 suppliers registered in the year were evaluated in relation to social, ethical and compliance criteria and 71 (4%) in environmental criteria. In the previous ethical analysis, carried out annually, 333 suppliers were inactivated due to the infraction of some rule foreseen in the Company's internal procedures.



333

potential suppliers were inactivated for falling to meet social, ethical and compliance criteria.

¹⁵ For services that require the work of employees from contracted companies at ENGIE Brasil Energia's facilities, an integration meeting is held with the mandatory presence of all service providers. At this meeting, emphasis is placed on safety procedures, in addition to socio-environmental precautions applicable to the execution of all activities.



ESG integration into supply chain management strategy (2023 targets)

- Ensure the quality and compliance of services rendered with outsourced professionals, in long-term contracts, within the Company's facilities, in terms of Occupational Health and Safety. To this end, quarterly assess compliance with regard to the topic of all contractors under these conditions.
- Contribute to the decarbonization journey of Scopes 2 and 3:
 - Engage suppliers that together represent 50% of 2022 expenses in the decarbonization journey, through webinars;
 - Create and implement an evaluation questionnaire for suppliers that together represent 50% of the 2022 expenses, to form a ranking, allowing the formatting of an emissions reduction strategy.

Supplier evaluation stages

- **Preliminary ethical analysis** – to be conducted annually throughout the entire supplier base;
- **Due Diligence - Level I** – includes the Company's 50 largest suppliers in the previous year, in addition to all contracts that exceed the predetermined financial threshold for analysis;
- **Due Diligence - Level II** – investigation undertaken by an independent third party where actual or potential violations are detected on the part of a person or the analyzed company that may result in risk for the Company.



Combating child, forced and compulsory labor

ENGIE Brasil Energia is committed to promoting Human Rights and does not, under any circumstances, allow the exploitation of child, forced or compulsory labor. The Company thereby not only avoids commercial relationships with organizations that adopt such practices, but also has a guideline in place to report any cases that it becomes aware of to the relevant authorities.

Conduct expected from employees, suppliers and partners in this respect is described in the Human Rights Policy and in the Code of Ethics of ENGIE Brasil Energia and widely disclosed to all audiences and available from the corporate [website](#).

Investors

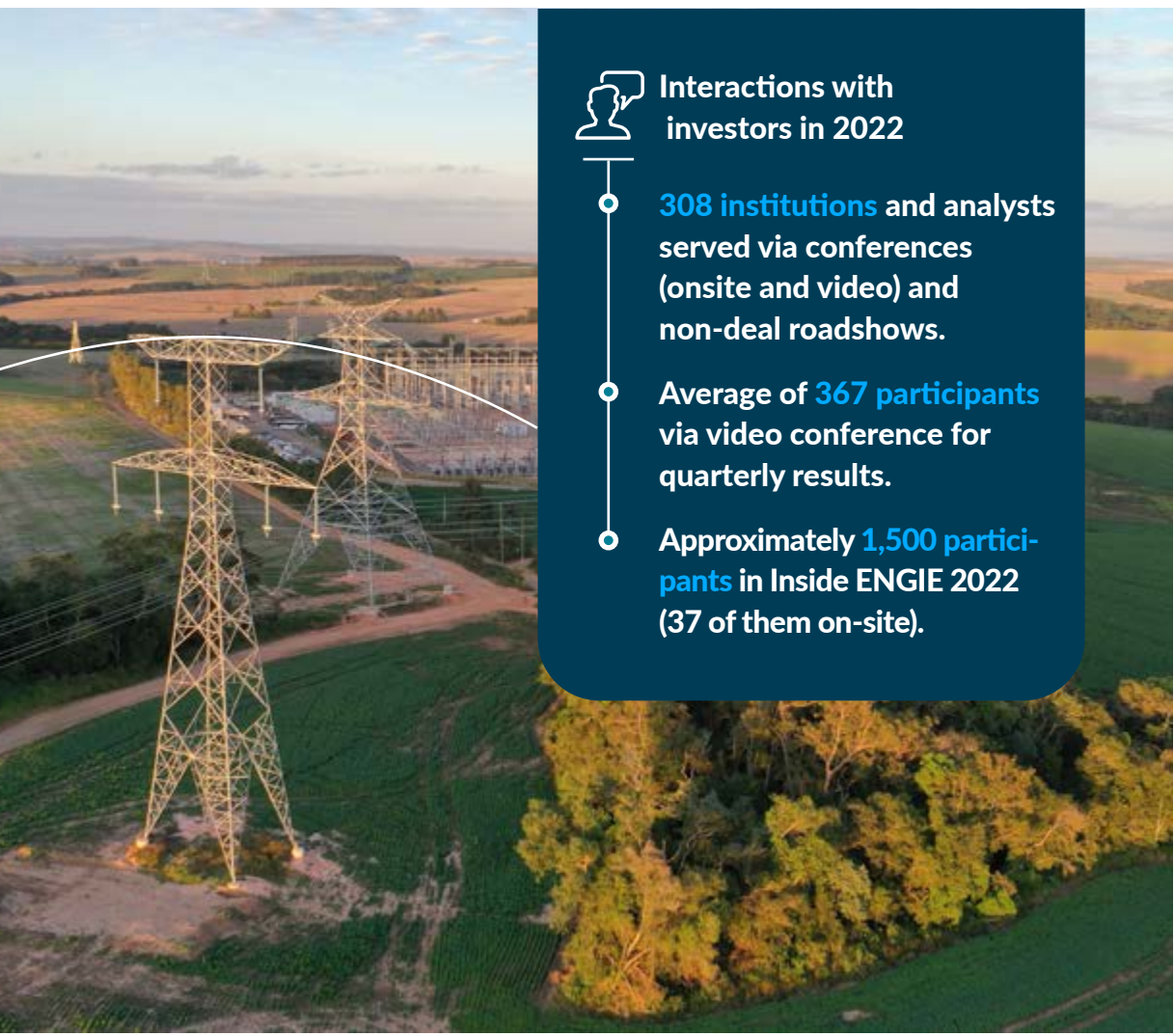
[GRI 2-6; 2-29]

At year-end 2022, ENGIE Brasil Energia's shareholder base stood at 273.3 thousand, up 4.0% from 2021. The Company seeks to build a relationship of trust and transparency, with all investors, be they individuals or legal entities, guaranteeing equitable provision of information on strategy, governance, risks, and business performance.

This information is disclosed on a timely basis through the repositories of B3 and the Securities Commission (CVM), as well as the dedicated investor [website](#) – where guidance can also be found on remote attendance at Shareholders' Meetings, in accordance with the CVM Instruction 561, including a specific channel for submitting suggestions on matters for discussion at Shareholders' Meetings.

In addition, pertinent content is sent by e-mail and meetings with market analysts are held frequently to present results, clarify doubts, and address other relevant matters. Some of the key materials disclosed to investors through different channels of communication include:

- Material Facts;
- Notices to the Shareholders;
- Announcements to the Market;
- Quarterly reports on performance and presentations of results;
- Management Report and Financial Statements;
- Reference Form; and
- Sustainability Report.



Interactions with investors in 2022

- **308 institutions** and analysts served via conferences (onsite and video) and non-deal roadshows.
- **Average of 367 participants** via video conference for quarterly results.
- **Approximately 1,500 participants** in Inside ENGIE 2022 (37 of them on-site).

“Inside ENGIE”, an event that stands as a key platform for interaction with this group of stakeholders, was held on December 7, bringing together investors and analysts at the Company’s head offices in Florianópolis (SC). Coordinated by the Investor Relations area and conducted by the Executive Board, the meeting provided in-depth information on the market scenario, performance, and business strategy, as well as regulatory matters, financial performance, risk management, socio-environmental aspects and governance. To expand its reach, Inside ENGIE was broadcast live via ENGIE Brazil’s YouTube channel, and may be viewed through [this link](#).

The “Inside ENGIE” event was held on December 7, bringing together investors and analysts at the Company's headquarters in Florianópolis (SC).

Stakeholder management

[GRI 2-25; 2-29]

For ENGIE Brasil Energia, effective stakeholder management is a key tool for corporate strategy design and deployment, not just because it enables managing a series of risks, but also by enabling the capture of opportunities on several fronts – based on the diverse outlooks that characterize the broad spectrum of audience with which the Company relates. **Through consultation and engagement, each of these audiences contributes to the continued improvement of policies and practices.**

In this sense, being open to dialog plays a key role that is reflected both in the provision of information relevant to stakeholders and in actively listening to their perceptions. To this end, ENGIE Brasil Energia maintains structured organizational communication practices.

An assortment of communication platforms seeks to keep audiences duly abreast of the Company's activities to serve as a sounding board to capture their demands. Employees, for example, have access to content disseminated by means of an intranet portal, in-house newsletter and social media, special campaigns, events, and a series of informational materials. The Company also listens to this audience through various means, including frequent organizational climate surveys (ENGIE & ME – [see chapter 4](#)), meetings with leaders, and focal groups with experts in the People and Culture Management area.

As members of the local communities, employees take part in the Sustainability Panels held to engage the population in regions where the company has a presence. **In 2022, the Panels took place in nine municipalities – eight in the catchment area of hydropower plants and one in Florianópolis, where the company has its main offices. Together, the events had approximately 430 attendees** – 30% of whom were direct and outsourced employees. In addition to the internal public, community leaders, educators, local suppliers and representatives from third sector entities and authorities were invited

to name the positive and negative impacts of the Company's presence in each territory, as well as its potential contribution to sustainable development. In parallel with the Panels, the Company held individual interviews with other community members – public officials in particular – to expand the listening range. Learn more on [About the Report](#).

Structured dialogs with communities, usually held every two years, join other continuous interaction platforms at operational assets and projects undergoing implementation. Some highlights include Ombudsmanships – available by telephone, e-mail or instant messaging apps –, toll-free lines and e-mail addresses for contact and questions. In addition, field teams and local managers pay attention to the community's demands, and most assets are open to visitation by means of the [Conexão Program](#).

At assets in implementation - the stage when operations have their greatest impact on the local community - stakeholder management has been undergoing continued improvement to make sure that the statements received through the various channels are duly logged, reviewed, and addressed.



Furthermore, the use of technology has been boosting this activity, as illustrated by the model in place at the Novo Estado project, which uses an online platform combining Business Intelligence (BI) and geo-location. The tool enables analyzing data on mapped stakeholders and interactions with parties concerned with/impacted by the project. Individual analysis based on the records for each interaction and a range of different charts facilitate decision-making.

The model's success has led to its adoption at the Santo Agostinho project, where stakeholder relations began before the start on construction work by means of public hearings devoted to introducing the local community to the project. On a different front, environmental education initiatives and corporate social responsibility projects stand as relevant engagement platforms, enabling the outside public to better understand the Company's activities and their impacts.

These interactions make our action plans richer and more assertive, in particular as concerns socio-environmental initiatives, based on the

demands posed by those closest to the operations. **Through dialog, ENGIE Brasil Energia develops action plans that drive community relations and support initiatives in the areas surrounding our activities.** Some of the Company's non-financial objectives include a pledge that 100% of all assets and projects must provide for social action plans based on extensive dialog with stakeholders, in line with the ENGIE Group's methodologies.

In addition to the audiences previously mentioned in this Report – employees, communities, clients and suppliers –, the Company seeks to engage several other groups of stakeholders. Trade associations in the segments where we operate, universities, representatives of every level of government, the press, not-for-profit organizations and more are part of ENGIE Brasil Energia's stakeholders map. Our relationship with each of them is driven by ethics and cooperation.


The table below summarizes the main means of interaction and topics addressed with key stakeholders.

Stakeholder Group	Relevant topics for engagement	Main means of communication/engagement
Clients	<ul style="list-style-type: none"> • Service quality. • Customer experience and satisfaction. • Complaints and incidents management. • Bespoke projects/solutions. • Information on products with socio-environmental requirements. • Ethical Conduct. 	<ul style="list-style-type: none"> • Conversations towards solution/business development. • Procurement platforms and processes. • Commercial/Events team interactions. • Alliances and partnerships. • Digital channels (Website, social media, app, blog). • Service channels (telephone, e-mail). • Satisfaction surveys. • Complaints channels. • Cooperative social projects (Good Partnerships Program). • Ethics Channel.
Employees	<ul style="list-style-type: none"> • Ethical Conduct. • Occupational health and safety. • Diversity, equitability, and inclusion. • Talent capture, development, and retention. • Corporate culture. • Career path and benefits. • Well-being actions. 	<ul style="list-style-type: none"> • Daily interactions with colleagues and leaders. • Climate surveys. • Diversity Census. • Internal communication (intranet, newsletter, campaigns). • External digital channels (website, social networks, blogs). • Ethics Channel.
Labor Unions – Employee representatives	<ul style="list-style-type: none"> • Ethical Conduct. • Occupational health and safety. • Career path and benefits. • Well-being actions. 	<ul style="list-style-type: none"> • Direct contact with the area in charge of negotiating collective bargain deals.
Investors	<ul style="list-style-type: none"> • Ethical Conduct. • Economic and financial performance. • ESG performance and rating. • Share price and dividends. • Investments and business development. • Impact from operations. • Strategies towards ESG-related demands. • Risk management. 	<ul style="list-style-type: none"> • Investor Day / Inside ENGIE • Results video conferences. • Investor surveys. • Annual and Extraordinary Shareholders' Meeting. • Digital channels (website, social networks, blog). • Service channels (website, telephone, e-mail). • Press coverage. • Ethics Channel.

Stakeholder Group	Relevant topics for engagement	Main means of communication/engagement	Stakeholder Group	Relevant topics for engagement	Main means of communication/engagement
Community	<ul style="list-style-type: none"> Ethical Conduct. Impact on community development (jobs, investments, taxes, local procurement, etc.). Social responsibility actions. Environmental action. Investment in a project's regional infrastructure. 	<ul style="list-style-type: none"> Town hall meetings. Public hearings. Ombudsmanship (field, telephone, email). On-site service from local teams. Alliances and partnerships with local entities. Digital channels (Website, social media, app, blog). Press coverage (national and local). Sustainability Panels. Ethics Channel. 	Public sector – Judiciary Branch	<ul style="list-style-type: none"> Ethical Conduct. Compliance with environmental regulations. Compliance with conditions precedent. Support to society. Local investments. 	<ul style="list-style-type: none"> Contact with local teams. Notices for clarification. Ethics Channel.
Suppliers	<ul style="list-style-type: none"> Ethical Conduct. Supply-chain sustainability. Contracting and payment formats. New projects. Actions in support of supplier qualification. 	<ul style="list-style-type: none"> Supplier registration and evaluation platform. Suppliers' portal. Contract managers. Ethics Channel. 	Regulators	<ul style="list-style-type: none"> Ethical Conduct. Compliance with environmental regulations. Compliance with conditions precedent. Support to society. Local investments. 	<ul style="list-style-type: none"> Contact with local teams. Notices for clarification. Ethics Channel.
Press / Opinion Drivers	<ul style="list-style-type: none"> Ethical Conduct. ESG, economic, operational and financial performance. Social impact and contribution. New projects and operations. 	<ul style="list-style-type: none"> Supplier registration and evaluation platform. Suppliers' portal. Contract managers. Ethics Channel. 	Inspection Authorities	<ul style="list-style-type: none"> Ethical Conduct. Compliance with environmental regulations. Compliance with conditions precedent. Support to society. Local investments. 	<ul style="list-style-type: none"> Contact with local teams. Notices for clarification. Ethics Channel.
Public sector – Executive Branch	<ul style="list-style-type: none"> Ethical Conduct. Transition to a low-carbon economy. Data on project operations. Operation quality. Investment expansion. Economic and financial performance. Jobs and income generation / Taxes. 	<ul style="list-style-type: none"> Corporate Website. Direct contact with local teams. Events. Publications / Media Relations. Digital channels (Website, social media, app, blog). Ethics Channel. 	Local Development Forums	<ul style="list-style-type: none"> Ethical Conduct. Sustainable local development. Economic and Financial Performance. 	<ul style="list-style-type: none"> Meetings and events. Ethics Channel.
Public sector – Legislative Branch		<ul style="list-style-type: none"> Meetings, communiqués, public hearings. 	Hydrographic Basin Committees	<ul style="list-style-type: none"> Water resources management and conservation. 	<ul style="list-style-type: none"> Meetings and events. Ethics Channel.
		<ul style="list-style-type: none"> Meetings, communiqués, public hearings, and consultations. Ethics Channel. 	Representation entities	<ul style="list-style-type: none"> Ethical Conduct. Economic and financial performance. ESG performance and rating. Investments and business development. Operational impacts. Improved infrastructure conditions and business competitiveness. 	<ul style="list-style-type: none"> Meetings and events. Digital channels (website, social networks, app, blog). Press coverage. Ethics Channel.
			Third-Sector Organizations	<ul style="list-style-type: none"> ESG, economic and financial performance. Socio-environmental impact and contribution. New projects and operations. 	<ul style="list-style-type: none"> Meetings, events, sponsorships, and donations. Digital channels (website, social networks, app, blog). Press coverage. Ethics Channel.

7 Operational and Financial Performance

- » Macroeconomic scenario
- » Operational performance
- » Economic and financial results




95.9%
of renewables sources

76 PLANTS IN OPERATION


8.4 thousand MW of own installed capacity (+2.9% compared to 2021)

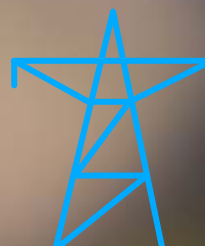
5,013 aMW generated (+28.3% compared to 2021)

ods 7



ods 8





2 TRANSMISSION SYSTEMS IN OPERATION


UPTIME RATE OF **99.97%**

BRL 11.9 billion in net operating revenue


BRL 6.7 billion in Ebitda

BRL 2.6 billion in net income


BRL 3.1 billion in investment



6.1% stock appreciation



BRL 30.9 billion in market value in 12.31.2022



Dividend yield of **8.1%**

Lages Cogeneration Plant (biomass)

Macroeconomic scenario

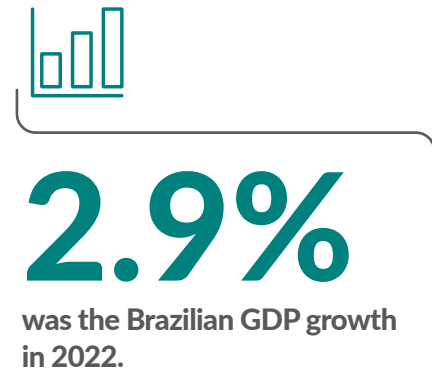
Global economic activity in 2022 was affected by the persistence of the Covid-19 pandemic, the conflict between Ukraine and Russia, the increasing cost of living and worsening financial conditions in several countries. Food and energy prices increased due to the decreased supply of raw materials originating in the conflict zone; higher interest rates in developed economies such as the United States; and bottlenecks in global supply chains. The International Monetary Fund estimates that world growth decelerated from 6% in 2021 to 3.2% in 2022. World inflation is forecast to increase from 4.7% in 2021 to 8.8% in 2022.

In Brazil, the lifting of pandemic-related measures, together with economic stimulus, had a positive impact on the economy, with 2.9% GDP growth in 2022, according to the Brazilian Institute of Geography and Statistics (IBGE).

On the other hand, inflation in Brazil represented a concern in the period, spiking to 12.1% close to the middle of the year, and falling back in the latter half to 5.8% at year-end – 0.8 p.p. above the Central Bank’s inflation target. Albeit more con-

trolled, inflationary pressure was instrumental in driving successive increases in local funds rate (Selic) to 13.75%. The US Dollar (Ptax) closed 2022 at BRL 5.22 – down 6.5% year-on-year.

In the labor market, the year had a positive balance of 2 million new formal vacancies, according to the General Register of Employed and Unemployed (Caged). Unemployment was the lowest since 2015, with an annualized average rate of 9.3% according to the government statistics office (IBGE).



Sectoral context

Average worldwide demand for energy decelerated in 2022 driven among other factors by the weakening global economy and crises experienced in countries traditionally providing international security in energy supplies, resulting in the need to resort to making emergency purchases from thermal power plants. On the other hand, circumstances also accelerated the energy transition with many countries optimizing the operation of, and investment in, clean energy generation.

The year saw further liberalization of the Free Energy Market in Brazil. As from 2023, medium-voltage consumers with volumes over 500kW are already able to migrate and purchase energy from the source most appropriate to their business. In 2024, all consumers hooked up to high voltage energy, will be permitted to use the free market option, irrespective of the volumes consumed. Another highlight in the year were discussions and investments related to renewable energy generation, stimulated by rising fossil fuel prices

and a growing awareness of the importance of the energy transition to a more sustainable economy. With the goal of adjusting demand and consumption to a more sustainable future and endowed with a largely clean matrix, Brazil has played a significant role in the carbon market while the country’s electric energy sector as a whole has been recognized for its relevance in the decarbonization process.

According to data from the Energy Research Company (EPE), net energy consumption in the country increased by 1.2% in 2022, reaching 508,576 GWh. The free market grew by 2.5%, while the captive market remained largely stable during the year at just 0.1% higher. Commercial sector consumption led the way with a 5.4% increase, followed by household (1.1%) and industrial (0.4%) consumption. “Other sectors” retracted 1.3%.

In a breakdown by regions, the increase in consumption was greatest in the North (4.2%), followed by the South (2.3%), Central-West (1.8%), Northeast (1.5%) and Southeast (0.1%).

Operational performance

[GRI 3-3; G4-EU1; EU2; EU11; EU30]

[SASB IF-EU-000.D; IF-EU-420A.2; IF-EU-550A.2]

[2030 Agenda Goals: 7.2; 7.3; 8.2; 9.1; 9.4]

Assets uptime

In 2022, considering all scheduled and forced stoppages, the plants operated by ENGIE Brasil Energia recorded an uptime rate of 92.5% of which: 95.2% for hydro plants, 88.4% for complementary source plants and 48.3% for the Pampa Sul Thermal Power Plant.

Compared with 2021, there was a slight increase of 0.1 p.p. in global uptime, reflecting 0.3 p.p. uptime gain at the hydroelectric plants and 0.8 p.p. at those fired from complementary sources. At Pampa Sul, there was a 4.0 p.p. year-on-year reduction.

The uptime increase at hydro (0.3 p.p.) and complementary (0.8 p.p.) plants is largely due to higher ratios at the Jaguará Hydro Plant and the Lages Co-generation Plant, respectively,

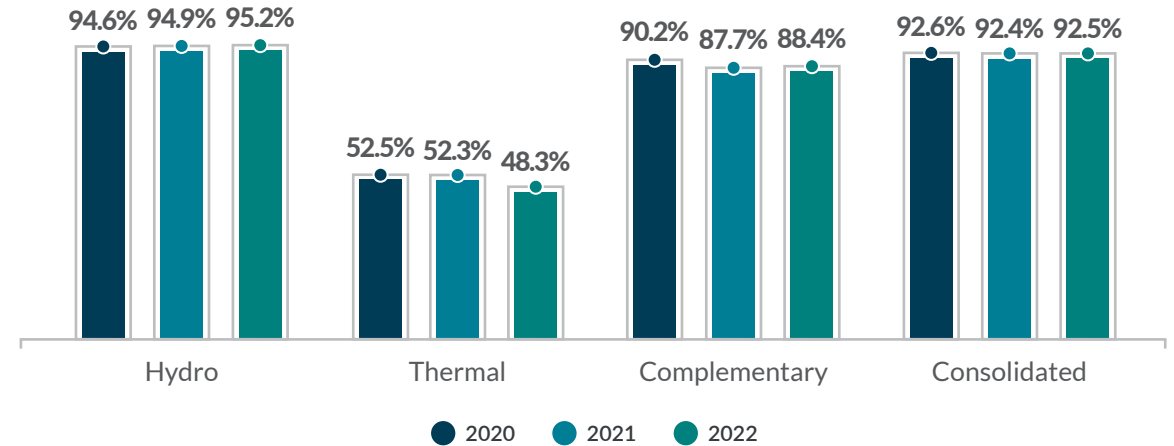
both of which underwent maintenance in the preceding year.

Conversely, at the Pampa Sul Thermoelectric Plant's reduction was impacted by downtime for maintenance work done during a period of low demand for thermal power dispatch in the light of plentiful hydro resources throughout the grid. Pampa Sul will shortly cease being part of the generation portfolio, the Company continuing to forge ahead with its [decarbonization strategy](#).

In the context of energy transmission, the Gralha Azul and Novo Estado transmission lines reported high operational performance standards in 2022, with 99.97% total uptime.

The transmission assets went into commercial operations gradually over the course of 2021 and 2022, and both started to operate fully from February 2023.

Uptime operating (considering scheduled shutdowns)*



* To enable a comparison, uptime data for the Thermal Power Plant has been revised to exclude generation from the Jorge Lacerda TPP, which is no longer part of the Company's generation park.



Energy production

In 2022, the total generation from the plants operated by ENGIE Brasil Energia was 43,912 GWh (5,013 MWa), up 28.3% from 2021, when the total was 34,217 GWh (3,906 MWa), excluding generation from the plants in the Jorge Lacerda Thermolectric Complex in the light of its disposal in October 2021.

At the hydro plants, annual production in 2022 was 36,512 GWh (4,168 MWa), up 34.0% from 2021. This was due to increased generation from plants located in the South subsystem's hydrographic basins, contrary to the same period in 2021, when plant reservoirs were recovering from a severe drought.

In the case of the complementary plants, reported energy production in 2022 was 6,266 GWh (715 MWa), up 15.9% year-on-year. The production increase is due mainly to the entry into full commercial operations of the Campo Largo II Wind Complex, which generated 1,562 GWh (178 MWa), up 57% from 2021. **Solar energy also**

contributed to the gain in output, principally from the Paracatu and Floresta photovoltaic plants, both of which were incorporated in the Company's portfolio at the end of 1Q22.

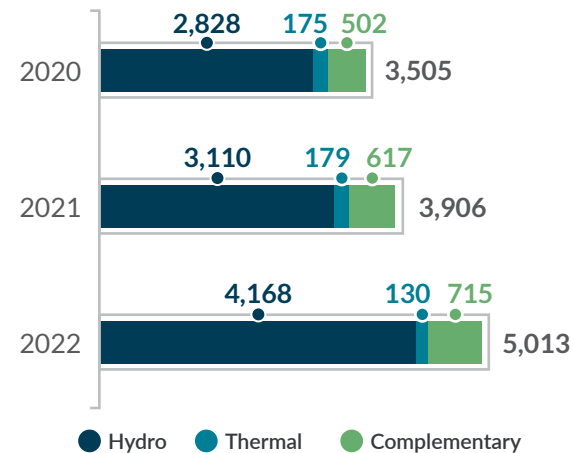
In parallel, the Pampa Sul Thermolectric Plant reported generating 1,134 GWh (130 MWa), down 27.5% from 2021, due to low demand for thermal dispatch. It is worth noting that 2021 was a year characterized by drought and requiring dispatch from the thermolectric plants outside the order of merit for energy guarantee a situation not repeated in 2022 by virtue of a significant improvement in water resources.

It is also worth pointing out that the increase in the Company's hydropower generation does not necessarily improve economic-financial performance. Similarly, a reduction in this type of generation does not necessarily imply deteriorating economic and financial performance. This is due to the application of the Energy Reallocation Mechanism (MRE), where

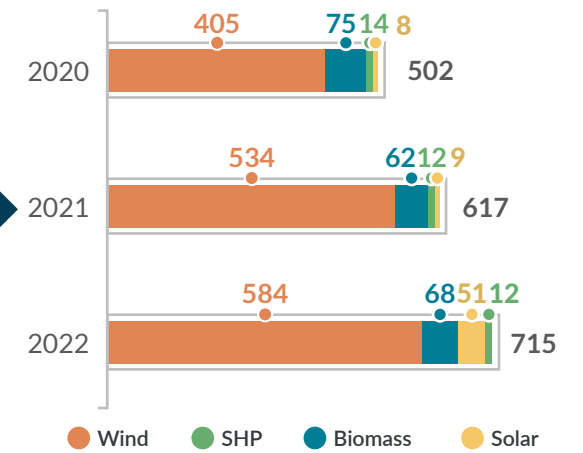
the inherent hydrological risks of hydropower generation are shared proportionally among MRE participants. As for the Company's thermal generation, its reduction may (depending

on the level of the Company's contracting) increase exposure to the Differences Settlement Price (PLD), the inverse also being true, all other variables remaining the same.

Generation (MWa)



Generation by complementary source (MWa)



* To enable comparison, uptime data for the Thermal Power Plant has been revised to exclude generation from the Jorge Lacerda TPP, which is no longer part of the Company's generation park.



Modernization and predictive maintenance of the hydro plants

The modernization of the hydro plants is essential for ensuring operational efficiency and constitutes one of the Company's investment axes. **In this context, in 2022, ENGIE Brasil Energia continued its modernization projects at the Salto Osório (PR), Jaguará (SP) and Miranda (MG) hydro plants.** In the first, the project, categorized as large scale, began in 2017 and includes the replacement of equipment and systems with the latest technologies. Besides the efficiency gains, the end result will be an increase in physical guarantee (estimated at 13.9 MWa). In 2022, work on the Plant continued with the modernization of the second generator unit, to be completed by December. Assembly of the new equipment is

practically complete and commercial operations are expected to begin in the first quarter of 2023. The project is slated for full completion by 2024.

Modernization of the Jaguará Hydro Plant, in turn, advanced with the manufacture of the new number one generator unit, installation and operational startup expected to take place in the first half of 2023. The focus at the Miranda Hydro Plant is on the modernization of control and instrumentation systems (including generator frequency and voltage regulators as well as a supervisory system). In 2022, manufacture, acquisitions and in-factory testing of the new equipment took place, with installation set during the course of 2023.

Throughout 2022, the Salto Osório Hydroelectric Power Plant advanced in the modernization of the second generating unit, reaching the end of December with the assembly of the new equipment practically completed – the project is expected to be fully completed in 2024.

Another asset-management focal point is increased Plant reliability and operational efficiency. To prevent failures leading to stoppages, guarantee the safety of operations and reduce risks and costs, the Company uses predictive maintenance methods to manage asset health.

In addition to tried and tested techniques in the industry such as vibration analysis and thermography, the Company is implementing a system based on machine learning to enhance detectability of anomalies which can affect the generation assets. The artificial intelligence system evaluates a constant flow of data obtained from thousands of sensors installed in the plants, detecting symptoms in real time which may indicate future failures, enabling early measures to be taken to avoid undesirable incidents feeding through to generation downtime.

In 2022, employment of this new technology enabled avoiding generation asset failures, reducing maintenance and downtime costs. Installation of the technology will continue in 2023, extending the system's coverage to all hydro plants and, more specifically, covering the most critical systems at all generator units.

Gas Transportation

In 2022, TAG transported an average volume of gas of 34.7 million m³/day (40.3 million m³/day in 2021). Volume via extraordinary agreement was 12.8 million m³/day, representing approximately 12% of TAG's total contracted volume, and 18% considering only the integrated network (ex- GTA Urucu-Manaus, where Petrobras remains the sole carrier). **In 2022, 52 transportation agreements were executed with 15 carriers besides Petrobras (comprising 11 distinct economic groups).**

Since the end of the second quarter of 2022, maintenance operations on TAG's pipeline network have been fully managed by ENGIE Soluções em Manutenção (Esom), an ENGIE Group company in Brazil. At the same time, since the first quarter of 2022, TAG has taken over total remote control of its transportation operations through the Supervision and Control Center (CSC) located at the company's offices in the city of Rio de Janeiro. With this, the agreement with Petrobras Transporte S.A. (Transpetro) was terminated as planned on June 25, 2022.

Average volume of gas transmitted (MM m³/day)



52

transportation agreements were signed in 2022.



Economic and financial results

[GRI 3-3; 201-1]

[2030 Agenda Goal: 8.4]

Below, we provide, a summary of the main elements of financial results, reported in greater depth in the [Management Report and Financial Statements](#).

Results summary by segment – 2022 X 2021

(in BRL million)

	Electric Energy					Consolidated
	Generation	Transmission	Trading	Solar panels	Gas transportation	
	2022					
Net operating revenue	9,512	1,703	685	7	-	11,907
Operational costs	(4,505)	(1,140)	(669)	(3)	-	(6,317)
Gross income	5,007	563	16	4	-	5,590
Selling, general and administrative expenses	(346)	(13)	(5)	(2)	-	(366)
Other operating (expenses) revenues, net	(21)	22	-	-	-	1
Impairment, net	(185)	-	-	118	-	(67)
Disposal of subsidiary	10	-	-	(94)	-	(84)
Equity income	-	-	-	-	727	727
Earnings before interest and taxes	4,465	572	11	26	727	5,801

Electric Energy

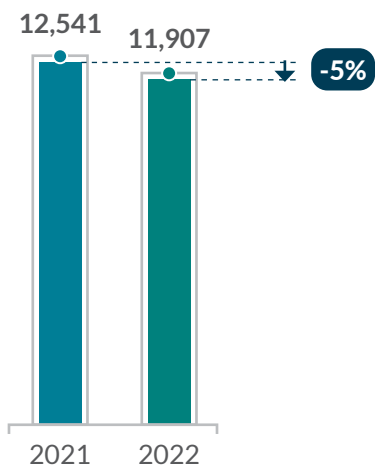
	Generation	Transmission	Trading	Solar panels	Gas transportation	Consolidated
2021						
Net operating revenue	8,561	2,836	1,113	31	-	12,541
Operational costs	(2,919)	(2,564)	(1,095)	(51)	-	(6,629)
Gross income (loss)	5,642	272	18	(20)	-	5,912
Selling, general and administrative expenses	(314)	(8)	(4)	(4)	-	(330)
Other operating expenses, net	(9)	-	-	-	-	(9)
Impairment, net	(998)	-	-	(78)	-	(1,076)
Disposal of subsidiary	(200)	-	-	-	-	(200)
Equity income	-	-	-	-	602	602
Earnings before interest and taxes	4,121	264	14	(102)	602	4,899
CHANGE						
Net operating revenue	951	(1,133)	(428)	(24)	-	(634)
Operational costs	(1,586)	1,424	426	48	-	312
Gross income (loss)	(635)	291	(2)	24	-	(322)
Selling, general and administrative expenses	(32)	(5)	(1)	2	-	(36)
Other operating (expenses) revenues, net	(12)	22	-	-	-	10
Impairment, net	813	-	-	196	-	1,009
Disposal of subsidiary	210	-	-	(94)	-	116
Equity income	-	-	-	-	125	125
Earnings before interest and taxes	344	308	(3)	128	125	902

Net operating revenue

Net operating revenue was down from BRL 12,541 million in 2021 to BRL 11,907 million in 2022, that is, down BRL 634 million (5.1%) due to a combination of reduced construction revenues from transmission systems reflecting the stage reached in construction, and lower revenues from trading operations, mitigated by the increased volume of energy sold and higher average selling prices.

Net operating revenue

(BRL million)

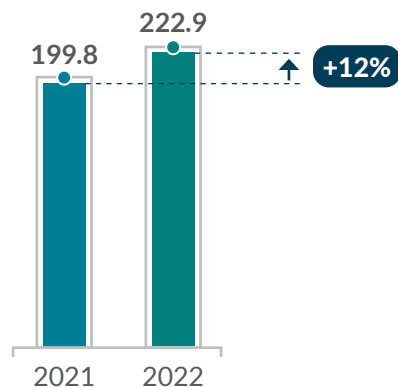


Net average selling price

The average energy selling price net of charges on revenue and trading operations, reached BRL 222.85/MWh in 2022, up 11.5% from the BRL 199.79/MWh average reported for calendar year 2021. The change was largely due to the inflation restatement of existing agreements, the reduction in refunds under regulated-environment agreements, and the acquisition of the Floresta and Paracatu Photo-

Net average selling price*

(BRL/MWh)



*Net of taxes on sales and trading operations.

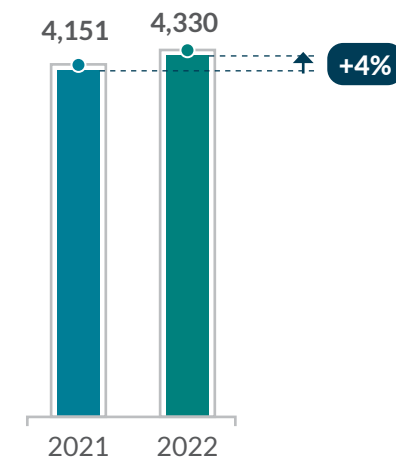
tovoltaic complexes, energy from which is contracted at prices higher than average for the rest of the Company's portfolio. These effects were partly mitigated by lower prices on the short-term market for operations conducted, mainly with traders, given the substantive decrease in the Differences Settlement Price (PLD) from previous periods because of the better hydrology in 2022.

Sales volume

The volume of energy sales under agreements net of trading operations in 2022 was 37,932 GWh (4,330 MWa), versus 36,365 GWh (4,151 MWa) in 2021, an increase of 1,567 GWh (179 MWa) or 4.3%. The increase in the volume of energy sold was significantly due to improved energy availability because of the more favorable hydrology in 2022 compared with 2021, and the acquisition of the Floresta and Paracatu Photovoltaic Complexes.

The average energy selling price net of charges on revenue and trading operations, reached BRL 222.85/MWh in 2022, up 12% from the BRL 199.79/MWh average reported for calendar year 2021.

Sales volume (MWa)

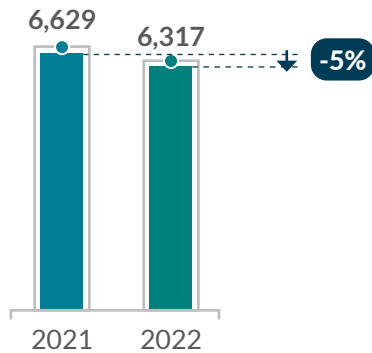


Operational costs

In 2022, operational costs were BRL 6,317 million, down BRL 312 million (4.7%) from 2021's BRL 6,629 million. This reflects the following factors: (i) an increase of BRL 1,586 million (54.3%) in energy generation and sale from the portfolio segment; (ii) a decrease of BRL 1,424 million (55.5%) in the costs of the transmission segment; (iii) a reduction of BRL 426 million (38.9%) in the operational costs of energy trading; and (iv) a decrease of BRL 48 million (94.1%) in sale and installation costs of solar panels.

Operational costs

(in BRL million)



Ebitda and Ebitda margin

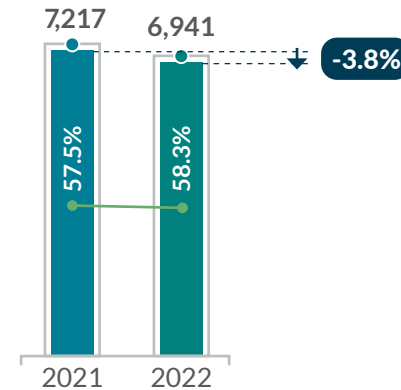
Adjusted Ebitda was down BRL 276 million (3.8%), from BRL 7,217 million in 2021 to BRL 6,941 million in 2022. The main changes in adjusted EBITDA lie in the electric energy generation and sales segment, negative effects of which were as follows: (i) BRL 1,591 million from hydrological risk renegotiation (GFOM) in 2021; (ii) BRL 695 million from energy purchases; (iii) BRL 71 million in compensation and restatement revenues from concession assets of the Jaguará and Miranda HPPs; and (iv) BRL 59 million from royalties. These effects were mitigated by an increase in the following: (vii) BRL 1,187 million from the combined changes in the volume of energy sold and average net selling price; (viii) BRL 247 million from short-term market transactions; (ix) BRL 220 million in own fuel consumption; and (x) BRL 66 million in payroll costs.

Furthermore, the transmission segment had a positive impact on Ebitda, with the following principal effects: (i) BRL 204 million increase in construction income, due to progressing construction works; (ii) BRL 74 million in increased revenues from return on contract assets; (iii) BRL 20 million from a positive adjustment to

the acquisition price of Novo Estado Transmissora de Energia; and (iv) BRL 13 million in recognized O&M Annual Allowed Revenues (RAP), net of costs.

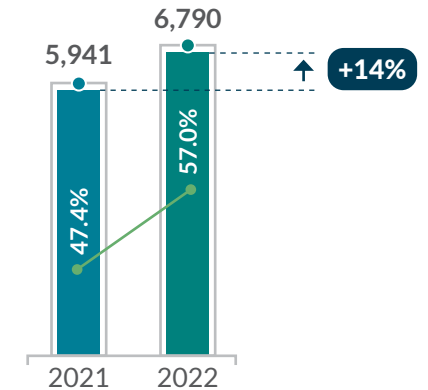
Considering non-recurring and hydrological risk renegotiation effects, Ebitda was up BRL 849 million (14.3%) year-on-year, from BRL 5,941 million in 2021 to BRL 6,790 million in 2022.

Adjusted Ebitda and adjusted Ebitda margin (BRL million/%)*



*Adjusted Ebitda: net income + income tax and social contribution + financial results + depreciation and amortization + impairment + non-recurrent effects.

Ebitda and Ebitda margin (BRL million/%)*



*Ebitda: net income + income tax and social contribution + financial results + depreciation and amortization.

Consolidated adjusted Ebitda margin was up 0.8 p.p. year-on-year, from 57.5% in 2021 to 58.3% in 2022.

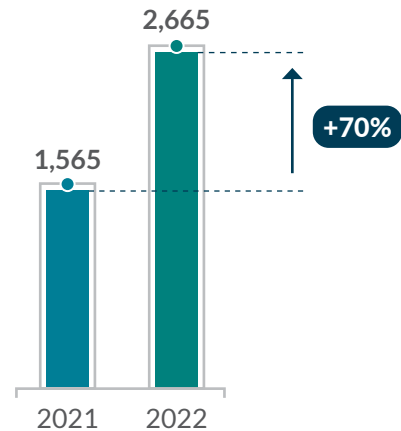
Net income

Net income rose from BRL 1,565 million in 2021 to BRL 2,665 million in 2022, up BRL 1,100 million, or 70.3%. This increase is a consequence of a combination of the following effects: (i) a reduction in non-recurring effects with a net positive impact of BRL 705 million; (ii) a positive impact of BRL 564 million on net financial income; (iii) a BRL 276 million decrease in adjusted Ebitda; (iv) a BRL

53 million decrease in depreciation and amortization; and (v) a BRL 54 million decrease in income tax and social contribution, taking into account recurring transactions. Excluding non-recurring effects, net income was up BRL 395 million (16.7%) year-on-year. Furthermore, ex- the effects of 2021's hydrological risk renegotiation, net income was up 109.6%

Net income rose from BRL 1,565 million in 2021 to BRL 2,665 million in 2022, up BRL 1,100 million, or 70.3%.

Net income (in BRL million)

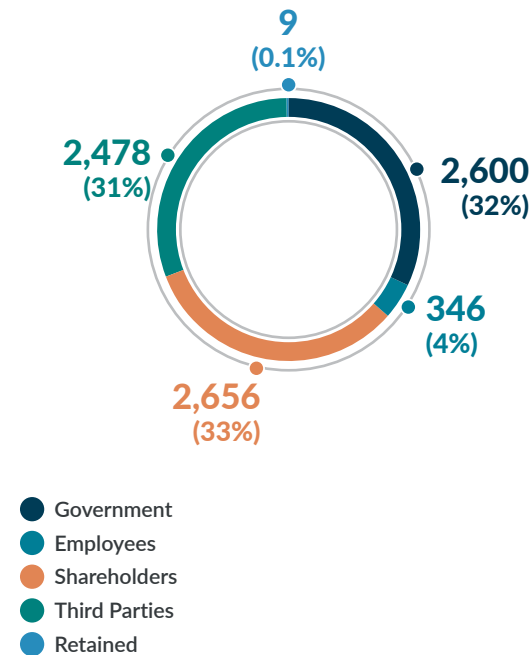


Added and Distributed Value (DVA)

In 2022, the Company generated BRL 8,088.4 million in value added, which was allocated to our stakeholders as the figure below shows. The amount was up 17.9% from the BRL 6,858.3 million distributed in 2021.

Value added allocation

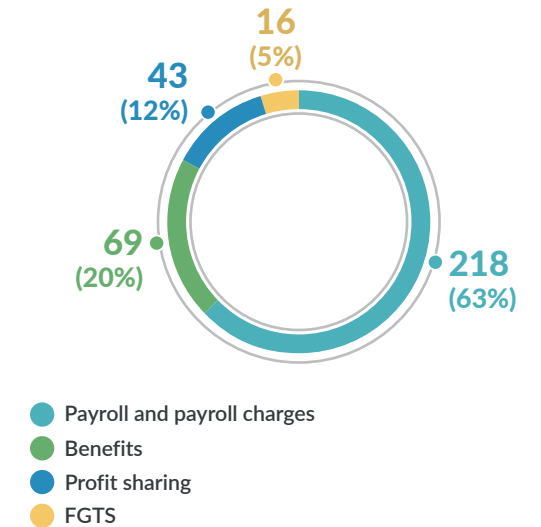
(% of total)



The BRL 346.0 million allocated to employees breaks down as follows:

Breakdown of value added allocated to employees

(BRL million, % of total)



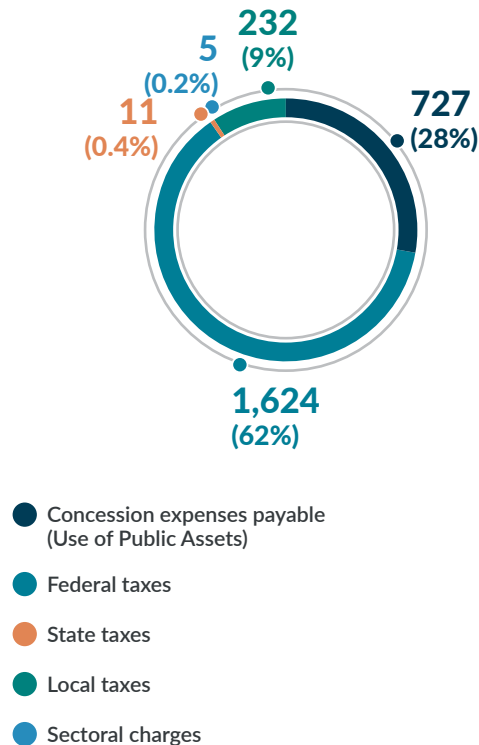


Conjunto Eólico Trairi

The BRL 2,599.8 million allocated to the government broke down as follows:

Breakdown of value added allocated to government

(BRL million and % of the total)

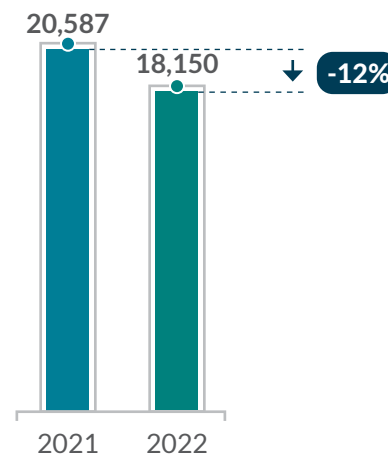


Debt

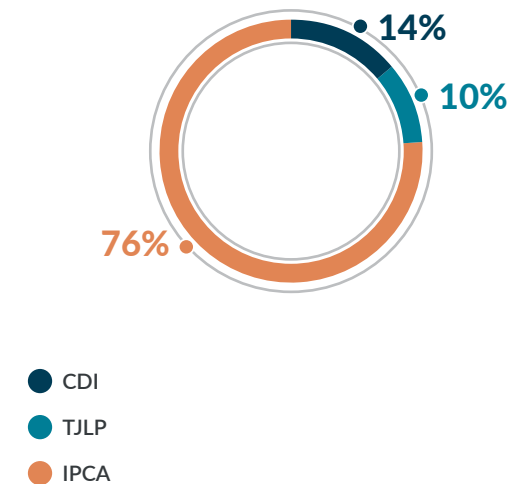
As of December 31, 2022, total consolidated gross debt, representing principally loans, financing, debentures, and preferred shares redeemable, net of hedging operations, totaled BRL 18,150 million – down 11.8% (BRL 2,437 million) from the position as of December 31, 2021. Average debt maturity at yearend 2022 was 7.6 years.

The nominal weighted average cost of debt at the end of 2022 was 11.4% – equivalent to IPCA + 5.3% – (13.1% – equivalent to IPCA + 2.8% – at the end of 2021). The reduction in relation to the previous year is mainly due to the deceleration of the IPCA in the period.

Total debt (BRL million)



Debt breakdown

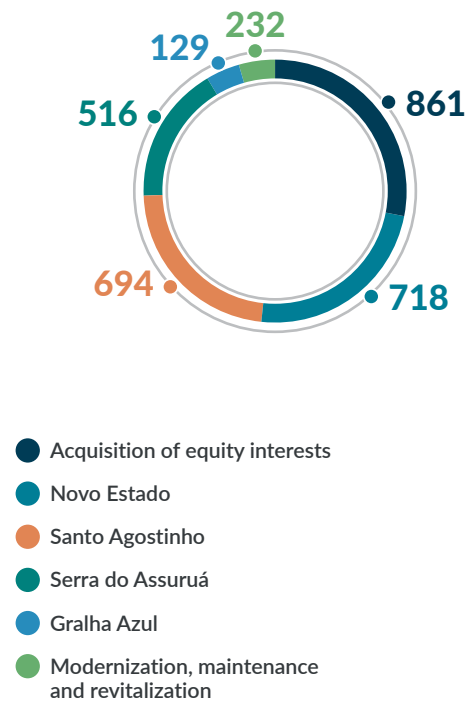


Investments

In 2022, the Company invested BRL 3,150 million, of which:

- **BRL 861 million** were applied in the acquisition of equity interests: (i) BRL 656 million in the Floresta and Paracatu photovoltaic plants; (ii) BRL 182 million in the Serra do Assuruá Wind Complex; and (iii) BRL 23 million in the Assú Sol Photovoltaic Complex;
- **BRL 2,057 million** invested in new projects construction, as follows: (i) BRL 718 million dedicated to the Novo Estado Transmission System; (ii) BRL 694 million in the Santo Agostinho Wind Complex – Phase I; (iii) BRL 516 million in the Serra do Assuruá Wind Complex; and (iv) BRL 129 million in the Galha Azul Transmission System;
- **BRL 232 million** allocated to maintenance and revitalization projects for the generation complex – of these, BRL 46 million were allocated exclusively to the modernization of the Salto Osório Hydroelectric Power Plant.

Investments (BRL million)



Stock market

ENGIE Brasil Energia is a component of more than ten indices in the Brazilian market. Since its listing on B3's Novo Mercado, the Company has become a component of the Special Corporate Governance Stock Index (IGC) and the Special Tag-Along Stock Index (ITAG), which covers those companies offering greater protection to minority shareholders in the event of the sale of a controlling stake. The Company's shares are also included in the Corporate Sustainability Stock Index (ISE), comprising companies with a recognized commitment to social and corporate responsibility, as well as the Electric Energy Stock Index (IEE), which is a sector index made up of the more significant listed companies in the industry.

The Company's shares are also a component of B3's leading stock index – the Ibovespa – and

traded under the ticker EGIE3. On the US Over-the-Counter (OTC) market, the Company's Level 1 American Depositary Receipts (ADRs) are traded under the EGIEY ticker, one ADR being equivalent to one common share.

ENGIE Brasil Energia's shares appreciated by 6.1%, while the Electric Energy Stock Index (IEEX) and the Ibovespa appreciated by 3.1% and 4.7%, respectively. The average daily trading volume was BRL 66.8 million, up 10.9% from 2021, when trading turnover was BRL 60.2 million.

On the last trading day in December 2022, the closing price of the Company's shares was BRL 37.88/share, translating into a market capitalization of BRL 30.9 billion.

ENGIE Brasil Energia's shares appreciated by 6.1%, while the Electric Energy Stock Index (IEEX) and the Ibovespa appreciated by 3.1% and 4.7%, respectively.

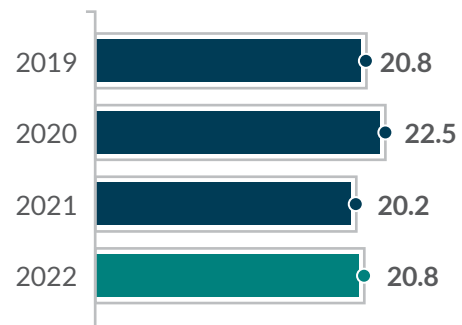
EGIE3 vs. Ibovespa vs. IEEX (Base 100 - 12.31.2021)



ROE¹ - Adjusted return on equity (%)



ROIC² - Adjusted return on invested capital (%)



Notes: In-house study by ENGIE Brasil Energia based on the Company's Financial Statements.
 1- ROE: net earnings of the last 4 quarters / shareholders' equity. Adjusted ROE disregards non-recurring events.
 2- ROIC: effective rate x EBIT / invested capital (invested capital: debt - cash and cash equivalents - restricted deposits for debt service + SE). Adjusted ROIC disregards non-recurring events.



Dividends and Interest on Shareholders' Equity

At its meeting of August 2, 2022, ENGIE Brasil Energia's Board of Directors approved the credit of interim dividends in the amount of BRL 577.9 million (BRL 0.7082542240 per share) based on the financial statements as of June 30, 2022, representing a payout of 55% of distributable net income for the first half of 2022. Payout took place on December 12, 2022.

On November 8, 2022, approval was given to the credit of complementary interim dividends in the amount of BRL 472.8 million (BRL 0.5794807287 per share) based on the financial statements as of June 30, 2022, representing a complementary payout of 45% of distributable net income for the first half of 2022, reaching 100% payout in the period.

Subsequently, the Meeting held December 8, 2022, approved distribution of interest on shareholders' equity for fiscal year 2022 in the amount of BRL 200.0 million (BRL 0.2451197455 per share). The ex-interest

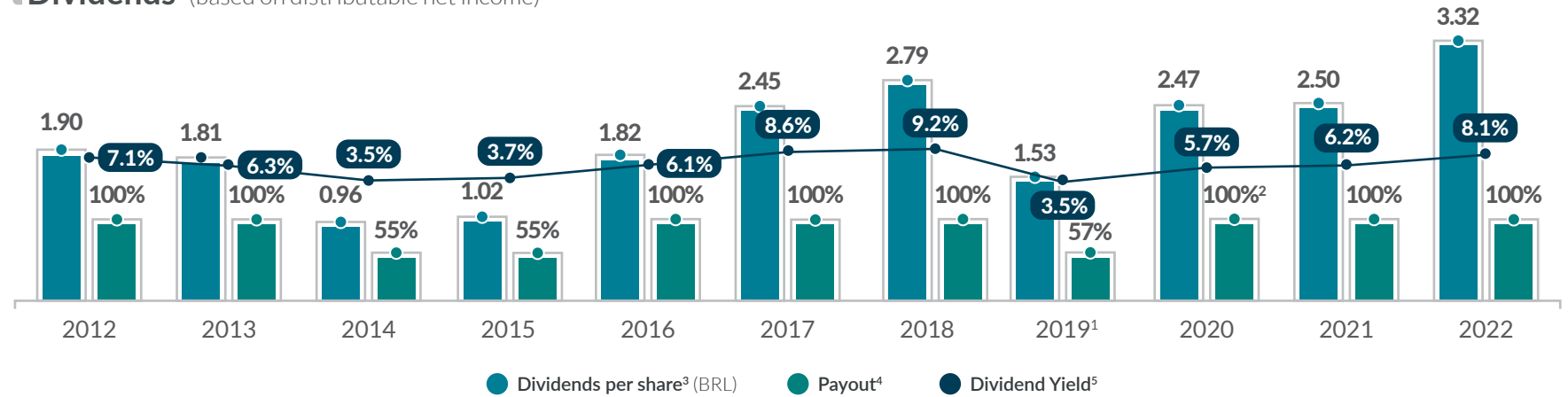
on shareholders' equity date was December 23, 2022, and the Executive Board will set the payout date in due course.

In addition, the Meeting of February 16, 2023, approved a proposal for distribution of com-

plementary dividends of BRL 1,455.2 million (BRL 1.7834407362 per share) for fiscal year 2022. The proposal is to be ratified by the Annual General Meeting – on which it is incumbent to decide the conditions for credit and payout.

The total amount proposed for distribution of earnings in 2022 was BRL 2,705.9 million (BRL 3.3162954344 per share), equivalent to 100% of the net adjusted income, a dividend yield of 8.1%, up 1.9 p.p. from 2021.

Dividends (based on distributable net income)



1 - Figures for 2019 were resubmitted in the light of the AGM's decision on the retention of interim dividends for fiscal year 2019.

2 - Payout equivalent to 100% of the distributable adjusted net income (ex-hydrological risk negotiation).

3 - For the purposes of comparability between fiscal years, an adjustment in dividend per share was made in the light of the share bonus approved on December 07, 2018.

4 - Considers the annual adjusted net income.

5 - Based on a volume-weighted closing price of the common shares in the period.

8

About the Report

- » Report profile
- » Material topics
- » Relevant issues
- » GRI/SASB summary
- » TCFD summary
- » Complementary Folder



Report profile

[GRI 2-2; 2-3; 2-4; 2-5; 2-14]

This is ENGIE Brasil Energia's 16th Sustainability Report aligned with the guidelines of the Global Reporting Initiative (GRI), a not-for-profit organization that proposes guidelines to ensure the quality and comparability of reports produced by organizations around the world. In recent years, in line with global ESG management and reporting trends, the Company has been adding to its Report certain recommendations from other benchmarks for the topic, such as the International Integrated Reporting Council (IIRC), the United Nations Organization Global Compact, the World Economic Forum, the Sustainability Accounting Standards Board (SASB), and the Financial Stability Board (FSB) – within the purview of the Task Force on Climate-Related Financial Disclosures (TCFD).

This edition thus carries information on the period from January 1 to December 31, 2022, the same interval that applies to its financial information, and focuses on the Company's

environmental, social, economic and governance performance, as well as aspects relevant to the corporate strategy and business model adopted in the period at hand. The information disclosed concerns the activities of ENGIE Brasil Energia, with registered offices in Florianópolis (SC), and all of its subsidiaries – as discussed in the 2022 [Management Report and Financial Statements](#).

In line with the latest GRI-proposed Standards, this Report **underwent independent external review – entrusted to the Veritas Bureau** –, reflecting the Company's commitment to transparency. [Read the independent auditor's Assurance Letter on page 147](#).



Publication

ENGIE Brasil Energia's Sustainability Reports are published annually and may be viewed [on our Website](#). The previous edition was published in April 2022, and covers the year 2021. Any comments or questions on the publication may be submitted by e-mail to ri.brenergia@engie.com.



Preparation of the Report involves several of ENGIE Brasil Energia's areas, which provide information, indicators and analyses concerning different domains of our business, enabling a cross-sectional approach to the Company's sustainability

context. The publication, including the material topics, are analyzed and approved by the Executive Board, Audit Committee, Board of Directors and Fiscal Council - the last two, in meetings held on 04.17.2023.

Stakeholder engagement

[GRI 2-29; 3-1; 3-2; 413-1; 413-2]

Pursuant to GRI recommendations, ENGIE Brasil Energia's 2022 report concentrates on topics that are material to business sustainability seen from different viewpoints. To make sure that the Report addresses the interests of both the Company and its various stakeholders, **the Materiality Assessment that underlies this Report included a comprehensive local communities engagement process that took place in the latter half of 2022.**

Improved health safety conditions as the Covid-19 pandemic abated in Brazil enabled ENGIE Brasil Energia to resume holding Sustainability Panels – in-person events of a multi-stakeholder nature devoted to identifying socio-environmental aspects arising from the Company's activities. In addition to plant employees, community leaders, educators, local suppliers and representatives from Third-Sector entities and the public sector, were invited to point out positive and negative impacts of ENGIE Brasil Energia's presence in each territory, as well as its potential contribution to sustainable development.

The Panels were held from August to November, 2022, involving the communities surrounding eight hydroelectric power plants that the Company operates, in addition to its registered officers (see figure). Taken together, the dialogs had approximately 430 attendees. In parallel with the panels, individual interviews were held with other community members – and public-sector officials in particular – to expand the listening range. Expert consultants coordinated the process to ensure an unbiased and balanced collection of views.

It is worth underscoring that the sustainability panels are a recurring practice for the Company. In 2019, it held an extensive community dialogue process with approximately 600 participants. In 2021, while still under the pandemic's impact, the activities involved 93 individuals from seven Brazilian states with residence adjoining nine projects, including hydro plants, wind farms and photovoltaic plants.

Municipalities hosting Sustainability Panels in 2022



- 1 Passo Fundo (RS)
- 2 Machadinho (RS)
- 3 Itá (SC)
- 4 Minaçu (GO)
- 5 Palmeirópolis (TO)
- 6 Sonora (MS)
- 7 Indianópolis (MG)
- 8 Florianópolis (SC)
- 9 Estreito (MA)



Key impacts of the Company's activities as identified by Sustainability Panel participants



POSITIVE

- **Jobs, income and business opportunities generation**
- **Tax revenues**
- **Cooperation with communities**
- **Improved local infrastructure**
- **Renewable energy generation**
- **Care for the environment**
- **Development of and support to socio-environmental projects**
- **Employee quality of life**



NEGATIVE

- **Changed environmental conditions: impact on plant and wildlife, noise, emissions, scenery**
- **Disorganized municipal growth during construction periods**
- **Lacking information on operations and socio-environmental and economic impacts**
- **Relocation of families/communities to enable project implementation**

According to GRI guidance, the level of impact on stakeholders provides the parameters for the engagement level of other audiences forming the sample in attendance aside from communities, employees, and local suppliers. ENGIE Brasil Energia therefore prioritized listening to two other social groups potentially affected by its activities: investors and clients. The former were invited to complete a questionnaire on the relevance of topics deemed potentially material by ENGIE Brasil Energia. The questionnaire was applied at the "Inside ENGIE" event, held on December 7, 2022. A total 16 investors took part in the survey. Similarly, a sample of 185 clients of the Company was invited to complete online, the same form as submitted to investors. Out of these, five responded effectively.

Material topics

[GRI 3-2]

Stakeholder engagement is integral to the 2022 Materiality Assessment carried out to review the material topics listed in the 2021 Sustainability Report and to identify any new topics material both to the inclusion of ESG-related aspects in the business strategy and to disclosure in the 2022 Report. This included a combination of analyses, chief among which:

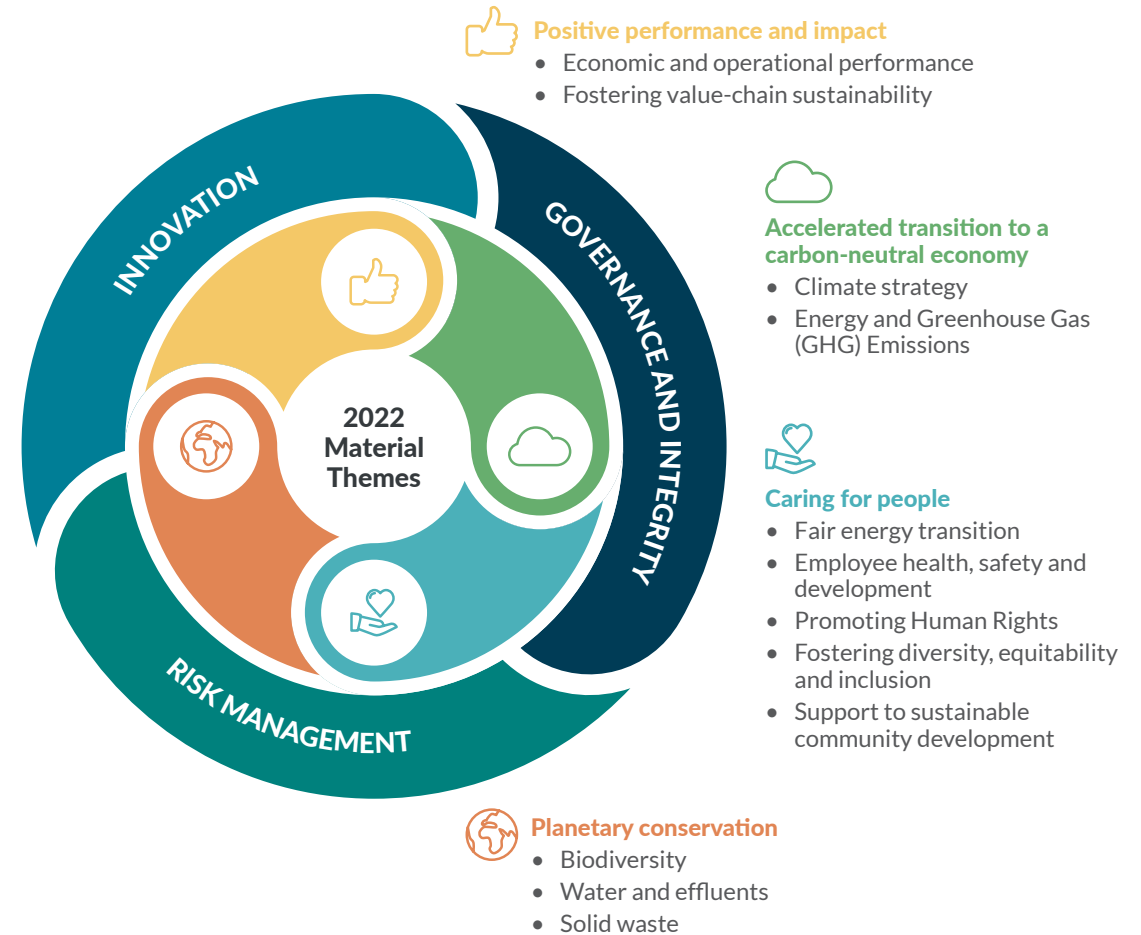
- **Corporate context:** considers internal documents, guidelines and communication platforms featuring ENGIE Brasil Energia's ESG policies and practices, in addition to interviews with Senior Managers;
- **Industry benchmarking:** review of sustainability reports disclosed by other industry players to identify recurring material topics and the approaches thereto, as well as how these topics connect with the 2030 Agenda;
- **Global frameworks:** review of ESG management and reporting guidelines for materiality correlation purposes;

- **Stakeholder engagement:** consolidating the results of different mechanisms for interaction with specific stakeholder groups, such as community dialogues, on-line surveys and client and investor surveys, among others.

These analyses led to the proposition of material topics and the respective performance indicators, which the Company evaluated in terms of monitoring and reporting feasibility in the light of effective topic management, as well as any operational and strategic issues involved.

Therefore, this cycle's materiality considers three cross-sectional topics – which connect with all others – and four other strategic thematic axes involving 12 topics deemed extremely relevant to the Company, as the figure below shows.

2022 material themes



Associated indicators

Based on the definition of material topics, the Company selected the performance indicators to monitor and report. For this cycle, in addition to the disclosures proposed by the **Global Reporting Initiative** (GRI), which the company traditionally reports, the publication added, where applicable, indicators from the **Sustainability Accounting Standards Board** (SASB) – CDSB Framework and the Electric Utilities Power Generators Standard (2018). The table next shows the GRI indicators reported in connection with each material topic.

The GRI Summary below indicates the page location of responses to indicators – in some cases, the Summary itself may provide a response. Furthermore, page 146 references responses to the guidelines of the Task Force on Climate-Related Financial Disclosures (TCFD).

Topic	Theme	GRI Indicator	SDG/goals
Governance and integrity		3-3; 205-1; 205-2; 205-3; 406-1; 418-1	16.5; 16.6; 16.7
Risk Management		3-3	16.6; 16.7
Innovation		3-3	8.3; 9.4; 9.5
Positive Performance and impacts	Economic and operational performance	201-1	8.4
Positive Performance and impacts	Fostering value-chain sustainability	308-1; 308-2; 414-1; 414-2	8.7; 8.8; 12.7
Accelerating the transition to a carbon-neutral economy	Climate strategy	3-3; 201-2	7.2; 9.4; 13.1; 13.2; 13.3;
Accelerating the transition to a carbon-neutral economy	Energy and greenhouse gas (GHG) emissions	302-1; 302-3; 305-1; 305-2; 305-3; 305-4; 305-6; 305-7	7.3; 8.4; 12.2; 13.2
Caring for people	Fair energy transition	3-3	7.1
Caring for people	Employee health, safety and development	401-2; 403-1; 403-2; 403-3; 403-4; 403-5; 403-6; 403-7; 403-8; 403-9; 403-10; 404-1; 404-2; 404-3	4.3; 8.5; 8.8
Caring for people	Promoting human rights	3-3; 413-1; 413-2	8.7; 11.3; 11.a
Caring for people	Fostering diversity, equitability and inclusion	401-1; 401-3; 405-1; 405-2	5.1; 5.5; 8.5; 10.2; 10.3; 10.4
Planetary conservation	Biodiversity	304-1; 304-2; 304-3; 304-4	6.6; 15.1; 15.5; 15.8;
Planetary conservation	Water and effluents	303-1; 303-2; 303-3; 303-4; 303-5	6.3; 6.4; 12.2
Planetary conservation	Solid waste	306-1; 306-2; 306-3; 306-4; 306-5	11.6; 12.5

GRI/SASB Summary

Statement of use Engie Brasil Energia has reported the information cited in this GRI content index for the period January 1 to December 31, 2021 with reference to the GRI Standards.

GRI 1: Fundamentos 2021

GRI Standard	Description	Answer / Page / URL	Omitted requirements/ reason	SDG
The organization and its reporting practices				
GRI 2: General Disclosures 2021	2-1 Organizational details	10		
GRI 2: General Disclosures 2021	2-2 Entities included in the organization's sustainability reporting	136		
GRI 2: General Disclosures 2021	2-3 Reporting period, frequency and contact point	136		
GRI 2: General Disclosures 2021	2-4 Restatements of information	Only when indicated throughout the report		
GRI 2: General Disclosures 2021	2-5 External assurance	136; 147		
Activities and workers				
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	10; 12; 112; 113; 115; 165		
GRI 2: General Disclosures 2021	2-7 Employees	55; 152		
GRI 2: General Disclosures 2021	2-8 Workers who are not employees	55; 152		
Governance				
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	18; 151 and https://www.engie.com.br/investidores/governanca-corporativa/administracao/?selection=Administra%C3%A7%C3%A3o		
GRI 2: General Disclosures 2021	2-10 Nomination and selection of the highest governance body	18		
GRI 2: General Disclosures 2021	2-11 Chair of the highest governance body	151		
GRI 2: General Disclosures 2021	2-12 Role of the highest governance body in overseeing the management of impacts	18		
GRI 2: General Disclosures 2021	2-13 Delegation of responsibility for managing impacts	18		
GRI 2: General Disclosures 2021	2-14 Role of the highest governance body in sustainability reporting	136		
GRI 2: General Disclosures 2021	2-15 Conflicts of interest	18		
GRI 2: General Disclosures 2021	2-16 Communication of critical concerns	18		
GRI 2: General Disclosures 2021	2-17 Collective knowledge of the highest governance body	18; 151		
GRI 2: General Disclosures 2021	2-18 Evaluation of the performance of the highest governance body	18		
GRI 2: General Disclosures 2021	2-19 Remuneration policies	18		

GRI Standard	Description	Answer / Page / URL	Omitted requirements/ reason	SDG
GRI 2: General Disclosures 2021	2-20 Process to determine remuneration	18		
GRI 2: General Disclosures 2021	2-21 Annual total compensation ratio	Item a: 11,7 Item b: 15,6 Item c: 1,8	-	
Strategy, policies and practices				
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	3		
GRI 2: General Disclosures 2021	2-23 Policy commitments	18; 27		
GRI 2: General Disclosures 2021	2-24 Embedding policy commitments	18		
GRI 2: General Disclosures 2021	2-25 Processes to remediate negative impacts	73; 116		
GRI 2: General Disclosures 2021	2-26 Mechanisms for seeking advice and raising concerns	27		
GRI 2: General Disclosures 2021	2-27 Compliance with laws and regulations	27		16
GRI 2: General Disclosures 2021	2-28 Membership associations	156		17
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	116; 137		
GRI 2: General Disclosures 2021	2-30 Collective bargaining agreements	55		8
Material Topics				
GRI 3: Material Topics 2021	3-1 Process to determine material topics	137		
GRI 3: Material Topics 2021	3-2 List of material topics	137; 139		
GRI 3: Material Topics 2021	3-3 Management of material topics	35; 36; 43; 47; 59; 63; 66; 73; 75; 77; 89; 94; 100; 101; 106; 112; 113; 122; 126		
Economic Performance				
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	126		8
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	98		13
Local Suppliers				
GRI 204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	165		8
Anti-corruption				
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	27		16
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	27		16
GRI 205: Anti-corruption 2016	205-3 Confirmed incidents of corruption and actions taken	27		16
Energy				
GRI 302: Energy 2016	302-1 Energy consumption within the organization	100; 162		7
GRI 302: Energy 2016	302-3 Energy intensity	100		7
Water and Effluents				
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	86		6
GRI 303: Water and Effluents 2018	303-2 Management of water discharge-related impacts	86		6

GRI Standard	Description	Answer / Page / URL	Omitted requirements/ reason	SDG
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	86; 161		6
GRI 303: Water and Effluents 2018	303-4 Water discharge	86; 161		6
GRI 303: Water and Effluents 2018	303-5 Water consumption	86; 161		6
Biodiversity				
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	77; 157		15
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	77		15
GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	77		6, 15
GRI 304: Biodiversity 2016	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	77; 157		15
Emissions				
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	101		8, 13
GRI 305: Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	101		8, 13
GRI 305: Emissions 2016	305-3 Other indirect (Scope 3) GHG emissions	101		8, 13
GRI 305: Emissions 2016	305-4 GHG emissions intensity	101		8, 13
GRI 305: Emissions 2016	305-6 Emissions of ozone-depleting substances (ODS)	164		8, 13
GRI 305: Emissions 2016	305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	164		8, 13
Waste				
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	89		11, 12
GRI 306: Waste 2020	306-2 Management of significant waste-related impacts	89		11, 12
GRI 306: Waste 2020	306-3 Waste generated	89		11, 12
GRI 306: Waste 2020	306-4 Waste diverted from disposal	89; 162		11, 12
GRI 306: Waste 2020	306-5 Waste directed to disposal	89; 162		11, 12
Supplier Environmental Assessment				
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	113		12
GRI 308: Supplier Environmental Assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	113		12
Employment				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	55; 152		8
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	57		8
GRI 401: Employment 2016	401-3 Parental leave	152		8
Occupational Health and Safety				
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	66		8

GRI Standard	Description	Answer / Page / URL	Omitted requirements/ reason	SDG
GRI 403: Occupational Health and Safety 2018	403-2 Hazard identification, risk assessment, and incident investigation	66		8
GRI 403: Occupational Health and Safety 2018	403-3 Occupational health services	66		8
GRI 403: Occupational Health and Safety 2018	403-4 Worker participation, consultation, and communication on occupational health and safety	66		8
GRI 403: Occupational Health and Safety 2018	403-5 Worker training on occupational health and safety	66		8
GRI 403: Occupational Health and Safety 2018	403-6 Promotion of worker health	66		8
GRI 403: Occupational Health and Safety 2018	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	66		8
GRI 403: Occupational Health and Safety 2018	403-8 Workers covered by an occupational health and safety management system	66		8
GRI 403: Occupational Health and Safety 2018	403-9 Work-related injuries	66		8
GRI 403: Occupational Health and Safety 2018	403-10 Work-related ill health	66		8
Training and Education				
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	63; 155		4, 8
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	63		4, 8
GRI 404: Training and Education 2016	404-3 Percentage of employees receiving regular performance and career development reviews	63		4, 8
Diversity and Equal Opportunity				
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	59; 155		5, 8, 10
GRI 405: Diversity and Equal Opportunity 2016	405-2 Ratio of basic salary and remuneration of women to men	155		5, 8, 10
Non-discrimination				
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	27		16
Local Communities				
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	106; 137		11
GRI 413: Local Communities 2016	413-2 Operations with significant actual and potential negative impacts on local communities	137		11
Supplier Social Assessment				
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	113		8
GRI 414: Supplier Social Assessment 2016	414-2 Negative social impacts in the supply chain and actions taken	113		8
Customer Privacy				
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	47		16
Indicadores Setoriais				
GRI G4: Electric sector 2014	G4-EU1 Installed capacity, broken down by primary energy source and regulatory regime	12		
GRI G4: Electric sector 2014	G4-EU2 Energy input into the grid, broken down by primary energy source and regulatory regime – net energy production	122		
GRI G4: Electric sector 2014	G4-EU3 Number of residential, industrial institutional and commercial consumer units	112		
GRI G4: Electric sector 2014	G4-EU8 Electric energy research and development and sustainable development promotion	43		
GRI G4: Electric sector 2014	G4-EU11 Average thermal plant efficiency by energy source and regulatory system	122; 162		
GRI G4: Electric sector 2014	G4-EU30 Average plant uptime factor by energy source	122		

Summary SASB

Disclosure	Description	Page	Omission / Justification
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"	101	
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.2. Greenhouse gas (GHG) emissions associated with power deliveries	101	
Greenhouse Gas Emissions & Energy Resource Planning	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	101	
Greenhouse Gas Emissions & Energy Resource Planning	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	-	N.A
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	164	
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	86; 161	
Water Management	IF-EU-140a.2 Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Zero non-compliance	In 2022 there was no incident associated with water.
Water Management	"IF-EU-140a.3 Description of water management risks and discussion of strategies and practices to mitigate those risks"	86	
Coal Ash Management	IF-EU-150a.1. Amount of coal combustion residuals (CCR) generated, percentage recycled	89; 162	
Coal Ash Management	IF-EU-150a.2 Total number of coal combustion residual (CCR) impoundments, broken down by hazard potential classification and structural integrity assessment	89; 162	
Energy Affordability	IF-EU-240a.1 Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	8	Partial. ENGIE Brasil Energia does not serve residential customers (due to regulatory restrictions) and does not publicly segregate average prices for commercial and industrial customers.
Energy Affordability	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	-	N.A
Energy Affordability	IF-EU-240a.3 Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	-	N.A
Energy Affordability	IF-EU-240a.4 Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	-	N.A
Workforce Health & Safety	IF-EU-320a.1 (1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	66; 156	
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)	-	N.A
End-Use Efficiency & Demand	IF-EU-420a.2 Percentage of electric load served by smart grid technology	122	ENGIE applies, both at the Generation Operation Center (COG), at the Transmission Operation Center (COT) in Florianópolis, and in the Plants where the operation takes place in loco, differentiated technological resources that ensure reliability, safety and efficiency of the operation, and consequently, of the grid. However, network operation is carried out by ONS (National Electric System Operator).
End-Use Efficiency & Demand	IF-EU-420a.3 Customer electricity savings from efficiency measures, by market	-	AT. It is not part of ENGIE Brasil Energia's commercial scope.

Disclosure	Description	Page	Omission / Justification
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	-	N.A
Nuclear Safety & Emergency Management	IF-UE-540a.2 Description of efforts to manage nuclear safety and emergency preparedness	-	N.A
Grid Resiliency	IF-EU-550a.1 Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	47	
Grid Resiliency	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	122	
Activity Metric	IF-EU-000.A Number of: (1) residential, (2) commercial, and (3) industrial customers served	112	
Activity Metric	IF-EU-000.B Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers		Not available
Activity Metric	IF-EU-000.C Length of transmission and distribution lines	12	
Activity Metric	IF-EU-000.D Total electricity generated, percentage by major energy source, percentage in regulated markets	122	
Activity Metric	IF-EU-000.E Total wholesale electricity purchased		Not available

Recommendations from the TCFD – Task Force on Climate-Related Financial Disclosures

Topic	Recommendations	Page or external reference
Governance (a)	Describe the board’s oversight of climate-related risks and opportunities.	94 to 99
Governance (b)	Describe the board’s role in assessing and managing climate-related risks and opportunities.	94 to 99
Strategy (a)	Describe the climate-related risks and opportunities the organization has identified.	98, 99
Strategy (b)	Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.	31, 33, 35, 98, 99
Strategy (c)	Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios.	Internal studies, not public.
Risk Management (a)	Describe the organization’s processes for identifying and assessing climate-related risks.	98, 99
Risk Management (b)	Describe the organization’s processes for managing climate-related risks.	47, 98, 99
Risk Management (c)	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.	47 to 53, 98, 99
Metrics and targets (a)	Disclose the metrics used by the organization to assess climate-related risks and opportunities.	98 to 104
Metrics and targets (b)	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	98 to 104
Metrics and targets (c)	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	32, 94

DECLARATION OF INDEPENDENT VERIFICATION – BUREAU VERITAS



INTRODUCTION

Bureau Veritas Certification Brazil (Bureau Veritas) has been engaged by ENGIE Brasil Energia S.A. (ENGIE), to conduct an independent verification of its ENGIE 2022 Annual Report (hereinafter referred to as the Report).

The information published in the report is the sole responsibility of ENGIE's management. Our responsibility is defined according to the scope below.

SCOPE OF WORK

The scope of this verification covered the Global Reporting Initiative™ standards and Principles 1 for Sustainability Reporting and refers to the rendering of accounts for the period from January 1 to December 31, 2022.

RESPONSIBILITIES OF ENGIE AND BUREAU VERITAS

The preparation, presentation and content of the Report are the sole responsibility of ENGIE's management. Bureau Veritas is responsible for providing an independent opinion to the interested parties, in accordance with the scope of work defined in this statement.

METHODOLOGY

The verification covered the following activities:

1. Interviews with those responsible for the material topics and the content of the Report;
2. Remote verification of corporate and operational processes (sample verification of material indicators GRI and SASB);
3. Analysis of documentary evidence provided by ENGIE for the period covered by the Report (2022);
4. Evaluation of the systems used to compile data;
5. Analysis of engagement activities with interested parties (stakeholders) developed by ENGIE;
6. Evaluation of the system used to determine the material aspects included in the Report, considering the context of sustainability and scope of the published information.

¹ Materiality, Stakeholder Inclusion, Sustainability Context, Completeness, Balance, Comparability, Accuracy, Timeliness, Clarity and Reliability

The verification level adopted was Limited, in accordance with the requirements of ISAE 3000², incorporated into Bureau Veritas internal verification protocols.

LIMITATIONS AND EXCLUSIONS

Excluded from this verification was any assessment of information related to:

- Activities outside the reported period;
- Position statements (expressions of opinion, belief, objectives or future intentions) by ENGIE;
- Accuracy of economic and financial data contained in this Report, extracted from financial statements, verified by independent auditors;
- Greenhouse Gas (GHG) emissions inventory, including energy data;
- Data and information of affiliated companies or outsourced employees, over which there is no operational control by ENGIE;
- Data from ENGIE Distributed Solar Generation (EGSD).

The following limitations have been applied to this verification:

- The principles of Data Accuracy and Reliability were verified on a sample basis, exclusively in the light of the information and data related to the material themes presented in the Report;
- The economic information presented in the Report was specifically verified against the principles of Balance and Completeness of the GRI.

OPINION ON THE REPORT AND THE VERIFICATION PROCESS

- For the preparation of this Sustainability Report, ENGIE used the result of the materiality process carried out in 2022. The document presented the Materiality Study of ENGIE Brasil Energia, which proposed to review the material topics listed in the 2021 Sustainability Report, as well as to identify any new topics relevant both to the insertion of ESG aspects to the business strategy and to the disclosure in the report for 2022.
- In our understanding, ENGIE's Sustainability Report presents the impacts of the company's activities in a balanced manner.
- ENGIE has demonstrated an adequate data collection and compilation method in relation to the GRI Reliability Principle.
- The inconsistencies found in the Report were adjusted during the process and were satisfactorily corrected.

RECOMMENDATIONS

- Update the date of the new approved guidelines regarding the Public Agent Relationship Policy and Claims Handling Procedure, dated in 2014.
- Regarding the surveillance audit process, the document proving the absence of nonconformities was not signed. In this sense, it would be important for formal documents to be signed and validated by the company.

² International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information



- Regarding the supplier indicator that addresses the values of contracts, it is necessary to prepare a system in which the reported values can be demonstrated, bringing reliability to the indicator.

CONCLUSION

As a result of our verification process, nothing has come to our attention that could indicate that:

- The information provided in the Report is not balanced, consistent and reliable;
- ENGIE has not established appropriate systems for the collection, compilation and analysis of quantitative and qualitative data used in the Report;
- The Report does not adhere to the Principles for defining the content and quality of the GRI Standard for sustainability reporting.

CLAIM OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas Certification is an independent professional services company specializing in Quality, Health, Safety, Social and Environmental management with more than 190 years of experience in independent assessment services.

Bureau Veritas has implemented and applies a Code of Ethics throughout its business to ensure that its employees maintain the highest standards in their daily activities. We are particularly attentive to avoid conflicts of interest.

The verification team has no other link with ENGIE, other than the independent verification of the Sustainability Report. We understand that there is no conflict between other services performed by Bureau Veritas and this verification carried out by our team.

The team that conducted this verification for ENGIE has extensive knowledge in verifying information and systems that involve environmental, social, health, safety and ethical issues, which combined with the experience in these areas, allows us a clear understanding of the presentation and verification of good corporate responsibility practices.

CONTACT

<https://www.bureauveritas.com.br/pt-br/fale-com-gente>

São Paulo, March 2023.

Francisco Rollo

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Credits



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Sustainability Forum:
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Ethics, governance, integrity, and human rights agenda

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Investor Relations

Graphic Design and Layout

L7 Design

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GRI consulting, preparation and text editing

We Sustentabilidade



Whistleblower channel for reports of any kind

<https://www.canalintegro.com.br/EngieBrasilEng>
ou 0800 580 2586 (confidentiality assured)



Supporting materials

- [2022 Management Report and Financial Statements](#)
- [2022 Emissions Inventory](#)
- [2021/2022 CDP Report](#)
- [Policies](#)



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Complementary folder

Governance Profile

[GRI 2-9; 151]

Board of Directors' principal skills

Effective Directors	Industry (Energy utilities)	Prior knowledge of the Company	Experience as CEO or Chairman	Audit, risk, compliance	Finance / accounting	ESG
Maurício Stolle Bähr Chairman of the Board	X	X	X		X	X
Paulo Jorge Tavares Almirante	X	X	X		X	X
Dirk Achiel Marc Beeuwsaert	X		X		X	
Karin Koogan Breitman	X					X
Pierre Jean Bernard Guiollot	X				X	
Simone Cristina de Paola Barbieri		X				X
Paulo de Resende Salgado				X	X	X
Manoel Eduardo Lima Lopes				X	X	
Adir Flávio Sviderskei	X	X				X

Number of executives in governance bodies by gender

	Men	Women	Total
Board of Directors	7 (78%)	2 (22%)	9
Executive Board	7 (88%)	1 (12%)	8

Number Directors by age group

	Men	Women	Total
29 or younger	0	0	0
30-50	0	0	0
Over 50	7 (78%)	2 (22%)	9 (100%)

Number of Executive Officers by age group

	Men	Women	Total
29 or younger	0	0	0
30-50	4 (50%)	1 (12%)	5 (62%)
Over 50	3 (38%)	0	3 (38%)

Officers' equity stakes in the Company's controlling group

Officer	Basic salary share multiple *
Eduardo Antonio Gori Sattamini (CEO)	0.000
Gabriel Mann dos Santos	0.000
Guilherme Slovinski Ferrari	0.000
José Luiz Jansson Laydner	0.037
Luciana Moura Nabarrete	0.005
Marcelo Cardoso Malta	0.250
Márcio Daian Neves	0.000
Marcos Keller Amboni	0.000
Average - All Officers	0.036
Average ex- the CEO	0.041

*Calculations: the Company's share price at year-end times the number of shares held by the Officer in the same period, divided by their latest basic salary.

Employee profile

[GRI 2-7; 2-8]

Total number of employees by contract type and gender

Contract	Men	Women
Permanent	863	294
Temporary	28	30
Apprenticeship	0	3
Internship	42	31

Use of maternity/paternity leave by gender

[GRI 401-3]

	Men	Women	Total
Total employees entitled to maternity/paternity leave	42	11	53
Total employees taking maternity/paternity leave	42	11	53
Total employees returning to work, during the reporting period, after the end of the maternity/paternity leave	42	7*	49
Total employees returning to work after a maternity/paternity leave and who were still employed 12 months after their return	23	11	34 (94%)

*As of December 31, 2022, four employees remained on maternity leave.

Hires and terminations

[GRI 401-1]

Number of hires by gender

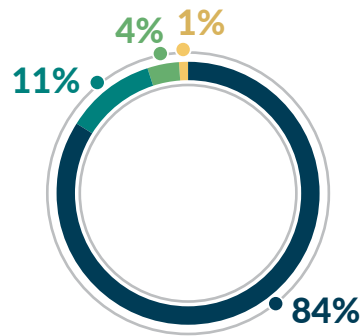
	Men	Women	Total
2020	206	66	272
2021	121	45	164*
2022	110	91	201

* The number disclosed in the 2021 Report mistakenly added two registration adjustments as new hires.

Hires by age group and gender

	Men	Women	Total
29 y.o. or younger	43	33	76
30-50 y.o.	48	76	123
Over 50 y.o.	1	0	1

Hires by region



- South
- Northeast
- Central-West
- Northeast

Percentage of vacancies filled by internal candidates

2022	11.00%
------	--------

Hire rate by gender

Men	Women	Total
9.0%	7.5%	16.5%

* Formula: number of employees hired per group / total number of employees

Hire rate by age group*

29 y.o. or younger	30-50 y.o.	Over 50 y.o.
6.3%	10.2%	0.1%

* Formula: number of employees hired per group / total number of employees

Number of hires by job class

Job class	2021	2022
Officers	2	0
Managers	1	0
Analysts, engineers, and specialists	93	146
Operators and technicians	70	55

Number of terminations by gender

	Men	Women	Total
2020	104	28	132
2021	150	45	195
2022	111	45	156

Terminations by age group and gender

	Men	Women	Total
29 or younger	11	13	24
30-50	63	22	85
Over 50	37	10	47

Terminations by job class

Job class	2021	2022
Officers	0	0
Managers	12	3
Analysts, engineers, and specialists	124	122
Operators and technicians	59	40

Turnover by gender*

	Men	Women	Total
	9.1%	5.6%	14.7%

* Formula: (hires + voluntary terminations) per gender divided by 2 / total employees per group.

Turnover by age group*

29 or younger	30-50	Over 50
4.1%	8.6%	2.0%

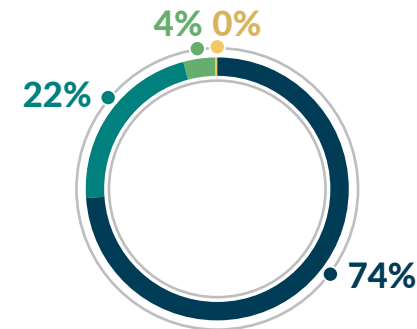
* Formula: (hires + voluntary terminations) per gender divided by 2 / total employees per group.

Voluntary turnover by gender

Men	Women	Total
6.9%	5.0%	11.9%

* Formula: (hires + voluntary terminations) per gender divided by 2 / total employees per group.

Terminations by region



- South
- Northeast
- North
- Southeast

Diversity

[GRI 405-1; 405-2]

Employees by age group and gender

	Men	Women	Total
29 or younger	114	85	199
30-50	680	226	906
Over 50	97	13	110

Disabled or special needs individuals

Year	Men	Women	Total
2021	22	13	35
2022	28	26	54

Ratio of men's to women's basic salary by job class

Job class	Ratio*
Officers	68.7%
Managers	89.0%
Analysts, engineers and specialists	78.6%
Operators and technicians	59.1%
General	78.0%

* Formula: average female compensation / average male compensation

Professional development

[GRI 404-1]

Investment in training (R\$ million)



Average training hours by gender

	Men	Women	Overall
2020	47.2	26.1	43.0
2021	60.0	17.8	49.7
2022	65.1	37.7	57.8

Average training hours by job class

Job class	Men	Women	Total
Officers	62.6	32.1	94.7
Managers	67.0	61.9	128.9
Analysts, engineers, and specialists	46.0	37.8	83.8
Operators and technicians	91.8	35.3	127.1

Health and Safety

[SASB IF-EU-320A.1.]

Total reportable incidents rate (TRIR)	1.4
Fatality rate	0.0
Near-miss frequency rate (NMFR)*	1.3

Formula: (statistic count × 200,000) / hours worked

Compensation

Salary ratio - highest salary and other employees

	2021	2022
Ratio of the highest salary paid by the company and the median salary of all other employees	15%	15%
Ratio of the highest salary paid by the company and the average salary of all other employees	18%	12%

Commitment to outside initiatives

[GRI 2-28]

The list ahead names the initiatives and entities of which the Company is a participant:

- Associação Brasileira das Empresas Geradoras de Energia Elétrica (Abrage);
- Associação Brasileira de Energia Eólica (ABEEólica);
- Associação Brasileira de Manutenção (Abraman);
- Associação Brasileira dos Agentes Comercializadores de Energia Elétrica (Abraceel);

- Associação dos Produtores de Energia de Santa Catarina (Apesc);
- Associação Brasileira dos Produtores Independentes de Energia Elétrica (Apine);
- Associação Brasileira das Empresas de Transmissão de Energia Elétrica (Abrate);
- Associação Brasileira da Infraestrutura e Indústrias de Base (ABDIB);
- Associação Brasileira das Companhias Abertas (Abrasca);
- Câmara de Comercialização de Energia Elétrica (CCEE);
- Centro de Pesquisa de Energia Elétrica (CEPEL);
- Comitê de Gerenciamento da Bacia Hidrográfica do Rio Canoas;
- Conselho de Desenvolvimento do Território Cantuquiriguaçu (Condetec);
- Conselho Nacional de Recursos Hídricos (CNRH);
- Conselho Estadual de Recursos Hídricos de Santa Catarina (CERH-SC);
- Conselho Estadual de Recursos Hídricos do Paraná (CERH-PR);
- Conselho Temático de Meio Ambiente e Sustentabilidade da Confederação Nacional da Indústria (CNI);
- Instituto Brasileiro de Governança Corporativa (IBGC);
- International Electric Community;
- Electric Power Research Institute (EPRI/EUA);

- Empresa de Pesquisa Energética (EPE);
- Federação das Indústrias do Estado de Santa Catarina (Fiesc);
- Fundação Comitê de Gestão Empresarial (Funcoge);
- Instituto Acende Brasil;
- Sociedade de Previdência Complementar (PREVIG);
- Fundação Eletrosul de Previdência e Assistência Social (ELOS); e
- Associação de Assistência à Saúde (Elosaúde).

Globally, controlling shareholder ENGIE endorses the Carbon Disclosure Program (CDP), the United Nations Organization (UNO) Global Compact, the Act4Nature biodiversity protection initiative, and other actions focusing on climate change and the energy transition:

- Solar Impulse Foundation;
- We Mean Business;
- Business Leadership Criteria on Carbon Pricing (UN Global Compact);
- Caring for Climate (UN Global Compact);
- Hydrogen Council;
- Terrawatt Initiative (founding member), which aims to exert global-scale influence on regulatory conditions for competitive, massive construction of solar energy generation; and
- Science Based Targets (SBTi).

Environment

[GRI 304-1; 304-4]

Biodiversity

List of Conservation Units within a 15-kilometer radius of Plants operated by the Company *

Asset	Total concession area (ha)	Conservation Unit (UC)	UC area (ha)	Class	Sphere	Biome	State
Itá	18,992.5	Parque Natural Municipal do Apertado	22.43	Park	Municipal	Atlantic Rainforest	RS
		Parque Natural Municipal Mata Rio Uruguai Teixeira Soares	429.12	Park	Municipal	Atlantic Rainforest	RS
		Parque Natural Municipal Centenário	3.20	Park	Municipal	Atlantic Rainforest	RS
		Parque Estadual Fritz Plaumann	733.36	Park	State	Atlantic Rainforest	SC
Machadinho	17,733.8	Parque Estadual de Espigão Alto	1,443.68	Park	State	Atlantic Rainforest	RS
		Parque Natural Municipal Mata Rio Uruguai Teixeira Soares	429.12	Park	Municipal	Atlantic Rainforest	RS
		Parque Natural Municipal Centenário	3.20	Park	Municipal	Atlantic Rainforest	RS
		Parque Estadual Rio Canoas	571.38	Park	State	Atlantic Rainforest	SC
Passo Fundo	15,932.3	Parque Estadual do Papagaio-Charão	1,023.28	Park	State	Atlantic Rainforest	RS
		Parque Natural Municipal Sagrisa	1,425.00	Park	Municipal	Atlantic Rainforest	RS
Salto Santiago	21,978.9	Estação Ecológica Rio dos Touros	356.90	ESEC	State	Atlantic Rainforest	PR
Cana Brava	16,859.9	Reserva Particular do Patrimônio Natural Serra do Tombador	141.71	RPPN	Private	Cerrado	TO
		Área de Proteção Ambiental Lago de São Salvador do Tocantins, Paranã e Palmeirópolis	14,587.11	APA	State	Cerrado	TO
		Área de Proteção Ambiental Pouso Alto	77,274.86	APA	State	Cerrado	GO
São Salvador	17,223.4	Área de Proteção Ambiental Lago de São Salvador do Tocantins, Paranã e Palmeirópolis	14,587.11	APA	State	Cerrado	TO
		Área de Proteção Ambiental Lago de Peixe/Angical	7,628.66	APA	State	Cerrado	TO

Asset	Total concession area (ha)	Conservation Unit (UC)	UC area (ha)	Class	Sphere	Biome	State
Rondonópolis	47.7	Parque Estadual Dom Osório Stoffel	13,068.03	Park	State	Cerrado	MT
José Gelazio	205.2	Parque Estadual Dom Osório Stoffel	13,068.03	Park	State	Cerrado	MT
Trairi – Central Mundau	229.6	Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
		Área de Proteção Ambiental do Estuário do Rio Mundaú	9,222.38	APA	State	Caatinga	CE
Ferrari	3.7	Parque Estadual de Porto Ferreira	681.42	Park	State	Atlantic Rainforest	SP
		Reserva Particular do Patrimônio Natural Sítio Kon Tiki	11.89	RPPN	Particular	Atlantic Rainforest	SP
Estreito	55,946.1	Parque Nacional da Chapada das Mesas	16,599.37	Park	Federal	Cerrado	MA
		Monumento Natural das Árvores Fossilizadas	18,018.99	MONA	State	Cerrado	TO
Miranda	5,033.0	Parque Estadual Pau Furado	2,181.80	Park	State	Cerrado	MG
		Reserva Particular de Patrimonio Natural - RPPN JACOB	358.33	RPPN	Particular	Cerrado	MG
Jaguara	3,469.2	Parque Estadual das Furnas de Bom Jesus	2,063.10	Park	State	Cerrado	SP
Tubarão / Nova Aurora	357.1	Área de Proteção Ambiental da Baleia Franca	8,534.08	APA	Federal	Atlantic Rainforest	SC
Assu V	157.2	Floresta Nacional de Açú	225.02	FLONA	Federal	Caatinga	RN
Trairi – Central Cacimbas	107.4	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
Trairi – Central Estrela	197.2	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
Trairi – Central Fleixeiras	74.1	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
Trairi – Central Guajiru	75.6	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE

Asset	Total concession area (ha)	Conservation Unit (UC)	UC area (ha)	Class	Sphere	Biome	State
Trairi – Central Ouro Verde	185.4	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
Trairi – Central Santa Monica	118.3	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
Trairi – Central Trairi	37.7	Área de Proteção Ambiental do Estuário do Rio Mundaú	1,558.78	APA	State	Caatinga	CE
		Área de Proteção Ambiental das Dunas da Lagoinha	1,320.88	APA	State	Caatinga	CE
Campo Largo	14,643.2	Parque Nacional do Boqueirão da Onça	346,908.10	PARNA	Federal	Caatinga	BA
		Área de Proteção Ambiental do Boqueirão da Onça	505,694.33	APA	Federal	Caatinga	BA
Umburanas	7,796.5	Área de Proteção Ambiental do Boqueirão da Onça	505,695.33	APA	Federal	Caatinga	BA
Galha Azul	90,890	Área de Proteção Ambiental Estadual da Escarpa Devoniana	505,002.18	APA	State	Atlantic Rainforest	PR
Galha Azul	90,890	Estação Ecológica Fernandes Pinheiro	631.71	ESEC	State	Atlantic Rainforest	PR
Galha Azul	90,890	Área de Proteção Ambiental do Rio Verde	18,247.22	APA	State	Atlantic Rainforest	PR
Galha Azul	90,890	Área de Proteção Ambiental Estadual da Serra da Esperança	252,680.47	APA	State	Atlantic Rainforest	PR
Galha Azul	90,890	Floresta Nacional de Irati	4,676.88	FLONA	Federal	Atlantic Rainforest	PR
Galha Azul	90,890	Parque Nacional dos Campos Gerais	26,072.33	Park	Federal	Atlantic Rainforest	PR
Galha Azul	90,890	Reserva Biológica das Araucárias	18,331.02	REBIO	Federal	Atlantic Rainforest	PR
Galha Azul	90,890	Área de Proteção Ambiental do Passauna	19,157.54	APA	State	Atlantic Rainforest	PR
Paracatu	842.1	Parque Estadual de Paracatu	6,400.3	Park	State	Cerrado	MG
Floresta	392.9	Área de Proteção Ambiental Dunas do Rosado	16,593.7	APA	State	Caatinga	RN

* Some conservation units are named more than once because they lie within the 15-kilometer buffer surrounding different Plants in the same region.

Number of species included in the IUCN red list and domestic conservation lists with habitats in areas affected by the organization's operations *

Asset	Red List Class (IUCN)				
	Critically endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (NT)	Least Concern (LC)
Campo Largo Wind Complex	3	8	17	19	884
Umburanas Wind Complex	4	7	17	19	889
José Gelázio SHP	0	6	21	33	1014
Rondonópolis SHP	0	6	21	33	1014
Gralha Azul TL	11	26	45	54	1667
Novo Estado TL	4	22	51	49	2003
Lages Co-generation Unit	3	9	29	38	872
Cacimbas Wind Farm	17	26	45	29	1319
Fleixeiras Wind Farm	17	26	44	27	1310
Guajiru	17	26	45	28	1327
Mundaú Wind Farm	17	26	45	27	1310
Ouro Verde Wind Farm	17	26	45	29	1319
Santa Mônica Wind Farm	17	26	45	29	1319
Trairi Wind Farm	17	26	44	27	1310
Tubarão Wind Farm	24	42	74	64	1533
Cana Brava HPP	3	11	24	33	1215
Estreito HPP	0	5	22	25	1094

Asset	Red List Class (IUCN)				
	Critically endangered (CR)	Endangered (EN)	Vulnerable (VU)	Near Threatened (NT)	Least Concern (LC)
Itá HPP	2	7	23	39	962
Jaguara HPP	2	9	24	35	1152
Machadinho HPP	2	8	23	36	901
Miranda HPP	1	6	23	31	1190
Passo Fundo HPP	3	6	21	37	903
Ponte de Pedra HPP	0	5	22	30	926
Salto Osório HPP	2	3	19	35	1002
Salto Santiago HPP	2	9	21	37	977
São Salvador HPP	0	9	20	33	1095
Assú Solar Plant	0	0	9	12	637
Cidade Azul Solar Plat	24	42	74	64	1533
Floresta Solar Plant	15	23	47	31	1312
Paracatu Solar Plant	1	7	28	24	1041
Ferrari TPP	4	10	27	34	1424
Ibitiúva TPP	1	8	20	30	1127
Pampa Sul TPP	2	6	18	14	601

*Considering the IUCN's 50-kilometer buffer.

Water

[GRI 303-3; 303-4; 303-5]

[SASB IF-EU-140A.1]

Total water withdrawal volume by source (in ML)

	2020	2021	2022	2022/2021 chg.
Surface water	458,089.2	486,271.8	4,180.3	-99%
Ground water	14.1	13.2	14.1	7%
Third-party water	2,163.4	2,214.3	1,813.9	-0.2
Total	460,266.7	488,499.3	6,008.2	-99%

Water withdrawal by source (ML) in water-stressed areas

	2022
Third-party water	0.1
Total	0.1

Total volume of water consumed (in ML)

	2020	2021	2022*	2022/2021 chg.
Total water consumed	9,666.6	7,233.6	4,387.3	-39%
Total water consumed in all water-stressed areas	0.0	0.0	0.1	-

* Material consumption decrease in 2022 due to the 2021 disposal of the Jorge Lacerda Thermal Power Complex.

Volume of water used in thermal power plants (in ML)

Procedure	2020	2021	2022	2022/2021 chg.
Processing	5,670.1	4,931.9	2,950.5	-40%
Cooling	454,575.7	483,543.3	3,029.4	-99%
Total	460,245.8	488,475.2	5,979.9	-99%
Consumption*	9,649.8	7,215.8	4,364.2	-40%

*Water consumption not included in total because it is part of the volume used for cooling purposes.

Total water disposal volume (in ML)

	2020	2021	2022	2022/2021 chg.
Surface water	448,718.9	479,704.5	120.8	-99.97%
Third-party water	1,881.2	1,561.1	1,500.1	-3.91%
Total	450,600.1	481,265.6	1,620.9	-99.66%

Total thermal disposal volume (in ML)

	2020	2021	2022*
	447,882.1	477,637.8	0.0

*The Pampa Sul TPP has a water re-use system and does not dispose of water.

Energy

[GRI 302-1; G4 EU11]

Total direct energy consumption - Non-renewable sources (GJ)

	2020	2021	2022	2022/2021 chg.
Diesel fuel	217,656.0	253,512.0	37,334.5	-85%
Fuel oil	21,744.0	0.0	0	-
Coal	58,714,992.0	54,632,124.0	10,338,656.4	-81%
Total	58,954,392.0	54,885,636.0	10,375,990.9	-81%

Total direct energy consumption - Renewable sources (GJ)

	2020	2021	2022	2022/2021 chg.
Wood biomass	1,283,031.3	953,244.0	1,942,884.0	104%
Sugarcane biomass	10,083,855.0	8,672,616.2	8,300,304.0	-4%
Total	11,366,886.3	9,625,860.2	10,243,188.0	6%

Total consumption of grid energy (GJ)

	2020	2021	2022	2022/2021 chg.
	270,804	279,781	107,472	-62%

Coal-firing TPP efficiency

TPP/Unit	2020	2021	2022	2022/2021 Chg.	Specific consumption (tons of coal/MWh) 2022	Specific consumption (tons of coal/MWh) 2021
Pampa Sul	35.2%	35.4%	35.7%	0.3 p.p.	0.93	0.91

Waste

[GRI 306-3; 306-4; 306-5]

[SASB IF-EU-150A.1.; IF-EU-150A.2.]

Waste not allocated to final disposal

Hazardous Waste ((in metric tons)

Disposal	2020	2021	2022*	Change 2022/2021
Re-use	59.9	51.5	0.8	-98.4%
Recycling	180.7	55.4	41.6	-24.9%
Co-processing	127.7	205.6	49.0	-76.2%
Total	368.3	312.5	91.4	-70.7%

* Material decrease in 2022 due to the 2021 disposal of the Jorge Lacerda Thermal Power Complex.

Non-hazardous waste (in metric tons)

Disposal	2020	2021	2022*	Change 2022/2021
Re-use	5,850.5	5,593.8	298.0	-94.7%
Recycling	1,139,623.2	972,918.9	105,469.7	-89.2%
Composting	131,783.8	92,465.4	93,681.6	1.3%
Degraded areas recovery	817,593.0	1,010,011.0	726,885.5	-28.0%
Co-processing	95.3	178.0	89.8	-49.5%
Total	2,094,945.7	2,081,167.1	926,424.6	-55.5%

* Material decrease in 2022 due to the 2021 disposal of the Jorge Lacerda Thermal Power Complex.

Waste allocated to final disposal

Hazardous waste* (in metric tons)

Disposal	2020	2021	2022	2022/2021 chg.
Incineration (mass burning)	0.3	0.9	0.8	-11.1%
Landfill	149.1	551.4	464.3	-15.8%
Total	149.4	552.3	465.1	-15.8%

* Data from previous years considered "on-site stored" waste as a final disposal, but the concept was re-interpreted in 2022. The line was excluded and the totals reported for 2021 and 2020 were re-calculated.

Non-hazardous waste* (in metric tons)

Disposal	2020	2021	2022	Variación 2021/2022
Landfill	431,483.1	450,601.1	113.8	-99.9%
Total	431,483.1	450,601.1	113.8	-99.9%

* Data from previous years considered "on-site stored" waste as a final disposal, but the concept was re-interpreted in 2022. The line was excluded and the totals reported for 2021 and 2020 were re-calculated.

Coal burning waste generation* (in metric tons)

2021	2022	Change	% recycled
2,431,529.7	816,904.9	-66.4%	100%

* The reported volume considers coal-firing generation only.

Ash and gypsum

	2021	2022
Total ash and gypsum waste recycled/re-used	2,526,974.2	921,708.0
Total ash and gypsum waste disposed	0	0
Data coverage (as % of the denominator)	100%	100%

Emissions

[GRI 305-6; 305-7]

[SASB IF-EU-120A.1]

NO_x, SO_x and other material atmospheric emissions

(in metric tons)*

	2020	2021	2022	2022/2021 chg.	Percentage of emissions in densely populated areas**
NO _x	15,834.8	17,795.3	3,023.8	-83.0%	11%
SO _x	112,551.3	97,215.8	1,617.7	-98.3%	0%
Persistent Organic Pollutants s (POP)	Not Measured	Not Measured	Not Measured	Not Measured	-
Volatile Organic Compounds (VOC)	Not Measured	Not Measured	Not Measured	Not Measured	-
Hazardous Air Pollutants (HAP)	Not Measured	Not Measured	Not Measured	Not Measured	-
Particulate matter (MP)	2,978.2	4,530.4	2,322.7	-48.7%	5%
Lead (Pb)	Not Measured	Not Measured	Not Measured	Not Measured	-
Mercury (Hg)	0.16	0.13	0.03	-77.4%	0%

* Sampled data.

** The Lages CO-generation Unit is the only thermal operation in a densely populated area (approximately 50,000 residents in surrounding areas)

Intensity of NO_x, SO_x and other material atmospheric emissions

(Kg/MWh, all Plants)*

	2020	2021	2022	2022/2021 chg.
NO _x	0.47	0.49	0.09	-82.3%
SO _x	3.31	2.67	0.05	-98.3%
Persistent Organic Pollutants s (POP)	Not Measured	Not Measured	Not Measured	Not Measured
Volatile Organic Compounds (VOC)	Not Measured	Not Measured	Not Measured	Not Measured
Hazardous Air Pollutants (HAP)	Not Measured	Not Measured	Not Measured	Not Measured
Particulate matter (MP)	0.09	0.12	0.07	-46.5%
Lead (Pb)	Not Measured	Not Measured	Not Measured	Not Measured
Mercury (Hg)	0.00	0.00	0.00	-76.5%

* Sampled data

Intensity of NO_x, SO_x and other material atmospheric emissions – Thermal Power Plants (Kg/MWh from emitting TPPs)*

	2020	2021	2022	2022/2021 chg.
NO _x	2.79	3.46	2.01	-41.9%
SO _x	21.89	20.59	1.58	-94.3%
Persistent Organic Pollutants s (POP)	Not Measured	Not Measured	Not Measured	Not Measured
Volatile Organic Compounds (COV)	Not Measured	Not Measured	Not Measured	Not Measured
Hazardous Air Pollutants (HAP)	Not Measured	Not Measured	Not Measured	Not Measured
Particulate matter (MP)	0.53	0.88	1.54	75.0%
Lead (Pb)	Not Measured	Not Measured	Not Measured	Not Measured
Quicksilver (Hg)	0.00	0.00	0.00	0.00

* Sampled data

Emission of ozone-depleting substances (ODS) – Operational Control (tCO₂e)

SDO	2020	2021	2022
HCFC (R-22)	194.4	194.3	112.0
HCFC-141b	0	0	0

Emission of ozone-depleting substances (ODS) – Equity (tCO₂e)*

SDO	2020	2021	2022
HCFC (R-22)	216.2	213.4	114.3
HCFC-141b	0	0	0

Fugitive Emissions* – TAG (Gas transportation) (tCO₂e)

	2020	2021	2022
Fugitive emissions – TAG (100%)	441.9	440.7	383.7
ENGIE Brasil Energia's share (32.5%) of TAG's fugitive emissions	143.6	143.2	124.7

* Uncontrollable emissions from micro-leaks in parts (valves, flanges, connectors, etc.) of hydrocarbon-carrying pipelines, as well as coolant gas emissions from refrigeration and air-conditioning equipment and fire extinguishers.

Suppliers

[GRI 2-6; 204-1]

Contracted supplier amounts in 2022

Source	Amount (BRL million)	Ratio
Domestic	6,090.6	99%
International (imports)	59.5	1%
Total	6,150.1	

Contracted amounts in 2022 by location and number of suppliers

Location	Contracted amounts (BRL million)	%	Number of suppliers
RS	2,021.0	32.9%	468
SP	1,712.1	27.8%	965
SC	899.8	14.6%	902
MG	422.8	6.9%	351
BA	259.3	4.2%	118
CE	166.4	2.7%	136
RJ	132.7	2.2%	97
RN	132.5	2.2%	153
PR	126.6	2.1%	796
ES	61.2	1.0%	27
International	59.5	1.0%	53
DF	38.6	0.6%	35
PA	35.2	0.6%	300
GO	27.8	0.5%	114
AL	11.7	0.2%	3
TO	10.0	0.2%	102
PE	9.5	0.2%	20
MS	9.0	0.2%	83
MA	8.2	0.1%	61
MT	5.3	0.1%	81
PB	0.6	0.0%	6
AM	0.2	0.0%	4
RO	0.01	0.0%	1
TOTAL	6,150.1	100%	4,876

