

ENGIE Brasil Energia

SUSTAINABILITY REPORT 2021

Message from the Management

[GRI 102-14]

We live in times where society is subject to rapid, involuntary and profound changes. In these last two years, the words challenge and resilience have dominated the speech, while at the practical level we have come to understand the dimension which is really essential to the planet and to ourselves. Priority agendas emerged during this period, opening up opportunities for us to evolve in terms of humanity, this translating into renovation and a necessary welcoming stage to the future.

Despite the uncertainty surrounding the pandemic, economic recovery was responsible for driving the strengthening in the growth agenda and the intensification of business opportunities. Better still, there was a maturation process in the private sector ensuring that this ambition came to fruition in a more responsible and sustainable manner making way for placing ESG (Environmental, Social & Governance) themes at the strategic core of corporate decision making.

Based on this common understanding, we saw an exponential growth in the public commitment for combating climate change, which supports the ENGIE Group's successful strategy of accelerating the transition to a carbon neutral economy and contributing to the decarbonization journey of our clients.

The scenario described above, to introduce our 2021 Sustainability Report, demonstrates how excited we are about what the future holds and, more than that, the dimension of our role as drivers of positive change for Brazil. At the same time that we expand renewable sources in the national electricity matrix and offer the necessary infrastructure for the recovery, we strengthen our historic commitment to socio-environmental action in the communities of which we are a part.



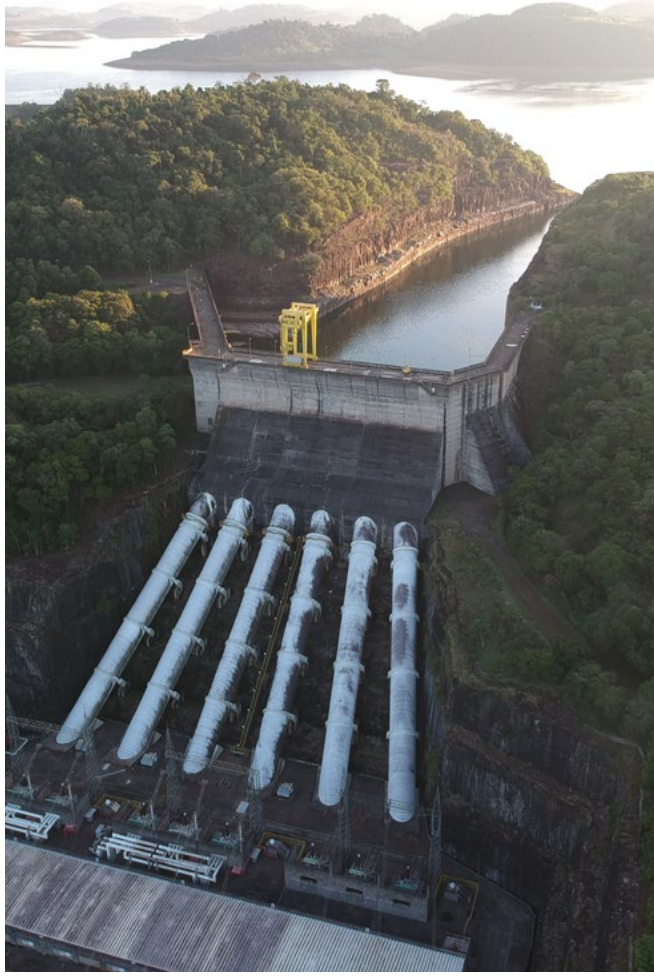
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OUR OPERATION

But it was not only the lessons learnt from the pandemic in 2021. The scenario in the electric energy sector became even more complex in the light of the hydrology crisis experienced in Brazil throughout the year – a continuation of below average hydrology that has been a characteristic since 2012 and feeding through to shortfalls in hydroelectric generation in the country as a whole. In the context of the Company, these impacts were partly mitigated through an extraordinary operational effort focused on maintaining a high degree of efficiency and uptime together with active commercial management of the portfolio with an emphasis on an optimized strategy of contracting and sale. When compared to 2020, we faced a year with a Settlement Price for Differences (PLD) 58.0% higher in the Southeast subsystem and a hydrological generation deficit of 27.0%, 7.2 p.p. higher than the previous year.

From the strategic point of view, this situation confirmed the relevance of diversification of our operations through the expansion of other renewable sources, especially wind and solar, as well as entry into new segments such as energy transmission and the transportation of natural gas – an activity performed by Transportadora Associada de Gás – TAG. Combined with our growth plan, this strategy justifies the economic and financial performance recorded by the Company in 2021. Added to this were the positive results arising from the recognition during the year of the effects of 14,052/2020 and 14,182/2021 Laws, permitting the reimbursement of costs relative to renegotiation of hydrological risk to the tune of R$ 1.6 billion.

In this context, adjusted Ebitda reached R$ 7.2 billion, a year-on-year increase of 12.3% even in the face of a challenging hydrological scenario. Net income reported R$ a reduction of 44.1% totaling R$ 1.6 billion, this despite the impairment and the impacts from accelerating inflation reflected in the restatement of concessions payable and other financial expenses. With respect to the latter effect, we would point out that the indexation of energy sales agreements resulted in an increase of 4.9% in average price in the period, thus tending to neutralize inflationary effects on results over the medium-term. Excluding impairment and other non-recurring amounts booked in 2021, adjusted net income reached R$ 2.4 billion, a decrease of 11.8% over the total of 2020.



We are pursuing the future vision of ENGIE Brasil Energia in a responsible way assuring both shareholder remuneration as well as the competitivity necessary for the sustainable expansion of the businesses through the implementation of new generation and infrastructure projects. Among these are the Campo Largo Phase II Wind Complex in the state of Bahia, this going into full commercial operation in August.

As a whole, our wind complexes now offer 1.2 GW of installed capacity, bringing with them local socio-environmental development and greater renewable energy to the National Interconnected System (SIN). To this group of assets will be added Santo Agostinho Wind Complex in the state of Rio Grande do Norte, where construction was begun in 2021. This will be ENGIE's largest wind energy project in Brazil with an installed capacity of 434 MW with investments worth approximately R$ 2.3 billion (baseline month December 2020).

In the infrastructure sphere, in August, we were able to announce the energization of the first lines and substations in the Gralha Azul Transmission System, thus bringing forward by 16 months delivery time stipulated by the National Electric Energy Agency (Aneel). As for Novo Estado – which in December energized its first substation – the challenges are more profound. In 2021, this project reported accidents with nine fatalities among the employees of contracted companies. It is with much regret and profound respect for their tragic loss, that we extend our solidarity to the families of the deceased.

As is demonstrated by our safety track record and culture, for ENGIE Brasil Energia the loss of life in the work environment is unacceptable. Thus, we spare no effort in implementing action and correction plans for ensuring the effective application of our occupational health and safety guidelines and practices by contracted companies for the execution of projects. In this journey, we identified the need to broaden the discussion on the topic in the energy transmission segment and, as a new member of this segment, the Company now shares the responsibility for reversing this scenario. We are certain that this contribution will have a relevant social impact, given the need to accelerate the implementation of these projects in the country.



OUR FUTURE VISION

ENGIE Brasil Energia continues to be alert to market opportunities, understanding as essential in the context of the energy transition that investments in renewable generation and transmission systems are in step with one another. In this way we contribute to the offtake of clean energy generated by our current and future assets – we have projects at an advanced stage of development which total 2.1 GW of renewable energy.

Considering the current state of the market, with a plethora of projects, we believe that it is the right moment to invest in the expansion of portfolio volume, at the same time always evaluating the macro-economic scenario and balancing out risks against returns – factors critical to our recognized financial discipline and thus to the economic sustainability of the business. An important step in this direction was taken in September 2021 with the acquisition of the Assú Sol Photovoltaic Complex in Rio Grande do Norte with an installed capacity of up to 750MW.

At the end of the year, we recorded 95.8% of renewable sources composing our own generator complex. This represents a historical landmark and the result of the ongoing process in decarbonizing ENGIE's portfolio in Brazil.

In October we concluded the sale to FRAM Capital of the Jorge Lacerda Thermoelectric Complex located in Capivari de Baixo (SC). This transaction was conducted in such a way as to ensure a gradual and fair transition in the region's economy – reducing the local socio-environmental impacts that could potentially result from an abrupt termination of these operations. In the same context, we continue to analyze proposals for the sale of Pampa Sul Thermoelectric Plant in Rio Grande do Sul, with a view to having entirely renewable energy generation by the end of 2022.

As to trading, we remain focused on the excellence of delivery to our Free Energy Market clients, to which we offered in 2021 a range of solutions anchored in digitalization. Our digital Energy Place relationship platform brought with it new functionalities in attending free consumers. With an increasingly proactive commercial positioning, the Company has been expanding its reach, prepared to attract and manage customers of different profiles and encourage the development of new businesses, capturing the opportunities expected for the coming years, resulting from the greater opening of the market.

In line with our efforts to support other companies to decarbonize their operations, we have registered significant growth in adherence to contracts with guaranteed origin, renewable energy certificates and carbon credits. In this sense, we continue to monitor the developments necessary for the evolution of the carbon market in the country, based on the important definitions established by COP26 – United Nations Conference on Climate Change.

OUR COMMITMENTS

Building relations of value, the partnership with our clients goes well beyond the commercial sphere. Evidence of this was the launch of programs such as Parcerias do Bem (Partnerships for Wellbeing) for inviting our clients to engage in our initiatives of social responsibility for fostering sustainable development in different regions of the country, especially in which ENGIE Brasil Energia is inserted. As a result, one of the projects that gained momentum was Mulheres do Nosso Bairro (Women of Our Neighborhood), which, with the support of the Company's clients, had its second public notice launched in October with a focus on promoting training and income generation for more than 100 women in 14 states in the country.

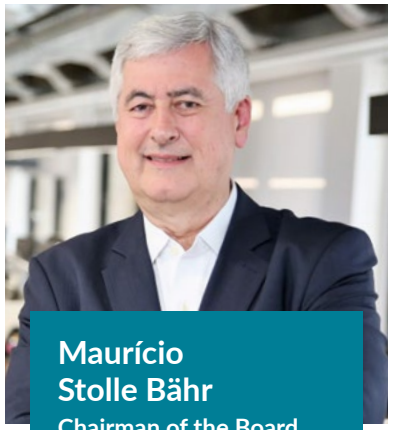
Still on the basis of our commitments to gender equality, we made progress in initiatives to accelerate the careers of women in Operations & Maintenance (O&M). In Umburanas, Bahia, where one of our wind farms is located, we created exclusive scholarships for women in courses for Electrician's Assistant for Wind Turbines and Basic Electrician. Due to the wide interest aroused, the project will also be replicated in Rio Grande do Norte.

Looking to 2021, the exercise of prioritizing the essentials made it possible for the Company, even in the midst of so many challenges, to continue delivering results of value to its most diverse stakeholders – employees, investors, customers and communities, among others, without neglecting the lessons learned along the way.

Consequently, connected one to the other and to the planet on which we live, we continue working on what matters to society, based on constant consultation with the communities and other stakeholders, at the same time as advancing progressively in the direction of a better future including the fair and accessible energy transition without leaving anyone behind.

There is much to be done for generating and transmitting the clean energy necessary for driving the sustainable development of the country.

We have no time to lose! Let's go!



Maurício Stolle Bähr
Chairman of the Board of Directors



Eduardo Antonio Gori Sattamini
Chief Executive and Investor Relations Officer

Highlights

AWARDS AND RECOGNITIONS

Ranked **23rd among the 100 most sustainable companies in the world**, according to the ranking **"Global 100" 2021**, published by the **Corporate Knights** Magazine

Component of **2022's Corporate Sustainability Index (ISE)** of B3 – for the 17th consecutive year, since the advent of the ISE.

Component of 2022's Carbon Efficient Index (ICO_2) of B3 for the second time – since qualification for the assessment, as a participant of the IBRX100.

Best Company in Latin America, in the Environment category, at the Sustainability Award 2021, promoted by the Inter-American Development Bank (IDB), in partnership with Latin Trade magazine.

2021

Second place overall in the 23rd Abrasca Annual Report Award, with honorable mention in the Corporate Governance category.

Highlight of the energy sector in the **Melhores e Maiores 2021**, Exame Magazine classification.

Presence on the Clean 200 list, composed of publicly traded companies that have a significant part of the revenue generated by products and services directed to solutions for the planet, leading the energy transition. The evaluation is carried out by the magazine Corporate Knights, together with the entity As You Sow.

Winner of the **Transparency Trophy** of the National Association of Finance, Administration and Accounting Executives (Anefac) – category "companies with net revenues up to R$ 8 billion", for the 12th time.

1º place in the **Abraconee 2021 Award** (Brazilian Association of Accountants in the Electricity Sector) – **Best Disclosure of Accounting Information** in the "Large Companies" category

Ranked by the **Institutional Investor magazine** (Electric & Other Utilities – Latin America), as follows:

1st winners index overall
ENGIE Brasil Energia

1st place overall and sell-side
Best CEO

2nd posição sell-side
Best CFO

1st place sell-side
Best IR Companies

1st place sell-side
Best Analyst Day

2nd place overall **1st** buy-side
Best IR professional

3rd place overall **1st** sell side
Best ESG metrics

Performance evolution

[GRI 201-1; 102-7] [SASB IF-EU-240A.1]

Indicator	2021	2020	2019	Change 2021 x 2020	Change 2021 x 2019
Operational and commercial					
Operating plants	68	60	60	8	8
Own installed capacity (MW)	9,939.4	10,431.2	10,431.2	-4.7%	-4.7%
Installed operating capacity (MW)	8,218.7	8,710.5	8,710.5	-5.6%	-5.6%
Own installed capacity from renewables (%)	7,873.7	7,508.5	7,580.5	4.9%	4.9%
Energy sales (GWh)	35,801	37,957	37,925	-5.7%	-5.6%
Energy sales (MWm)	4,087	4,321	4,329	-5.4%	-5.6%
Average net sales price (R$/MWh)	202.9	193.4	189.5	4.9%	7.1%
Number of consumers from free market (ACL)	689	720	621	-4.3%	11.0%
Economic-financial (R$ million)					
Net Revenue	12,541	12,259	9,804	2.3%	27.9%
Adjusted Ebitda	7,217	6,427	4,842	12.3%	49.0%
Adjusted Net income	2,369	2,686	2,102	-11.8%	12.8%
Total debt (loans, financing, debentures and RPS)	20,587	16,672	14,437	23.5%	42.6%
Investments	3,407	4,013	4,903	-15.1%	-30.5%
ROE[1] (%)	19.7	36.1	33.0	-16.4 p.p.	-13.3 p.p.
ROIC[2] (%)	19.9	22.7	20.8	-2.8 p.p.	-0.9 p.p.
Earnings per share (R$)	2.50	2.47	1.53	1.2%	63.4%
Average share price[3] (R$)	39.22	40.64	39.05	-3.5%	0.4%

1 – ROE: net income of the past 4 quarters / shareholders' equity. Adjusted ROE disregards non-recurring items.
2 – ROIC: effective tax rate x EBIT / invested capital (invested capital: debt – cash and cash equivalents – deposits earmarked for debt servicing + SE).
3 – Average closing price, daily averages.
4 – FR = number of workplace related accidents for every million hours of exposure to hazards.
5 – SR = number of days lost due to work-related accidents in every thousand hours of exposure to risk.

Indicator	2021	2020	2019	Change 2021 x 2020	Change 2021 x 2019
Environmental					
Donation and planting of seedlings (thousands)	475	360	404	31.9%	17.6%
Plant visitors and environmental education program participants (thousands)	133	33	90	303.0%	47.8%
Water input (thousands of megaliters)	488.0	459.3	426.6	6.2%	14.4%
Waste generated (millions of tons)	2.532	2.526	2.064	0.2%	22.7%
Percentage of waste recovered (%)	82.2	82.9	99.9	-0.8%	-17.7%
CO_2 emissions – Corporate Participation (millions t of CO_2)	5.5	5.9	5.3	-6.8%	3.8%
CO_2 emissions intensity ($KgCO_2$/MWh) – Corporate Participation	183.9	211.4	152.4	-13.0%	20.7%
Social Responsibility					
Own resources non-incentivized investments – (R$ thousand)	7,078	7,504	4,035	-5.7%	75.4%
Incentivized investments – Infancy and Adolescence Fund. Culture Incentive Law, Law for Sport, Health and others (R$ thousand)	11,105	15,130	21,841	-26.6%	-49.2%
Human capital					
Number of employees at ENGIE Brasil Energia (as of December 31)	1,201	1,538	1,398	-21.9%	-14.1%
Percentage of women in the workforce	24.4%	19.9%	19.1%	4.5 p,p	5.3 p,p
Investment in training and professional development (R$ million)	4.6	3.8	5.6	21.1%	-17.9%
Total number of hours of training	59,682	66,062	73,488	-9.7%	-18.8%
Number of occupational accidents and accidents with employees commuting to and from work	2	5	7	↓	↓
Frequency Rate (FR) – operation and maintenance[4]	0.568	1.203	Not aval.	↓	Not aval.
Frequency rate (FR) - construction[4]	1.649	0.561	Not aval.	↑	Not aval.
Severity Rate (SR) - direct employees[5]	0.000	0.006	Not aval..	↓	Not aval.

Summary

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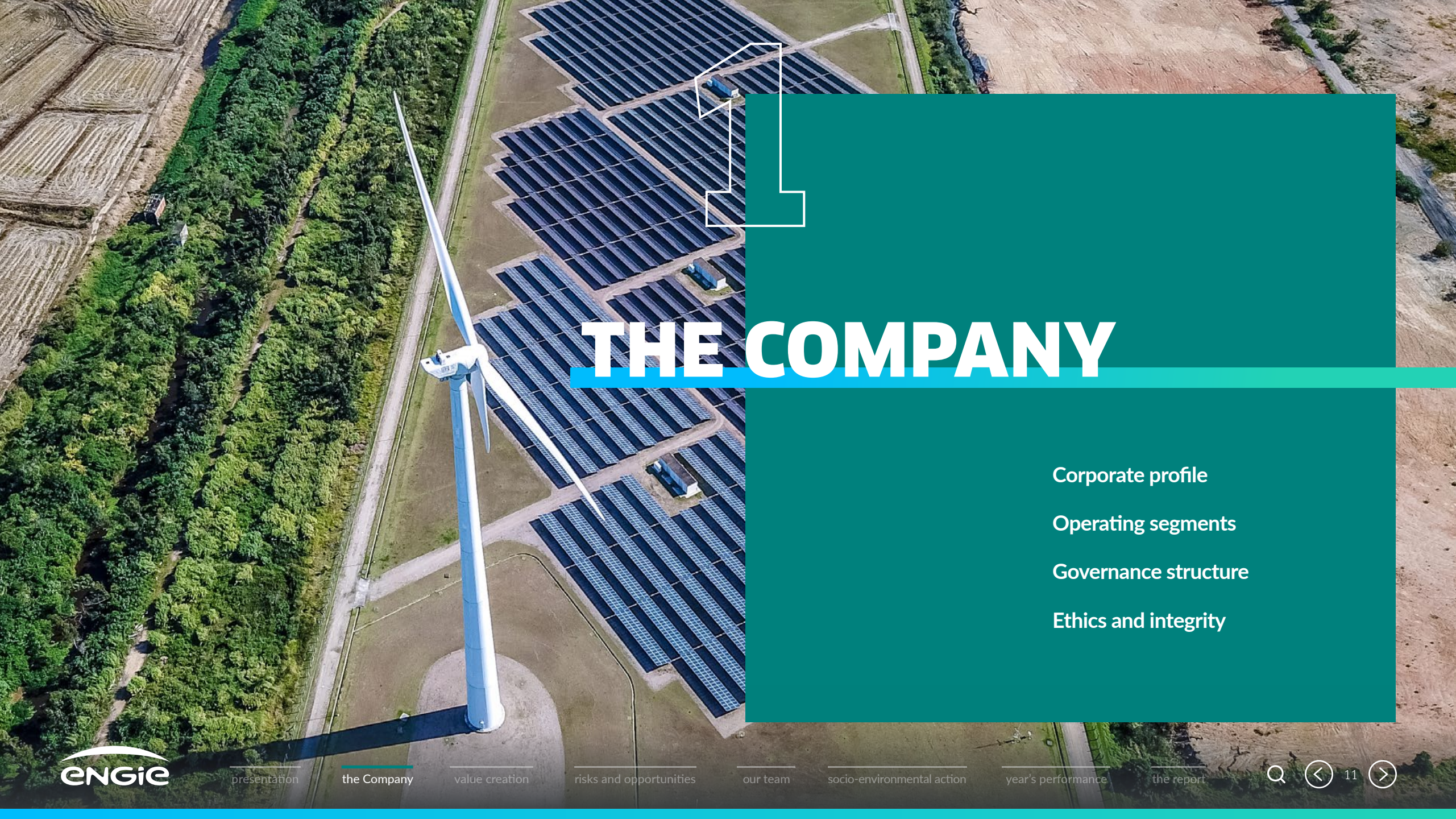
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1 THE COMPANY

Corporate profile

Operating segments

Governance structure

Ethics and integrity

Corporate profile

[GRI 102-1; 102-2; 102-4; 102-5; 102-6; 102-7; G4 EU1]
[2030 AGENDA GOAL: 16.6]



Present in 21 Federative Units

23 years presence in Brazil

Equity participation in natural gas transportation (**4,500** km of pipeline) - TAG

2 Transmission Systems approx. **2,800** km of lines

68 generation plants

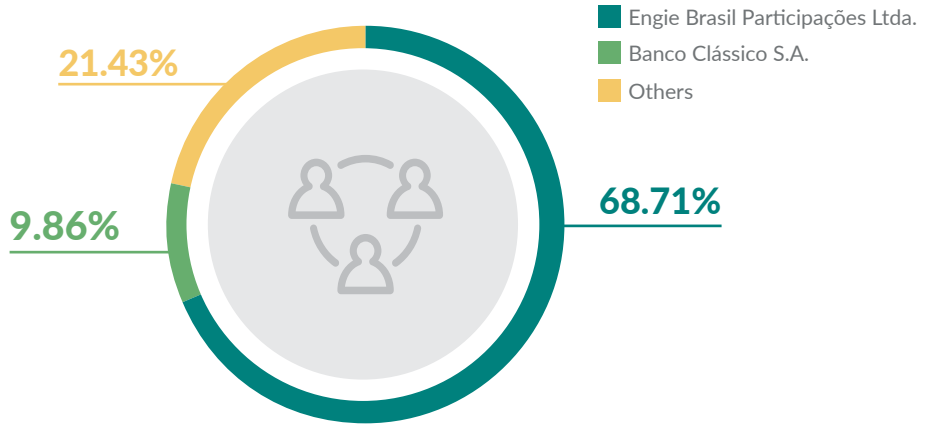
- **11 hydroelectric plants**
- **1 thermoelectric unit**
- **56 complementary** biomass, SHPs, wind and solar power plants

The Company

ENGIE Brasil Energia is an investment platform in energy infrastructure, present in the segments of centralized and distributed generation, commercialization, trading and transmission. To these activities is added the transportation of natural gas, performed by Transportadora Associada de Gás – TAG, in which the Company holds an equity interest. Thus, the operations directly cover 21 Brazilian states.

With capital stock totaling R$4,903 million, at the end of 2021, ENGIE Brasil Energia had 815,927,740 common shares listed on B3, under the ticker EGIE3. It is also part of the US over-the-counter market, trading Level I American Depositary Receipts (ADRs), identified as EGIEY – in the ratio of one ADR for each common share.

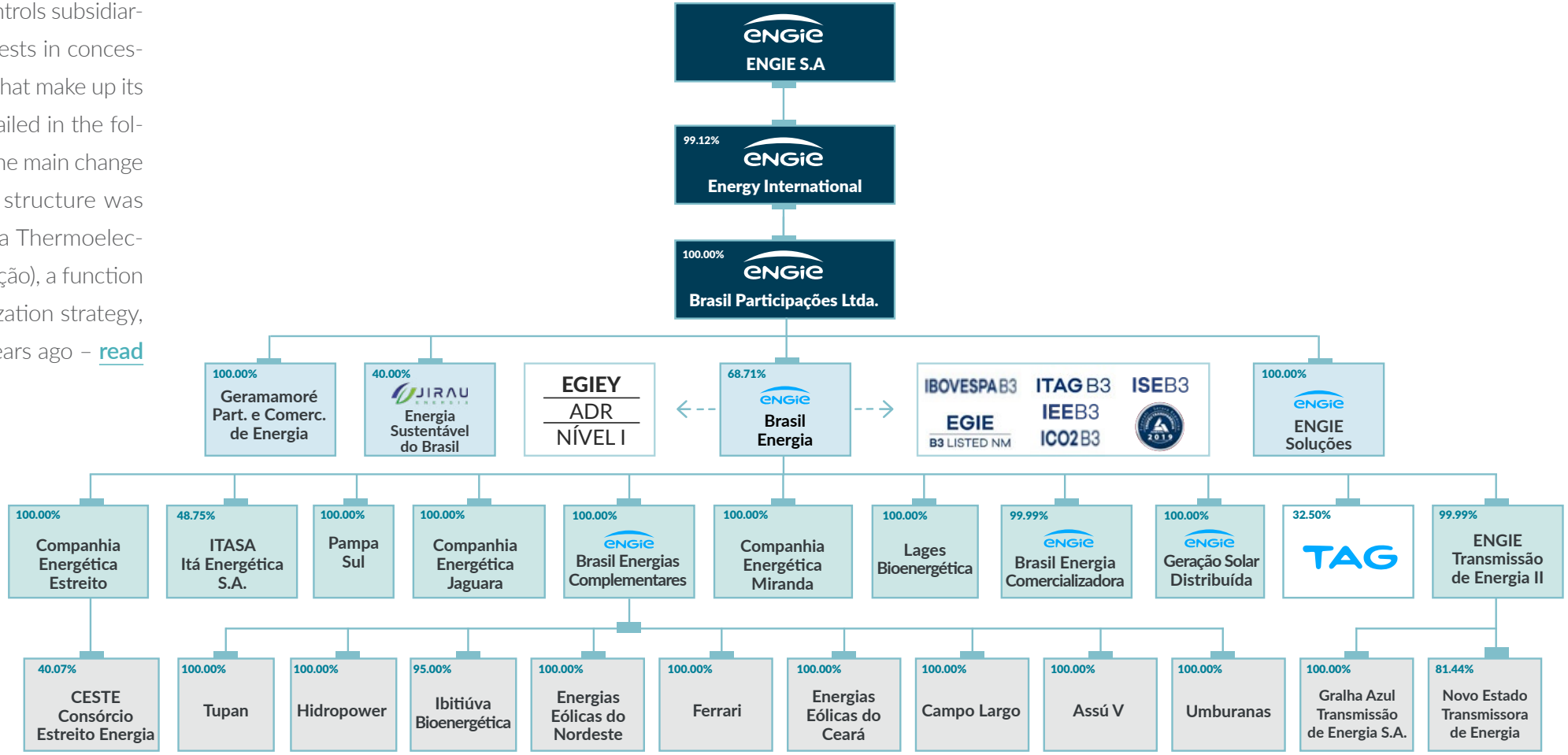
Shareholder structure (as at 12.31.2021)



Corporate Structure

ENGIE Brasil Energia controls subsidiaries and maintains interests in concessions run by consortia that make up its generating complex – as detailed in the following infographic. In 2021, the main change registered in the corporate structure was the sale of the Jorge Lacerda Thermoelectric Complex (Diamante Geração), a function of the Company's decarbonization strategy, announced more than five years ago – read more on page 17.

Corporate Structure* (as at 12.31.2021)



* Simplified structure

Post-dating the period of the Report, we concluded the sale of shares in ENGIE Geração Solar Distribuída (EGSD) to Gera Energia Brasil S.A., a company in the Gera Group in February 2022. This disinvestment is aligned to the strategy for expansion in centralized generation and transmission infrastructure.

Additionally, in March 2022 the acquisition of the Paracatú and Floresta Photovoltaic Complexes was concluded. The transaction is described in greater detail in the "Value Creation" section.

Assets portfolio and location (as at 12.31.2021)



Legenda

- Hydroelectric
- Thermoelectric
- Complementary
- Expansion
- Transmission
- TAG

Assets breakdown (as 12.31.2021)

	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]
1	Salto Santiago	1,420.0	733.3	100%	1,420.0	733.3	11.20.2030
2	Itá	1,450.0	740.5	69.0%	1,126.9	564.7	12.30.2032
3	Salto Osório	1,078.0	502.6	100%	1,078.0	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	**8,102.3**	**4,303.3**		**6,391.7**	**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
13	Pampa Sul	345.0	323.5	100%	345.0	323.5	03.30.2050
	Total	**345.0**	**323.5**		**345.0**	**323.5**	

(1) Already considers the extension of concessions for the Hydroelectric Power Plants, resulting from the adhesion to the renegotiation of the hydrological risk referred to in Law 14,052/2020.

To be continued...

Continuation

	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[2]	Campo Largo II Complex (Wind)	361.2	192.5	100%	361.2	192.5	12.10.2054
14[3]	Umburanas Complex - Phase I (Wind)	360.0	213.3	100%	360.0	213.3	08.03.2050
15[2]	Campo Largo Complex (Wind)	326.7	166.5	100%	326.7	166.5	08.03.2050
16[4]	Trairi Complex (Wind)	212.6	97.2	100%	212.6	97.2	02.04.2045
17	Ferrari (Biomass)	80.5	35.6	100%	80.5	35.6	07.26.2042
18	Assu V (Solar)	34.0	9.2	100%	34.0	9.2	06.07.2051
19	Lages (Biomass)	28.0	13.7	100%	28.0	13.7	10.28.2032
20	Rondonópolis (SHP)	26.6	14.0	100%	26.6	14.0	12.18.2032
21	José G. da Rocha (SHP)	24.4	11.9	100%	24.4	11.9	12.18.2032
22	Ibitiúva (Biomass)	33.0	17.3	69,3%	22.9	13.6	04.05.2030
23	Nova Aurora P&D (Solar)	3.0	0.3	100%	3.0	0.3	not applicable
24	Tubarão R&D (Wind)	2.1	0.3	100%	2.1	0.3	not applicable
	Total	**1,492.1**	**771.8**		**1,482.0**	**768.1**	
	General total	**9,939.4**	**5,398.6**		**8,218.7**	**4,509.3**	

	Gas Pipelines	Size	Ownership	Compression stations	Expiration of concession/ authorization
25	Transportadora Associada de Gás – TAG	4,500 km	32.5%	11	From 2039 to 2041

	Expansion - Generation	Total installed capacity (MW)	Total physical guarantee (aMW)	Ownership	Own installed capacity (MW)	Own physical guarantee (aMW)	Expiration of concession/ authorization
26[5]	Jirau (Hidro)	3,750.0	2,211.6	40%	1,500.0	883.2	08.13.2043
27[6]	Santo Agostinho Wind Complex - Phase I (Wind)	434.0	218.0	100%	434.0	218.0	-
28[7]	Paracatu Photovoltaic Complex (Solar)	158.3	34.0	100%	158.3	34.0	06.17.2051
29[8]	Floresta Photovoltaic Complex (Solar)	101.5	25.1	100%	101.5	25.1	06.17.2051

	Expansion - Transmission	Size	Ownership	Substation	Expiration of concession/ authorization
30	Gralha Azul	1,000 km	100%	5	03.2048
31	Novo Estado	1,800 km	100%	1	03.2048

(2) Complex made up of 11 wind farms.
(3) Complex made up of 18 wind farms.
(4) Complex made up of eight wind farms.
(5) The transfer of the 40% stake of ENGIE Brasil Part. in Jirau HPP to the Company should be examined timely.
(6) Complex made up of 14 wind farms.
(7) Complex made up of four photovoltaic plants.
(8) Complex made up of three photovoltaic plants.

Operating segments

Generation Complex: 8,218.7 MW of own installed capacity

Start-up: Campo Largo Wind Farm - Phase II

Decarbonization of assets: sale of the Jorge Lacerda Thermoelectric Complex

Company matrix

95.8% renewable (in 2021) X 86.2% renewable (in 2020)

Gas Transportation: 32.5% in TAG

30 new extraordinary service contracts

1st significant transportation contract with a new agent

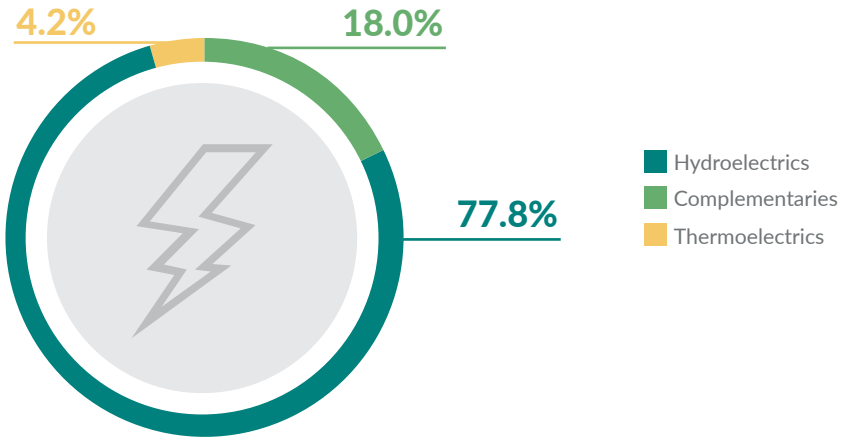
Generation

[GRI 103-1; 103-2; 103-3]
[SASB IF-EU-000.D]

At the end of 2021, ENGIE Brasil Energia's generator complex reported 8,218.7 MW of proprietary installed capacity. Of this total, 95.8% corresponds to energy from renewable sources – of the 68 plants operated by the Company, 11 were hydropower plants and, 49 wind-powered, three biomass-fired plants, two photovoltaic solar plants, two Small Hydroelectric Plants (SHPs) and a conventional thermoelectric plant. With the full control of 64 of these assets, ENGIE Brasil Energia participates in the remainder through consortia which hold the concession or via specific authorizations for operating. .

ENGIE Brasil Energia energy matrix – own installed capacity

(as 12.31.2021)



The significant increase in the percentage of renewable sources – 86.2% in 2020 – is based on two factors. The first was the start of commercial operations in January 2021, at the Campo Largo Phase II Wind Complex located in the state of Bahia, with 361.2 MW of installed capacity. The second, with a greater impact, was the sale of the capital of Diamante Geração de Energia Ltda to Fundo de Investimento Fram. Diamante holds the total assets comprising the Jorge Lacerda Thermoelectric Complex– an asset located in the state of Santa Catarina with an installed capacity of 857 MW - and coal fired.

The sale is in line with the Company's decarbonization strategy and implemented in recent years. It should be noted that the negotiation was only concluded after a long process of internal analysis and engagement with stakeholders – community, business partners and state and federal authorities, among others. This comprehensive dialog with all parties resulted in an understanding that immediate decommissioning, one of the options examined, would mean a sudden and serious rupture to the local socio-environmental dynamic, adversely affecting the purpose of a fair energy transition. With operations now continuing under the management of another controlling company, at least twenty thousand direct and indirect jobs have been preserved in the region as well as a turnover of more than R$ 6 billion in the local economy in the south of the state of Santa Catarina.

Pampa Sul Thermoelectric Plant, the only remaining coal-fired plant in ENGIE Brasil Energia's portfolio, will receive the same treatment. The Company continues to sound out potential purchasers for the sale of the asset, the conclusion of which is planned for no later than the end of 2022.

Our renewable installed capacity increased from **86.2%** in **2020** to **95.8%** in **2021**, mainly due to the sale of the Jorge Lacerda Thermoelectric Complex.



Extension of the hydropower plant concessions

The enactment of laws 14.052/2020 and 14.182/2021 provided fresh conditions for the renegotiation of the hydrological risk associated with hydroelectric energy generation; concession holders of the hydroelectric plants, members of the Energy Reallocation Mechanism (MRE) will be compensated for the effects arising from two factors:

i. restrictions on the offtake of energy due to the delay of entry into operation or startup of operations in unsatisfactory technical conditions of transmission installations; and the

ii. difference between the physical guarantee granted at the motorization phase and the effective addition of value of each motorized generator unit to the National Interconnected System (SIN).

Pursuant to the new legislation, compensation must be effected through an extension of the concession period, limited to seven years and established on the basis of parameters set by Aneel.

Subsequently, Aneel Normative Resolution 895 established the methodology for calculating the compensation, as well as establishing procedures for renegotiation of the hydrological risk. All the Company's hydropower plants are eligible for compensation, the additional concession period being shown in the chart on the right-hand side.

Extension of ENGIE Brasil Energy's hydroelectric plant concession period

(as per Ratifying Resolution 2.932/21)

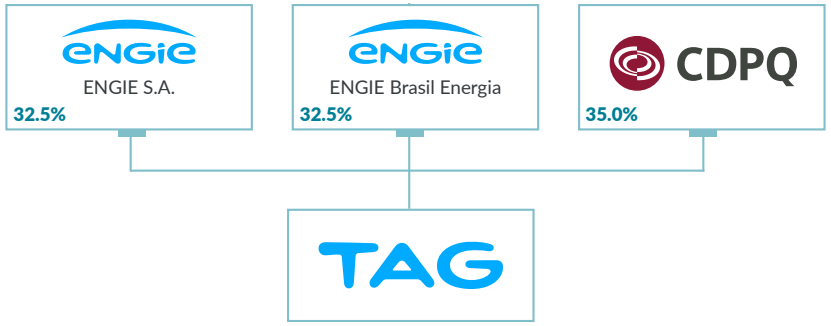
Hydroelectric Plant	Extension period (in days)
Salto Santiago	784
Itá	806
Salto Osório	925
Cana Brava	872
Estreito	1,876
Jaguara	177
Miranda	179
Machadinho	1,180
São Salvador	1,136
Passo Fundo	925
Ponte de Pedra	894

Gas transportation

The largest natural gas transportation operation in Brazil, with an infrastructure of 4,500 km of high-pressure gas pipelines extending along the country's southeastern and north-eastern seaboards as well as a further section of line between Urucu and Manaus, in the state of Amazonas, crossing 10 Brazilian states and almost 200 municipalities.

The gas pipeline network has several interconnection points, among them, 10 gas distributors, 12 active gas entry points (including three Liquified Natural Gas (LNG) terminals) and a further 91 gas exit points as well as 11 compressor stations for supplying refineries, fertilizer plants and thermoelectric power plants.

Corporate Structure - TAG



ENGIE Brasil Energia's presence into the natural gas segment in Brazil is in line with the Group's global strategy of being a leader in the energy transition. This requires large scale and sophisticated infrastructure such as TAG's gas pipelines, contributing to the diversification and decarbonization of the Brazilian energy mix.

A TAG is significantly contracted (~99%) out for an average term of approximately 9 years through current agreements with Petróleo Brasileiro S.A. (Petrobras). The company has been working on the development of solutions for driving expanded access to new agents in the natural gas transportation system, fundamental for the growth of the sector and for attracting more investments along the entire chain in the context of deverticalizing the sector and liberalization of the gas market in Brazil.

TAG's ratings

In 2021, TAG was assigned a risk evaluation of AAA(bra) for the Long-Term National Rating, both from Fitch Ratings as well as Moody's. On the international scale, TAG was assigned a BB risk rating from Fitch and Ba1 from Moody's, one notch above the sovereign rating for Brazil, and the best classification applicable to a Brazilian company with a purely local business operation.

In January 2021, TAG and Proquigel, a company in the Unigel Group, signed an interruptible gas transmission agreement for supplying two fertilizer plants operated by the petrochemical company in the states of Bahia and Sergipe for a period of up to a year. During 2021, 3.3 million cubic meters (MMm³) of gas were delivered daily, representing the first significant agreement for the transportation of gas to be signed with a new agent.

In addition, TAG signed an agreement with Transportadora Brasileira de Gasoduto Brasil-Bolívia (TBG) and Nova Transportadora do Sudeste (NTS) for sharing the Capacity Offer Portal marketplace (POC). The digital platform simplifies access to the Brazilian natural gas transportation system, facilitating the coordination and visibility of capacity offers of the gas transmission companies and introducing greater dynamism to the sector.

It was through the POC marketplace that in December TAG concluded the offer of network capacity for 2022, signing 30 new agreements of the extraordinary service type, to begin in January 2022 and lasting a year. These agreements totaled 11.3 million m³ of transportation capacity, in agreements of the entry-exit model signed with nine companies.

Contracts breakdown - TAG

Gas pipelines	Extension (km)	Contract maturity	Volumes contracted (MM m³/day)	% Projected net operating revenue*	Readjustment Index
Gasene	1,400	nov-33	30.3	40.7%	46% basket IGP**; 54% US PPI
Malha Nordeste	2,000	dec-25	21.6	23.3%	IGP-M
Pilar-Ipojuca	200	nov-31	15.0	6.3%	IGP-M
Urucu-Manaus	800	nov-30	6.7	29.7%	50% IGP-M; 50% IPCA
Lagoa Parda-Vitória*	100	dec-22	0.7	0.0%	IGP-M
Total	**4,500.0**		**74.3**	**100.0%**	

* Start of billing on 01/01/2022.
** 1/3 IGP-M; 1/3 IPA; 1/3 IGP-DI.



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Governance structure

[GRI 102-16; 102-18; 102-22]

Member of the Novo Mercado (B3) since 2005

Only common shares, which ensures an equal relationship between shareholders and greater rights (100% tag along)

267 thousand investors in 2021

+28.4% than in 2020

+169% than in 2019

Statutory Audit Committee, since 2020

Creation of the Governance, Risks and Controls Unit, in 2021

A fundamental value in our corporate culture, ethics anchor all actions and relationships developed by ENGIE Brasil Energia, the Company endeavoring to conduct its activities in a transparent manner – together with shareholders and other stakeholders – its initiatives being directed to the sustainable management of risks and opportunities. Based on this commitment, the Company operates in line with the best governance practices, such as those defined in the Brazilian Code of Corporate Governance. ENGIE Brasil Energia also integrates B3's Novo Mercado listing segment composed of companies with superior transparent corporate rules and with enhanced minority investor rights.

In 2021, we created the **Governance, Risks and Controls Unit**, which strengthens the generation of value, given the opportunity for synergy and complementarity between activities.



In the context of improving the governance structure and related good practices, the Governance, Risks and Controls Unit was established in 2021 with the function of coordinating risk management initiatives, the internal controls program, the Integrated Management System (SIG) and the strategic plan, all of which existed previously but structurally segregated. The centralization of these work fronts in a single Organizational Unit enhances the creation of value, giving the opportunity for capturing synergies and complementarity among activities. The new Unit has been integrated with remaining governance support bodies adopted by the Company as detailed in the following infographic.

Governance support

Governance, Risks and Controls Unit	**Created in 2021.**
Statutory Audit Committee	**Three members – two of whom are Independent Board Members**
Internal Audit	**Direct report to the Board of Directors**
Fiscal Council	**Supervision and control, reports to shareholders.**

Fóruns temáticos

1. Energy
2. Ethics
3. Financial
4. Risk Management
5. Tax Governance
6. Innovation
7. Human Performance
8. Processes
9. Products
10. Dam Safety
11. Safety in Industrial Control Systems
12. Insurance
13. Sustainability
14. Transmission

Responsible for strategic guidance and its effective implementation, the Board of Directors and the Management Board have in this structure the necessary support for running the business, based on the assertive identification and treatment of risks and opportunities with a focus on preventive and corrective actions in the face of the various challenges faced by the Company's activities.

With a view to the continuing evaluation of the Company's practices, the Board of Directors regularly analyzes management's commitment to the recommendations of the Brazilian Code of Corporate Governance. In the light of this evaluation, ENGIE Brasil Energia publishes an annual report in which it highlights the principles and practices enshrined in the document and applied in its management of the Company – justifying eventually those elements of the Code not adhered to. The report is available in the corporate website.

Policies and management guidelines

Approved by the Board of Directors, ENGIE Brasil Energia's corporate guidelines express our intentions and commitments in relation to various aspects involved in management. Applicable to the entire organizational structure, these documents are shared with stakeholders, in particular:

Ethics Code and Practical Guide to Ethics: a series of fundamental principles to be followed by all who directly or indirectly are involved in actions of responsibility at the Company.

Policy for Combating Corruption and Bribery: establishes the commitment to comply with all the laws for prevention of corruption and bribery in the conducting of the businesses. Thus, it seeks to ensure the effectiveness of the corporate anti-bribery management system, attested by the ISO 37001 certification, achieved by ENGIE Brasil Energia in 2021.

Sustainable Management Policy: expresses the Company's guidelines with respect to quality, energy management, environment, climate change, occupational health and safety, social responsibility and stakeholder engagement.

Human Rights Policy: establishes commitments and guidelines focusing on the Company's projects, operations, and value chain.

Investments and Derivatives' Policy: establishes the criteria for investing available resources in the financial market and limits on the use of derivatives.

Trading and Disclosure Policy: lays down practices for disclosure and the use of corporate information as well as for the trading of securities issued by ENGIE Brasil Energia, such as shares and debentures.

Risks and Opportunities Management Policy: aims to maintain and enhance the Company's value, reputation, and internal motivation, encouraging the taking of legally reasonable risks deemed as acceptable and economically viable.

Policies for the Appointment, Compensation and Evaluation of Directors, Officers, and Committee Members: aim to add transparency to the Company's top-management activities and procedures.

Personal Data Privacy and Protection Policy: establishes principles, standards and responsibilities governing the safe use and storage of individual or corporate information to which the Company may have access based on its interactions.

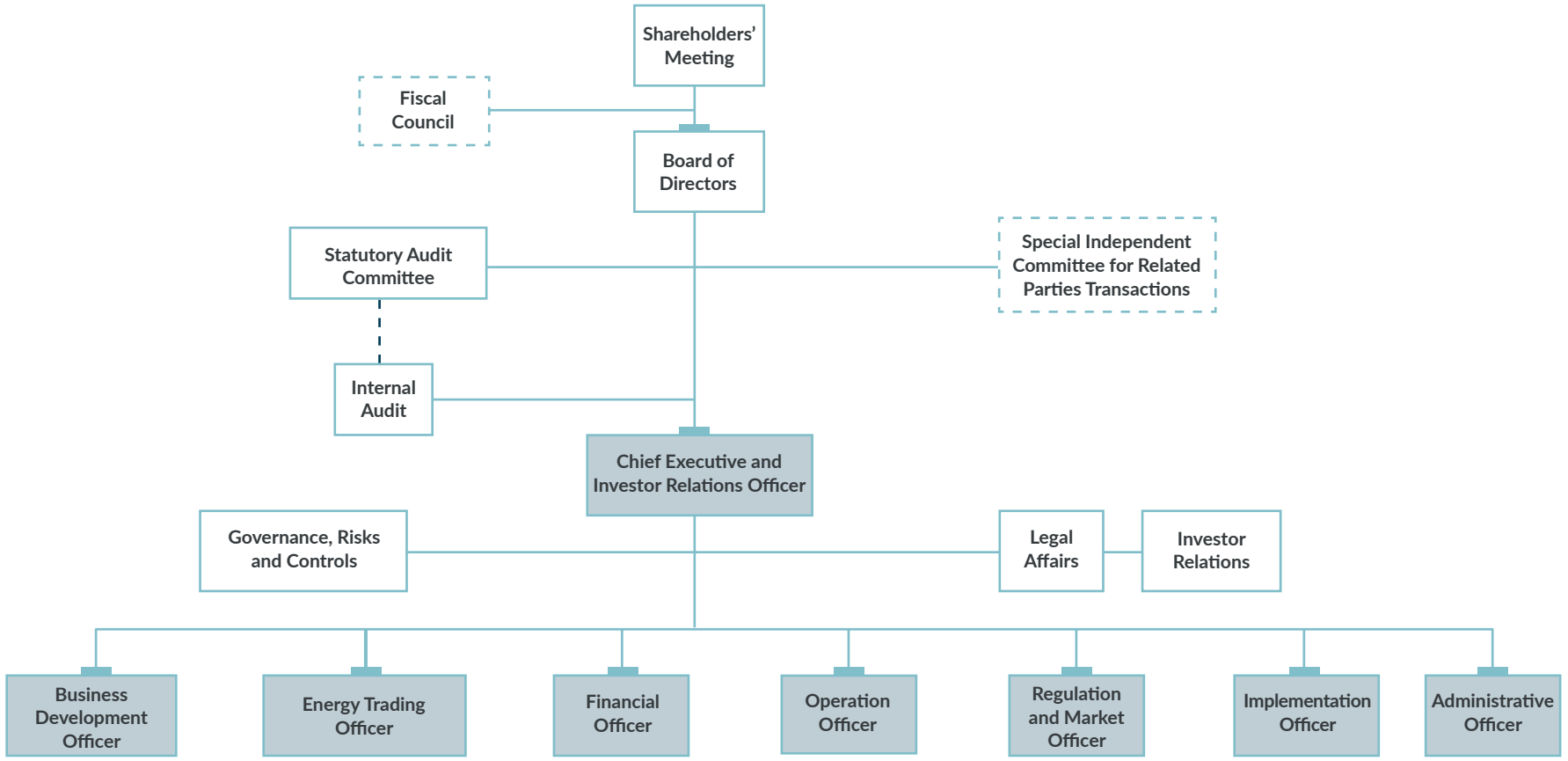
All the mentioned policies can be accessed through **link here**.



Management structure

The General Shareholders' Meeting is the most senior deliberative body in ENGIE Brasil Energia's governance structure, followed by the Board of Directors and the Management Board.

Management Organization Chart (as at 12.31.2021)



- Non-permanent structure. Its installation is extraordinary, subject to the call of the respective body to which it reports.
- Comprises the Management Board.
- Supervision.

The composition and attributions of the governance bodies can be consulted on our **website**.

Investor relations

Open dialog, transparency and trust characterize the relationship of ENGIE Brasil Energia with its shareholders – there were more than 267 thousand at the end of 2021, an increase of 28.4% compared with 2020, and 169% in relation to 2019. Among other factors, this reflected the general growth in the number of investors, especially personal investors, registered by the Brazilian stock market during the year. To ensure that this segment and the market in general is adequately informed of our businesses and decisions, we publish periodic bulletins through the intermediary of B3 and the Brazilian Securities and Exchange Commission (CVM) website as well as in the Company's Investor Relations website.

Transparent information

Among the principal information released to investors through the different communication channels, important are:

- **Material** Facts
- Notices to the **Shareholders**
- Announcements **to the Market**
- **Sustainability** Report
- **Management** Report and **Account Statements**
- **Reference Form**
- Quarterly report on **results** and **results** presentations

In addition, we dispatch relevant content by e-mail, holding video-conferences as well as hosting meetings with market analysts – for presenting results and responding to questions – and maintain direct contact through the **"Speak to IR"**, channel, accessible via website and telephone. The website offers guidance relative to the remote participation in Shareholders' Meetings as per CVM Instruction 561, including a specific channel for making suggestions on matters to be discussed in the Meetings.

Interaction with investors 2021

206
institutions and analysts attended via conferences (onsite, telephone and video) and non-deal roadshows;

36
participants at the Annual Conference hosted by the Association of Capital Markets' Analysts and Investment Professionals (Apimec).

1,469
participants in results' video conferences (average numbers of 367 per quarter);

1,400
participants in the Inside ENGIE up to December 31, 2021.



Further improving the model adopted in 2020 – completely digital in the light of the pandemic –, our annual meeting with investors known as "Inside ENGIE 2021", was held on December 10 and transmitted live and made accessible to the public at large through ENGIE Brasil's channel on Youtube. In 2021, the Company also offered a translation in Brazilian sign language (Libras), an initiative to promote the inclusion of the hearing impaired among the participants.

As in the case of previous editions, the initiative was aimed at enriching information of interest to investors, notably business strategy, developments in the regulatory framework of the business sectors, status of the projects in implementation and development, financial performance, risk management, socio-environmental performance and outlook. The full video of the event can be accessed from this **link**.

Ethics and Integrity

[GRI 102-16; 102-17; 103-1; 103-2; 103-3; 205-1, 205-3; 406-1; 412-3]
[2030 AGENDA GOALS: 16.5, 16.6]

Ratification
Business Pact for Integrity Against Corruption
(Instituto Ethos)

Obtaining
ISO 37001
certification - Anti-Bribery Management Systems

Channel for complaints or ethical questions

https://www.canalintegro.com.br/engiebrasil

0800 580 2586 (toll free)

In 2021

ZERO
corruption reports received

4 **complaints of discrimination/ harassment properly handled**

In order to guide all the activities and its relationships, ENGIE Brasil Energia maintains clear guidelines regarding its positioning in integrity. In addition to the Code of Ethics and the Anti-Corruption and Bribery Policy, shared with all stakeholders, internal documents guide the conduct of directors, officers and management in general in relation to the topic – with emphasis on the Privacy and Personal Data Protection Policy and the Guides to Ethics in Supplier Relations and Relationship with Business Consultants.

Good Practices in the value chain

In line with the ENGIE's new Due Diligence, it is mandatory for all suppliers to execute an ethical evaluation of materials and services. This evaluation particularly covers exposure to risks related to Human Rights and Corruption.

Supplier groups considered critical in these themes are subject to an even more rigorous analysis in accordance with the specifics and dimension of the related impacts.

Following this process, identified risks are analyzed by the Ethics and Compliance area of the controlling company, ENGIE Brasil, and shared together with pertinent recommendations, with the teams involved in the relationship – which includes in some cases, the Ethics, Compliance and Privacy Department of ENGIE (in France).



Due diligence processes, audits, contractual provisions and a rigorous program of internal controls, have strengthened the culture of compliance and risk management. Together with these initiatives, the Company has intensified training and awareness campaigns on the theme.

In 2021, the Company continued to maintain employees current on the essential ethical principles such as the combat of fraud, corruption, gifts and hospitality, conflict of interests and human rights. In the light of the relevance of the theme, specific training was given on cybersecurity covering risks related to virtual attacks, critical aspects related to work procedures and preventive measures.

Lectures were also held together with additional discussions on ethics and related themes such as harassment in the workplace as well as internal campaigns on conflict of interests and a special event for commemorating International Anti-Corruption Day on December 9. For all these opportunities for interaction, the availability/use of the Whistleblowing Channel (see in the next page) was emphasized, stimulating the employees to access this platform as well as to consult managers for clarification on doubts as to the application of corporate policies on the theme.

Voluntary commitments

[GRI 102-12]
[2030 AGENDA GOALS: 17.16]

In 2021, the Company ratified its adherence to the **Business Pact for Integrity Against Corruption**, an Instituto Ethos initiative in conjunction with the **United Nations Global Compact**, of which ENGIE Brasil Energia is a signatory.

During the year, ENGIE Brasil Energia received **ISO 37001 certification, with respect to Anti-bribery Management Systems** – previously certification applied to the Controlling Company in Brazil, albeit sweeping up EBE's operations as well. However, the Company has now been granted its own certification.

Ethics-related doubts or whistleblowing

Dedicated to receiving reports and manifestations related to ethical questions, the Whistleblower Channel - in place since 2019 - may be accessed by stakeholders through the website **www.canalintegro.com.br/engiebrasil** or telephone 0800 580 2586 (toll free).

Managed by a specialized company, the Channel guarantees absolute confidentiality of all manifestations received with the assurance of non-retaliation. Just as with other channels operated by the Company to this end, the verification of complaints is the responsibility of ENGIE Brasil Energia's Ethics Forum.

No cases of corruption were confirmed among complaints lodged with the Channel during 2021. However, four complaints of discrimination/harassment were deemed well-founded, resulting in the implementation of corrective measures. Out of these, three involved direct employees of ENGIE Brasil Energia, while one was exclusively between employees of an outsourced company – the Company being informed of the fact and corrective measures taken by the service provider itself.





2 VALUE CREATION

Sustainability in the purpose

The energy transition context

Business model

Strategy and competitiveness

Sustainability in the purpose

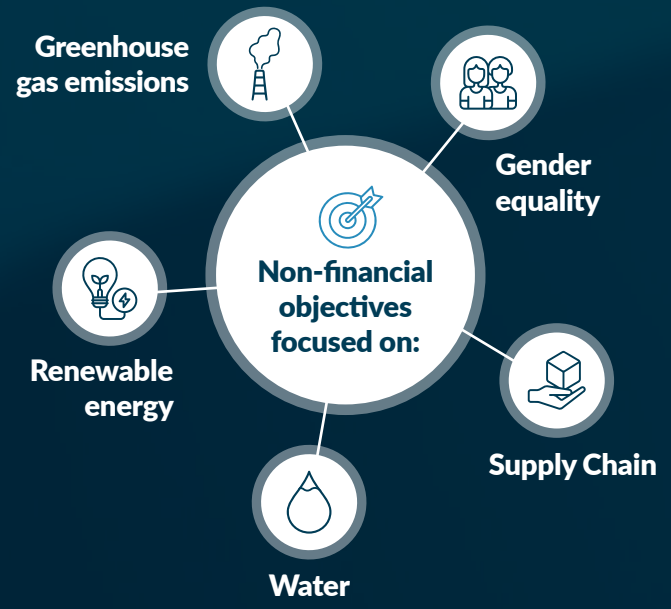
[GRI 103-1; 103-2; 103-3]
[METAS DA AGENDA 2030: 5.5; 6.4; 7.2; 9.4; 12.7; 13.2]

Purpose:

To act to accelerate the transition to a carbon-neutral society, through reduced energy consumption and more environmentally friendly solutions.

Axis of Purpose:

3Ps
- People
- Planet
- Performance



The positive impact on people and the planet combined with financial and operational performance, constitutes the basis of ENGIE's purpose. The principle guides the businesses for obtaining equilibrium between economic performance, environmental conservation, and social development.

Purpose

To act to accelerate the transition to a carbon-neutral society, through reduced energy consumption and more environmentally-friendly solutions.

People	Planet	Performance
to contribute to better quality of life for all people, through solutions that reduce the carbon footprints of cities, local authorities and businesses.	To contribute to the environment by reducing energy consumption and offering more sustainable solutions.	To reconcile a positive impact on the planet and people with business performance.

Internally, an important tool for monitoring the implementation of our purpose is the ENGIE Group's non-financial objectives, which reinforce the Company's commitment to sustainable development. For this reason, key among non-financial objectives are initiatives directed especially towards the generation of renewable energy, the promotion of gender equality and combating climate change. The following chart highlights the main non-financial global objectives out to 2030.



Non-financial objectives of the ENGIE Group -2030

2020 Aspect	2021 Results	2030 Objective
Greenhouse Gas Emissions (GHG)	67 $MtCO_2e$	To reduce by at least 43 $MtCO_2e$ the total greenhouse gas emissions from the generation of the Group's electric energy — in 2019, this total was 80 $MtCO_2e$ (goal aligned to the Science Based Target – SBTi initiative).
Gender equality	25%	Expand the participation of women in the Group's Management to 50% — in 2019 this percentage was 24% of all leadership positions.
Renewable energy	34%	Increase to 58% the participation of renewable sources in the energy production capacity mix worldwide — against 28% reported in 2019.
Supply chain	40%	By 2030, reach 100% of the responsible purchasing index (excluding energy purchases) that involve socio-environmental assessments and inclusive purchases; and by 2030, reach 100% of preferred suppliers certified by Science Based Targets (SBTi) commitments.
Water	-12%	Reduction of water consumption in industrial activities by 35% in 2030 — from 93Mm^3 in 2019 to 60Mm^3 in 2030.



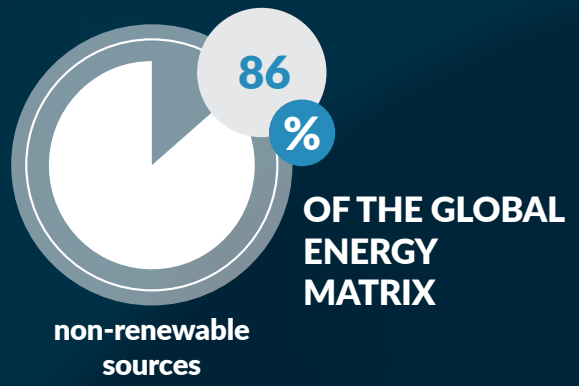
Again, in relation to GHG emissions, the ENGIE Group has established the worldwide goal of reaching carbon neutrality by 2045. ENGIE Brasil Energy is working to establish its own goal in the light of the current movement towards asset decarbonization: if the sale of the Pampa Sul Thermoelectric Plant is closed before the end of 2022, the Company will then have a generation portfolio made up entirely of renewables allowing it to establish a specific goal for its own operations with a much shorter timeframe for reaching carbon neutrality than the Controlling Company.

The Company has **10 renewable energy projects** registered with the United Nations Clean Development Mechanism (CDM) and eligible to generate carbon credits. In total, all the projects generate about **3.0 million annually in carbon credits** - susceptible to commercialization or use by the Company to offset its own emissions.

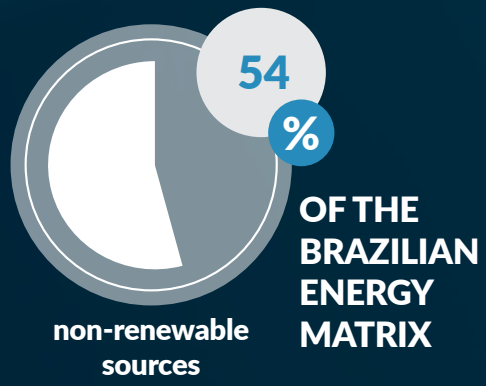
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The energy transition context

Decarbonization + Fair Energy Transition



OF THE GLOBAL ENERGY MATRIX



OF THE BRAZILIAN ENERGY MATRIX

Among the Sustainable Development Goals (SDGs) proposed under the United Nations Agenda 2030 for sustainable development, within the scope of the seventh goal is a substantial increase in the participation of renewable energy in the global energy matrix. Essential is the construction of a low carbon economy – which depends on the gradual replacement of fossil fuels for supplying society with energy – ENGIE accelerating this change throughout the world.

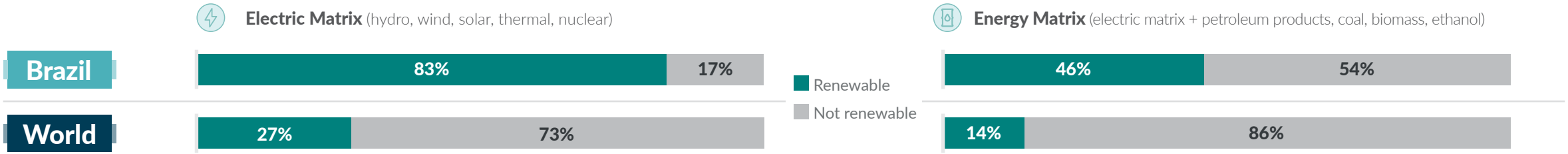
The following chart shows that 86% of the energy used globally still comes from non-renewable sources and revealing the path to be followed. In addition to substituting sources, another concern is accessibility: many people still do not enjoy access to energy – or make only limited use of it – be it because of structural difficulties or due to cost. The energy transition must therefore also take in consideration social aspects.



Energy transition - challenges and trends

Expansion of access at affordable prices + emission reduction

Decarbonization + Fair Energy transition		Challenges	Solutions / tendencies
Energy Matrix	**Electrification** Replacement from fossil fuels to electricity	Part of the demand is not electrifiable	**Green hydrogen / Biogases** Clean and storable **Natural gas** Transition fuel Support to the electrical matrix, through thermoelectric plants Carbon capture and Storage (CCS) **Other fuels** Ex: Ethanol or biodiesel
Electric Matrix	Growth in renewables sources	**Intermittence of renewables** Incidence of sun and wind is not programmable **Distance from consumer centers** Better renewable resources are far from load centers	**More flexible and robust systems** Expansion of transmission and other infrastructures **Distributed resources** Closer to load centers Storage / Batteries



Source: Empresa Brasileira de Pesquisa Energética (EPE).

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Business model

[GRI 102-2; 201-2; G4 EU1]
[SASB IF-EU-000.C]
[2030 AGENDA GOALS: 7.2; 7.3; 9.4]

ENGIE Brasil Energia's business model reflects our purpose of accelerating the energy transition through the generation and trading of renewable energy as well as offering necessary infrastructure for the offtake of this energy and the gradual substitution of fossil fuels in the national electricity matrix.

With its business activities in a range of different and complementary segments, the Company is able to pinpoint potential synergies, enhance the resilience against risk, at the same time maximizing the capture of opportunities stemming from the tendencies and challenges that arise.

4 OPERATING SEGMENTS

- GENERATION
- TRANSMISSION
- COMMERCIALIZATION
- GAS TRANSPORTATION

CAPITALS in the generation of shared value

People
Human, social and relationship capital

Planet
Natural capital

Performance
Financial, manufactured and intellectual capital



Operating segments of ENGIE Brasil Energia*

GENERATION

23 years of performance

68 operated plants

8,218.7 MW
own 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 Systems under construction, since 2019

~ 2,800 km
of transmission lines

14 substations

TRADING

Beginning of operations in 2018

5,782 GWh
of energy sold

13.9%
of the total commercialized in 2021

* In February 2022, the Company sold ENGIE Geração Solar Distribuída, thus discontinuing activities in this line of business.

Capital Overview - Business model and value creation (I)



PEOPLE

Capital: human, social and relationship

Inputs / resources

- Engaged and highly qualified professionals for specialized service to different stakeholders.
- Investments in training, compensation and wellbeing.
- Diverse team, with complementary skills and competences.
- Investment in social responsibility initiatives.
- Stakeholder management systems and mechanisms.

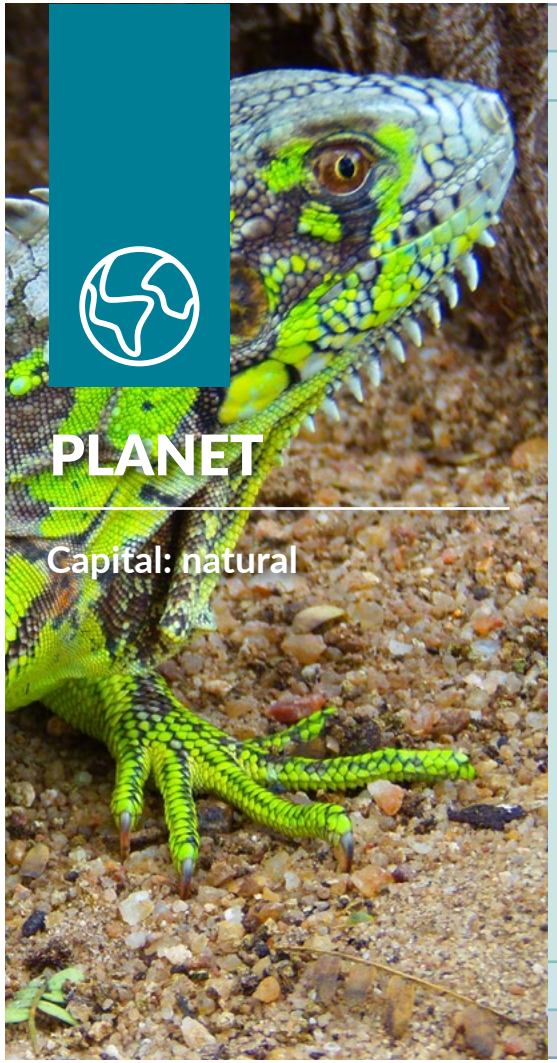
Outputs to business

- Competence in the strategy´s execution.
- Culture of safety and risk prevention, with a focus on people's health and integrity.
- Development of processes, products and services that meet or exceed stakeholder expectations.
- Team spirit: cooperative and respectful work environment.
- Harmonious coexistence with local stakeholders.
- Reduction of relationship and reputational risks.

Outputs to society / beyond business

- Job and income generation.
- Continuing training of professionals for the electricity sector, with a strong commitment to sustainability.
- Promotion of the health and wellbeing of employees and their families.
- Support for the sustainable development of communities.

Capital Overview - Business model and value creation (II)



Inputs / resources

- Natural resources for generating energy, especially renewable: water, wind, sun, biomass.
- Biodiversity to maintain the balance of the ecosystems and climate.

Outputs to business

- Renewable energy for transmission and commercialization.
- Operational safety, based on adequate environmental and climatic conditions.
- Reference in sector environmental programs.

Outputs to society / beyond business

- Renewable energy for consumption.
- Combating climate change and its impacts.
- Environmental conservation.

Capital Overview - Business model and value creation (III)

PERFORMANCE

Capital: financial, manufactured, and intellectual



Inputs / resources

- Investments for implementation, maintenance and operation of generation assets and energy infrastructure.
- Energy generation and infrastructure assets: hydroelectric, wind, photovoltaic and biomass plants; electric power transmission and natural gas transportation systems.
- Technologies and systems – mechanisms for the integrated management of operations and the control of risks and opportunities inherent to the business.
- Knowledge and experience in deployment and operation of generation assets and energy infrastructure.
- Expertise in sustainable management.

Outputs to business

- Return to shareholders: net profit, increase in equity, appreciation of assets, return on invested capital.
- Operational security: availability of assets for power generation and transmission.
- Legal and contractual compliance.
- Market presence: industry leadership.
- Culture and organizational structure oriented towards sustainability.
- Innovation in processes, services and products.

Outputs to society / beyond business

- Strengthening of the National Interconnected System (SIN), expansion of the use of renewable energies, expansion of the population's access to electricity, collection of taxes.
- Reliability and availability to the National Interconnected System.
- Supply of renewable energy and energy transmission systems.
- Expanding access to natural gas.
- Offering innovative and sustainable projects, products and services.

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Strategy and competitiveness

[GRI 103-1; 103-2; 103-3; 201-2]
[SASB IF-EU-000.C; IF-EU-000.D]

3 axes of strategy

EXPANSION AND DIVERSIFICATION

2021 HIGHLIGHTS

PARACATU and FLORESTA
Photovoltaic Sets



SANTO AGOSTINHO
Wind Complex - Phase I

COMMERCIAL DYNAMISM AND PORTFOLIO MANAGEMENT

2021 HIGHLIGHTS

Energy Place (business platform)

E-conomiza (solution for providing access of small companies to the free market)

INNOVATION AND NET ZERO CARBON TRANSITION

The focus of the ENGIE Group's expansion strategy – renewable energy and energy infrastructure - has a fundamental role to play in the acceleration of the energy transition. In this context, ENGIE Brasil Energia is consolidating a privileged position both in Brazil and globally in its response to the challenges and opportunities presented by the movement towards decarbonization. In exercising this leadership, the Company structures its corporate strategy based on three axes which provide the necessary guidance over the medium- and long-term.

Axes of corporate strategy

Expansion and diversification

- Growth through acquisitions (capturing opportunities with results in the short run).
- Organic growth (constructivist vision for long-term results).

Commercial and portfolio management dynamism

- Proper balance of terms, prices, and market risk management.
- Closeness with customers by means of customized offerings for different demand profiles and consolidating partnerships.

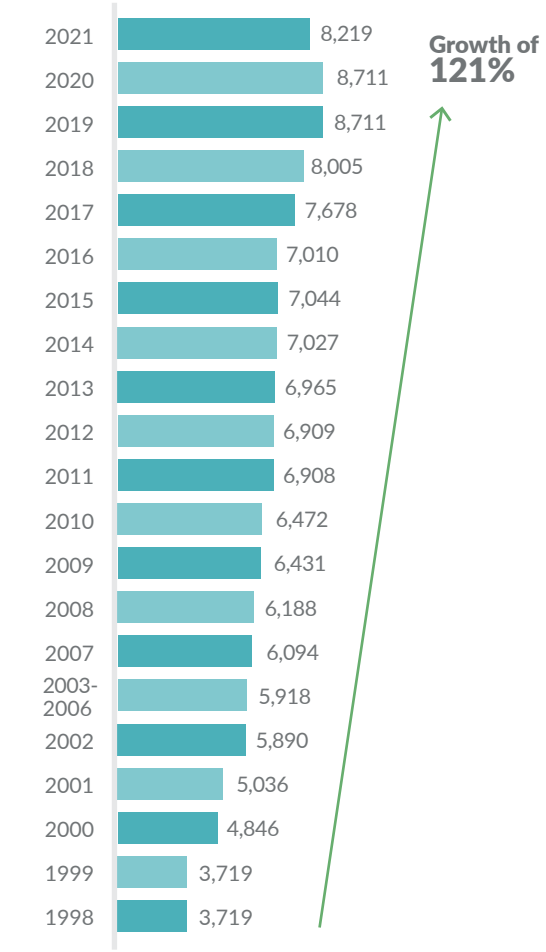
Innovation and carbon net zero (3Ds)

- Decarbonization.
- Decentralization.
- Digitalization.

Expansion and diversification

In order to grow sustainably with return and risk rates suited to the profile of the business, ENGIE Brasil Energia selects its investments carefully in projects that demonstrate economic, operational and socio-environmental feasibility. Allied to raising funds at competitive costs, the Company's experience in planning and executing the implementation of assets constitutes a pillar of the business expansion strategy, reflected both in the growth of renewable energy generation capacity and in the entry into other segments of the sector in recent years.

Trend in proprietary installed capacity (in MW)



Expansion in generation

Paracatu e Floresta Photovoltaic Complexes

ENGIE Brasil Energia's Board of Directors has installed a Special Independent Committee for Transactions with Related Parties (CRP)[1] to evaluate the potential acquisition of Paracatu and Floresta (Paracatu and Floresta) Photovoltaic Complexes. Paracatu and Floresta were contracted at the Second Reserve Energy Auction 2015, held by Aneel (Aneel Auction 009/2015), by the company Solaire Direct, company acquired by the ENGIE Group that year. The total solar energy sold was 59.1 average MW for a term of 20 years. Pursuant to the Regulations, the CRP is composed of members of the Board of Directors, the majority of them Independent Directors, the remainder being drawn from the Company's Officers.

The Paracatu Photovoltaic Complex is located in Paracatu (MG) and has an installed capacity of 158.3 MWp with a sales agreement of 34.0 average MW, in the amount of R$ 364.13/MWh (base Nov/2020) restated according to the IPCA. Commercial operations began in February of 2019.

The Floresta Photovoltaic Complex is located in the city of Areia Branca (RN) and has an installed capacity of 101.5 MWp, having contracted 25.1 average MW in the amount of R$ 357.78/MWh (base Nov/2020) restated at the IPCA. Commercial operations began in December of 2017.

After carrying out all the steps of due diligence and evaluation, developed with the support of specialized consultants, the CPR issued a report with its recommendation to the Board of Directors. As a subsequent fact to those reported in this Sustainability Report, the board members approved, on February 14, 2022, the acquisition of Paracatu and Floresta, for the total amount of R$625 million.

[1] The CPR is composed of members of the Board of Directors, mostly independent, and directors of the Company.



Jirau Energia

Jirau Energia, new brand of Energia Sustentável do Brasil (ESBR), 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.

Since November 2016, Jirau HPP has 50 generating units in operation, representing a total installed capacity of 3,750 MW. The plant was unveiled on December 16, 2016.
In May 2017, ENGIE Brasil Participações (EBP) announced the engagement of Banco Itaú BBA S.A. to provide financial advisory services for an economic-financial study for the preparation of a proposal for the eventual transfer to ENGIE Brasil Energia (EBE) of EBP's stakes of 40% in ESBR Participações S.A. (ESBRpar) – holder of 100% of the capital stock of Energia Sustentável do Brasil and the 100% participation in Geramamoré Participações e Comercializadora de Energia Ltda. The transfer assessment has been put on hold, awaiting more favorable conditions for discussions on the transfer to resume.

In 2021, the Plant generated an average of 1,898.5 MW, 10.2% above the of 1,722.8 average MW in 2020, with an Availability Factor to the National System Operator (FID) of 99.3%.

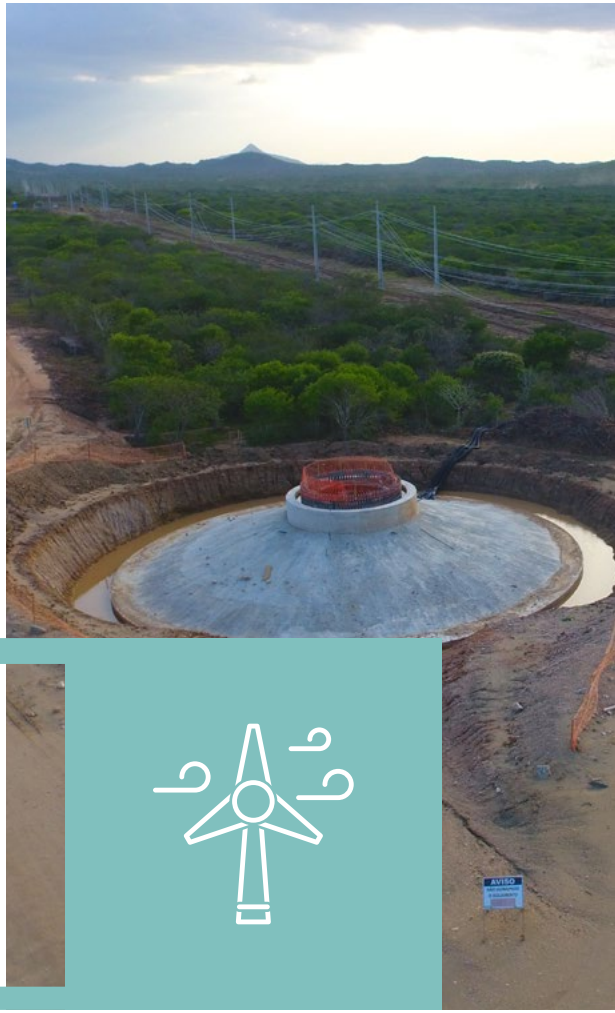
Santo Agostinho Wind Complex – Phase I

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 absorb R$ 2.3 billion in investment (as of Dec/2020) and generate more than one thousand direct jobs in the region. It was enabled by energy sales to free-market customers.

In June 2016, the Rio Grande do Norte State environmental authority, the Instituto de Desenvolvimento Sustentável e Meio Ambiente – Idema, issued a preliminary license declaring the project environmentally feasible. By August 2021, all Implementation Licenses had been secured, as well as the relevant consents from the Instituto do Patrimônio Histórico e Artístico Nacional (IPHAN) national heritage authority for the wind farms.

In November 2021, the Preliminary Simplified License was authorized while the Company has filed for the Simplified Installation License in relation to the construction of the transmission line and connection bay at the Monte Verde substation linking the wind complex to the grid. Activities are scheduled to begin in the first quarter of 2022.

By the end of 2021, the progress with Balance of Plant work (excluding the wind turbines) has reached 27.4%. Activities currently in progress at the wind farms' site involve brush clearance, construction of access roads, excavation and concreting of the wind turbine foundations and the installation of medium voltage networks. Work on the building of the Collector Substation is also advancing. Overall work on the project is 7.7% concluded. The entry into operation of the first parks is scheduled to take place by the end of 2022.



The implementation of this phase will absorb investments of R$ 2.3 billion, generating more than one thousand direct jobs.

Transmission projects pending implementation

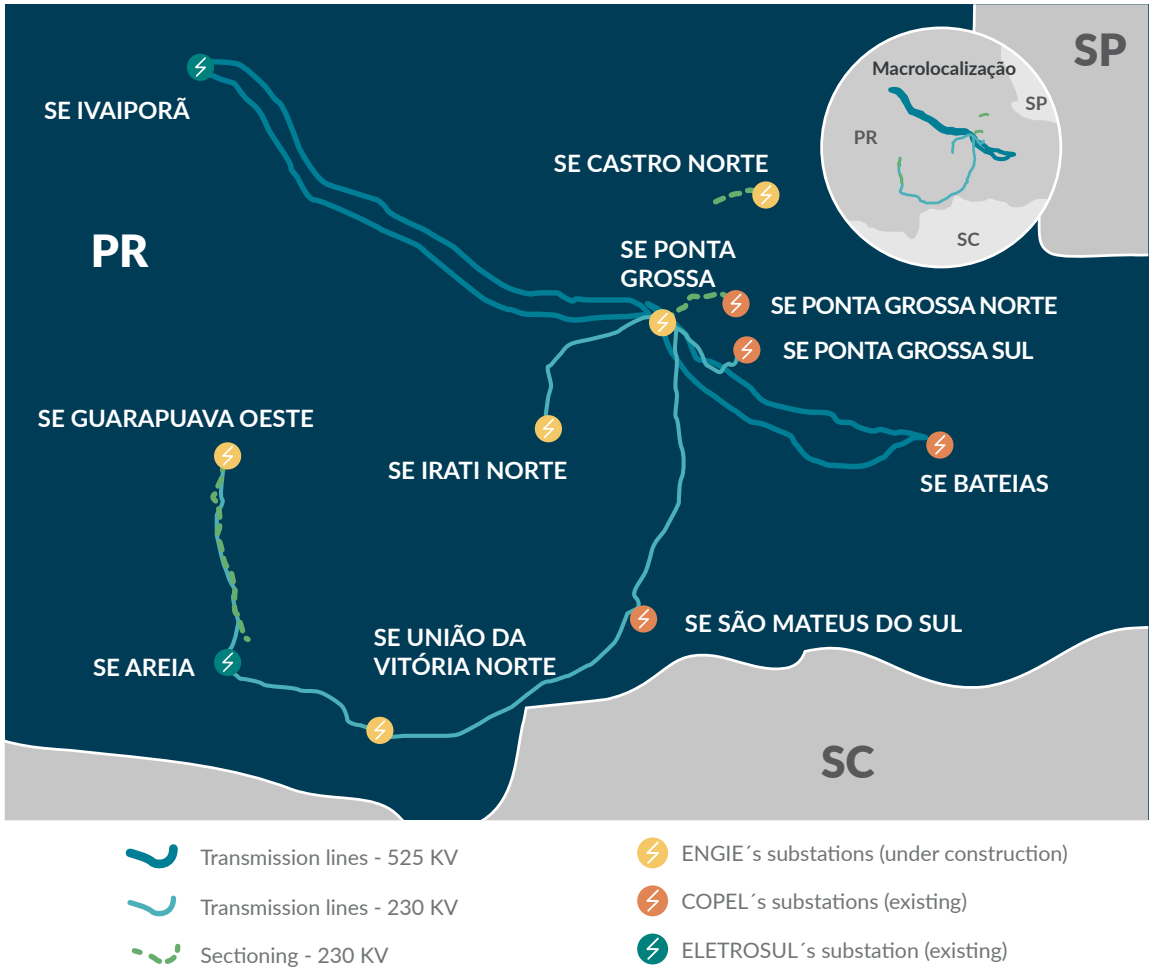
Gralha Azul Transmission System

With about 1,000 kilometers in the state of Paraná (PR), the project also includes the installation of five new substations and expansion of another five existing ones. The concession term for the public utility transmission service, including the licensing, the construction, assembly and the operation and maintenance of the transmission line installations is 30 years as from signature date of the concession agreement, with a maximum cut-off date for entry into operation set for March 9, 2023.

By the end of 2021, work on the implementation of the Gralha Azul Transmission System had reached 98.7% overall completion, with just the stringing of the transmission line cables and conclusion of the commissioning process pending, and in compliance with the timeframe established in the federal concession agreement. The first transmission lines were energized in August 2021 and, by the end of the year, six transmission lines comprising the project have already been energized, providing a transmission service and generating revenue from the project's commercial operations – equivalent to 6.5% of the Allowed Annual Revenue (RAP) was made.

As an event subsequent to the period under review, in early April 2022, further lines were energized, expanding the project's RAP up to approximately 95% of the total. In this way, the anticipation of the concession agreement's deadline for completion guaranteed, in turn anticipating the solution to the supply of energy from the Itaipu Hydropower Plant to the state of Paraná.

Gralha Azul Location (Paraná)



Novo Estado Transmission System

The object of the concession is the construction, operation, and maintenance of approximately 1.8 thousand kilometers of transmission lines, a new substation and upgrades to a further three existing substations in the states of Pará and Tocantins, for a term of 30 years.

Novo Estado Location (Pará and Tocantins)



The installation license of the project has been issued by the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama). The cutoff date for the transmission system to go into operation is March 9, 2023.

By the end of 2021, overall completion of the Novo Estado project had reached 91.5%. Work in progress on power line tower foundations was reported to be 92% concluded, assembly 79% and with 56% of the stringing of the conductor cables to the transmission lines completed. The commissioning of the Serra Pelada and Itacaiúnas substations and the Serra Pelada – Itacaiúnas transmission line were concluded in December 2021. This set of assets was energized on December 19, thus beginning partial commercial operations and generating 9.2% of the project's RAP.

The Serra Pelada – Miracema transmission line is expected to go into operation in the first quarter of 2022, the expectation for receipt of approximately 50% of the RAP being rescheduled for no later than May 2022.

In the case of the Xingu – Serra Pelada transmission line, the outlook is for startup in operations by the end of the fourth quarter of 2022, so concluding the implementation of the project and ensuring anticipation of commercial activities in relation to the deadline enshrined in the federal concession agreement.

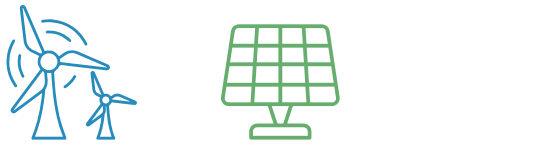


Projects under development

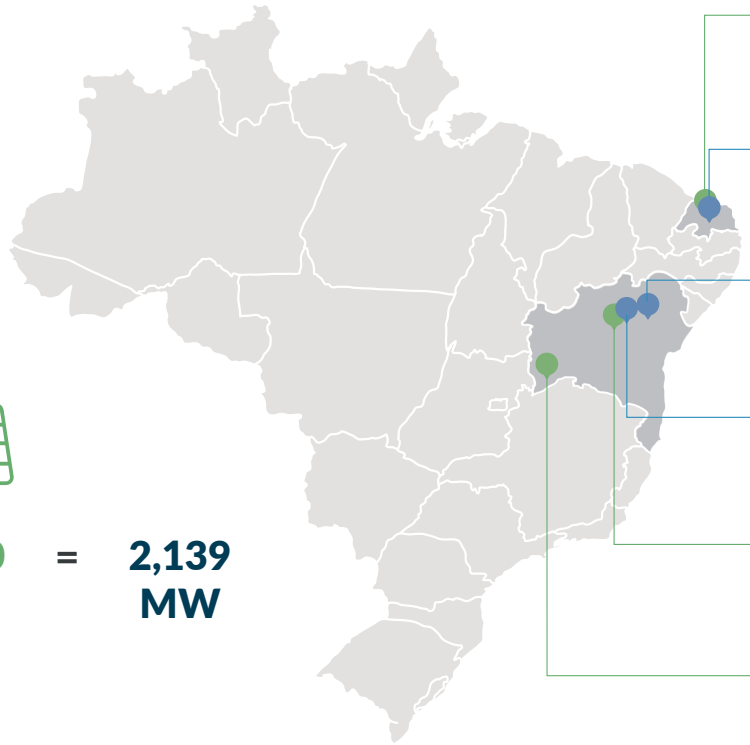
Aware of the commitment to expand generation from renewable sources, in order to accelerate the transition of the Brazilian electricity matrix, ENGIE Brasil Energia maintains several projects in the development phase - that is, with feasibility studies at an advanced stage, albeit without a guarantee that implementation will proceed. Together, these photovoltaic power plant and wind complex projects have the potential to add up to 2.1 GW to the Company's installed capacity - both greenfield (projects yet to be built) and acquisitions of existing operational projects.

In this context, one of the highlights of 2021 was the acquisition of the Assú Sol Photovoltaic Complex project, located in the municipal district of Assú (RN). With about 750 MW of installed capacity, in an area adjacent to the areas of the Assú I, II, III, IV and V projects, of about 150 MW, – located in the municipality of Assú (RN), – the project will have a total installed capacity of approximately 900 MW. The implementation of the Complex will capture synergies from the Assú V Photovoltaic Plant (30 MW), which started commercial operations in December 2017, and from Santo Agostinho Wind Complex, under construction, located about 100km from Assú.

Projects in development
Generation



779 MW + **1,360 MW** = **2,139 MW**



Assú Photovoltaic Complex – RN
Installed Capacity:
870 MW

Sto. Agostinho Wind Complex (Phase II) – RN
Installed Capacity:
279 MW

Umburanas Wind Complex (Phase II) – BA
Installed Capacity:
250 MW

Campo Largo Wind Complex (Phase III) – BA
Installed Capacity:
250 MW

Campo Largo Photovoltaic Complex – BA
Installed Capacity:
400 MW

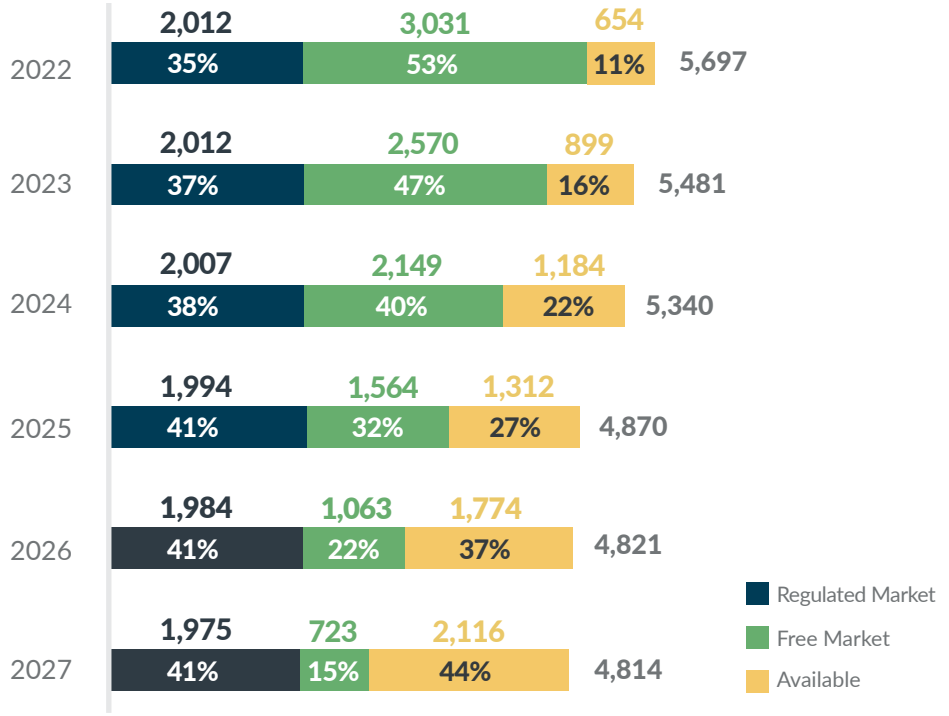
Alvorada Photovoltaic Complex - BA
Installed Capacity:
90 MW

Commercial and portfolio-management dynamism

ENGIE Brasil Energia's commercial activities are conducted both in the Regulated Contracting Environment (ACR) through Aneel-sponsored auctions, and in the Free Contracting Environment (ACL), where contracts are entered into directly with companies or energy traders. In the case of the Free Contracting Environment – which has reported growth over recent years – the Company's energy commercialization strategy has two important competitive advantages in relation to other sector players: portfolio management and the commercial dynamic adopted. As one of the largest energy generators in the country, the Company has the capacity to offer its customers free, short- and long-term competitive conditions, combined with the agility and dynamics that characterize its position as a private and global agent alert to market opportunities and needs.

Through the medium of our portfolio management mechanisms, we minimize the risks of short-term exposure, avoiding the payment of high energy costs when hydroelectric generation presents shortfalls – a situation which has arisen repeatedly over recent years.

Energy Balance (% of total; MWa)



Another element essential to commercial strategy is the expansion undergone in the Free Energy Market over recent years for various reasons, more especially in the changes in regulations initiated through specific parliamentary bills put to Congress in the context of modernizing the electric energy sector. Among these bills is PL 414/2021, currently under discussion for allowing greater flexibility with respect to the requirements for participating in this market – not only by corporate organizations but also residential consumers. Under current regulations, the free energy market can only be accessed by clients with a contracted demand equal or higher than a floor of 0.5 MW for incentivized energy – that is energy generated from renewable sources – and equal or higher than 1.0 MW for conventional energy. The eventual reduction of these minimum amounts will expand the possibilities of migration from the captive market – the domain of the electric energy distributors – thus adding more entities – both generators as well as consumers – to the Free Energy Market.



The advancement of regulation, in the context of the modernization of the electric sector, will favor the expansion of the Free Energy Market.



Sustainable Solutions

As one of the leading agents in the trading of energy in the ACL, ENGIE Brasil Energia tracks the development of this market - expected to expand over the next few years with a general restriction on consumption bands for eligible clients –, generating fresh contracting and relationship opportunities. In addition to energy from renewable sources, we offer complementary solutions with a focus on decarbonization – carbon credits, certified electric energy consumption from renewable sources (I-RECs) or special agreements for guaranteeing emissions-free electricity (ENGIE-REC) used by clients for reducing or offsetting Greenhouse Gas (GHG) emissions.

A pioneer in the Brazilian ACL, ENGIE not only accompanies regulatory developments but also anticipates the expected growth and digitalization of the business environment. In order to better meet the requirements of their clients and extend the benefits to other participants such as traders, the Company has recently launched a series of solutions and relationship tools, among which important are:

- **Energy Place:** A platform which offers the purchase of energy for both the short- and long-term and extended to all entities in the Free Market in an entirely digital format. Additionally, this energy e-commerce channel offers ENGIE Brasil Energia's managers and clients important information for the management of agreements: a track record of consumption, segmented data by consumer units and financial guarantees, among other relevant aspects. The platform also works as a relationship and digital service channel through the medium of requests for direct interaction with the Company's specialists. In 2021, the platform was improved with the launch of new functions. One of these permits proposals for energy purchases in the long-term market in an agile and digital format – a facility already available for short-term acquisitions from the platform since 2020. Another new feature is the possibility of seasonalizing the energy by informing monthly volumes demanded according to established minimum and maximum limits, thus introducing greater flexibility in the management of client agreements.

- **E-conomiza:** A solution for facilitating the participation of small and middle-market companies (with consumption of up to 1 MWm) in the free trading environment. Using this solution, the entire migration process as well as the management of the energy account is handled by Company specialists. A further advantage is the possibility of acquiring energy from renewable sources, thus adding the sustainability element to the client's operations.

- **Modulation swap:** This is a product for helping mitigate risks to which energy generators are exposed due to changes brought about by the introduction of the hourly spot PLD market. In addition to offering the safety of a hedge against hourly price variations, the solution encourages expansion in the use of renewables in Brazil by offering greater predictability to wind generators, more impacted by current variations in PLD.

- **Adhesion:** A product now firmly entrenched in the market - the focus being on clients requiring greater flexibility in the way they consume electric energy - and waiving the need for financial guarantees. Revised in 2021, it allows companies with more than one consumer unit to also contract energy in the free market as long as the aggregate load of all the units (industrial, commercial or service) to be attended by ENGIE Brasil Energia does not surpass one average MW.





3

RISKS AND OPPORTUNITIES

Mapping and control of risks

Innovation

Mapping and control of risks

[GRI 102-11; 102-15; 103-1; 103-2; 201-2]
[SASB IF-EU-550A.1]
[2030 AGENDA GOALS: 16.6; 16.7]

RISKS and OPPORTUNITIES MATRIX

probability of occurrence x impacts

10
categories of risks and opportunities evaluated

Cyber risk monitoring

Update of the environmental risk matrix

Approved by the Board of Directors, the Risk and Opportunity Management Policy guides the internal management of the topic, shared between the Board of Directors and other managers, with consequences for activities performed by all employees. To support this management, the Company has a Risk Management Forum, formed by professionals from different areas, working on identifying, understanding and classifying risks according to their probability as well as resulting impacts in the financial, strategic, operational and reputational scope.

This assessment is executed systematically, permeating all activities, based on three core principles:

- Creation and maintenance of value, reputation, and internal motivation.
- Encouraging a certain degree of risk taking, deemed reasonable relative to legal, economic, and social aspects.
- Assurance of conformity of actions with legal and regulatory obligations as well as with ENGIE Brasil Energia's values, policies, and commitments.



The Risk and Business Opportunities Matrix records the results of the analysis conducted internally directing corporative operations. In 2021, the Company strengthened management mechanisms consolidating activities in the second line of defense into a single Organizational Unit known as Governance, Risks and Internal Controls (GRC). This is now responsible, among other duties, for the updating of the Matrix, which classifies the risks as follows:

Tax Risk

- **Description:** adverse developments in the tax legislation, with potential impact on Company´s results.

- **Mitigation:** systematic monitoring of proposals or effective changes in legislation, which may affect the Company's activities. Such monitoring takes place both individually and through representative bodies.

Regulatory Risk

- **Description:** an adverse evolution of the regulations governing the electric energy industry. These regulations, which the Federal Government historically influences, may impact, for example, the modus operandi, terms and conditions of electric energy sale agreements in force, production levels, sectoral charges and the relationships between industry players.

- **Mitigation:** active participation in debates on changes in sector regulations, through representative bodies, combined with a strategic process that allows the Company to anticipate eventual changes.





Industrial Safety Risk

- **Description:** damage to the integrity of assets, the environment, society and/or the health and safety of people, as a result of the Company's operating activities.

- **Mitigation:** adopting best engineering practices from plant construction to operation and maintenance, monitoring civil structures by means of inspections, analyses and preventive maintenance done by a specialized team. Every hydropower plant under ENGIE Brasil Energia's responsibility has a Dam Safety Plan that relies on topic-specific methodologies, in line with the laws and standards in force, as well as with the recommended criteria of the International Commission on Large Dams (ICOLD) and the Brazilian Committee on Large Dams (CBGB).

- **Contingency:** all plants have in place Emergency Action Plans that provide for specific actions under various emergency scenarios, identified according to each project's reality and nature. All the dams that the Company operates are categorized as low-risk according to National Water Agency (ANA) and adopted by Aneel. In addition, we work with rigorous health and safety practices driven by the Sustainable Management Policy, in addition to Internal Accident Prevention Commissions and 11 NBR ISO 45001 certified plants (Occupational Health and Safety).



Integrated Plans in the South

In 2021, three hydroelectric plants operated by ENGIE Brasil Energia in the Southern Region – Passo Fundo, Itá and Machadinho – began a process of integrating their Emergency Action Plans with Civil Defense's municipality-based Contingency Plans in the areas of influence of the reservoirs. A critical element in the safety of contiguous communities, the plans set out guidelines and procedures in the event of accidents with dams or severe flooding.

In the region of the Passo Fundo Hydropower Plant, the Company began the social registration phase dedicated principally to improving information on residents downstream from the dam, identifying among other aspects, families which may be exposed to the results of adverse weather events. This process will make for more effective action in the light of risk or emergency situations, broadening its scope to keep residents safe.

The information raised during the registration phase – scheduled for the first quarter 2022 in the regions occupied by the Itá and Machadinho plants –, as well as the protocols for attending the population, will be integrated with the municipal Civil Defense Contingency Plans. ENGIE Brasil Energia's other plants will undertake the same process elsewhere in the country in line with dam safety criteria required by the legislation – more especially the National Civil Defense and Protection Policy – PNPDEC (Law 12,608/2012) and the National Dam Safety Policy (laws 12,334/2010 and 14,066/2020).

Aneel's official report on the question, published in 2019, states that the dams at Company-operated plants were found to be in normal conditions of stability.

Project installation risk

- **Description:** occurrence of events in the development or implementation of projects that may generate delays in the work schedule, additional costs in implementation, conflicts with stakeholders and inefficiencies in operation.

- **Mitigation:** management is entrusted to a highly qualified and experienced construction works management team. Contracts with contractors and other suppliers involved are meticulously tracked, including technical, financial, environmental, and social aspects, driven in any case by a permanent dialog with all stakeholders.

Cybersecurity risk

- **Description:** lacking or faulty planning, management or security in connection with resources and services in the areas of Information and Communication Technology (ICT), Automation Technology (AT), and the Internet of Things (IoT), that may have a negative impact on the Company's continued operations and image.

- **Mitigation:** Definition of policies, management processes, controls, and employee awareness of the risks that digital technologies pose. This involves the Information and Communication technologies (ICT) and the automation technologies (AT) used in industrial operation, control, and supervision activities. The Data Security Policy is approved by senior management and illustrates ENGIE Brasil Energia's commitment to data and digital security. The Company has a forum dedicated to Industrial Control Systems Security in the Operations area.

Market risk

- **Description:** the supply of and demand for electricity can deviate from forecast so affecting energy prices and volume.

- **Mitigation:** the use of a proactive commercial strategy and smart portfolio management for the agile capture of price variations, minimizing losses and maximizing gains.

Commercial counterparty risk

- **Description:** failure to comply with the commitments entered into by traders or free customers in the purchase or sale of energy, with an effect on the Company's revenues.

- **Mitigation:** active management of counterparty credit risk in line with our Commercial Counterparty Risk Policy.

"The Company has a forum dedicated to Industrial Control Systems Security.

Cybersecurity – regulatory developments

In 2021, cybersecurity regulations were approved for the electric energy sector under the authority of national grid operator (ONS) procedures as well as regulations established by Aneel, which came into effect in 2022. Representatives from ENGIE Brasil Energia played an active role in the discussions on the theme, either individually or through representative entities, for supporting the creation of the new regulatory framework.

The Company has already established an in-house framework based on the new regulations which include indicators for compliance and action plans for periodic monitoring.
The Data Security Program sets out the governance structure for managing data security risks at ENGIE Brasil Energia and third parties, and the digital technology used in the execution of the business activities – whether administrative or operational (automation systems for operation, supervision and industrial control of energy generation and transmission).

In 2021, we recorded no significant cybersecurity events which might have compromised the Company or third party services and data.

Risk of Non-Compliance with the Personal Data Privacy Law (LGPD)

- **Description:** lack or failure of planning, management or security in the treatment of data from the Company's stakeholders (individuals and legal entities), which lead to the improper disclosure of private information, leaving the Company exposed to regulatory and reputational risk.

- **Mitigation:** implementation of controls and monitoring to ensure compliance with the General Data Protection Law (LGPD), even before its entry into force in 2020. This process includes the training, creation and reviewing of procedures and new guidelines for supplier relations, among other initiatives.

Operationalization of the strategy risk

- **Description:** adversity in the operationalizing of ENGIE Group's strategic repositioning around four pillars – transition to a carbon neutral economy, accelerated growth in renewables and infrastructure; management of operational performance based on digitalization; operations based on four Global Business Lines (Renewables, Infrastructure, Thermal and Services).

- **Mitigation:** from the external point of view, we seek to participate in the debates with the regulator and civil society on themes such as the opening up of the Free Contracting Environment (ACL), and development in the regulations for distributed generation and the pricing of carbon

among others. In these debates, our contributions involve externalizing the Company's points of view and interests Internally, we invest in training, skills upgrading and in structures, both physical as well as IT, so that innovation and connection between areas flow efficiently and compatible with the more dynamic scenario that characterizes the energy transition.

Upgrading the environmental risks matrix

In 2021, the Company revised its mapping of socio-environmental risks in the area surrounding each one of the assets in order to enhance preventive and mitigatory actions, at the same time, providing a more detailed analysis of the size of potential impacts, to include those of a financial nature as a result of such exposure. In this way, a methodology for identifying, classifying, and managing environmental risks is established based on the Controlling Company's guidelines for evaluating the probability and impact of the risks applicable to each asset. Various factors are considered in this analysis, particularly those related to the biodiversity, traditional communities, reservoir usage and climate risk. Following classification of the risks, action plans are drawn up for short-, medium- and long-term horizons, thus allowing a more accurate strategic plan of mitigation and adaptation.

Ethics and compliance risk

- **Description:** non-compliance, internally or involving external collusion, with values and the principles of the Code of Ethics can lead to cases of corruption, fraudulent use of the Company's assets, interference in the competitive processes and disrespect for human rights. This characterizes non-compliance with the norms and regulations applicable to the activities of ENGIE Brasil Energia.

- **Mitigation:** in addition to the Ethics Policy Code, to the establishment of the Ethics Committee and to an external whistleblowing channel, we embraced a rigorous internal controls program called Income, to which all direct and indirect subsidiaries are subject. Income was created in 2005, to meet the US Sarbanes Oxley Act. It covers every operation by means



if 12 processes that subdivide into 14 sub-processes.

In addition to internal controls evaluations, the overall environment is analyzed based on the methodology provided by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The results of the Internal Audit tests and of the analysis of the overall control environment are subject to approval from the CEO and the Chief Financial Officer. Their reviews are subsequently submitted to the Board of Directors.

ODS 9

Innovation

[GRI 103-1; 103-2; 103-3; G4 EU8]
[2030 AGENDA GOALS: 9.4; 9.5]

Among the
150
most innovative companies, according to the *VALOR INOVAÇÃO BRASIL* AWARD

Research and Development:
R$ 72.8 million
in 2021

Programa Inove internal innovation program

Highlight: First large national wind turbine
(4.2 MW)

Innovation and carbon net zero transition

The transition to a carbon neutral economy requires increasingly more innovative solutions. In addition to offering products and services disruptive to segments in expansion – such as the Free Energy Market – they generate an incremental gain in corporate processes and practices. Aware of this demand, ENGIE Brasil Energia sees in innovation a transversal aspect to the strategy of the businesses, fostering the development of innovative projects with internal audiences as well as other stakeholders.

Internally, the Company encourages an innovative culture through initiatives, policies and tools which stimulate creative participation of the employees in the search for solutions to economic, operational, administrative, and socio-environmental questions. Similarly, it shares these challenges with outside partners – from universities to startups, including entities from the third sector – for cooperation in Research & Development, which also on many occasions feeds through to scientific and technological advances.

Based on these and other practices, in 2021, ENGIE Brasil continued among the 150 most innovative companies in Brazil according to the Valor Inovação Brasil award, promoted annually by Valor Econômico newspaper in partnership with Strategy& – a PwC consultancy. With the theme "Innovation in data security: challenges and opportunities", the 2021 edition evaluated innovation practices of companies of different sizes and sectors, operating throughout the country.

The following are highlights of the Company's main innovation fronts.

Research and Development (R&D)

Aligned to an open innovation culture, the Research and Development area operates through partnerships with companies, universities and research institutions. It reflects the provisions of Law 9,991/2000, which requires investment of 1% of annual net operating revenue be allocated to R&D activities.

Overall, the current portfolio of projects amounts to R$ 147.8 million in investments. The graph on the right-hand side shows a general view of contributions made to the Program by the research focused area.

Resources distribution

In 2021, ENGIE Brasil Energia allocated R$ 72.1 million to the Program with the following distribution:

R$ 20.7 million
to the National Scientific and Technological Fund (FNDCT);

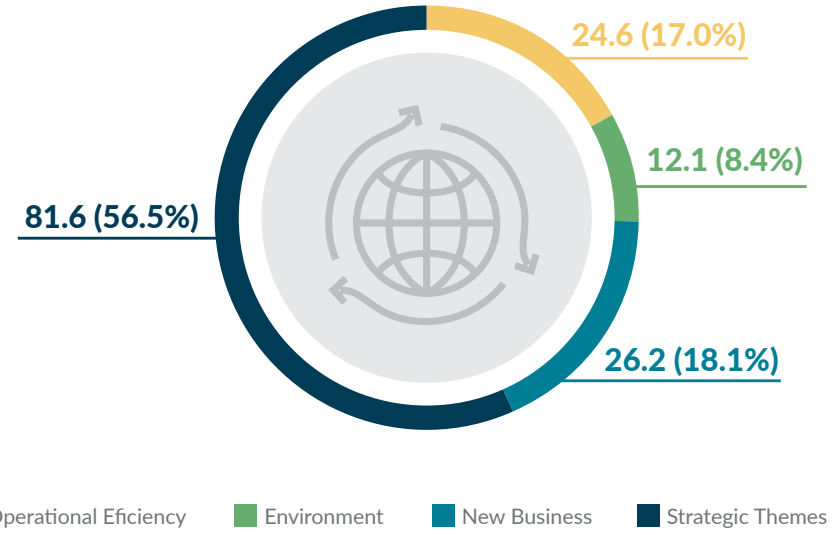
R$ 13.1 million
to the Energy Development Account (CDE), for supporting tariff modicity (as per Law 14.120 of March 2021);

R$ 10.2 million
to the Ministry of Mines and Energy (MME) for contributing to the running costs of Empresa de Pesquisa Energética (EPE);

R$ 28.1 million
in 16 projects composing the portfolio in execution.

R&D ENGIE Brasil Energia: investments in ongoing projects 2021

(R$ million)





Among the projects under development in 2021, of particular note was the continued development of the first large scale domestically manufactured wind turbine with a 4.2 MW capacity, this project being executed jointly with WEG – a Brazilian company specialized in the manufacture of electrical equipment – and Centrais Elétricas de Santa Catarina (Celesc), an electricity distribution company for the state of Santa Catarina.

At the end of the year, the prototype was at the end of commissioning, being tested in the city of Tubarão (SC), already connected to the National Interconnected System (SIN). As an event subsequent to the period under review, in March 2022 the equipment passed the final tests and certifications, starting commercial operation. In addition to providing energy to the National Interconnected System, the conclusion of this phase proves the operational viability of the equipment, giving WEG security to continue manufacturing the wind turbine in scale and making it available to the market.

In 2019, this strongly innovative project had already become a pioneer in executing the first certification of a heavy-duty wind turbine (2.1 MW) in the Southern Hemisphere. For the new wind turbine of 4.2 MW, in addition to certification, the first round of voltage dip trials – the first for a wind generator ever to be performed in Brazil - is planned.

R$ 147.8 mi

was the sum of investiments in the current projects portfolio in 2021

Again, at the end of 2021, for the first time in the history of the Company's R&D Program, ENGIE Brasil Energia issued a public call for proposals for financing Research and Development projects with the theme "Impacts of climate change and the use of the land in the Brazilian electricity sector". The eligible initiatives selected to receive resources, approximately R$ 4 million in all, consist of proposals put forward by professionals linked to companies or teaching and research institutions with a focus on impacts (future) for the electricity sector in Brazil and South America.

The Call for Proposals visualized projects distributed in five lines of research (i) paleoclimatology; (ii) future changes in South American atmospheric and oceanic standards (with an impact on renewable energy sources); (iii) quantification of humidity sources for key hydrographic regions in the production of energy; (iv) regional climate modeling with application to the predictability of significant events (droughts); and (v) quantification of the effects of changes in soil coverage in the components of the regional hydrological cycle. The selected proposals must be finalized in 24 months at the most.

LinkLab

To keep it in close contact with startups - elements fundamental to the innovation ecosystem - ENGIE Brasil Energia is a participant in LinkLab, an Associação Catarinense de Tecnologia (ACATE) program for maximizing synergies between small and large companies for the development of innovative projects. In 2021, the Company linked up directly with three startups for the development of Proof of Concept - POC in the different areas of the Company: Commercial, Environmental and Supplies. The POC were very successful, generating positive results for corporate management.

Inove Program

Focused on the strengthening of the culture of innovation among our employees, "Inove" is the first incentive program for improving processes, especially of an operational nature, resulting in a reduction in costs, an increase in safety and gains in efficiency. In its 2021 edition, the Program has recognized and rewarded 86 participating employees, with 26 approved ideas – which have an estimated financial return of R$ 4.5 million.





4

OUR TEAM

Employee profile

Diversity and inclusion

Health, safety and wellbeing

Professional development

ODS 8

Employee profile

[GRI 102-8; 102-41; 401-1]
[2030 AGENDA GOAL: 8.5]

1,201 employees

22% reduction compared to 2020, due to the sale of the Jorge Lacerda Thermoelectric Complex



ENGIE Brasil Energia's employees share the purpose of accelerating the energy transition, contributing to the construction of a more sustainable future and representing an essential source of capital in the success of the businesses. In this context, the Company strives to offer an ethical, safe, healthy and inclusive workplace environment which leverages both personal and professional development, generating recognition and satisfaction.

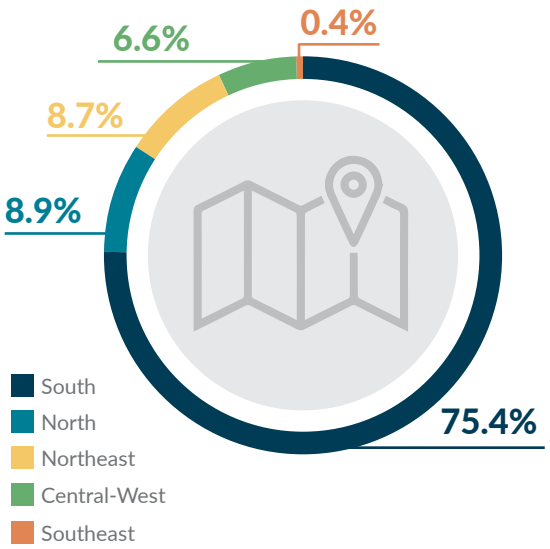
At year-end, ENGIE Brasil Energia's workforce was made up of 1,201 employees[2], which also includes the employees of projects where the Company holds a 100% equity stake. In addition, the Company also had an additional 186 employed at entities jointly owned by the Company – 150 at TAG, 32 at Companhia Energética Estreito and four at Itá Energética – plus 44 interns.

Employees by gender

Year	Male	Female	Total
2019	1,131	267	1,398
2020	1,232	306	1,538
2021	908	293	1,201

[2] Of the total number of employees, 93.3% were hired for an indefinite period.

Employees by region



The payroll saw a significant reduction of 21.9% in relation to 2020 following the divestment of the Jorge Lacerda Thermoelectric Complex. The sale of the Complex did not impact the number of terminations, since employees leaving ENGIE Brasil Energia did so as a result of the spinoff to a new investor. Another important factor underlying the variation was the implementation of a Voluntary Redundancy Plan (PDV), offering special conditions for voluntary termination / early retirement to some employees. The labor unions have agreed to the plan, which is being put into effect gradually, extending through to 2024 and run in parallel with a further plan for preparing for retirement (Viva Aposentadoria).

Admissions and terminations

	2019	2020	2021*
Admissions	140	272	166
Terminations	79	132	195

* Numbers take into consideration admissions and terminations at the Jorge Lacerda Thermoelectric Complex up to the date of disposal.

Freedom of association

The Company adheres to the resolutions of the International Labor Organization (ILO) and to freedom of labor union association, the right of collective bargaining and internal representation of the employees. In 2021, the entire payroll was covered by collective bargaining agreements, signed with entities representing the employees and listed as follows:

- National Federation of Engineers (including the Engineers Labor Union);
- National Federation of Industrial Technicians (including the Industrial Technicians Labor Union);
- National Federation of Urban Industries Workers;
- Administrators Union of the State of de Santa Catarina;
- Greater Florianopolis Bookkeeping Workers Labor Union;
- Economists Labor Union in the State of Santa Catarina;
- Electric Energy Industry Workers Union of Florianópolis; and
- Electric Energy Industry Workers Union of Lages.

Diversity and inclusion

[GRI 103-1; 103-2; 103-3; 405-1]

[2030 AGENDA GOALS: 5.1, 5.5, 8.5, 10.2, 10.3, 10.4]

Gender Equity Program:

PILLAR 01

Sustainably increase the % of women in the Company

PILLAR 02

Support the professional development of women at ENGIE and in society

PILLAR 03

Ensure a culture that promotes respect and wellbeing for women in the workplace

ENGIE combats all types of discrimination of minority or under-represented social groupings as well as being committed to promoting gender equality. Increasing the numbers of women in positions of leadership is among the ENGIE Group's non-financial objectives at the global level and reinforced in 2019 by the Company becoming a signatory to the UN's "Women's Empowerment Principles).

In a sector where predominantly there has been a traditional masculine presence due to cultural factors which range from skills training to insertion in the labor market, ENGIE Brasil Energia is working arduously towards gender equality and inclusion of women in its segments of operations. With the sale of the Jorge Lacerda Thermoelectric Complex, technically a labor intensive unit, the percentage of women in the Company has increased markedly from 19.9% in 2020 to 24.4% in 2021 — an increase of 4.5 p.p.

In order to further enhance the positive impact of gender equality initiatives, ENGIE Brasil Energia is developing a structured program of actions directed towards both in-house and external audiences. Some of these actions were already being implemented in 2021 and others are to be brought on stream during 2022.

24.4%

percentage of women in the Company in 2021 - increase of 4.5 p.p. compared to 2020

Program for supporting gender equity

PILLAR 1



Sustainably increase the % of women in the Company Strategy 50-50

- Talent Scout and Talent Spotter;
- Internship Program 50-50; and
- New Female Engineers in trainee format.

PILLAR 2



Supporting the professional development of women at ENGIE and in society

- Professional and technical vocation courses for women in the communities;
- Offer of bursaries for academic formation;
- Mentoring Program; and
- Succession Planning and Management of Potential.

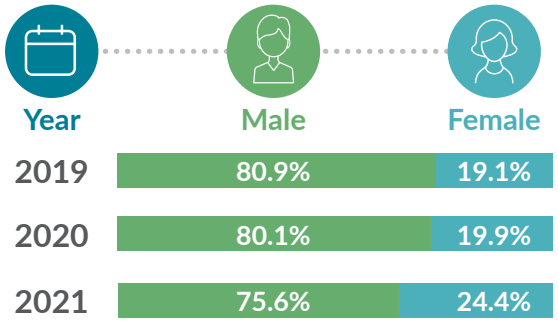
PILLAR 3



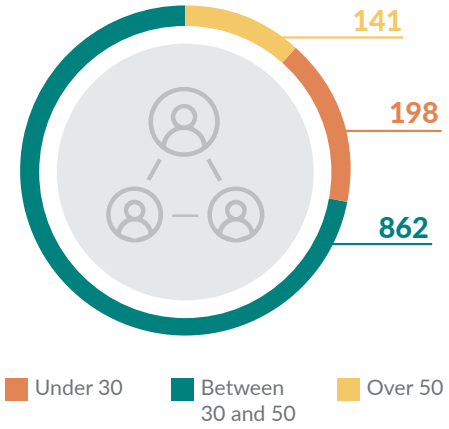
Ensuring a culture that promotes respect and wellbeing for women in the workplace

- Awareness and development initiatives on gender equality, including regular training and lectures; and
- Program for ensuring mental health and wellbeing of women in the workplace environment.

Employee distribution by gender



Number of employees by age group



Among the initiatives contemplated are for example technical training for women in the communities in which our operations are located. In the area surrounding the Campo Largo I, II and Umburanas, wind complexes in the state of Bahia, the Company, in conjunction with SENAI-BA, vacancies have been open for a women's only course for Wind Turbine Electrician's Assistant with 25 places and 180 classroom hours. In the light of the success of this initiative, ENGIE announced a second group of 20 women for a Low Voltage Residential Installation Electrician's course.

Again, in the state of Rio Grande do Norte, where the Company has an operational solar project and a wind complex under construction, and again in partnership with SENAI-RN, ENGIE Brasil Energia launched the Wind and Photovoltaic Generation Technology Program, which includes two technical courses which it is underwriting. Also free of charge, more than 300 applied, the course being run in two groups: one exclusively for women and the other mixed gender with women occupying half the places offered.

The organization of training courses is directly linked to the objective of increasing the supply of women in technical Operations & Maintenance careers on a sustainable basis, the focus being women in communities immediately surrounding the plants. While the conclusion of the training is not linked to the offer of work at the Company, prospects are increased of establishing a professional relationship with either ENGIE Brasil Energia or another of

Own employees, by gender and functional category (in 12.31.2021)

Employees, by gender and functional category	Male	% off male	Famale	% off famale	Total	% off total
Executives	7	1%	1	0%	8	1%
Management	217	24%	32	11%	249	21%
Analysts, engineers, and specialists	291	32%	155	53%	446	37%
Operators, technicians	393	43%	105	36%	498	41%
Total	**908**	**76%**	**293**	**24%**	**1,201**	

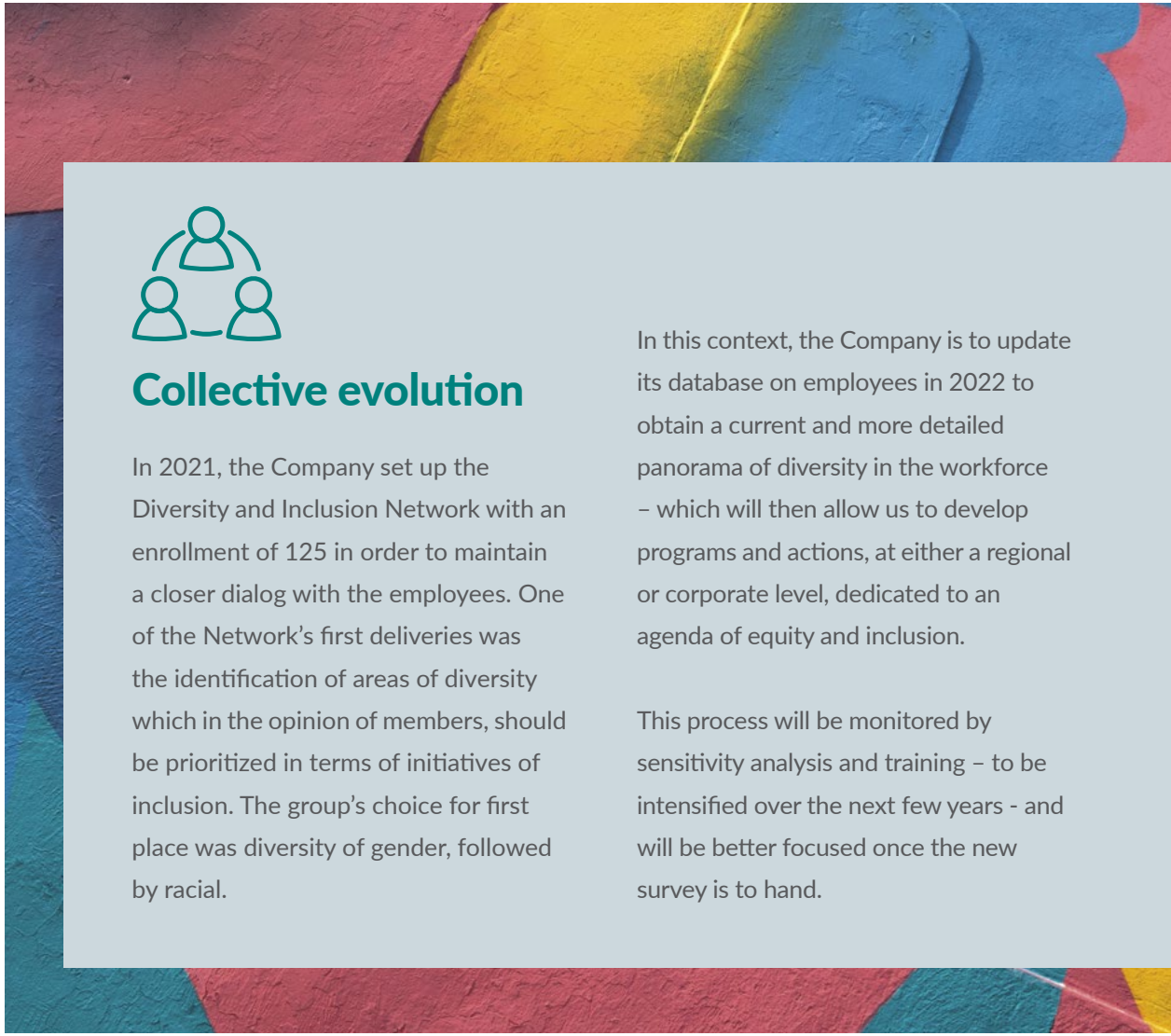
EDGE gender equity certification

For the first time, ENGIE Brasil obtained EDGE Assess certification, one of the leading global certifications for gender and intersectional equality. The certification process involves a rigorous evaluation of aspects such as women's representation in leadership, equality in remuneration, efficacy of guidelines and an inclusive organization culture. As a controlled company of ENGIE Brasil, the Company's policies and practices were also evaluated in the process.

the various power generation companies that have opened in these regions. In addition to collaborating with gender equality, support for technical training is aligned to one of the Company's corporate social responsibility pillars: generation of income and social inclusion – a fact which takes on an even greater significance in the interior of the country where there is a dearth of professional opportunities.

One of the initiatives currently under construction is the New Engineers Program in the trainee format, which is based on the hiring and development of recently graduated female engineers, with a view to professional training and acceleration for future placement in Operations & Maintenance positions. Under the Program 10 female engineers will be engaged for 12 months of activities as from the second half of 2022.

Our diversity policies also promote the inclusion of people with Special Needs, at the end of 2021, there were 35 employees in this group.



Collective evolution

In 2021, the Company set up the Diversity and Inclusion Network with an enrollment of 125 in order to maintain a closer dialog with the employees. One of the Network's first deliveries was the identification of areas of diversity which in the opinion of members, should be prioritized in terms of initiatives of inclusion. The group's choice for first place was diversity of gender, followed by racial.

In this context, the Company is to update its database on employees in 2022 to obtain a current and more detailed panorama of diversity in the workforce – which will then allow us to develop programs and actions, at either a regional or corporate level, dedicated to an agenda of equity and inclusion.

This process will be monitored by sensitivity analysis and training – to be intensified over the next few years - and will be better focused once the new survey is to hand.

ODS 8

Health, safety and wellbeing

[GRI 103-1; 103-2; 103-3; 403-1; 403-3; 403-6; 403-8; 403-9]
[SASB IF-EU-320A.1]
[2030 AGENDA GOAL: 8.8]

Frequency Rate and Severity Rate targets

100%

achieved in the year.

1,474

Management Safety Visits

PERMANENT CARE:

tackling Covid-19 among employees and service providers

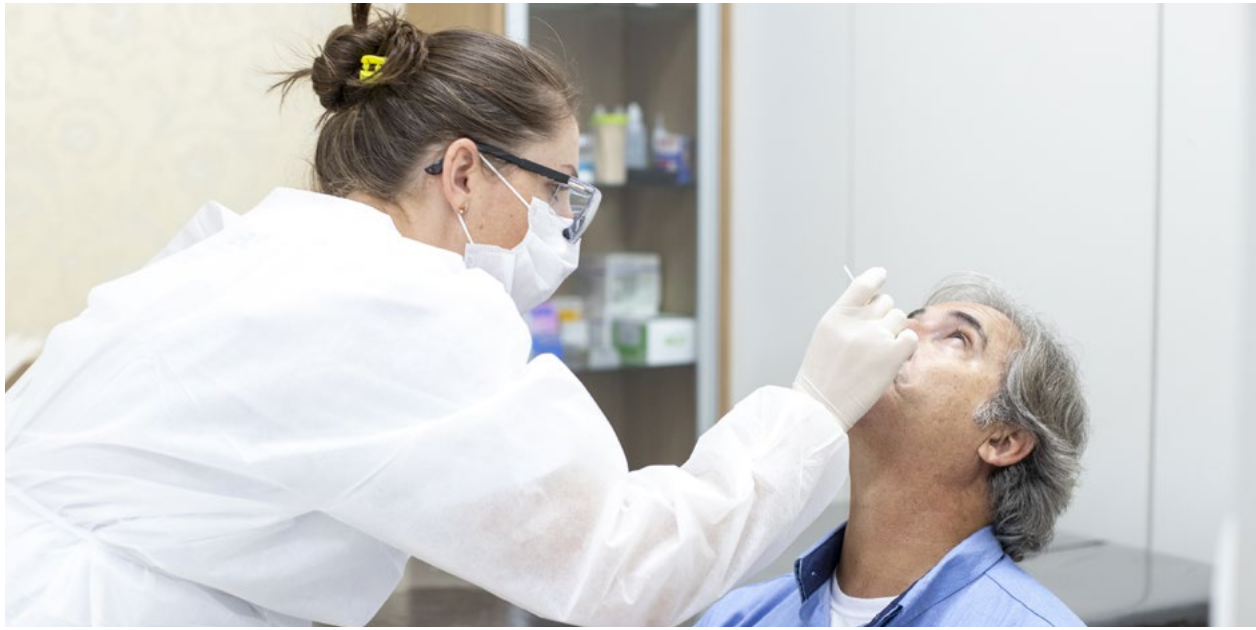
17

Internal Accident Prevention Commissions (CIPAs)

108

elected members, representing 100% of employees.

As set forth in the Sustainable Management Policy, the physical and psychological integrity, professionalism, training and competence of the employees are priorities for ENGIE Brasil Energia. The same care taken with direct employees is also dispensed to the service providers – the latter's agreements include clauses to this effect, also prioritizing the occupational health and safety of subcontractors and outsourced entities. Despite this, nine fatalities were registered with subcontractors during the year, all of them related to work on the Novo Estado Transmission System, a number well above the Company's track record (by comparison, four fatalities, all of them involving subcontractors, had been reported over the last 10 years).



Mental health in focus

Particularly in the light of the effects of the pandemic, in 2020, the Company ran regular surveys with employees for an enhanced perception of stress levels, balance between personal life and professional expectations and sentiments. This process was continued in 2021 in the light of the positive receptivity among employees together with actions and talks based on the results and opinions of the surveys.

In addition, we developed a Personal Support Program, free of charge and confidential, which offers psychological and nutritional support for employees and their families. This service can be offered remotely, facilitating access, especially in relation to residents in the interior of Brazil. In 2021, 873 consultations were made.

In addition to emotional support and quality of life programs, in the health care area a psycho-social risks prevention plan is being developed. The plan is designed to establish a diagnosis of culture in mental health. The aim here is to identify cultural aspects that have an impact on the relationship of people between work and self-care and which may cause future mental illness.

We believe in healthy relationships that generate self-care and an awareness of the work-life balance.

In the light of these events, certain actions were taken to strengthen the culture of safety among all involved in construction work in progress. Among these, were the use of awareness talks and forums with specialized consultancies, employing techniques of Coaching, Neurolinguistic Programming (PNL) and Andragogy. This culminated in the signature of a commitment instrument for a further 8 thousand employees to receive training with the strengthening of preventive attitudes in each one. In addition to actions relating to behavioral questions, processes for specialized and multidisciplinary teams were revised for reinforcing existing barriers and reducing the risk of faults.

The following charts show OHS indicators, separating out data for ENGIE Geração Solar Distribuída (EGSD), which is booked separately.

873

consultations

held in 2021 in the Personal Support Program

Occupational Health and Safety Indicators (except EGSD)

	2019	2020	2021	2021 Goal	2022 Goal
Frequency Rate (FR) operation and maintenance	-	1.203	0.568	≤ 1.40	≤ 1.40
Severity Rate (SR) direct employees	0.000	0.006	0.000	≤ 0.02	≤ 0.02
Frequency Rate (FR) – constructions	-	0.561	1.649	≤ 2.30	≤ 2.40

Occupational Health and Safety Indicators EGSD

	2019	2020	2021	Meta 2021
Frequency Rate (FR) direct employees	4.650	0.000	0.000	≤ 3.50
Severity Rate (SR) direct employees	0.302	0.000	0.000	None

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 and maintenance: direct and third party employees linked to the operation and maintenance processes (with the exception of construction work).
Frequency Rate (FR) construction work: considers direct + third party employees linked to construction work or hired by projects.

Reinforcing the dissemination of the safety culture, ENGIE Brasil Energia sets performance targets for the theme subject to manager compliance – Managerial Safety Visits (MSV) are an example - the practice including field visits for verifying the use of OHS procedures. The manager's responsibility is to check the control measures adopted and act as a multiplier for guidance on the theme with the employees. In 2021, 1,474 MSV were made, 6.9% up on 2020.

The Company has a structure of 17 Internal Accident Prevention Schemes (CIPA), comprising 108 members elected and appointed according to the NR5 rule, which represents the entire workforce. In addition, a dedicated system supports the management of risk and near-accident situations, consolidating records and including the indicators for the area and other aspects of corporate management. In 2021, 5,089 incidents were recorded in the system, 13.5% less than observed in 2020 (5,886) — of which 100 were classified as HIPOs (High Potential Events), a category which receives special handling with detailed action plans. In 2021, 73.3%[3] of the employees were working in certified units pursuant to the ISO 45001 standard. The remaining units, while not certified, pursue the same policies and procedures as contemplated in ISO 45001.

[3] Employees of the Pampa Sul Thermoelectric Power Plant, plants from complementary sources and implementation projects are not covered.

Diagnosis of a Safety Culture

In 2021, ENGIE Brasil Energia ran its second Health and Safety Culture diagnosis for identifying level of maturity reached by the safety culture. Based on this survey, the Company structured a plan of transformation to be implemented in 2022 in order to continue developing the theme.

Tackling Covid-19 among employees and service providers

In 2021, more especially in the first semester, the Covid-19 pandemic continued to present additional managerial and operational challenges although these were met thanks to the absolute commitment to ensuring physical and mental health of employees and their families.

Home office working for those employees with activities suited to this format continued to be executed with office-based work kept to a minimum. Precautions such as the use of face coverings, regular cleaning of surfaces and temperature checks on entering installations were also continued as in 2020. Tests (of the nasal swab type) were taken weekly for all employees and service providers during most of the year. These ceased to be obligatory for those fully immunized and asymptomatic, although again being fully applied at the end of 2021 with the onset of increased numbers of omicron variant cases.

With work continuing to be performed on a hybrid basis, the Company has begun to support the employees in the acquisition of electronic equipment and ergometric seating, negotiating special conditions with suppliers. In addition, workplace gymnastics are now also being offered in an online format so that the employees can continue to work out at home.



ODS 4

Professional development

[GRI 404-1; 404-3]
[2030 AGENDA GOAL: 4.3]

R$ 4.6 m
in training and qualification actions

Total of 60 thousand hours

49.7
hours per employee

95% **of employees recommend ENGIE Brasil Energia as a good place to work**

Performance + Career + Development Management Program involves = 100% of employees

The continuous development of employee competencies and skills is instrumental in the execution of the organizational strategy and swift adaptation to developments in ENGIE Brasil Energia's market. In 2021, the Company invested R$ 4.6 million in training and skills upgrading, an increase of approximately 20% in relation to the preceding year. In all, about 60 thousand hours were dedicated to learning, a year-on-year decrease of 9.7% in relation to 2020.

Average number of training hours



* Data for 2020 and 2019 has been modified by methodological updating.

Corporate education is one of the main pillars for employee professional development and growth and consequently, for reaching the Company's objectives. This is combined with the performance management process that takes place annually and provides all effective employees with guidelines for development, helps the identification of opportunities for improvement in performance in the existing function but with a view to meeting new challenges in the future.

To support this process, ENGIE Brasil Energia adopts a platform which systematizes Career Dialogs – in which the employee reflects on the evolution of their professional trajectory and the results of their work for the year – and which supports performance monitoring by the manager. Based on the Dialogs, Individual Development Plans (IDPs) are prepared by the employee with the guidance and validation of their immediate manager, as a reflection of their effective objectives and aspirations. On

systematizing the IDPs of all employees, the People and Culture Unit identifies recurring needs and on a proactive basis, proposes training or opportunities for collective development which meet the expectations of the majority.

Among the different forms of qualification, employees have access to a corporate education platform, with various options for development. These can be freely accessed or suggested both by the managers as well as by the People and Culture Unit based on the results of the IDPs. Of particular note, is the ENGIE University. This is a corporate university coordinated by the Controlling Company, offering educational programs to the Group's professionals on a global scale. There is also a school graduation and languages program in which the employee with the approval of the manager, enjoys financial support from the Company to fund their development. It is through these mechanisms that ENGIE builds a culture of continuous learning.

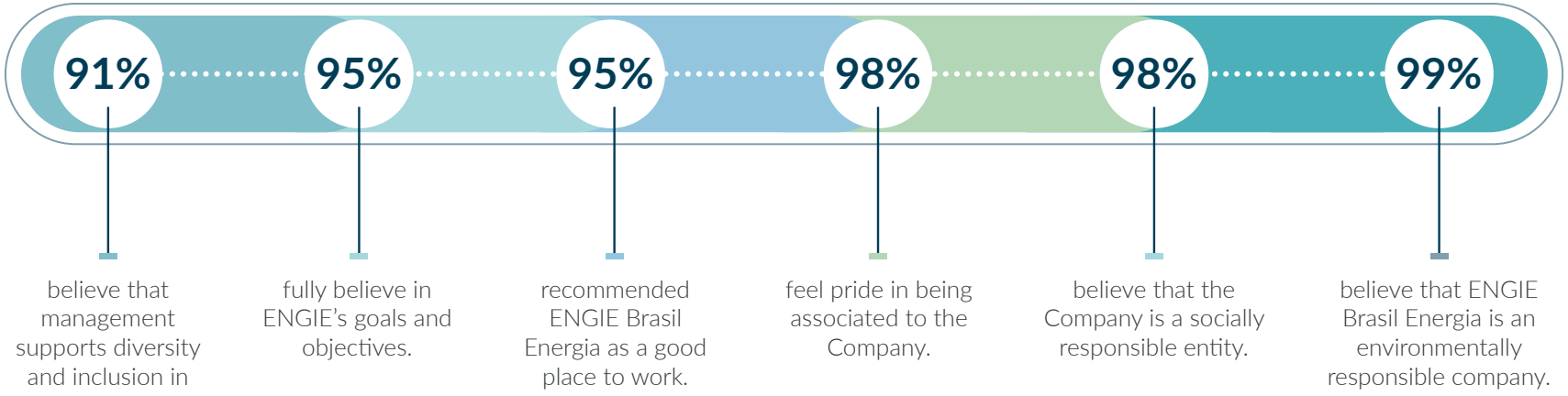
Organizational climate

To determine the adequacy of the programs developed for employees, the Company regularly holds organizational climate surveys. In 2021, 85% of employees completed their questionnaires. Highlights from this survey cycle include:

In 2021, the Company implemented a Hybrid Working Policy, applicable to employees not directly related to operational functions, enabling work on a remote basis (working from home) up to twice a week.



Employee opinion





5

SOCIO-ENVIRONMENTAL PERFORMANCE

Environmental management

Social responsibility

Relationship with suppliers

Projects in implementation

Socio-Environmental Performance

[GRI 102-11]

Present in all 6 BRAZILIAN BIOMES



More than 6,800 km inspected and maintained

More than 1,600 km² of reservoir area

27 Conservation Units supported

- **BIODIVERSITY**
- **WATER AND EFFLUENTS**
- **ENERGY**
- **WASTE**
- **ATMOSPHERIC EMISSIONS AND COMBATING CLIMATE CHANGE**

In developing its activities, whether for the implementation or the operation of assets, ENGIE Brasil Energia maintains its commitment to full compliance with the environmental legislation. At the same time, additional efforts are directed towards voluntary initiatives that surpass legal requirements and contribute effectively to the conservation of the ecosystem.

All the Company's environmental management initiatives are supported by detailed studies undertaken by specialists and duly validated by the appropriate environmental protection agencies – a preliminary requirement for obtaining and retaining more than 90 environmental licenses under the management of ENGIE Brasil Energia, the licenses amounting to more than 2.3 thousand preconditions.

Environmental investments

In 2021, socio-environmental investments in the areas surrounding the operating activities (excluding projects in implementation) amounted to **R$ 35 million**.

90 environmental licenses

under the management of ENGIE Brasil Energia, the licenses amounting to more than 2.3 thousand preconditions

As a result of this work in 2021, the following operating licenses were renewed:

- **Cacimbas Wind Farm in the Trairi Wind Complex**
- **Passo Fundo Hydroelectric Power Plant**
- **Ibitiúva Bioenergética Thermoelectric Plant**
- **230kV Trairi – Pecém Transmission Line**
- **Trairi Wind Farm Transmission Line (Faisa Trairi Consortium)**
- **Ponte de Pedra Hydroelectric Power Plant**
- **Tubarão Wind Plant**





Environmental initiatives are accompanied by a permanent dialog with stakeholders, especially the regulatory bodies and local communities. In this context, one of the highlights of 2021 was the Public Consultation for updating the Conservation and Usage Plan for the Areas Adjoining the Artificial Reservoir ("PACUERA" in the Brazilian acronym) of the Cana Brava Hydropower Plant in the state of Goiás. The purpose of the Plan is to provide guidance on the management and use of the Reservoir and its margins, disciplining conservation, restoration and the multiple uses, respecting the parameters established in the applicable norms. In the light of the pandemic, the federal environmental protection agency, Ibama, recommended the Consultation be held virtually and was broadcast via radio and YouTube channels, allowing broad participation of all representatives of civil society.

Opening to dialog

In addition to the structured consultation processes, such as the updating of PACUERAs, the interactions, comments or complaints received from the community are recorded in the Integrated Management System, generating entries to the "Action plans for stakeholders' communications", which are registered, analyzed and, where applicable, submitted for subsequent feedback to the relevant stakeholders. During the course of 2021, 107 manifestations were registered in the System.

Following the event, the communication channels for additional clarifications were kept open for a further 20 days. With all stages in the process concluded, the Company submitted the final report to Ibama for analysis and subsequent issue of an approval opinion. Again in 2021, a start was made on the revision of the Pacueras for the Salto Santiago and Salto Osório hydropower plants in conjunction with the licensing authority, Instituto Ambiental do Paraná (IAT). In accordance with all the legal provisions and the need for dialog with stakeholders, this process is expected to continue until 2023.

Environmental compliance and performance indicators are regularly monitored through the Integrated Management System (SIG). These indicators include aspects such as greenhouse gas emissions, management of water resources and effluent as well as solid waste and fauna and flora management. Annual targets are set for all the assets based on the most significant aspects and impacts for each operation as a means of ensuring continual improvements in environmental performance. By the end of 2021, of the 77 environmental goals established for the year, 69 – 89.6% – were achieved. Targets and indicators will be detailed over the next few pages.

77 environmental goals

established for the year, 89.6% were achieved

Certified operations

Bureau Veritas Certification has certified ENGIE Brasil Energia's Integrated Management System in line with the NBR ISO 14001 – Environmental Management; NBR ISO 9001 – Quality Management and ISO 45001 – Occupational Safety and Health Management standards. During 2021, the Jaguara and Miranda hydropower plants were also included within the scope of the same certification. In this context, the power generation processes of all the hydro plants operated by the Company are now certified, corresponding to 81.5% of all installed capacity operated by the Company.

The awarding of certification is subject to compliance with all the norms under the guidelines comprising the Integrated Management System and must show conformity of the processes with the requisites established by the International Organization for Standardization (ISO) and the applicable municipal, state, and federal legislation as well as in-house policies and rules.

Biodiversity

[GRI 103-1; 103-2; 103-3; 304-1; 304-3]
[2030 AGENDA GOALS: 2.5, 15.5, 15.8, 15.A]

At ENGIE Brasil Energia, the focus on biodiversity is integral to the commitment with sustainable development. In addition to the corporate policy on the theme, which includes biodiversity as part of the business strategy among its non-financial goals to be achieved by 2030, the Company has the objective of drawing up ecological management plans in the regions where its assets are located, with the involvement of the local communities, using nature-based solutions wherever possible.

Along all the axes of its operations, ENGIE seeks to mitigate the impacts its activities may have on the environment through the use of various socio-environmental programs. These initiatives are calibrated according to the maturity of each project and the conditions of conservation of the local ecosystem in the area contiguous to the plants.

Both with plants at the implementation stage as well as projects already in operation, various activities are performed for the mapping of the impacts and execution of mitigatory and conservation plans. All actions with a focus on biodiversity are developed in line with environmental licensing requirements and under the supervision of the appropriate authorities. Hereafter, the actions relative to the operating assets are described while the initiatives involving those projects in the process of implementation are described from page 115.

> **All actions with a focus on biodiversity are developed in line with environmental licensing requirement.**

Environmental highlight

ENGIE was recognized as the best company in Latin America in the Environment Category, part of the Latin Trade IndexAmericas Sustainability Award 2021, sponsored by the Inter-American Development Bank (IBD) in partnership with Latin Trade, a business magazine circulating in the region for 27 years.

The award recognizes good corporate practices based on a universe of six thousand organizations, taking into account the efficient and responsible use of economic, environmental and social resources. One of EBE's environmental initiatives particularly highlighted by Latin Trade and BID in its selection was the Biodiversity Matrix Project.

Assets in operation

In addition to specific programs for socio-environmental monitoring and in the context of assets in operation, since 2016 ENGIE Brasil Energia has been conducting a project for mapping and diagnosis of the status of the biodiversity in the region of the plants it operates. Under the name of Biodiversity Matrix, the project involves the survey of opportunities for the conservation of the biodiversity in all Brazilian biomes, itemizing the actions, species, and priority areas for conservation in each region, providing guidance on the Company's environmental investments.

To ensure the end result of this process is achieved, the initiative aims to capture synergies between the provisions conditional for licensing and priority actions for conservation as well as improving performance indicators and maximizing the positive impact on environmental aspects eventually under threat. Parameters such as threatened species, biome types, conservation units in the vicinity and routes taken by migratory birds are all used to list priority actions for each area. In this way, the Company seeks to optimize investment in environmental preservation.

In 2021, the Company embarked on the second phase of the Matrix, subsequent in the previous year to the completion of two pilot projects with quite distinct characteristics – the Salto Osório Hydroelectric Power Plant, in operation in the state of Paraná since 1975, and the Campo Largo Wind Complex – Phase I, in operation since 2018 in the state of Bahia. This stage was instrumental in obtaining more detailed information on the status of the biodiversity in the respective regions of both projects as well as identifying local stakeholders and conservation projects already executed by other public or private organizations.

On the back of the results raised for this phase, the Company drew up a strategic action plan for conservation of the biodiversity and for eco-systemic services in these regions, including opportunities for income generation in the local community. Among these actions, is the installation of an *arboretum* in the area of the Salto Osório and Salto Santiago power plants in the state of Paraná. With an area of 1.1 hectares – and a perimeter of 486 meters – the space is used to cultivate seedlings of indigenous species deemed as a priority for the region based on Biodiversity Matrix mapping. Such species include araucaria, *canafistula*, cherry, yerba-mate, *guabiroba*, imbuia, *ingá banana*, *ingá feijão* and jabuticaba, among others. Thus, the *arboretum* performs the function of a seed bank for seedlings to be cultivated in the forestry nursery in the region of the two plants.

In 2021, the Biodiversity Matrix was extended to the state of Minas Gerais, with the collection of data in the region surrounding the Miranda Hydroelectric Plant. Classification and priority parameters for the local biodiversity were updated – covering a 15-kilometer radius from the plant reservoir. Studies included more detailed research of the region's hydrographic basins covering more than 2 million hectares in 13 municipalities in the Triângulo Mineiro region, more specifically the "cerrado" or Cerrado area with an Atlantic Rain Forest influence.

In 2021

the Biodiversity Matrix was extended to Minas Gerais state, to Miranda Hydropower Plant region

Among the principal results in this stage of the Miranda survey, of particular note was:

- Identification of 145 species pertaining to seven distinct taxonomic groups: plants, invertebrates, fish, amphibians, reptiles, birds, and mammals.
- Registration of 18 Conservation Units, 13 Urban Parks and two Conservation Units currently being installed. Among the protected areas recognized in the National System of Conservation Units (SNUC), the Private Natural Heritage Reserves (RPPNs) have the greatest representation – 10 in all.

This and other information recorded in the study will provide the basis for the development of the project, and the actions to be taken over the coming years. In 2022, priority actions to be adopted at the Jacob RPPN are to be mapped. This private reserve is located in the area under the influence of the Miranda plant and maintained by ENGIE Brasil Energia, with the important function of conserving the species of the Brazilian *Cerrado*.

Revitalization of the Jacob RPPN

The Company rehabilitated the RPPN's premises during the year so that researchers and visitors from the community could be more adequately received.

In addition to modernization, a separate support base was built for the use of employees at the Reserve as well as a kitchen exclusive to the ASAS project – a partnership between ENGIE Brasil Energia and Instituto Estadual de Florestas IEF, where the focus is on the rehabilitation of wild animals victims of capture, ill treatment or trafficking.



Forest fires in the state of Bahia

On September 17, 2021, a fire was sighted in an area close to the Umburanas Wind Complex and continued to burn for two weeks. The cause was probably campfires lit by hunters in the region, then spreading through the brush due to drought conditions and the strong winds characteristic of the region in the period.

As a result, ENGIE's fire-fighting department was called on to support actions taken by the local authorities.

Due to restricted access, logistical control proved complex, involving the provision of food and accommodation for fire fighters as well as all the necessary equipment such as drones, pumps, water tanker trucks and PPEs, among others.

About 70 people participated actively in fighting the fire – 25 from ENGIE Brasil Energia, 17 from the environmental protection agencies (ICMbio and IBAMA) and 28 from outsourced companies. Not only did they successfully avoid significant damage to the fauna and flora but also ensured that the fire did not affect operations at the Wind Complex.

Conservation Units

The Company has 27 Conservation Units (UC)[4] in close proximity to its operations, totaling 1.03 million hectares of preserved area. A list of Units can be found in the Supplementary Brochure.

Donation and planting of seedlings

In addition to these actions, the Company maintains eight forestry nurseries contributing to the conservation of the local biomes through the production of native species. On average, ENGIE plants or donates to the communities more than 400 thousand seedlings annually. This initiative also has an educational character, part of the donations being to schools and other community organizations.

400 thousand seedlings

planted or donated to the communities

[4] The criterion for inclusion of the UCs is a 15 kilometers buffer zone and the parameter established in the Biodiversity Matrix program.

Ichthyofauna and invasive species

One of the key aspects to our environmental management is related to the aquatic environment in the hydropower plant reservoirs, based on the monitoring of the fish fauna (ichthyofauna) and the combating of invasive species – which can imbalance the ecosystem. In some of the hydrographic basins in which ENGIE Brasil Energia operates its hydroelectric power plants, severe drought conditions resulted in reduced reservoir levels in 2021. As a result, smaller lakes formed in the Passo Fundo (RS) and Salto Santiago (PR) reservoirs as well as river levels downstream from the Miranda Hydroelectric Plant (MG) fell. These situations - which can have an effect on the local ichthyofauna – required immediate action, coordinated by specialized teams, for environmental monitoring throughout the dry season.

On the issue of invasive species, Research & Development studies have been conducted to control the spread of the golden mussel, a small freshwater mollusk which attaches itself to plant structures and multiplies. In addition to the risk of imbalances in the local ecosystem, the presence of this species can have direct impacts on operations, increasing asset maintenance costs. On another front, the Company controls aquatic macrophytes in order to prevent indiscriminate multiplication by virtue of eutrophication (excessive presence of nutrients in the water). This work has contributed to the maintaining of multiple usage conditions in the reservoirs and minimizing impacts on the biodiversity and operations of the power plants.

Research and Development – eDNA

In 2021, the Company conducted a Research & Development project in the region of the São Salvador plant for developing genetic/molecular tools for improving the monitoring and conservation of the local ichthyofauna. Using new generation sequencing, with advanced sensitivity analytical techniques, it is now possible to monitor species in practically any environment, whether terrestrial or aquatic.

The method has been deemed as revolutionary in biodiversity studies, with the advantage of not being invasive. It has already proved efficacious in monitoring rare species and/or those where capture is difficult. Validation of these new methodologies will allow the periodic rapid and secure diagnosis of reservoirs, directly helping the stewardship of different species of fish as well as those native to the reservoirs themselves.

Avá-Canoeiro tribal land

In July 2021, the National Indian Foundation (Funai) approved the Work Plan proposed by ENGIE Brasil Energia for additional mitigating and compensatory measures relating to the impact of the Cana Brava Hydroelectric Power plant on the Avá-Canoeiro Tribal Lands. Filed with Funai in 2019 by the Company, the Plan was prepared by anthropologists, specialists in ethnicity, and envisages the expansion of ethnoecological studies in the tribal lands, in line with the Foundation's recommendations on the diagnosis and measures proposed at the time of the plant's installations – actions which are also being discussed by the Federal Judiciary in the form of civil class actions.

With the approval of the Plan, the work envisaged was initiated, albeit without the execution of the work in the field – pursuant to requirements under Ordinance 419/2020, which limits access to indigenous tribal land as a precautionary measure in the light of the Covid 19 pandemic.

Following conclusion of complementary studies, it is hoped that still unresolved impacts with the indigenous community can be mitigated.

> **The Plan was prepared by anthropologists, specialists in ethnicity, and envisages the expansion of ethnoecological studies in the lands.**



Water and effluents

[GRI 103-1; 103-2; 103-3; 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: 3.9, 6.4]

Care for water – one of the principal resources used by the Company in its operations – is a constant in all our activities. In hydroelectric plants, impacts and aspects related to hydric resources are monitored, studied and recorded in reports sent to the regulators.

In addition to the studies undertaken at the project installation phase, the Company monitors water used in the operations in order to register the volume and quality both on withdrawal and on disposal. In the case of the hydroelectric plants, the cooling system of the generator units is responsible for the larger part of water withdrawal although volumes used in the process flow through the system and are returned to the body from which the water originated with the same characteristics — with the exception of the temperature that increases with the process, albeit maintained within the standards required by the legislation.

Periodic physical-chemical and biochemical analyses attest to the quality of discarded water whether from the projects in the process of installation or projects already in operation, guaranteeing conformity with the legal parameters. In addition, all the hydropower plants adhere to the conditions of the Reservoir Water Quality and Monitoring Program.

35% reduction

of ENGIE's Group water consumption for industrial activities by 2030

Non-financial objectives: water

The ENGIE Group has established a global commitment of reducing water consumption by 35% in its industrial activities up to 2030 — from 93Mm³ in 2019 to 60Mm³ in 2030.

In order to reach this target, the Company is endeavoring to identify opportunities for improving **and economizing the use and consumption of water** at all its assets both in the productive process as well as in its administrative activities.



Largest demand for water is in thermoelectric generation given the demand for steam and other industrial processes such as heavy bottom ash extraction from the boilers. Reutilization technologies have been installed to reduce the amount of water withdrawal. In the case of these units as well as all the others, effluent generated is monitored accordingly in alignment with the requirements of the legislation.

With the objective of contributing to the conservation of water resources, ENGIE Brasil Energia's representatives sit on the committees for the hydrographic basins in the regions where it has assets as well as the Santa Catarina and Paraná State Councils for Hydric Resources.

Hydric stress

Considering the regions where we have operations which use the most water – our hydroelectric and thermoelectric plants – there are no records of the Company's activities affecting the local community's water supplies. Water shortage is more recurring in the areas close to our wind power operations in the Northeast, although this source of energy makes reduced use of the resource.

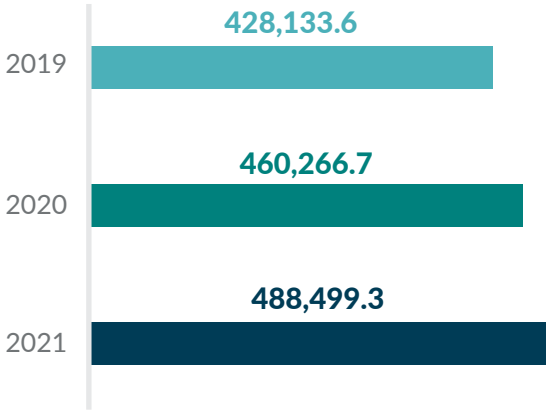
Based on various impact studies conducted in the socio-economic context of the areas of influence, shortage or risk of shortage, can be an issue during the licensing process both on the part of the regulator and/or the local community, both parties with the intuition of coordinating the Company's cooperation. An example of this type of interaction was the construction of a Water Treatment Station and a pipeline in the region of the Pampa Sul Thermoelectric Plant, following negotiations with Hulha Negra and Candiota city government, both municipalities traditionally having had difficulties supplying water with suitable quality and volume.

Considering all sources of water, total withdrawal volume in the operations during the year was 488.5 thousand ML, an increase of 6.1% compared with 2020 – proportional to the energy generation, especially at Units A and B of the Jorge Lacerda Thermoelectric Complex (CTJL), which has an open loop cooling circuit. Increased water consumption is also a reflection of a scheduled maintenance stoppage at the CTJL which required an increase in manpower at the site and thus greater use of third-party water resources, the restaurant being used by larger numbers for example.

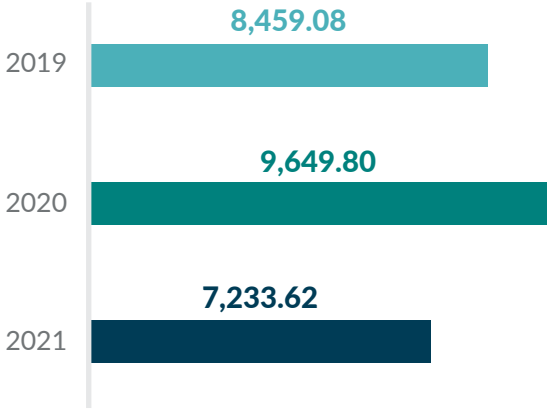
In relation to water consumption, the accumulated amount for the year was 7.2 thousand ML, a decrease of 25% compared with 2020, this particularly due to the disposal of CTJL – where the environmental indicators were consolidated with those of the Company up to the end of the month of October 2021. Both the figures for withdrawal and consumption should decline substantially in 2022 since the Complex was individually the heaviest in terms of both withdrawal and consumption.

Details of data by withdrawal source can be found in the Supplementary Brochure.

Total water withdraw (in ML)*



Total water consumption - all sources (in ML)



* Volumes for 2020 were corrected due to the adjustment in monitoring metrics.

In 2021, the internal control systems recorded two non-conformities in the monitoring of withdrawal and disposal of water by the Company. Both cases were promptly corrected without consequences.

Main water management-related risks

Potential Risk	Mitigation strategies and practices
Risk of emergency oil leaks at energy generation plants, in particular hydroelectric ones, with potential water contamination.	NBR ISO 14001-certified Environmental Management System, with preventive maintenance procedures, Operation tests and inspections, firefighting systems, containment barriers, and water-oil separation systems and, in the event of an accident, the Emergency Response Plan; Monitoring surface water quality.
Hydro plant reservoir pollution due to illegal use and occupation of reservoir banks.	Operations of the Property and Environmental Surveillance Teams for reservoirs and margins and periodic monitoring of surface water quality.
Disposal of effluent in disaccord with the standards established in the current legislation.	Monitoring of effluent and surface water quality.



Headwater spring conservation

The Brejo da Brásida Community Headwater Spring Restoration in the municipality of Sento Sé (BA) at the Umburanas Wind Complex is among the 26 projects selected under the Ministry for Regional Development's "Brazilian Waters" program in recognition of among other initiatives, the revitalization of hydrographic basins, such as the São Francisco, Parnaíba and Tocantins-Araguaia rivers. Since 2017, ENGIE Brasil Energia has been investing in a partnership with the Brejo da Brásida Residents Association (AMBB), contributing to the protection of various headwater springs and in other communities of the basin through environmental education initiatives, research and production of plant and herb catalogs of the *caatinga*, collection of seeds and production of seedlings in a company nursery. Another highlight is the planting of seedlings: 25,181 seedlings in 2021 alone were used by volunteer task forces for planting as part of the work for protecting headwater springs.

The work in Bahia is in addition to the Company's Corporate Headwater Springs Conservation Program. With its inception in 2010, the program has already been responsible for restoring more than 2.1 thousand springs in nine Brazilian states and helps to guarantee water of quality for the local communities – and in alignment to the Agenda 2030's sixth Sustainable Development Goal (SDG 6).

Energy

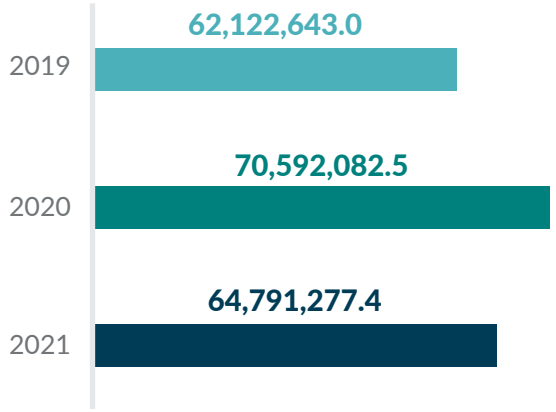
[GRI 103-1; 103-2; 103-3; 302-1; 302-3]
[2030 AGENDA GOALS: 7.3, 9.4]

The efficient use of energy is part and parcel of ENGIE Brasil Energia's commitment to decarbonizing its own operations. For this, the Company combines incentivization practices with the rational use of electricity by employees, and for equipment and installations which ensure energy efficiency and guidelines which orientate the preference for use of renewable fuels in transportation-related activities.

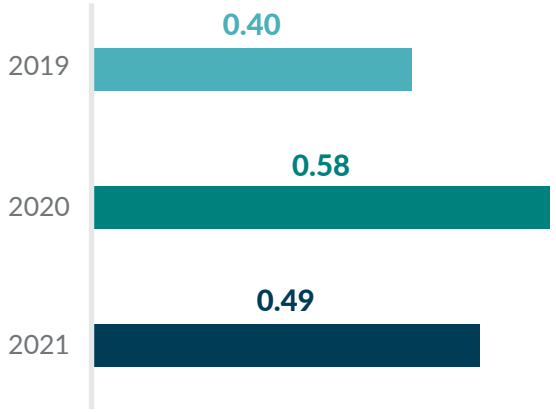
In 2021, we reported a decrease of 6.9% in energy consumption from non-renewables and a 15.3% decrease in renewable sources. The variation in non-renewables is related especially to reduced coal-fired thermoelectric generation during the year (8% lower than in 2020). In terms of renewables, the decline is also in line with the lower generation by the biomass fired thermoelectric power plants which reported a 17.3% reduced performance compared to 2020. Further information on operational performance is described in the Section "The Year's Performance".

Reflecting these results, total energy consumed by the Company during the year was 64.8 thousand GJ – 8.1% less than registered in 2020[5].

Total energy consumption (GJ)



Energy intensity* (GJ consumed / GJ produced)



[5] From 2018, the methodology for measuring plant energy consumption was changed: from that year, we began to subtract energy volume generated by the plant itself from total energy consumption. Thus, the indicator now considers energy consumed from the grid alone.

* Metrics were updated using net energy production data for the calculation. Previously the gross energy production number was used.

Waste

[GRI 103-1; 103-2; 103-3; 306-1; 306-2; 306-3]
[SASB IF-EU-150A.1; IF-EU-150A.2]
[2030 AGENDA GOAL: 12.5]

In addition to reducing the generation of waste itself, ENGIE Brasil Energia endeavors to ensure final adequate disposal, always prioritizing wherever possible, processes for recycling, reuse, and recovery of materials. To ensure correct disposal, the Company requires that the companies hired for the collection and discarding of waste meet the applicable environmental legislation, particularly that of Law 12,305, which regulates the National Solid Waste Policy.



During 2021, ENGIE Brasil Energia continued to use automatic balances for weighing waste at some of its plants, resulting in the entry of the respective weights directly to its database. This step is designed to add greater reliability to the process of waste management and should be extended to other units in the coming years.

Hazardous waste

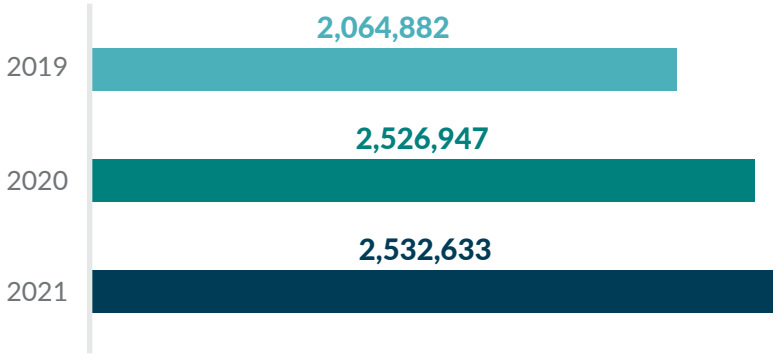
In the Company's operations, waste classified as hazardous originates from inputs of a chemical nature and is stored in secure locations, segregated from other areas, according to its physical state and the level of danger involved. Hazardous liquid waste – an example being spent oil – is stored in covered ventilated environments, with restricted access, impermeable flooring, and a containment system for emergency leakages.

Related risks and eventual leakages and accidents are monitored by specialist teams – and trained to handle emergency situations. Pursuant to ISO 14001, at certified plants, this process is frequently audited including those stages of the process executed by third parties.

Generation of waste

In 2021, waste generated by the Company remained practically unchanged in relation to 2020 with an increase of just 0.23%. In the year as a whole, 82.2% of total waste destined for final disposal was recovered.

Total waste for disposal (in tons)



Non-hazardous waste for disposal in 2021 totaled 2,531,768.28 tons, approximately 98% corresponding to ash from coal-burning in the thermoelectric plants. This ash is dispatched to the cement industry and partially to coal mine pits from where the coal was originally extracted. Disposal in coal pits is classified as mine recovery, a procedure which is authorized by the licensing environmental protection agency and, technically a form of restoring the impacts of mining the fuel in the first place. In the case of CTJL, two bottom ash basins are used to store the waste extracted from the boilers. The parameters established by the Operational Environmental Licenses (LAO) are monitored and notified to the supervising organ from time to time.

Despite the decline in ash volumes with the sale of the Jorge Lacerda Complex in October, Pampa Sul Thermoelectric Plant generated ash volumes 20% greater in 2021 than 2020. CTJL also contributed to stability in the annual volume due to the scheduled maintenance shutdown at the Complex itself, considerably increasing the volume of waste generated, a fact which did not occur in 2020.

In the case of the biomass-fired plants, ash is returned to agriculture or silviculture in accordance with the origin of the fuel (sugarcane and timber respectively). Movement of this waste complies with the applicable legislation, being weighed in the place it was generated, prior to transportation.

Currently, the projects with a certified environmental management system have targets related to the increase in the waste recovery index.

82.2%

of total waste destined for final disposal was recovered

Atmospheric emissions and combating climate change

[GRI 103-1; 103-2; 103-3; 201-2; 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, 7.3, 13.2, 13.3]

Our Greenhouse Gas Emissions Inventory can be accessed in full by clicking here.

In line with the commitments assumed by nations and companies during the United Nations Conference on Climate Change (COP26), held in Scotland in November 2021, ENGIE continued to work with the objective of improving corporate actions and strategies to reduce Greenhouse Gas (GHG) emissions and adapt its practices and processes to the transition scenarios for a low carbon economy. Thus, the Company seeks to effectively contribute to the mitigation of climate change and its impacts.

In order to accelerate the energy transition, ENGIE Brasil Energia combines support for decarbonization of clients and suppliers with rigorous management of its own emissions for executing the initiatives of mitigation of, and adaptation to climate change. Our annual Greenhouse Gas Emissions Inventory (GHG) adheres to the guidelines established for the Brazilian GHG Protocol Program and is certified by an outside independent party, consolidating data based on the two approaches in the Program: operational control and corporate stake.

In addition to maintaining a predominantly renewable energy matrix and rigorously controlling its own emissions, the Company has guided its actions based on three main pillars:

Management	Adapting	Mitigating
Focus on inventorying, engaging, raising awareness and disseminating.	Focus on mapping risks and opportunities, valuing and acting.	Focus on reducing, eliminating, compensating and innovating.

Goals and Metrics

Global Objectives — Greenhouse Gas Emissions

ENGIE Group maintains a series of commitments and objectives related to sustainability, including decarbonization. Thus, it defined its ambition to become Net Zero in 2045, covering the entire value chain, with defined intermediate goals (2025 and 2030) and aligned with the Science Based Targets (SBTi). In this sense, the main objectives are:

Objectives	Reference value (2019 year)	Result until 2021	Objective 2030
Greenhouse gas emissions from energy production (scopes 1 and 3), in line with the Science Based Targets (SBT) path.	80 $MtCO_2e$	67 $MtCO_2e$	43 $MtCO_2e$
Renewables as percentage of total capacity, in line with the Science Based Targets (SBT) path.	27.8%	34%	≥ 58%

Based on those Objectives, ENGIE Brasil Energia assumed some years ago the commitment to sell or decommission the last two nonrenewable-fired assets in the portfolio. In 2021, the Jorge Lacerda Thermoelectric Plant in the state of Santa Catarina was sold and it is envisaged that the Pampa Sul Thermoelectric Plant will be disposed before the end of 2022.

Hence, the Company is working to establish more aggressive commitments than the global ones mentioned before, especially in relation to carbon emissions, linked to ENGIE Brasil Energia's "Carbon Net Zero" objective. To this end, initiatives and goals were defined, linked to the Environment Management, which are monitored and validated by the Sustainability Forum, aiming at the establishment of the Net Zero Program, as well as the Company's strategies to operate in the carbon market.

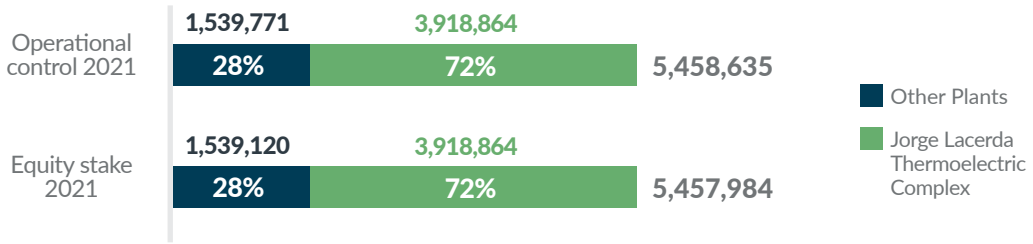
The indicators used to evaluate and manage the performance of actions were established at a strategic and operational level, becoming part of the Integrated Management System. In 2022, ENGIE Brasil Energia will complete its own first direct report to the Carbon Disclosure Project (CDP), one more important tool for disclosing our initiatives and the way we manage climate questions. Up to now, the Company's data was consolidated with that of the French Controlling Company, which prepares the report globally – the score obtained in 2021 being "A-".



Performance – GHG Emissions

The Company emitted 5,458,634.69 tCO_2e in 2021 when measured according to operational control, and 5,457,983.59 tCO_2e on the basis of equity stake held, as shown in the following table — a reduction of 7.2% in relation to the preceding year for the two parameters. The following graphic illustrates the weighting the Jorge Lacerda Thermoelectric Complex had on emissions – the data for this asset included in the totals up to disposal date (October 2021).

Details of total emissions in 2021 (tCO_2e)



Total emissions (tCO_2e)

Year	Operational control	Equity stake
2019	5,288,046.07	5,293,110.33
2020*	5,880,944.49	5,881,638.76
2021	5,458,634.69	5,457,983.59

*Data for 2020 has been updated considering the global warming potential (GWP) of the Fifth Evaluation Report of the IPCC - AR5. Amounts for the remaining years will be recalculated during 2022.

Direct emissions (Scope 1)

The Company's direct emissions in 2021 amounted to 5,430,479.71 tCO_2e when measured according to the plants under EBE's operational control and 5,429,609.62 tCO_2e when the parameter is the equity stake — a reduction of 7.2% compared to 2020. The decrease reflects largely the sale of the Jorge Lacerda Thermoelectric Complex, the data for which was included in the total figures for direct emissions up to the divestment data (October 2021).

Direct emissions – Scope 1 (tCO_2e)

Year	Operational control	Equity stake
2019	5,260,402.94	5,265,263.89
2020	5,853,984.06	5,852,774.10
2021	5,430,479.71	5,429,609.62

Indirect emissions (Scope 2)

Indirect emissions in 2021 totaled 11,991.96 tCO_2e on the basis of operational control and 12,170.51 tCO_2e when the parameter is equity stake — a reduction of 17.8% and 26.1% respectively, when compared to 2020. GHG emissions from electricity consumed are mainly associated with the operations of the Jorge Lacerda Thermal Complex and ancillary services provided by the Company to the National Interconnected System (SIN) – which are necessary to balance grid voltage, requiring generators to operate as motors consuming energy. This is a remunerated activity and arises when there is excess supply in the network in accordance with the determinations of the National Electric System Operator (ONS). After analysis by the regulator and a benchmarking survey in the electric sector this year, a decision was taken that emissions related to these services should be classified as SIN energy losses and not incorporated by the agents that exercise this function. As a result, energy consumption for this activity was eliminated from the calculation of the 2021 inventory.

Indirect emissions – Scope 2
(tCO_2e)

Year	Operational control	Equity stake
2019	12,825.45	12,873.02
2020	14,596.32	16,459.89
2021	11,991.96	12,170.51

Other emissions sources (Scope 3)

Total emissions from other sources of the Company in 2021 amounted to 16,163.02 tCO_2e as measured on the basis of operational control and 16,203.47 tCO_2e, if equity stake is the parameter, increases of 3.4% and 3.6% respectively, on a year-on-year comparison.

Other emissions sources – Scope 3 (tCO_2e)

Year	Operational control	Equity stake
2019	12,825.45	12,873.02
2020	15,632.74	15,635.99
2021	16,163.02	16,203.47

Emissions intensity

The emissions indicator for net generation in relation to 2020, fell by 11% when measured by operational control and 13% by equity participation.

Emissions intensity
($kgCO_2e/MWh$)

Year	Operational control	Equity stake
2019	190.0	152.4
2020	256.1	211.4
2021	226.4	183.9

Data on other significant atmospheric emissions (NOx, SOx, Particulate Material) can be seen in the Supplementary Brochure.

Carbon credits

The Company has ten renewable energy projects in the Clean Development Mechanism (CDM), corresponding to 49 registered plants. In total, the projects represent a potential of about 3 million carbon credits/year — excluding from this calculation Lages Bioenergética, which has concluded the ten years of credit issues to which it was entitled. The credits are sold to Brazilian companies of different sizes and in different sectors, interested in decarbonizing their operations.

In addition to the CDM registration, the Company's renewable energy projects comprise the ENGIE Group's Green Bond financing framework. Through this medium, it raises international funds for expanding renewable energy operations in Brazil. Of the 9.65 billion Euros raised by the Controlling Company in Green Bonds, more than 1 billion Euros were allocated to Brazilian projects.

Commitment to the Climate

The Lages Cogeneration Plant, which uses wood biomass as a source of generation, is part of the Climate Commitment Program, whose purpose is to connect companies interested in offsetting their greenhouse gas emissions with projects that generate a low carbon economy with added socio-environmental benefits.

Renewable energy certificates and agreements

With a focus on the neutralization of indirect emissions (Scope 2), renewable energy certificates (I-RECs - Renewable Energy Contracts) certify that electricity acquired by the client originates from renewable sources. São Salvador Hydroelectric Plant is certified for an I-REC issue – with an estimated 900 thousand I-RECs/year. In 2021, the Ponte de Pedra Hydroelectric Power Plant was also certified with an estimated generation of a million I-RECs/year — each MWh of energy generated equivalent to one I-Rec.

Another solution on offer to clients is ENGIE-REC, a contract which certifies, in addition to the purchase of energy with renewable origin, socio-environmental aggregates based on projects developed or supported by the Company in communities close to the plants. ENGIE-REC may also be used for neutralizing Scope 2 emissions.

Social responsibility

[GRI 103-1; 103-2; 103-3; 201-1; 413-1, 413-2]
[2030 AGENDA GOALS: 4.7, 8.3, 10.2, 11.3, 11.A, 12.8, 17.17]

We support the communities in which we operate in the following priority areas:

- **Access to culture and sport**
- **Protection of children and youth**
- **Income generation and social inclusion**

- **Culture and Sustainability Centers**
- **Confronting the pandemic in communities**
- ***Parcerias do Bem* (Partnerships for Good)**
- ***Mulheres do Nosso Bairro* (Women of Our Neighborhood)**
- **Education Support**

ENGIE Brasil Energia has in the communities of which it is a part, a priority audience with which it establishes a relationship based on ethics, dialog and cooperation. In this way, our actions and social responsibility have a focus on strategic areas to sustainable development.

In 2021, R$ 18.2 million was allocated by ENGIE Brasil Energia in community development projects not associated with project implementation – see highlights related to implementation on page 115. These investments break down into proprietary and incentivized funds, as the next table shows, to enhance the positive impact on communities.

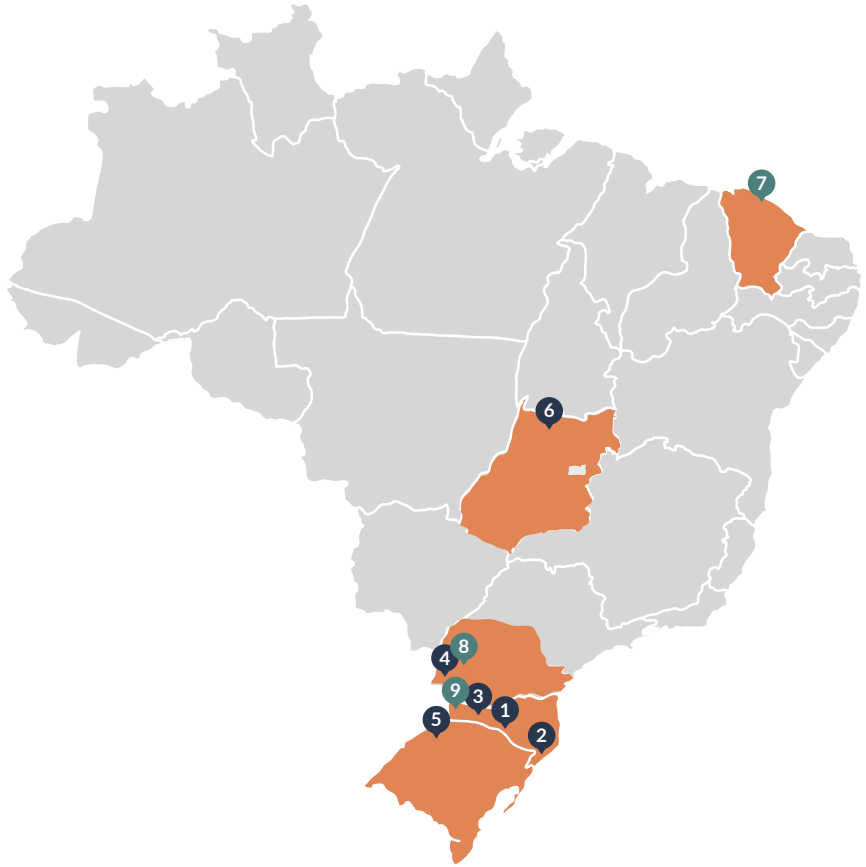
Investments in social responsibility (in thousands of R$)

Source	2019	2020	2021	Change 2021 x 2020
Non-incentivized investments	4,034.6	7,504.2	7,078.0	-5.7%
Investments through the Infancy and Adolescence Fund - FIA	2,609.0	1,868.4	1,262.8	-32.4%
Investments under the Culture Incentive Law – Rouanet Law	9,375.0	7,264.6	5,052.0	-30.5%
Investments under the Sport Incentive Law	2,490.0	1,418.5	1,262.5	-11.0%
Investments under the National Support Program for Oncological Care - PRONON	2,535.0	1,661.0	1,140.5	-31.3%
Investments under the National Care Support Program for People with Special Needs - PRONAS/PCD	2,546.0	1,436.3	1,147.5	-20.1%
Investments through the Municipal Fund for the Elderly	2,286.0	1,480.9	1,239.6	-16.3%
TOTAL	**25,875.6**	**22,633.9**	**18,182.8**	**-19.7%**

Culture and Sustainability Centers

The Culture and Sustainability Centers feature among the principal outreach initiatives with the communities in which the Company operates. Designed, installed, and maintained since 2011 with the support of ENGIE Brasil Energia, both through the medium of incentivized as well as proprietary resources, these spaces act as drivers of cultural and educational activities in regions where the Company maintains its assets, expanding access to the theater, music, dance and cinema and other artistic manifestations. The Centers are managed autonomously and independent of government and the Company by members of the local communities through a Civil Society Organization of Public Interest (Oscip).

Location – Culture and Sustainability Centers



Centers already in Operation

1. Alto Bela Vista (SC)
2. Capivari de Baixo (SC)
3. Concórdia (SC)
4. Quedas do Iguaçu (PR)
5. Entre Rios do Sul (RS)
6. Minaçu (GO)

Centers under process of implementation

7. Trairí (CE)
8. Saudades do Iguaçu (PR)
9. Itá (SC)

At the end of 2021, six centers were operating (see map), although still with some restrictions due to Covid 19 considerations. Work on a further two Centers in Trairi (CE) and Saudade do Iguaçu (PR) had begun and scheduled for conclusion in 2023 and 2024, respectively. The Itá Center (SC), in turn, continued its fund raising.

Visiting Program and Environmental Education

The Visiting Program and Environmental Education is another important tool in community engagement and the dissemination of the sustainability culture. In partnership with other entities, the Company structured visiting routines to plants in its generator complex, with explanations on how the operations work together with the presentation of locally mounted socio-environmental projects. Complementary to the Program are presentations in schools and other community environments with the emphasis on Environmental Education.

As a reflection of the lessons learnt during the period of the pandemic, in 2021 the initiative was adapted to the use of digital tools – such as conference calls and virtual tours – to maintain levels of engagement and for the exchange of information. The use of these resources expanded coverage of the activities: about 133 thousand participated during the year in the Program – a larger number than recorded in normal years.

From 2022, both the visits as well as the environmental education initiatives will be restructured with a more institutional approach, this aligned to the Company's strategic drivers. Among the principal objectives of this restructuring are the standardization of the means of execution and the connection between local and global aspects of sustainability based on the Sustainable Development Goals.

Sustainability as a shared value

As a means of engaging employees and the value chain in aspects of sustainability, ENGIE Brasil Energia runs annual events for disseminating know-how, at the same time promoting engagement among members of the community. The principal of these is the Sustainable Management Seminar, in 2021 in its tenth edition. This was made up of five presentations, among them, one from Sonia Favaretto, an icon in Brazil on the question of sustainability, and Mário Cortella, a well-known philosopher and educator, who spoke on the ethics theme. For each person enrolled in one of the events, the Company planted a tree, this translating into 1,671 plantings.

Similar events are also held in the field at the operating plants. Over the year, four editions of Environment Week (SEMA) were held with the support of local partners and the participation of an audience of 820 among employees, suppliers and the community in general.



Support for volunteering

ENGIE Brasil Energia has since 2018 held the "Energia Voluntária" campaign, which encourages employees to donate from their Income Tax bills to social projects such as culture centers, day-care centers, orphanages, hospitals, or homes for the elderly. The Company provides consultancy support for making donations and stimulating donor engagement in the supported causes. The 2021 campaign enjoyed the participation of 46 employees, generating donations of about R$ 115 thousand, distributed between the Infancy and Adolescence Fund (in which are included donations to the Pequeno Príncipe Hospital in Paraná) and the Fund for the Elderly.

In a similar vein, the Energy Wellbeing Program incentivizes employee donations to entities surrounding the Company's operations which support those most impacted by the Covid-19 pandemic. Some R$ 60 thousand were donated by employees and matched by R$ 81 thousand from the Company. These funds were largely converted into basic baskets of goods, PPEs, items of personal hygiene and cleaning materials and other initiatives of the "Saving Lives", project spearheaded by the Brazilian Development Bank - Banco Nacional de Desenvolvimento Econômico e Social (BNDES), which donated a further R$ 100 thousand.

An employee campaign for collecting donations was also run for the acquisition of school kits for children's care homes and public schools. With the participation of 245 donors, this campaign raised R$ 25.7 thousand, plus a matching amount of R$ 30 thousand from ENGIE Brasil Energia – enough to acquire 540 kits, distributed to six institutions.



R$ 115 thousand

in donations generated by the 49 employees who participated in the Income Tax campaign

Facing the pandemic in communities

In the light of the socio-economic impact of the Covid-19 pandemic on communities, ENGIE Brasil Energia continued to provide resources for supporting entities and projects dedicated to confronting these impacts, especially in the case of the more vulnerable social groups. Since the outset of the pandemic, the Company donated approximately R$ 11 million, notably to the following initiatives:

Participation in the Alliance for Life Project in Greater Florianópolis (SC)

Structuring of a large screening center for patients with suspected Covid-19 infections in order to alleviate pressure on hospital capacity in the region, greatly affected, especially in the first half of the year. ENGIE Brasil Energia contributed R$ 500 thousand to this end.

Contributing to the viability of an oxygen plant in Ponta Grossa (PR)

The Company donated R$ 750 thousand to the construction and operation of an oxygen plant in Ponta Grossa (PR), in the vicinity of the Gralha Azul Transmission System. The BNDES, through the "Saving Lives", donated a matching amount to the initiative.



Donation of medications for intubation

Given the shortage of materials at certain times during the year for patients in ICUs, ENGIE Brasil Energia joined a group of companies for donations to the Health Ministry of 3.7 million in medications used in the intubation procedure. This was enough for 500 beds over a six week period. Of an emergency nature, this initiative also enjoyed the support of TAG, Itaú Unibanco, Vale, Klabin, Petrobras, Raízen, BR Distribuidora and Instituto Brasileiro de Petróleo e Gás (IBP). All inputs were delivered to the Ministry, responsible for their distribution to the states through the Sistema Único de Saúde (SUS) ´the Brazilian National Health Service. ENGIE Brasil Energia contributed R$ 1 million to the initiative.

Adherence to the United by Vaccine movement

Movement with the objective of acquiring refrigerators, syringes, gloves, and sanitizer, among other inputs, to avoid bottlenecks in the vaccination process. The Company donated R$ 50 thousand.

Stimulus SC

The Company in partnership with LIDE Santa Catarina (Business Leaders Group), created the "Stimulus SC" fund for granting easy credit to small and medium businesses. ENGIE Brasil Energia contributed R$ 1 million to the fund, the first in Brazil, of a totally private nature, for supporting entrepreneurs to overcome losses due to the pandemic.

Donation of PPEs

Through the BNDES "Saving Lives" project for ensuring the feasibility of donations of personal protection equipment (PPEs) to four hospitals in the states of Sergipe, Rio de Janeiro, Pará and Rondônia. ENGIE Brasil Energia's contribution was R$ 100 thousand, with a corresponding amount from the Bank.



Parcerias do Bem (Partnerships for Good)

In September 2021, the Company launched the Parcerias do Bem program, inviting its clients – companies of different sizes and from different sectors – to engage in social responsibility initiatives for driving sustainable development in different regions of the country.

> **The program invites its clients to engage in social responsibility initiatives.**

Aligned to the Agenda 2030's 17 Sustainable Development Goals (SDGs), the Program has in its partnerships with organizations, its principal tool for expanding the positive impact of projects dedicated to education, culture, health, income creation and environmental conservation, among other aspects. During the year, a series of webinars was held by ENGIE Brasil Energia for potential partners, covering private social investment practices, use of fiscal incentive mechanisms, governance, and engagement of private individuals in the support of socio-environmental projects, among other themes.



Mulheres do Nosso Bairro (Women of Our Neighborhood)

Since October 2020, women, and girls from the communities where ENGIE Brasil Energia has its operations have the benefit of the Mulheres do Nosso Bairro project, an initiative for confronting the effects of the pandemic on women. In unison with the Company's commitment of promoting gender equality, activities include fostering entrepreneurship, training to join the labor market, information on support networks, sensitivity and awareness initiatives for combating domestic violence as well as support for women's health.



The project incorporates

During its first year of activity, support was given to **28** enterprises

led by women in **10** states

more than **100** **municipalities,** in different regions of the country

based on a Call for Projects under which ENGIE Brasil Energia donated **R$ 410 thousand** to investments in the businesses

At the end of 2021, **15** of these entities already reported average increases of **85% in sales**

A periodic survey recorded a happiness index among the women with their businesses at **99.3%**

Continuing these actions, the Company launched a second call for projects, this time in partnership with the Consulado da Mulher, the social action program of Consul – a Whirlpool company brand, a manufacturer of domestic appliances.

A total of 352 proposals were received out of which 30 local small projects were selected for acceleration in addition to three Civil Society Organizations (OSC) to act as project multipliers for the project – these institutions to be responsible for training 75 women entrepreneurs. The chosen initiatives are distributed in 27 municipalities in 14 states, where ENGIE Brasil Energia has operations. Together with the second invitation for projects worth R$ 508 thousand, ENGIE's total investment in the project to date has surpassed the R$ 1.2 million mark.

Worthy of note is that the participation of Consulado da Mulher in the Program came about as a result of the Parcerias do Bem (see above) initiative, bringing together one of ENGIE Brasil Energia's clients (Consul/Whirlpool) and one of the Company's social projects .

In parallel with this second round of the project, 40 online professional/entrepreneurial training courses were offered to women. At the end of the year, the platform of products for sale had 274 users in 20 different municipalities.

In turn, in the Combating Violence segment, ENGIE Brasil Energia renewed its partnership with the Instituto Maria da Penha, for creation of special content as part of the process of raising awareness on domestic violence.

40 online

courses for women's professional/ entrepreneurial training







Support for education

Among the principal impacts of the Covid-19 pandemic is the loss caused to academic activities, reflected in the difficulties of access to remote teaching facilities and in the learning deficit reported among students since 2020. In order to reverse this state of affairs over the short-term, at the end of 2021, ENGIE Brasil Energia launched a call for support for projects focused on reducing the level of school evasion or in the development of new competencies and skills among teachers and/or students.

At an investment of R$ 500 thousand, the call is expected to benefit 30 initiatives involving some eight thousand students in different regions of the country. In addition to support for Elementary and High School Education, projects related to professional training and teacher development were contemplated. Resources may also be applied to the acquisition of equipment or materials; construction or modernization; training and qualification; and the contracting of relevant services.

R$ 500 thousand investment

to benefit 30 initiatives involving some 8 thousand students in different regions of the country

Relationship with suppliers

[GRI 102-9; 102-10; 103-1; 103-2; 103-3; 205-1; 308-1; 308-2; 414-1; 414-2]
[2030 AGENDA GOALS: 8.7, 8.8]

Non-financial

OBJECTIVES

related to suppliers:

Socio-environmental evaluations and inclusive procurement

Suppliers with Science Based Targets (SBTi) commitments

Quarterly

social and environmental due diligence

process along the entire supply chain

In 2021, we established direct commercial relations with 922 suppliers and service providers as well as new links with 2,016 suppliers included in the database for consultation or price quotations – the latter not necessarily expected to result in business[6].

Aware of the potential for multiplication of good practices in the chain, the Company shares its corporate guidelines with this audience, especially the Code of Ethics and the Sustainable Management and Human Rights policies.

2030 non-financial objectives – suppliers

Among the objectives established by the ENGIE Group to be reached by 2030, two are linked to 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 preferred suppliers certified according to Science Based Targets (SBT) pledges.

[6] We excluded companies from the database where there was no commercial relationship over a given period in order to improve our control mechanisms.

Additionally, we apply the ENGIE Due Diligence policy, created by the Group to comply with the French legislation which provides for effective initiatives along the value chains of supplier companies for preventing corruption and detecting damage to the environment, health and human rights. On this basis, the Company's diligence process uses an automated platform for evaluating suppliers anchored in big data. In 2021, additional layers of analysis were added, with more detailed requirements for the 50 suppliers to which the Company has directed the greater volume of resources. The responsibility of an independent, outside company, this analysis seeks to identify compliance, operational, financial, reputational, and socio-environmental risks involved in the supplier engagement process.

Using this evaluation, negative impacts can be avoided and/or corrected. The following criteria apply to the process – related to the company and to the partners:

- Non-compliance with standards and regulations of governance;
- Register in the National Registry of Civil Convictions for Administrative Misconduct;
- Association with forced labor;
- Register in the National Registry of Disreputable and Suspended Companies and/or in the National Registry of Convicted Companies (CNEP);
- Existence of legal actions linked to environmental infringements;
- Regularly features in the environmental organs (when necessary);
- Negative repercussion in news outlets relating to socio-environmental issues or governance.





During 2021, all the suppliers in our database were evaluated according to ethical, social, and environmental criteria, 55 suppliers (to which the Company has directed the largest volume of resources) being evaluated on a more detailed basis. The Ethics Forum is responsible for the issue of opinions in relation to the maintenance or exclusion of commercial relations with suppliers where proven cases of an irregularity are found at the evaluation stages.

Stages in the evaluation of suppliers

Preliminary ethics evaluation
performed annually across the entire database.

Level I Due Diligence
focus on the 50 largest suppliers to the Company.

Level II Due Diligence
investigation performed by an independent third party, when infringements, effective or potential, are detected in relation to the person or company analyzed potentially posing a risk to the Company.

All long-term service agreements classified as high risk for the Company are now subject to specific documentary analysis. Equally, control is exerted over additional obligatory requirements for the supply or provision of specific services deemed critical.

Obligatory documents for the provision or supply of services are described both in the negotiation process as well as in the agreements between parties, subject to acceptance by the suppliers. In the case of services which require the work of contracted companies at ENGIE Brasil Energia's installations, an induction meeting is held with the obligatory presence of all outsourced manpower. At this meeting, the Company emphasizes safety procedures as well as socio-environmental care applicable to the execution of all activities.

Once activities under the agreement begin, periodic analyses are made to evaluate the performance of the supplier in relation to different pre-established criteria. Among the aspects verified, particularly in the case of critical services, are quality; occupational safety, medicine, and hygiene; the environment; social responsibility; improvements/innovations applied or suggested during the performance of the services and administrative and legal questions.

Should the performance of the supplier not achieve the agreed levels in any of these aspects, action plans are drawn up jointly to make the appropriate adjustments. However, failure to effectively execute the plan can trigger contractual recission.

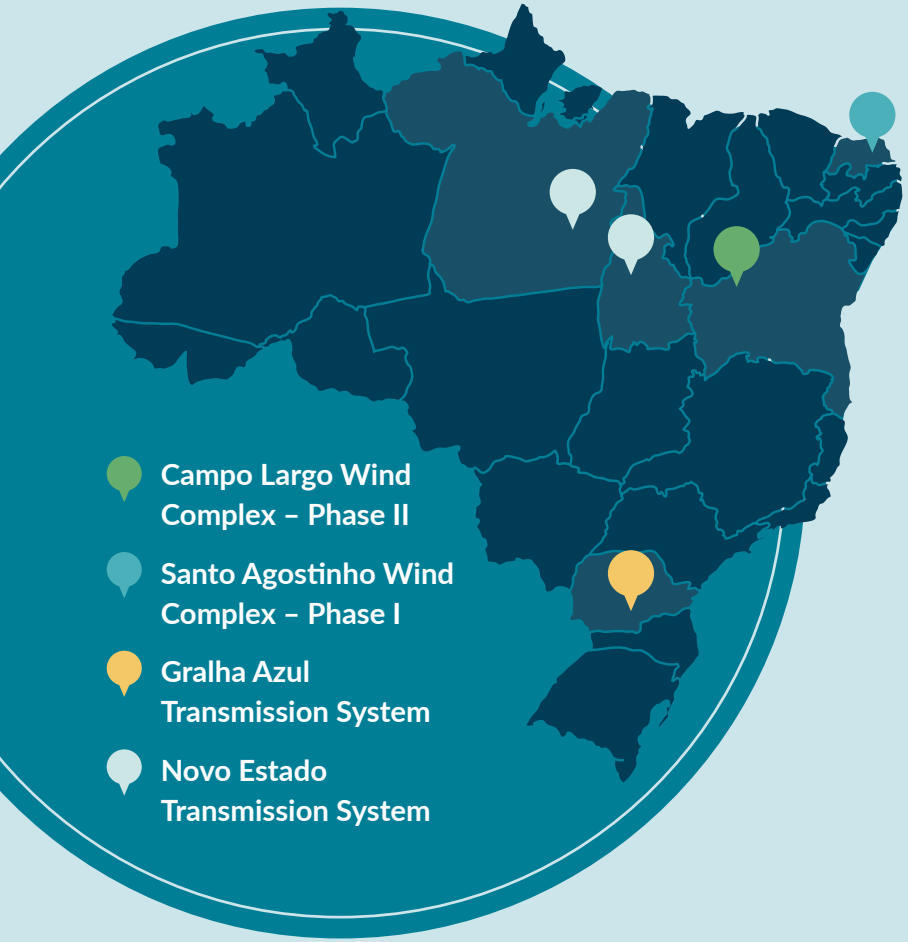


Exploitation of child, forced and compulsory labor and combatting discrimination

Under no circumstances does ENGIE Brasil Energia tolerate the exploitation of child, forced or compulsory labor and reserves the right not to hire services or to have a commercial relationship with entities that adopt this practice, moreover, committing to notifying the appropriate authorities of cases of which it becomes aware.

In line with one of its fundamental principles, the Company remains alert to sensitive situations which may compromise the execution of its activities, each one of our employees certifying that no type of discrimination is being practiced. All such principles and expected behavior of our employees, suppliers and partners are enshrined in EBE's Human Rights Policy and Code of Ethics, widely disseminated among all stakeholders and accessible from the ***corporate website.***

Projects in implementation



The installation of generation and transmission projects, directly or indirectly, has socio-environmental impacts on the surrounding communities. These effects, especially the negative ones, are evaluated and measured in studies preliminary to implementation and during the entire period of construction work. The results are presented to the communities through the medium of public hearings where debate between the Company, the licensing authority, and the communities themselves takes place — sometimes also including the representatives from the Public Prosecutors Office, local associations and third sector organizations. Based on this process, the licensing authority establishes supervisory and monitoring programs — many of which are maintained in the subsequent operational phase as a sine quo non for renewal of the licenses originally granted.

Among the environmental impacts, the local risk to biodiversity is particularly important, requiring preventive and mitigatory actions and appropriate management. Executed by ENGIE Brasil Energia from the conceptual stage of the projects, these actions include specialized technical studies, continuous monitoring of environmental conditions of the territory concerned and, where necessary, compensatory initiatives – always with the evaluation and agreement of the licensing authorities. Likewise, initiatives for preserving the archeological heritage are taken during the implementation stage.

The Company devotes special attention to the engagement of the local community in relation to socio-environmental aspects based on guidance from the licensing organs more especially through the medium of Social Communication and Environmental Education programs. In addition, EBE promotes sustainable development of the territories through support for socio-cultural projects and creation of income as well as improvements to local infrastructure.

In 2021, ENGIE Brasil Energia continued its socio-environmental programs which monitor construction work underway at the three assets still pending completion: the Campo Largo Wind Complex –Phase II, which went into operation in the second half, and the Gralha Azul and Novo Estado transmission systems still awaiting conclusion. In addition, similar socio-environmental initiatives were begun at the Santo Agostinho Wind Complex. Hereafter, find some socio-environmental actions undertaken within the scope of these projects.



Campo Largo Wind Complex Phase II

Social Initiatives

Highlights of 2021

In the year in which the project went into full operation, the focus of social investment in the region was on the conclusion of initiatives undertaken during the implementation phase, notably:

- Modernization of the Umburanas Citizenship Forum;
- Construction of the Campo Largo Community Center in Sento Sé;
- Construction of the Rodoleiro community square with sports' court in Umburanas;
- Implementation of a sewing atelier in the Rodoleiro rural community and running the "Between Thread and Needles – Sewing Dreams" sewing course, benefiting 20 men and women;
- Donation of hospital material and equipment for combating Covid-19 and basic baskets of goods.

Fresh Water

ENGIE Brasil Energia supported the adoption of Aqualuz technology for water treatment in cisterns of 40 families residing in the Rodoleiro and Barriguda da Brasília rural communities. More than R$ 90,000.00 were invested in the project comprising a simple structure made of a stainless steel box with glass lid, which purifies water in the cisterns through the sun's rays. This contributes directly to improvements in the health of the population, including diagnosis of the communities with respect to water purification, training of families in the use of the technology, installation of the equipment and the monitoring for the purposes of orientation.

Digital inclusion

The Company installed a Digital Empowerment Center (CED) in Umburanas, state of Bahia, in partnership with RECODE. In all, 82 young people took part in the activities between 2020 and 2021, with a focus on learning, income generation, entrepreneurship and civic engagement based on the responsible use of technology.

Continuous engagement

The mapping and engagement of stakeholders was continuous during implementation phase. Community demands were registered, assessed and addressed to our team – which adopts a weekly routine of updating and stakeholder management.

- **56** organizations and **93** stakeholders mapped.
- **186** manifestations recorded by the Community Complaints Office, among requests, questions, complaints.
- **350** people took part in the Social Communication Program.
- **18** meetings held with the Project Monitoring Commission (CAE).
- **2,500** people were recipients of information on the project in 2021 alone through the various information channels.

R$ 2.5 million

were invested during the implementation in social, environmental and cultural projects of interest to stakeholders



Campo Largo Wind Complex Phase II

Environmental Initiatives

Located in Bahia, the Campo Largo Wind Complex - Phase II covers an area of 72.6 km² in a region - identified as a migratory route for birds[7] - which together with the areas covered by the Campo Largo – Phase I and Umburanas wind complexes, forms a mega wind complex generating more than 1.0 GW of installed capacity located in a total area of 200 km². The wind power installations and access roads occupy less than 4% of the leased area – the remainder being preserved. In addition to the risk of birds colliding with wind turbines, installation of the project implies risks for other species of fauna in the region as well. This is principally due to brush clearance necessary for the installation of equipment and buildings as well as opening accesses to the construction/assembly sites.

These and other risks were managed and mitigated through environmental programs dedicated to monitoring and rescuing fauna, recovering degraded areas – mainly in the area of the works patio – and preserving the Legal Reserve area. Special attention also focused on the activities of rescue, identification, and conservation of the local archeological heritage. Where necessary, when the environmental impact cannot be mitigated, compensatory measures have been introduced with the agreement of the licensing authority.

In relation to birdlife, field teams monitor the species – registering any carcasses found in the region – in accordance with the environmental licensing process. In 2021, as well as in years preceding installation, no incidents were identified that would be indicative of birds of any species colliding with wind turbines in the Complex.

During the year, dialog with environmental organs and other stakeholders progressed. In this context, two public audiences were held on the upgrading of the Boqueirão da Onça Environmental Preservation Area (APA), adjacent to the wind complexes, an area with one of the largest remaining and best conserved examples of *caatinga*. This APA, which includes the Boqueirão da Onça National Park, has great biological importance, with a wide range of the region's species of fauna and flora.

With the beginning of operations at the Complex, the socio-environmental programs - introduced during the implementation phase - were extended in line with the requirements under the Operating License (LO), granted by the state environment protection agency Instituto de Meio Ambiente e Recursos Hídricos – Inema/BA.

[7] According to the Annual Report of the National Center of Research and Conservation of Wild Bird Life of the Centro Nacional de Pesquisa e Conservação de Aves Silvestres (Cemave).



Santo Agostinho Wind Complex Phase I

Social Initiatives

Prospection of demands

Launched in 2021, the implementation of the project includes a survey of the main stakeholders and local social demands. In all, 27 projects were examined, principally in the areas of health, social development, and education. Six have already been selected for development before the end of the first half of 2022, concentrated on digital inclusion, additional schooling, and income creation, including training in the breeding of caprinae.

A start was also made on the 16 projects of the Detailed Environmental Report Programs, such as Monitoring and Management of Fauna, Flora Rescue, Control of Erosion, Monitoring of Water Resources, Management of Solid Waste and Liquid Effluent, Environmental Education, Management of the Archeological Heritage and Integrated Educational Heritage Program.

Improvement of Access Roads

The restoration of RN-129, a state road giving access to the towns of Lajes and Pedra Preta, was deemed one of the Company's social investment priorities in the region – given the precarious nature of the route and urgent need for repairs. Improvements are scheduled for early 2022 and will bring direct benefits to the local community as well as giving access to employee traffic and machines and equipment to the construction works patio.

Through a Technical Cooperation Agreement with the State of Rio Grande do Norte Highway Department (DER), ENGIE Brasil Energia is responsible for executing road improvements while the state government is committed to providing preventive and corrective maintenance once restorative work is concluded.

R$ 25 million

is the total forecasted investment in social, environmental, and cultural projects of public interest, whether related to the licensing process or of a voluntary nature

Stakeholder management

The relationship with the stakeholders began even before a start was made on implementation of the complex with a public hearing arranged to present environmental impact studies to the community, answer questions and hear opinions. The Stakeholder Holder Management Program is designed to engage different stakeholders and minimize possible conflicts and is the responsibility of a dedicated team.

The Communication Program was also begun prior to the inception of work on the project, identifying the target public, mapping available communication channels and defining the means used to inform the population as to ENGIE Brasil Energia's actions during the implementation period.

47 institutions and **189 stakeholders** (individual persons) were mapped.

21 manifestations registered by the Community Complaints Office.



Santo Agostinho Wind Complex Phase I

Environmental initiatives

The Santo Agostinho has already received a preliminary license issued by the environmental protection agency for the state of Rio Grande do Norte, *Instituto de Desenvolvimento Sustentável e Meio Ambiente* (Idema), declaring that the project is environmentally viable. All implementation licenses have been obtained as well as the respective agreements from the National Artistic and Historical Heritage Institute (IPHAN) for the wind farms to be built. Among actions provided under the authorizations is the rescue and monitoring of flora and fauna, waste management, the restoration of degraded areas, initiatives for conservation of the biodiversity and the management of the archeological heritage. Of the total 21 environmental programs conditional to the licensing process, 19 had already begun by the end of 2021.



Gralha Azul Transmission System

Social Initiatives

Promoting health

Supporting the improvement in the conditions for attending the population, ENGIE Brasil Energia continued to proactively combat Covid-19, donating material and equipment to departments of health and hospitals in the region. On another front, free cancer prevention examinations were also offered in 11 municipalities.

2,200 people

underwent pap smear tests, mammograms, PSA and skin analysis.

Stakeholder management - 2021

481 manifestations

recorded by the Community Complaints Office – requests, questions, complaints or denunciations. Attendance via the Community Complaints Office is continuous, enabled through different digital platforms and by visits of the team to the community.

4,000 communication materials

produced and distributed to inform the community about the project.

R$ 2 million

is the total invested in social, environmental and cultural projects of public interest

Quilombola Communities

In 2021, support focused on meeting the Covid 19 challenge through preventive campaigns, the donation of PPEs and about **500 basic baskets of goods** – to five quilombola communities neighboring the project. Another significant donation was the photovoltaic panels installed in the Remaining Community of the Rio do Meio Quilombolas, in the municipality of Ivaí (PR). The panels are installed at the community's Cassava Milling Plant with the aim of contributing to productive inclusion and food security.

Environmental Education initiatives were performed and others inherent to the Basic Quilombola Environment Project which includes the production of materials such as the Pocket Guide to Quilombola Rights, an Organic Agriculture Handout and the Paiol de Telha Community Base Tourism Plan.

More than 230 quilombola families benefited from the project.



Gralha Azul Transmission System

Environmental initiatives

The one thousand kilometer route of the transmission line transects 27 municipalities and about 2.4 thousand properties. Considering the environmental characteristics of the region – nearly 70% of the area occupied by the System is pasture or arable land – the main impact on the biodiversity from the asset's implementation is brush clearance.

The Company undertakes a series of preventive actions to mitigate these impacts and included in the licensing process. This is additional to the voluntary initiatives for the conservation of the indigenous species, involving programs which contemplate the monitoring of the flora and fauna, recovery of seeds, reforestation, and restoration of degraded areas, among other activities.

ENGIE Brasil Energia has also invested in engineering solutions to help reduce the impacts of construction work such as the erecting of powerline towers, cable stringing using drones (see box) and the adoption of self-supporting towers - requiring less space for implementation in areas of primary vegetation. The project adopts a route which avoids areas of preservation such as Private Natural Heritage Reserves and Conservation Units, consolidated urban and touristic centers, and traditional communities, among other preventive measures.

Hence, where necessary brush clearance is planned and authorized by the regulator in total compliance with the legislation. The environmental protection agencies are also kept informed through periodic reports on total vegetation loss involved in the project and other eventual impacts due to the implementation of the transmission line.

The System's environmental license was granted and approved by the state of Paraná environment protection agency, Instituto Água e Terra (IAT) together with the authorizations and agreements of the Fundação Cultural Palmares (FCP), the National Indian Foundation (Funai), the National Historic and Artistic Heritage Institute (IPHAN), the State Coordination for the Artistic and Historic Heritage (CEPHA) as well as all municipalities transected by the line and other relevant bodies.



Gralha Azul Transmission System

Environmental initiatives

Technology used for preservation

To reduce environmental impacts during implementation work, ENGIE Brasil Energia used drones for stringing the Gralha Azul Transmission System's cables. Light aircraft were also adopted for engineering inspections and environmental surveys, monitoring among other aspects, tower erection processes, occupational safety, brush clearance and waste management.

Energy cable stringing using drones reduces the need for brush clearance in the gaps between the towers by nearly 50% – helping to preserve the native forest cover and consequently, reducing the impact on the natural habitat of fauna. In the case of Gralha Azul, forecasted brush clearance for implementing the System accounted for just 4% of the area covered by the almost one thousand kilometers of transmission line. With the use of drones, this percentage dropped to approximately 2.2%.



Gralha Azul Transmission System

Environmental initiatives

Conservation of the native species

As environmental compensation, in 2021, the Company began the planting of native species in an area of 750 hectares, acquired in the municipality of Castro (PR). Here, 130 thousand indigenous species such as Araucaria, Imbuia, Pau-Marfim, Cedro Rosa and Canela are to be planted over a three year period. This is equivalent to seven times the total cleared by the project – and surpassing the legally required compensation.

In addition to this compensation, ENGIE Brasil Energia has voluntarily already completed the donation and planting of nine thousand seedlings together with the conclusion of the Germplasm Rescue Program which collects seeds for cultivating seedlings. Since the inception of the project, more than 2.7 million seeds have been collected and donated for production of seedlings in the nurseries run by the state environmental protection agency, Instituto Água e Terra (IAT).

In the same context, the Company has entered into an agreement with Embrapa Florestas for the installation of 13 technological units of reference in rural properties around the state of Paraná, with the objective of transferring technology and establishing a collection of this genetic material and future production of seedlings. With the focus on the planting and conservation of these species, the project combines genetic conservation with the creation of income for the local community.



Novo Estado Transmission System

Social Initiatives

Highlights 2021

During the year, the excavation of five archeological sites in the region was concluded. The collected remains were analyzed in a laboratory, systematized, and sent to the Casa de Cultura, in Marabá (PA), responsible for their safekeeping. In line with the permanent dialog with the local communities, socio-environmental investments were allocated to:

- The holding of workshops for training in headwater spring protection, fish farming, cooperativism and associativism.
- Incentives for breeding small-size animals and fish farming.
- Strengthening of family farming and agroecology, benefiting rural producers of Palmares II (Parauapebas/PA) and the Matinha (Guaraí/TO) community.
- Modernization of the Nossa Senhora do Perpétuo Socorro Municipal School for Infant Education in the Bela Vista District (Floresta do Araguaia/PA), and
- Digital inclusion with the donation of IT equipment to Vila Paraíso School (Xinguara/PA) and the Palmares II Digital Inclusion Center (Parauapebas/PA).

Community support

Since the start of the project, tackling the Covid-19 pandemic has been at the core of the Company's community support initiatives through the donation of materials and equipment to hospitals and municipalities neighboring the project. In addition to the healthcare area, investments also went to infrastructure with the recuperation of access roads and bridges and to public order – donations of equipment and material for the construction of Police Department Offices and Paramilitary Police Posts.

R$ 3 million

is the total invested in social, environmental and cultural projects of public interest

Management of Stakeholders

The Novo Estado project has been notable for its Stakeholder Management, undertaken with the support of an online platform which combines Business Intelligence and geo-localization. The tool permits the use of data analysis of mapped organizations and interactions with interested parties/parties impacted by the project. Analysis by individual based on registers of each interaction and management on the basis of various charts, facilitate decision-making. Data is analyzed in weekly stakeholder management meetings.

- **100** institutions and **737** stakeholders mapped.
- **1,858** interactions registered and analyzed.
- **46** manifestations registered by the Community Complaints Office.
- **18** meetings with Social Committees comprising representatives from government and the local communities.
- **1,500** primers distributed with information on the project and environmental education.



Novo Estado Transmission System

Environmental initiatives

The project 1,800 kilometers long, intercepts 24 municipalities between the Amazon and the Cerrado biome as well as 1,143 properties. Implementation is taking place in parallel within 20 socio-environmental programs focused on reducing, controlling, and compensating impacts caused to the environment and the local community. Among the initiatives are flora and fauna monitoring and rescue, archeological prospection and recovery, environmental education, supervision of construction, social communication, recovery of degraded areas, environmental management, and action plans for the control of malaria, among other themes.

As with the Gralha Azul project, the route taken by the transmission line avoids, wherever possible, Conservation Units, indigenous tribal lands and quilombola communities. In areas where there are forest remnants and route diversion impossible, self-supporting power line towers are erected. This also applies to locations with a high density of threatened species protected by law or secondary green cover in the process of regeneration.



Control of malaria

A stretch of the Novo Estado Project Transmission lines is located in areas where malaria is endemic. For this reason, the Company has been contributing to tackling the disease. Among the actions for reinforcing preventive infrastructure, control and diagnosis of malaria in the municipalities, are the acquisition and donation of motorcycles, microscopes, computers, intradomicile spray pumps, among other equipment. In addition, printed matter is being donated for use in educative campaigns on the theme.



6 YEAR'S PERFORMANCE

Scenario 2021

Operational performance

Business performance

Scenario in 2021

Macroeconomic Context -

Recovery

from the economic effects of Covid-19 / High inflation

Worst

hydrology

on record since 1931

Preventive and mitigating actions by the operator

increase of more than

R$ 25 bi

in expenses for the National Interconnected System (SIN)

Macroeconomic scenario

The second year of the Covid-19 pandemic in general was marked by a recovery in economic growth in juxtaposition to high inflation – a common trend both in Brazil and elsewhere. The Gross Domestic Product (GDP) grew by 4.6%, which practically compensates the 3.9% decrease observed in 2020.

With mass vaccination against coronavirus and the corresponding resumption in the routine and habits of the majority of the population, Brazilian economic activity entered a recovery phase, albeit slightly below forecast. According to data published by the federal statistics office – Instituto Brasileiro de Geografia e Estatística – IBGE, the industry and services sectors closed the year reporting growth of 4.5% and 4.7%, respectively. For agriculture, there was a drop of 0.2% in 2021 - attributed, in part, to climatic problems that impacted the year's harvest.



Recording the worst result since 2015, high inflation had an impact on growth with a deterioration in household purchasing power. The IPCA reported a variation of 10.1%, while the INPC posted 10.2% for the accumulated twelve-month period of 2021.

The uncertainties brought about by the pandemic and its consequences also influenced the financial market. The basic rate of interest (Selic) reached 9.2%, an increase of 7.2 p.p. in the year while the US Dollar (Ptax) rose as high as R$ 5.58 – at the end of 2020, the closing rate was R$ 5.19, by comparison.

In the labor market, the effects of the economic recovery also had their impact although still only in a modest fashion. Data published by the IBGE in October 2021, indicated an unemployment rate of 12.1% – in 2020, this rate had ended the year at 14.5%.

Electricity power industry

Empresa de Pesquisa Energética (EPE) data shows net energy consumption in Brazil increasing 5.2% in 2021 to 500,209 GWh – whereas in 2020 there was a decrease of 1.6% due to the impact of the pandemic.

The sector which produced the strongest increase was industry with 9.2% growth in the year, followed by commercial, with 5.5% and residential at 1.8%. Other classes rose 2.6%. As to the breakdown by region, the Northeast recorded the greatest increase in consumption with a 7.0% rise compared to 2020, followed by the North (5.6%), South (5.3%), Southeast (4.9%) and the Central-West region (2.1%).

Maintaining a tendency seen over the past few years, free market consumption rose 6.7% in 2021 – in 2020, the increase had been 13.1%. The captive market reported a decline in consumption of the order of 0.6%, 2021 versus 2020.

Data published by the IBGE in October 2021, indicated an unemployment rate of 12.1% – in 2020, this rate had ended the year at 14.5%.





Hydrological influence

The hydrological year 2021 in Brazil was the worst since records began in 1931: the average Affluent Natural Energy (ENA) was 51.6 GWa – 1.6 GWa below the ENA for 1971, the worst year up to 2021. Water shortages were concentrated mainly in the first nine months of the year.

Predicting this risk, in October 2020, the Electric Energy System Operator (ONS) began a series of negotiations with the responsible organs, requesting the dispatch of additional thermal energy outside the order of merit as well as flexibilization of minimum outflow rates at various hydropower plants in the SIN as a means of preserving reservoir levels. The System and Service Charges underlying the corresponding additional thermal dispatch totaled more than R$ 25 billion in expenses during the year.

Despite the efforts of the ONS in the 2021 rainy season, reservoir levels in the South-East submarket reported the slowest recovery of the last decade, recording at the peak (May/21), 35.6% of useful storage capacity (20 p.p. below the 2020 peak).

As a result, prospects of energy rationing and deficits began to surface at the beginning of the second half of 2021, media repercussions alerting to the lowest reservoir levels in the historical series, most notably in August and September.

After recording an average of R$ 201.2/MWh in the first six months of the year, PLD spiked at a ceiling of R$ 583.88/MWh in July and August in the light of the hydrological scenario – closing off the third quarter at an average of R$ 581.76/MWh.

The situation reversed in the final quarter of the year with the fourth best hydrology in the past decade due to an early start to the rainy season. Thus, reservoirs in the South-East submarket, where levels had sunk as low as 16.5% of their useful volume, threatening an energy deficit at the end of September, began refilling ahead of schedule and already in October (normally reservoir levels begin to recover in December). The year ended with levels of 25.6% of useful volume in the region, 6.4 p.p. more than amounts registered for the end of 2020.

The year ended with useful volumes at 25.6% in the region, 6.4 p.p. more than the amount recorded at the end of 2020. Consequently, the average national PLD in the final quarter closed at R$ 134.64/MWh. The average price relative to 2021 as a whole was R$ 276.52/MWh, an increase of 67% compared with 2020 – when there was a slippage in demand due to the pandemic.

R$276.52 /MWh

was the average price relative to 2021 as a whole



Operational performance

[GRI G4-EU1; EU2; EU11; EU30]
[SASB IF-EU-420A.2]
[2030 AGENDA GOALS: 7.2, 7.3, 8.2, 9.1, 9.4]

Generation
8.1% **higher than recorded in 2020**

hydroelectric **+9.2%**
thermoelectric **-8.0%**
complementary **+22.9%**

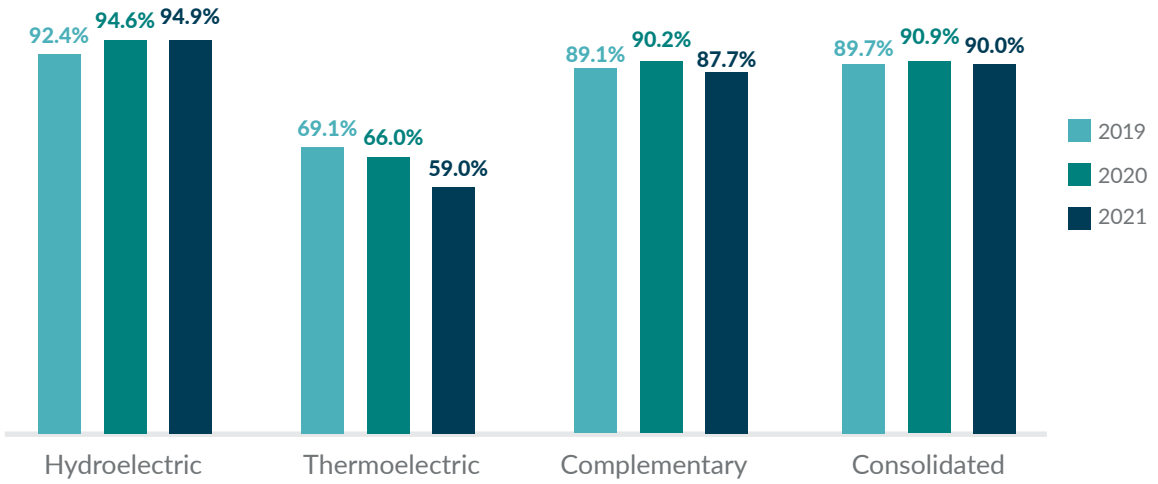
Availability
0.9%
lower than in 2020

Average volume of transported gas (TAG): 4.1% **lower than in 2020**

In 2021, considering all programmed stoppages at plants operated by ENGIE Brasil Energia, the uptime ratio was 90.0%, 94.9% for the hydropower plants, 59.0% at the thermoelectric plants and 87.7% at the plants fired from complementary sources.

Uptime reduction at the thermoelectric plants is due largely to programmed maintenance at both Jorge Lacerda C and Pampa Sul Thermal Power Plants, both of which underwent a general revision during the year. Meanwhile at the complementary plants, the reduction was influenced by corrective maintenance at the wind farms.

Uptime operating considering scheduled shutdowns



Meanwhile, the electricity output from plants operated by ENGIE Brasil Energia in 2021 was 37,916 GWh (4,328 average MW), resulting in output 8.1% higher than 2020, when the total was 35,163 GWh (4,003 average MW).

At the hydropower plants, generation in 2021 was 9.2% higher than the preceding year due to the increased generation between January and July 2021, compared with the same period in 2020, when there was a critical hydrological shortfall in the Southern subsystem.

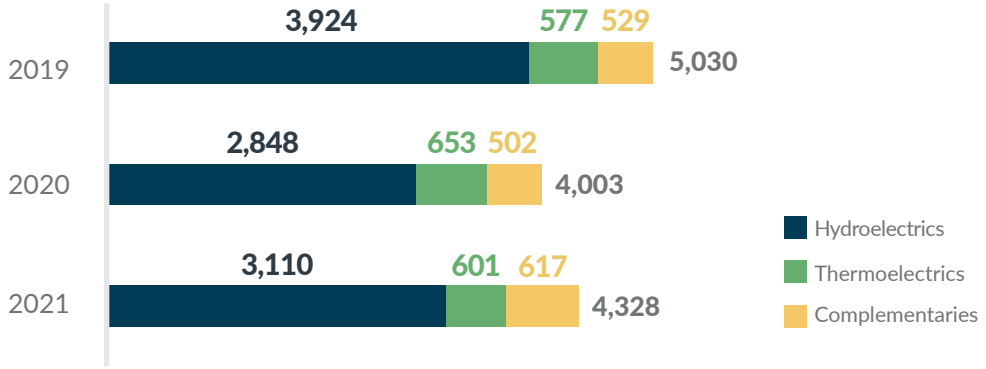
Generation from the thermoelectric plants was 8.0% down on 2020, mainly due to overhauling of generator units as well as the sale of the Jorge Lacerda Thermoelectric Complex.

The complementary plants reported an increase of 22.9% in generation reported for 2021, largely due to the entry into commercial operations of the Campo Largo II Wind Complex.

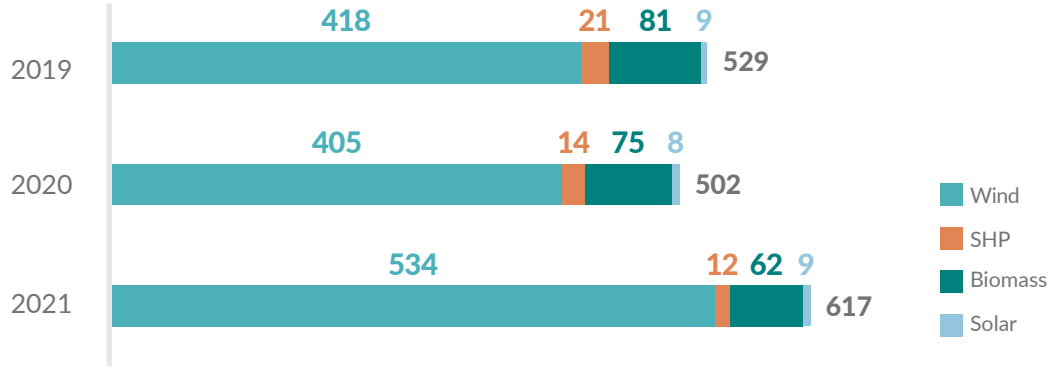
Important to highlight in 2021 that while global generation at ENGIE Brasil Energia was 8.1% higher compared to 2020, this was still 13.9% down on generation reported for 2019.

In addition to the hydrological shortfall in the Southern subsystem in 2020, in general the pandemic triggered a reduction in National Interconnected System energy consumption. This contributed to a reduction of 20.4% in ENGIE's global generation in that year in relation to 2019.

Generation (average MW)



Generation by complementary source (average MW)



Worthy of note is that the increase in the Company's hydroelectric generation does not necessarily result in an improvement in economic-financial performance. Similarly, a reduction in this type of generation does not automatically mean a deterioration in economic-financial performance. This is due to the Energy Reallocation Mechanism (MRE), which is designed to share the hydrological risks inherent to hydropower generation among its participating members. In addition, relative to the Company's thermoelectric generation, reduction may increase exposure (due to the Company's level of contracting) to the Differences Settlement Price (PLD), the contrary also being the case, all other variables remaining the same.

With respect to gas transportation, Transportadora Associada de Gás (TAG) receives natural gas daily at gathering points along its pipeline network and delivers it to the carriers at entry points known as city gates, in return being remunerated for the transportation service, comprising a portion for the effective transportation of the natural gas molecule and a charge for unutilized capacity (ship-or-pay). All Natural Gas Transportation agreements are regulated by the National Petroleum Agency (ANP).

> **MRE share the hydrological risks inherent to hydropower generation among its participating members.**



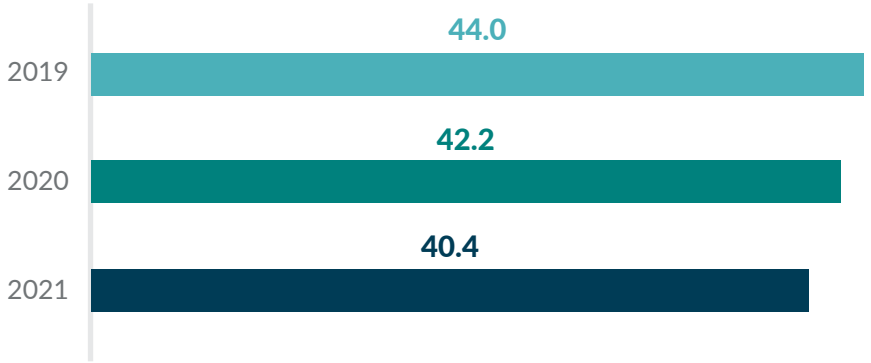
Operations Generation Center (COG)

Of the 9,939.4 MW, the operation for which the Company is responsible, 58.7% (5,832.8 MW) are operated remotely out of the COG, at its headquarters in Florianópolis (SC). In this model, sophisticated technological resources permit real time monitoring, so increasing operational efficiency. A total of 59 of the 68 plants in the generator complex are operated via COG. Itá Hydroelectric Plant, the largest asset in installed capacity operated by the Company, is undergoing adaptations which will enable remote operations to begin from the second half of 2022.

On March 16, 2021, the Lower Chamber of Congress approved a Bill proposing Law 4,476/2020, known as the New Gas Law, amending the regulatory framework for the sector. The text received the presidential sanction without veto on April 8, 2021. The aim of the new law is to increase private investment in the sector, promote competition, reduce costs, and increase natural gas consumption. In addition, the new legislation gives transparency, independence, and isonomy of information to industry agents, legal security to existing contracts and agility in contracting transportation capacity. It also gives more autonomy to the ANP to regulate the industry's activities.

In 2021, transported gas volumes were 40.4 million m^3/day (42.2 million m^3/day in 2020). In 2021, TAG had transportation agreements with Petrobras and Proquigel, while in 2020, all agreements had Petrobras as carrier.

Average volume of gas transmitted (MM m^3/day)



Modernization of the hydroelectric plants

Essential for ensuring operational efficiency, hydroelectric power plant modernization constitutes an investment axis of the Company. In this context in 2021, modernization projects at the Salto Osório, (PR), Jaguara (SP) and Miranda (MG) hydropower plants continued apace. At Salto Osório, a start was made on the project in early 2017. Considered a major overhaul, the project involves the replacement of equipment and systems with modern technology. In addition, this will translate into a gain in efficiency, resulting in increased physical guarantee (estimated at 13.9 average MW). In the second half of 2021, the plant was able to report startup in commercial operations of the first modernized generator unit. The forecast is for the project to be fully concluded in the first quarter of 2024.

In turn, the modernization of the Jaguara Hydroelectric Plant has progressed with the manufacture of a new generator for unit 01, installation and start in operations being due before the end of 2022. In the case of Miranda Hydroelectric Plant, the modernization project involves instrumentation and control systems (including generator speed and voltage regulators in addition to the supervisory system). In 2021, dimensioning and acquisitions of material were undertaken, stages which precede activities in the field - to start in 2022.

Business performance

[GRI 102-6; 201-1; 201-4; G4 EU3]
[SASB IF-EU-000.A; IF-EU-000.B]

689
free clients

1,758 consumer units
Represent 41% of physical sales

90%
satisfied or very satisfied

Net Promoter Score:
69.6%

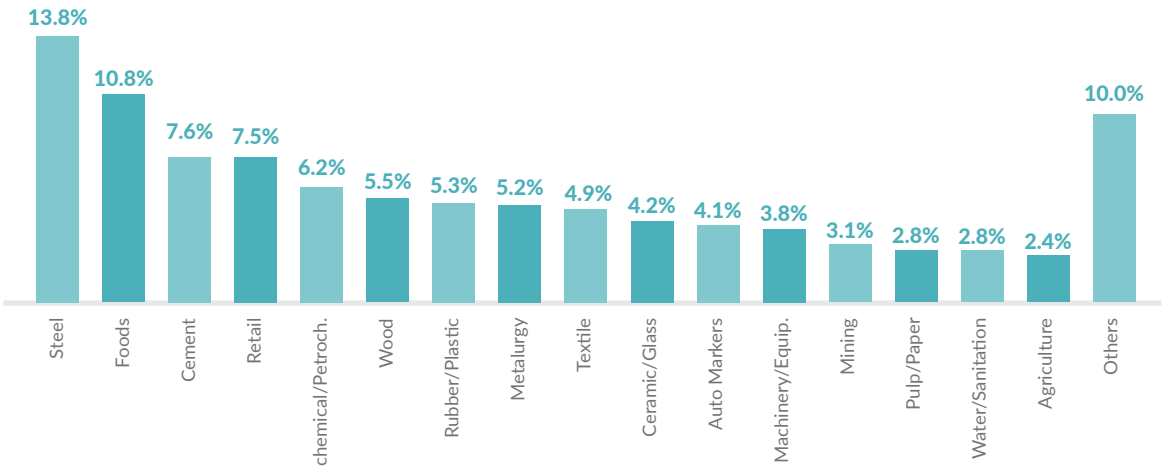
Adjusted Ebitda:
R$ 7,217 mi
(+12.3% compared to 2020)

Total earnings in 2021:
R$ 2,038 mi
(R$ 2.50 per share)

Commercial dynamic

In addition to intelligent portfolio management (see more on page 49), we used a commercial dynamic driven by portfolio diversification among clients of different sizes and in different sectors. This practice compensates for eventual impacts from negative conjunctural scenarios in given segments, thus reducing excessive risks from any given sectorial exposure. During the course of 2021, the offer of decarbonization solutions was also a highlight of the period through the use of carbon credits (RCEs) and renewable energy certificates (CERs), both of which are becoming increasingly attractive to the market (**see more here**).

Diversification of clients portfolio



Clients relationship

❄689
free clients served
- 4.3% compared with 2020

❄ 1,758
consumer units attended
+ 7.3% compared with 2020

❄ 644 thousand tCO_2
RCEs sold in 2021 (Emissions Reduction Certificates – carbon credits)

❄ 8 thousand GWh
CERs traded in 2021 (Renewable Energy Certificates – I-REC and ENGIE-REC)

SATISFACTION INDICES*

90.0%
of clients satisfied or very satisfied.
- 2.5 p.p. in relation to 2020

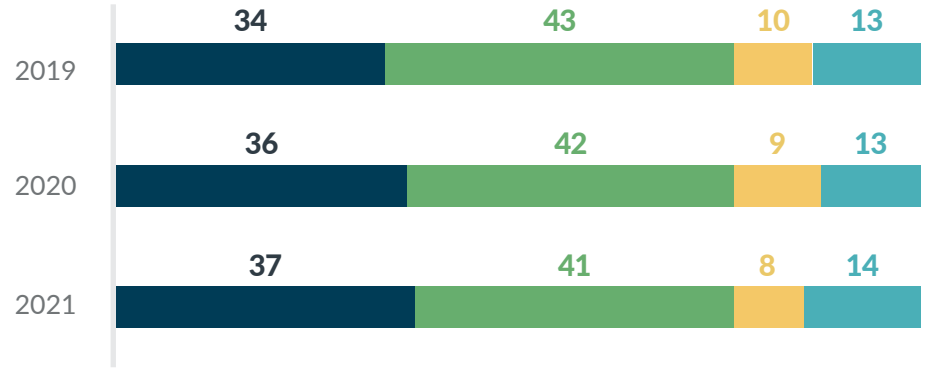
69.6%
of Net Promoter Score (NPS)
+ 2.4 p.p in relation to 2020

*According to a survey executed with a sample of clients in the final quarter of 2021.

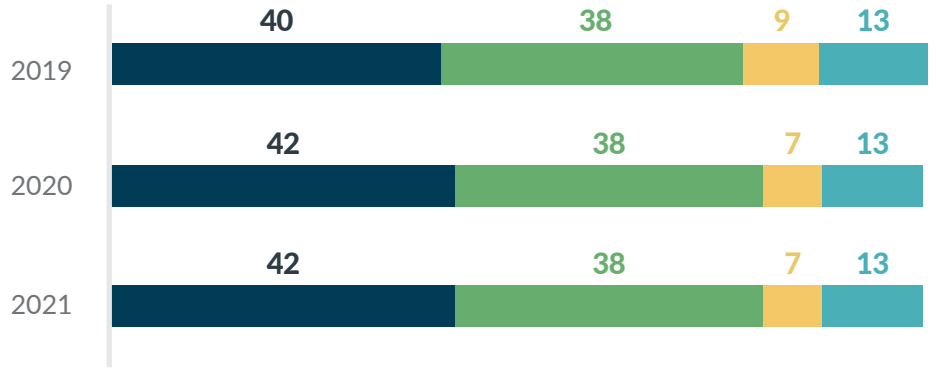


In 2021, free consumers (excluding CCEE and other revenues) represented 40.7% of physical sales, decrease of 0.8 p.p., when compared to 2020.
Free consumers also represented 37.6% of net operating revenues, in line with 2020.

Breakdown of Customers by Physical Sales (%)



Breakdown of Customers in Contracted Sales Comprising Net Operating (%)





Synthesis of financial indicators

Result by segment – 2021 x 2020 (in R$ million)

	Electric energy			Solar panels	Gas transportation	Consolidated
	Generation	Transmission	Trading			
	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)
Impairment, net	(998)	-	-	(78)	-	(1,076)
Disposal of subsidiary	(200)	-	-	-	-	(200)
Equity income	-	-	-	-	602	602
Other operating expenses, net	(9)	-	-	-	-	(9)
Income (loss) before financial results and taxes	**4,121**	**264**	**14**	**(102)**	**602**	**4,899**
	2020					
Net operating revenue	8,539	2,555	1,084	81	-	12,259
Operational costs	(3,328)	(2,274)	(1,112)	(82)	-	(6,796)
Gross income (loss)	**5,211**	**281**	**(28)**	**(1)**	**-**	**5,463**
Selling, general and administrative expenses	(268)	(1)	(3)	(5)	-	(277)
Impairment	(58)	-	-	(41)	-	(99)
Equity income	-	-	-	-	487	487
Other operating expenses, net	(5)	-	-	-	-	(5)
Income (loss) before financial results and taxes	**4,880**	**280**	**(31)**	**(47)**	**487**	**5,569**
	Variação					
Net operating revenue	22	281	29	(50)	-	282
Operational costs	409	(290)	17	31	-	167
Gross income (loss)	**431**	**(9)**	**46**	**(19)**	**-**	**449**
Selling, general and administrative expenses	(46)	(7)	(1)	1	-	(53)
Impairment, net	(940)	-	-	(37)	-	(977)
Disposal of subsidiary	(200)	-	-	-	-	(200)
Equity income	-	-	-	-	115	115
Other operating expenses, net	(4)	-	-	-	-	(4)
Income (loss) before financial results and taxes	**(759)**	**(16)**	**45**	**(55)**	**115**	**(670)**

Net operating revenue

Net operating revenue increased from R$ 12,259 million in 2020 to R$ 12,541 million in 2021, that is a rise of R$ 282 million (2.3%). This variation reflects mainly the following factors:

Generation and sales of energy from the portfolio: an increase of R$ 22 million (0.3%), essentially driven by the following positive effects: (i) R$ 174 million in the remuneration of concession financial assets relative to the portion of the payment for the grant of the Jaguara and Miranda hydropower plant concessions with respect to the energy destined to the Regulated Contracting Environment (ACR), due to the increase in average balances and higher inflation between comparative periods; (ii) R$ 30 million from transactions executed in the short-term market, principally on the CCEE. These effects were partially attenuated by decreases of: (iii) a non-recurring R$ 84 million from a tax claw-back in 2020; (iv) R$ 46 million in revenue from energy sales agreements in the regulated and free markets due to a combination of the variations in energy volumes sold and average selling price; (v) R$ 34 million with respect to supplier indemnifications due to claims and collection of contractual fines for downtime, received in the previous year; and (vi) R$ 30 million arising from the export of energy in 2020.

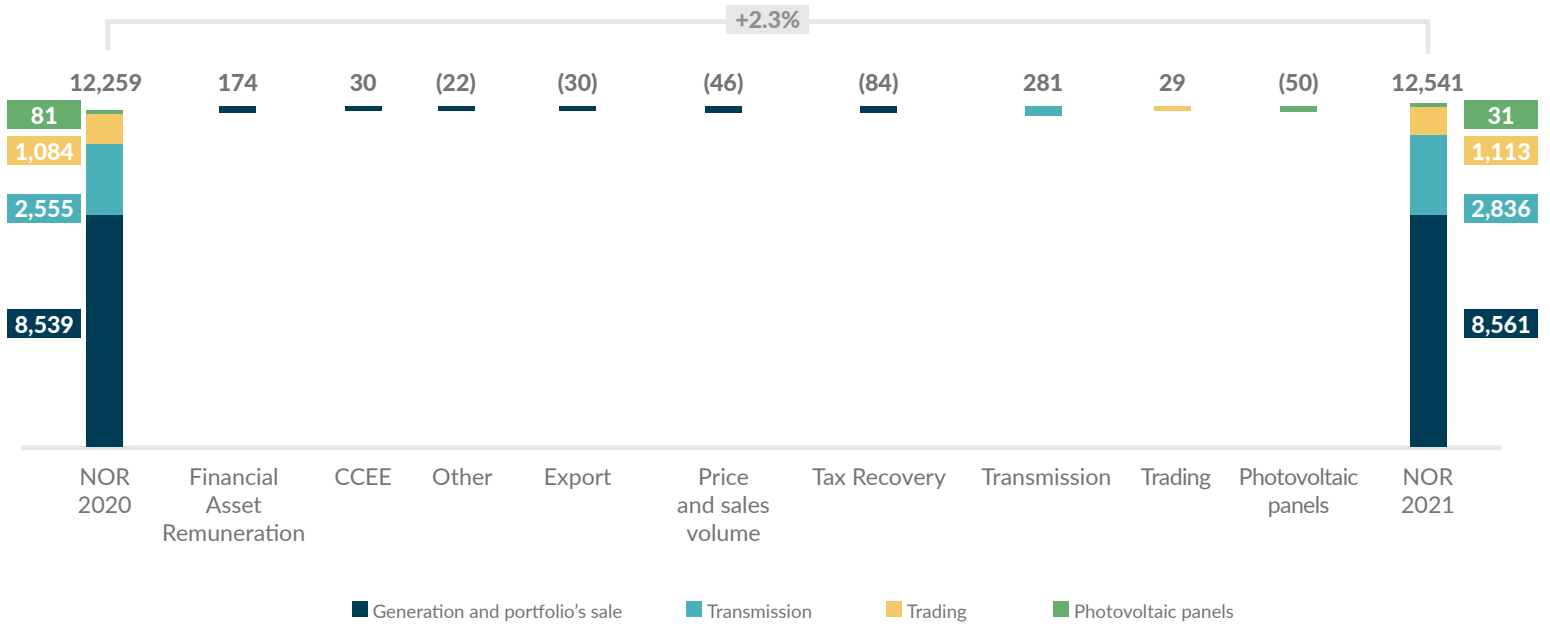
Transmission: an increase of R$ 281 million (11.0%) in the transmission segment.

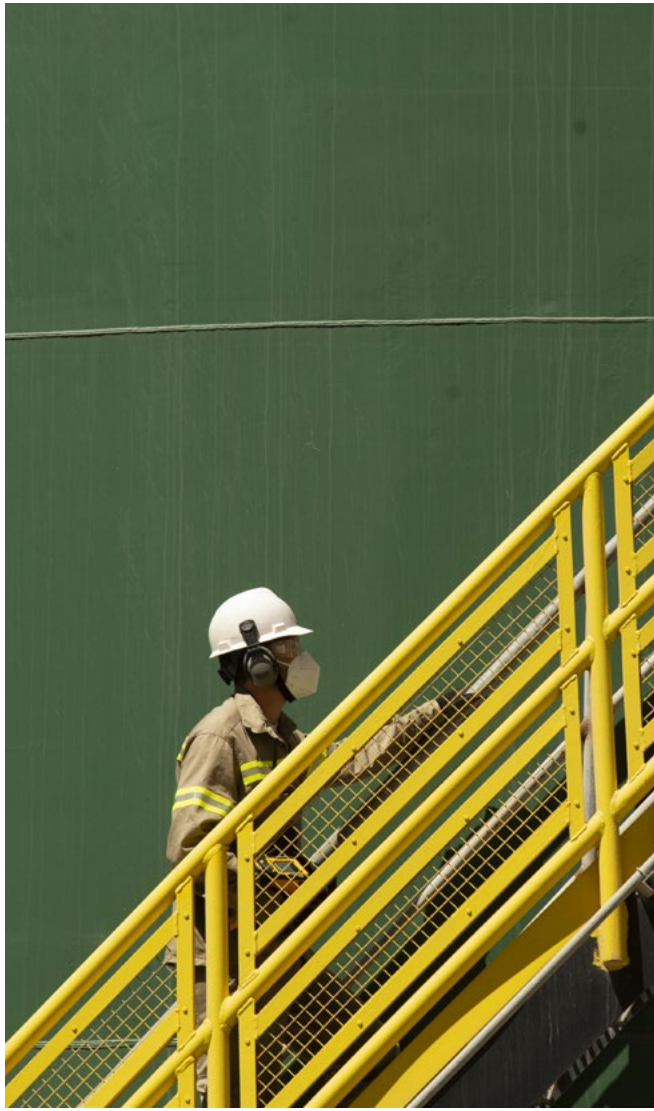
Trading: an increase of R$ 29 million (2.7%) arising principally from the positive result in 2021 from marking to market future sales and higher revenues from transactions in the short-term market, partially attenuated by the decrease in operations realized.

Solar panels: a decrease of R$ 50 million (61.7%) in the sale and installation of solar panels.

Net operating revenue increased from R$ 12,259 million in 2020 to R$ 12,541 million in 2021, that is a rise of R$ 282 million (2.3%).

Evolution in Net operating revenue (R$ million)



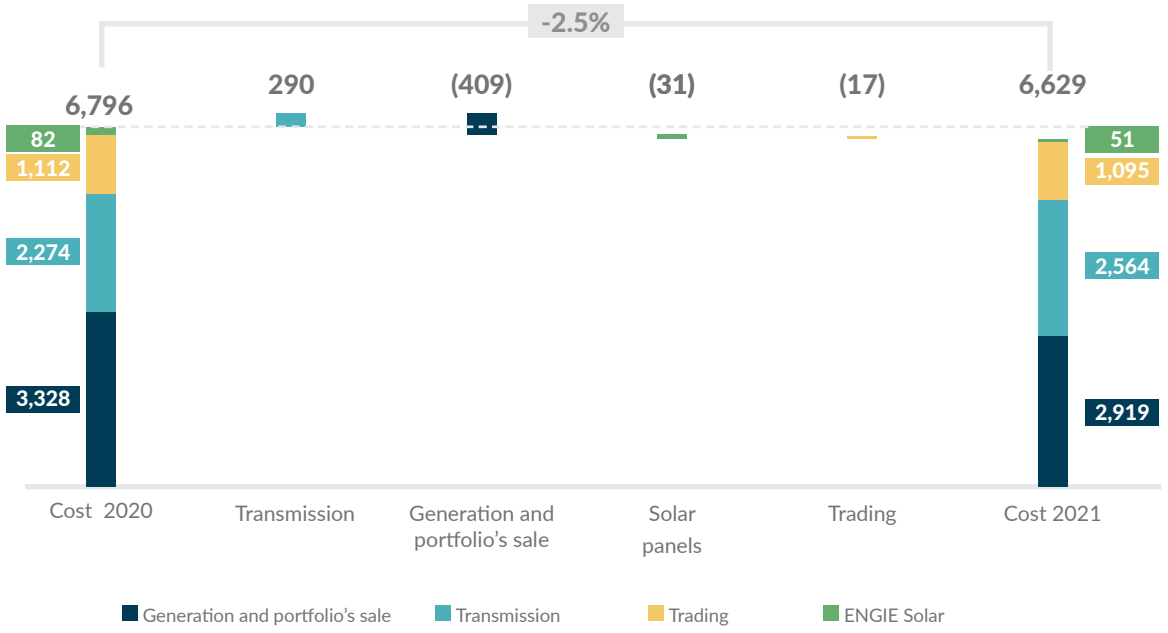


Operational costs

In 2021, operational costs reached R$ 6,629 million, R$ 167 million (2.5%) lower than the costs posted in 2020 of R$ 6,796 million. This variation was a reflection of the combination of the following factors: (i) a decrease of R$ 409 million (12.3%) in the generation and sales of energy from the Company's portfolio segment; (ii) a reduction of R$ 31 million (37.8%) in solar panel sales and installation costs; (iii) a reduction of R$ 17 million (1.5%) in the costs of energy trading operations; and (iv) growth of R$ 290 million (12.8%) in the costs of the transmission segment.

Of the variation under item (i), particular note should be made of the recovery in past energy costs following the renegotiation of hydrological risk following the enactment of laws 14.052/2020 and 14.182/2021, which between the two years recorded an increase of R$ 623 million. In addition, part of the values booked in 2021 relates to those hydroelectric plants, the ownership of which is in the hands of companies forming consortia and therefore subject to the unanimous agreement of all participating members as per Aneel Normative Resolution 895/2020. The process of reaching such an agreement only occurred in November 2021.

Evolution in Operational Costs (R$ million)

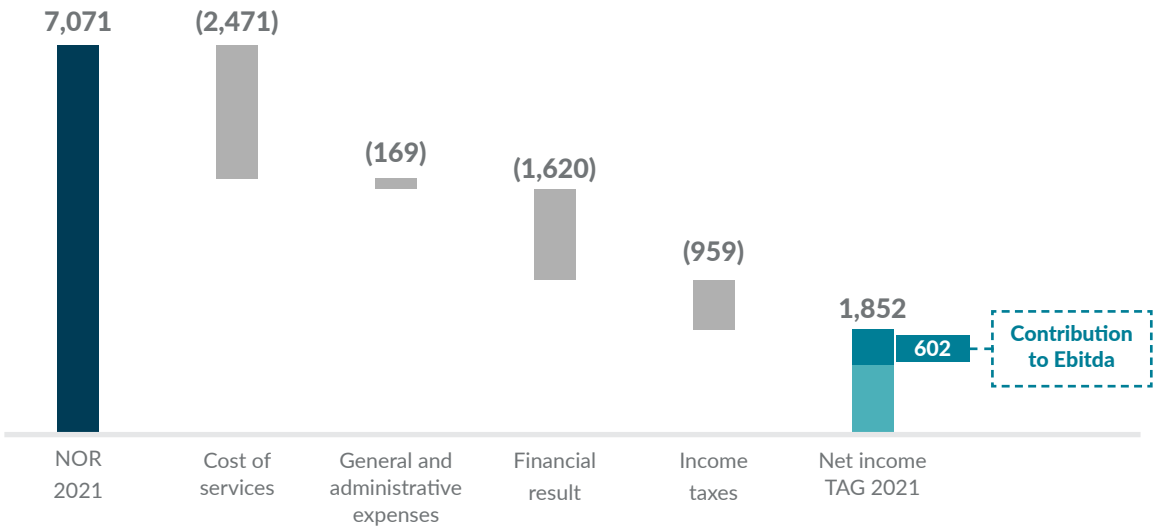


Equity Income – Gas Transportation

On July 20, 2020, the Company acquired an additional shareholding stake of 3.25% in TAG out of the total 10% still held by Petrobras, the corporate stake in TAG increasing from 29.25% to 32.5%. On a 2020 x 2021 comparison, equity income increased by R$ 115 million (23.6%) from R$ 487 million in 2020 to R$ 602 million in 2021.

The variation was a combination of the following effects: (i) R$ 365 million increase in Ebitda principally due to the restatement of transportation tariffs and FX variation in one of the transportation agreements, partially attenuated by readjustment in operational and maintenance contracts; (ii) R$ 127 million increase in Income Tax and Social Contribution, mainly due to the increase in 2020 x 2021 pre-tax profits; booking of tax credits clawed back from past fiscal years and the non-recurring effect of the booking of extemporary tax incentive credits on profits generated in the Sudene development area (R$ 72 million) in 2020; (iii) an increase in net financial expenses of R$ 80 million, largely driven by the increase in the US Dollar exchange rate on currency denominated loans, which are protected by a hedge – the effects of the exchange variation are compensated by the increase of Ebitda and CDI between the consecutive years; and (iv) an increase of R$ 43 million in depreciation and amortization expenses, due to the incorporation of new fixed assets.

Income Statement TAG (R$ million)





Ebitda and Ebitda margin

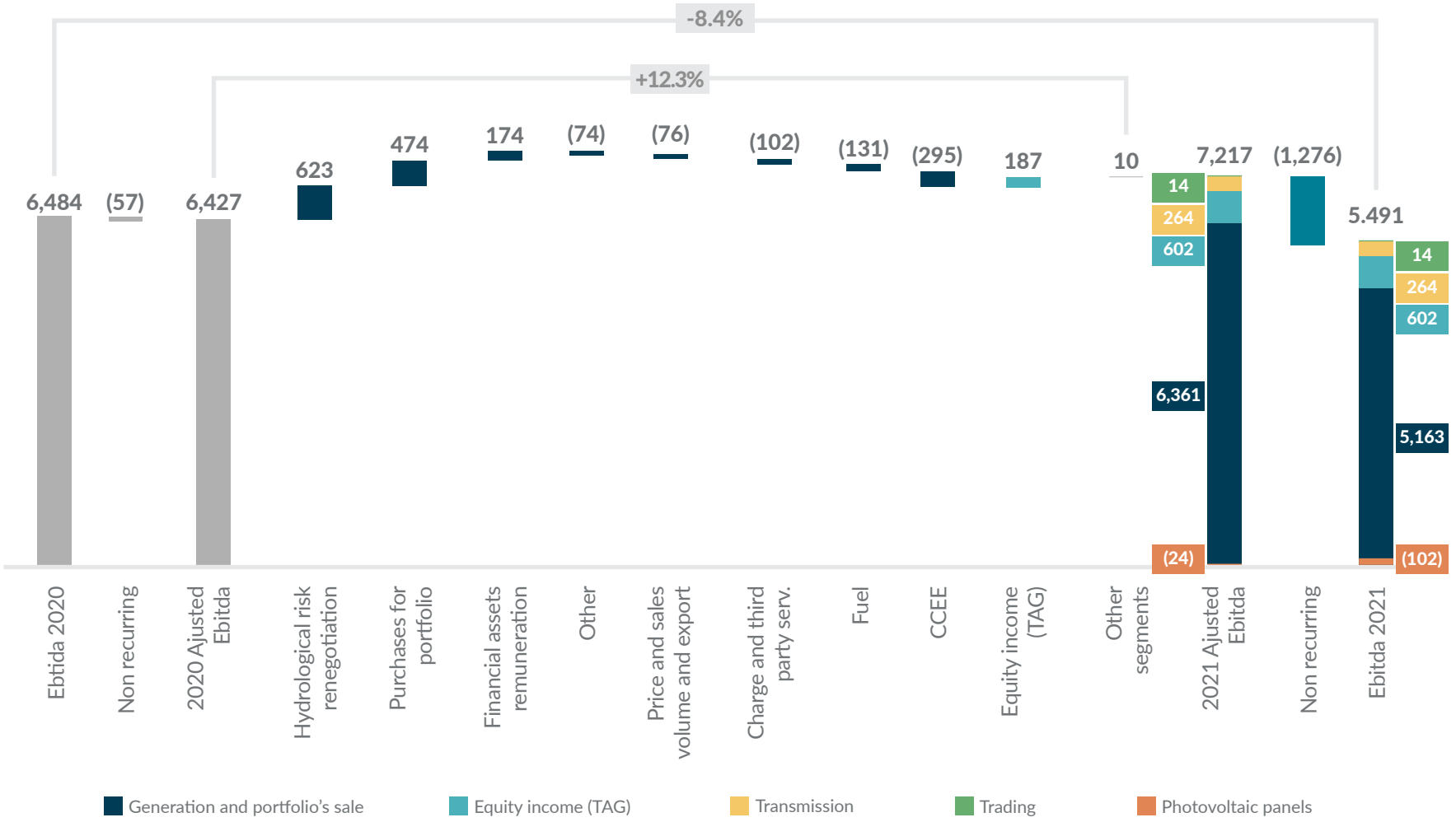
On a 2021 x 2020 comparison basis, adjusted Ebitda increased by R$ 790 million (12.3%) from R$ 6,427 million in 2020 to R$ 7,217 million in 2021. This change was a combination of the following positive effects: (i) R$ 593 million (10.3%) from generation and sales of energy from the Company's portfolio segment; (ii) R$ 187 million (45.1%) due to the improved results from the joint corporate stake in TAG; and (iii) R$ 45 million (145.2%) generated from the energy trading segment. These positive impacts were counterbalanced by the following negative effects: (iv) R$ 19 million (380.0%) in the solar panel segment; and (v) R$ 16 million (5.7%) from the energy transmission segment.

The generation segment, with a variation shown in item (i) above, reflected the following positive items: (i) R$ 623 million as a result of the renegotiation of hydrological risk; (ii) R$ 474 million in energy purchases; (iii) R$ 174 million in revenue from remuneration and monetary restatement of the Jaguara and Miranda concession assets; and (iv) R$ 15 million in insurance costs. These effects were attenuated by the following decreases: (v) R$ 295 million in transactions from the short-term market; (vi) R$ 131 million with the consumption of proprietary fuel; (vii) R$ 56 million in costs with materials and third party services; (viii) R$ 46 million of charges for network use; (ix) R$ 46 million from the combination

Adjusted Ebitda increased by R$ 790 million (12.3%).

of the variations in energy volume sold and net average selling price; (x) R$ 34 million with supplier indemnifications; (xi) R$ 30 million from energy exports; (xii) R$ 29 million in payroll costs; (xiii) R$ 11 million in royalties; and (xiv) R$ 15 million relative to other revenues, operational and administrative costs and expenses.

Ebitda evolution (R$ million)



Generation Adjusted Ebitda Margin

The adjusted Ebitda margin for the generation segment posted an increase of 6.1 p.p. from 68.2% in 2020 to 74.3% in 2021.

Consolidated Adjusted Ebitda Margin

The consolidated adjusted Ebitda margin posted an increase of 4.7 p.p. from 52.8% in 2020 to 57.6% in 2021.

It should be noted that the consolidated Ebitda margin is partially reduced due to the effects of energy trading operations, the booking of revenues and costs relative to the construction of the transmission lines and the operations realized by the EGSD subsidiary where margins are lower than those recorded from the Company's remaining businesses. The following table reconciles net income with Ebitda:

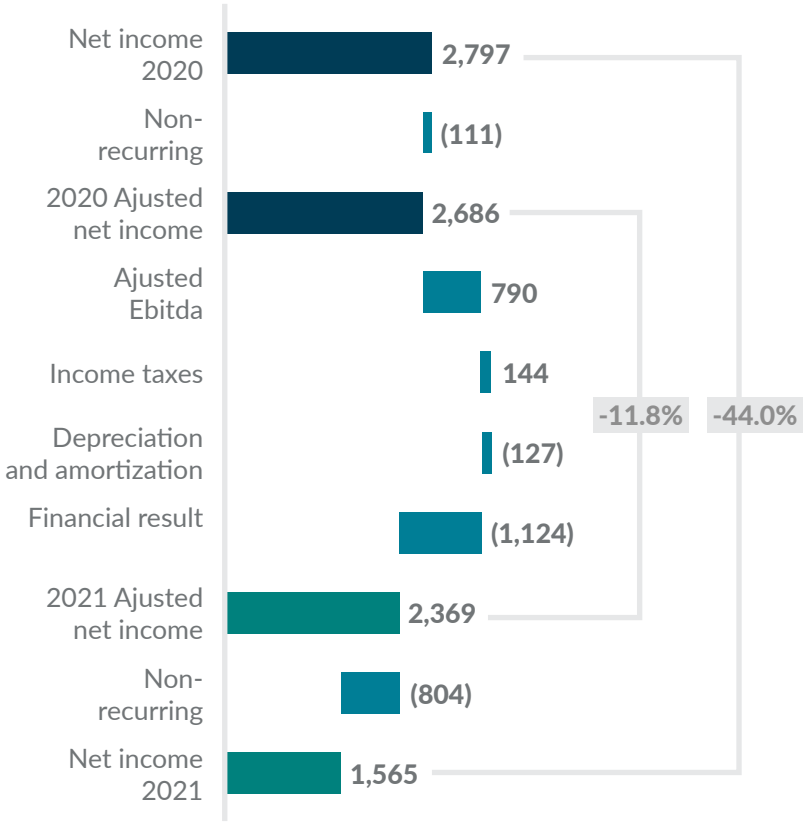
Reconciliation of net income with Ebitda

(In million of R$)	2019	2020	2021	Chg % 2021x2020
Net income	2,311	2,797	1,565	(44)
(+) Income tax and social contribution	777	890	255	(71.3)
(+) Net financial result	1,207	1,882	3,079	63.6
(+) Depreciation and amortization	863	915	1,042	13.9
Ebitda	**5,158**	**6,484**	**5,941**	**(8.4)**
Non-recurrent effects				
(+) Impairment	5	99	1,076	987.1
(+) Disposal of subsidiary	-	-	200	100
(+) Gain in laws uit	-	(84)	-	(100)
(+) Revenue from breach of contract - Pampa Sul	(321)	0	-	-
(+) Extemporane ous tax incentive credits	-	(72)	-	(100)
Ajusted Ebitda	**4,842**	**6,427**	**7,217**	**12.3**

Net income

Net income fell from R$ 2,797 million in 2020 to R$ 1,565 million, that is, a decrease of R$ 1,232 million or 44.0%. This negative effect is the result of the following impacts: (i) growth of R$ 790 million in adjusted Ebitda; (ii) increase of R$ 127 million of depreciation and amortization; (iii) increase of R$ 1,124 million of recurring net financial expenses; (iv) decrease of R$ 144 million of Income Tax and Social Contribution on recurring transactions; and (v) booking of non-recurring effects net of Income Tax and Social Contribution with a negative impact of R$ 915 million. Excluding the non-recurring effects, net income was down by R$ 317 million (11.8%) between the compared years.

Net income (R$ million)

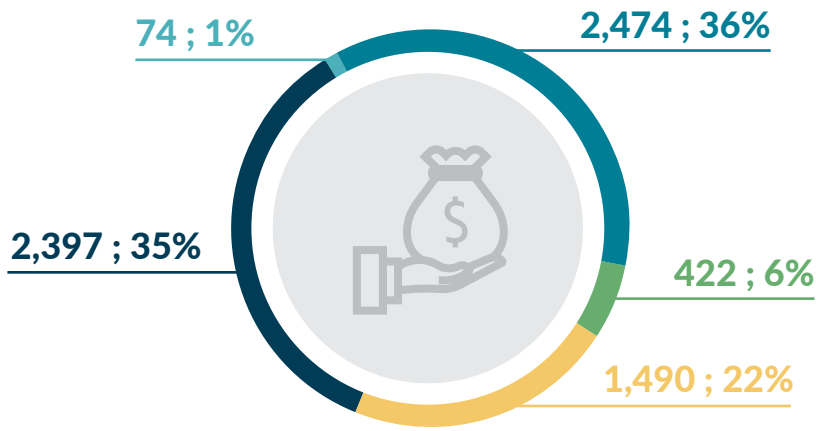




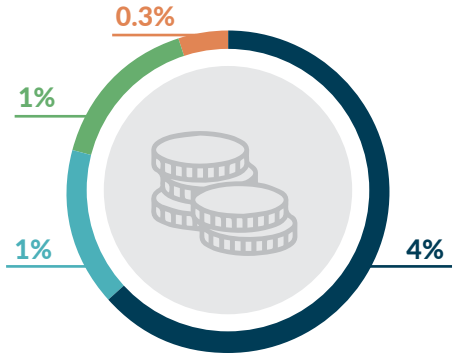
Value added and financial support received

In 2021, the Company generated R$ 6,858 million in value added. The results were distributed across our stakeholders as the figure shows. The result is 7.9% lower than the R$ 7,444 million distributed in 2020.

Value-added distribution (R$ million and % of total)

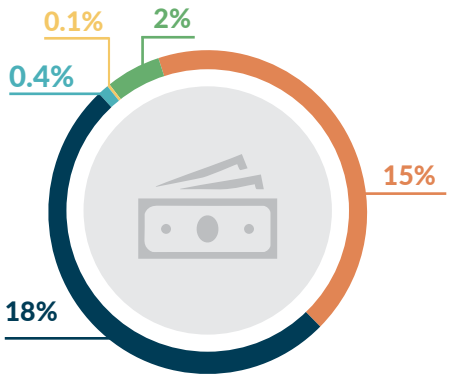


Out of R$ 422 million distributed to employees:



- R$ 282 million – compensation and charges.
- R$ 67 million – benefits.
- R$ 55 million – profit sharing.
- R$ 18 million – Fundo de Garantia por Tempo de Serviço (FGTS).

Out of R$ 2,474 million distributed to government:



- R$ 1,221 million – federal taxes.
- R$ 29 million – state taxes.
- R$ 5 million – municipal taxes.
- R$ 169 million – sectoral charges.
- R$ 1,050 million – charges on concessions payable.

Support received

The total monetary value of financial support ENGIE Brasil Energia received from the government in 2021 was R$ 107 million, up 38% from 2020´s R$ 77.9 million, of which:

R$ 103 million
in federal incentives, via Amazon Development Superintendence (Sudam) and Northeast Development Superintendence (Sudene)

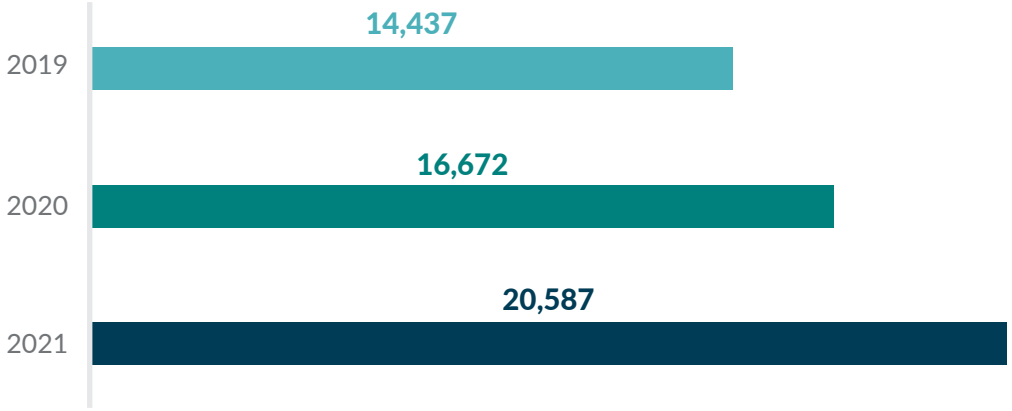
R$ 2 million
in connection with the Lei do Bem, also federal, for RD&I incentives

R$ 2 million
in Bahia State incentives, in connection with the "Desenvolve Bahia Program."

Debt

As of December 31, 2021, total consolidated gross debt, representing principally loans, financing, debentures, and preferred shares redeemable, net of hedging operations, totaled R$ 20,587 million — an increase of 23.5% (R$ 3,915 million) compared to the position as of December 31, 2020. The average debt maturity at the end of 2021 was 6.9 years.

Total debt (R$ million)



The variation in the Company's debt is related essentially to a combination of the following events during 2021: (i) drawdowns from the Brazilian Development Bank (BNDES) and on-lending banks amounting R$ 2,794 million, largely for the construction of the Novo Estado and Gralha Azul transmission systems and Campo Largo II Wind Complex; (ii) R$ 530 million loan to build the Company's working capital and early repayment of the financing for the São Salvador Hydroelectric Power Plant and indirectly controlled entities forming the Santa Mônica and Trairí Wind Complexes; (iii) R$ 762 million from the 2nd debentures issue of Pampa Sul TPP and emission of ENGIE Brasil Energia; (iv) generation of R$ 2,244 million in charges to be paid and monetary restatement; and (v) R$ 2,415 million in amortizations of loans, financing and debentures.

The average weighted nominal cost of debt at the end of 2021 was 13.1% — equivalent to IPCA + 2.8% — (7.6% — equivalent to IPCA + 2.9% — at the end of 2020). The increase in relation to the previous year is mainly due to the acceleration of the IPCA index in the period and the new contracts for financing projects under construction linked to this index, which accounts for the indexation of 66% of the total debt.

On December 31, 2021, the Company's net debt (total debt less result of derivatives operations, deposits earmarked to the guarantee of debt servicing and cash and cash equivalents) was R$ 14,612 million, an increase of 24.0% compared with the end of 2020.



Net debt (R$ million)

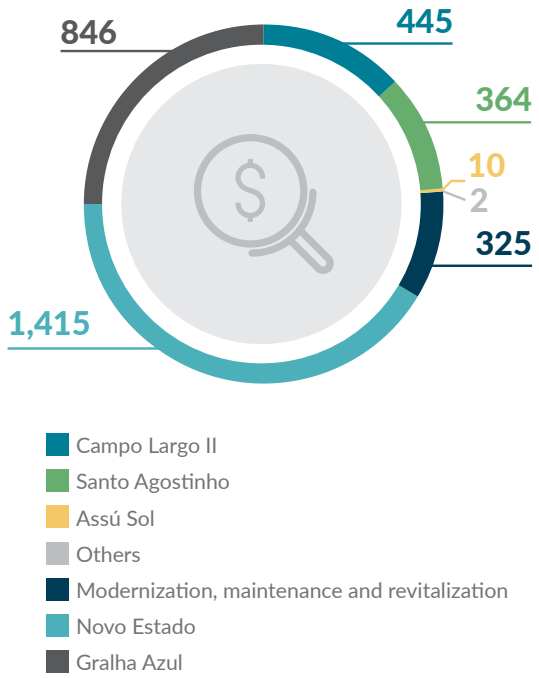
	12/31/2019	12/31/2020	12/31/2021	Chg. % 2021 x 2020
Gross debt	14,763	17,246	20,645	19.7
Result of derivatives operations	(326)	(574)	(58)	(89.9)
Deposits earmarked for the payment of debt	(375)	(347)	(819)	136.0
Cash and cash equivalents	(3,870)	(4,539)	(5,156)	13.6
Total net debt	**10,192**	**11,786**	**14,612**	**24.0**
Net debt x Ebitda	**2.0X**	**1.8X**	**2.0X**	

Capital Expenditures

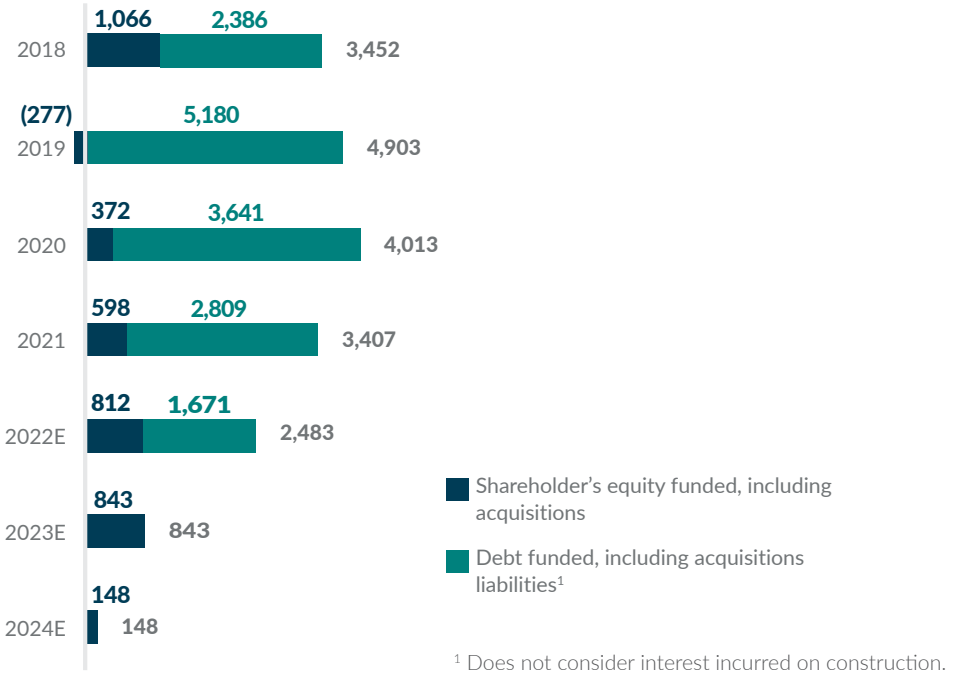
In 2021, the Company invested R$ 3,407 million, of which:

- R$ 10 million for the acquisition of equity interest in Assú Sol Photovoltaic Complex;
- R$ 3,072 million applied in the construction of new projects as follows: (i) R$ 1,415 million concentrated in the Novo Estado Transmissora de Energia transmission line; (ii) R$ 846 million in the Gralha Azul Transmission System; (iii) R$ 445 million in the Campo Largo II Wind Complex; (iv) R$ 364 million in the Santo Agostinho Wind Complex – Phase I; and (v) R$ 2 million in other projects;
- R$ 283 million were allocated to generator complex maintenance, revitalization, and modernization projects; and
- R$ 42 million invested in the modernization of the Salto Osório Hydroelectric Power Plant.

Capital expenditure (R$ million)



Investments made/budgeted and respective sources of financing (R$ million)



[1] Does not consider interest incurred on construction.

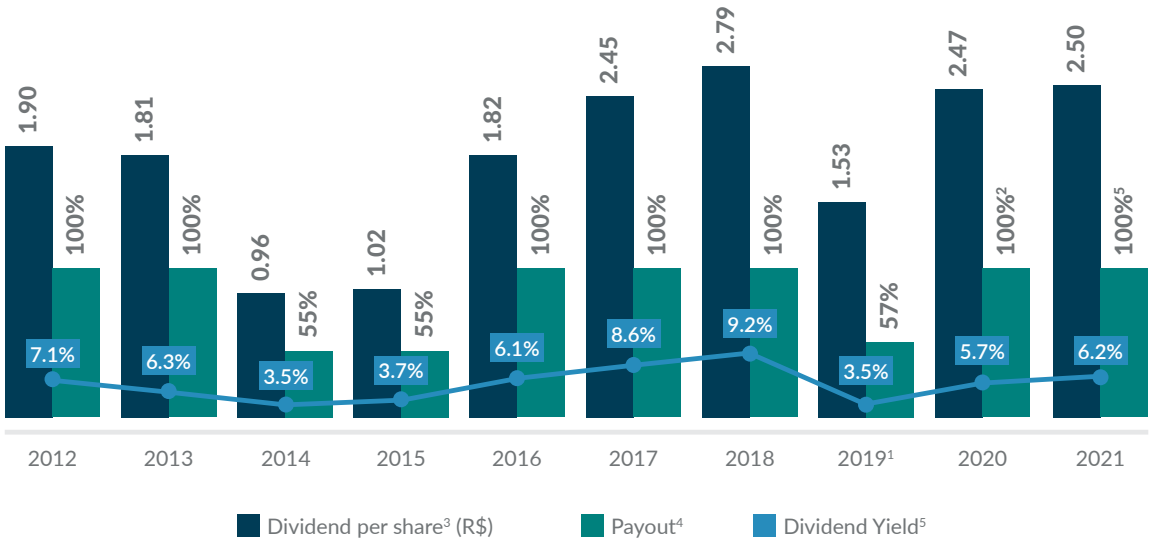
Dividends and Interest on Equity Capital

At the meeting held on August 5, 2021, ENGIE Brasil Energia's Board of Directors approved the proposal of a payout of intermediate dividends based on first half of 2021 financial statements, worth R$ 790 million (R$ 0.9676321449 per share), completing 100% of the profit for that semester, the payment of which occurred on November 29, 2021. Later on, at a meeting held on December 9, 2021, approval was given for the distribution of interest on shareholders' equity for the fiscal year 2021 amounting to R$ 60 million (R$ 0.0735359237 per share).

In addition, at the meeting of the Board of Directors of February 14, 2022, distribution of intermediate dividends paid out of the retained profits reserve for 2020 in the amount of R$ 639 million (R$ 0.7827524080/share) was approved. All these earnings must be ratified by the Annual General Meeting.

Despite the worst water crisis of the last 91 years and investments made during the course of 2021, the total dividend payout for 2021 was R$ 2,038.0 million (R$ 2.4977518245 per share), equivalent to 100% of the adjusted net income and retained earnings allocated to the profit reserve in 2020, with a dividend yield 0.5 p.p. - higher than that recorded in the previous year.

Past payout distribution



[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 volume-weighted closing price of ON shares in the period.

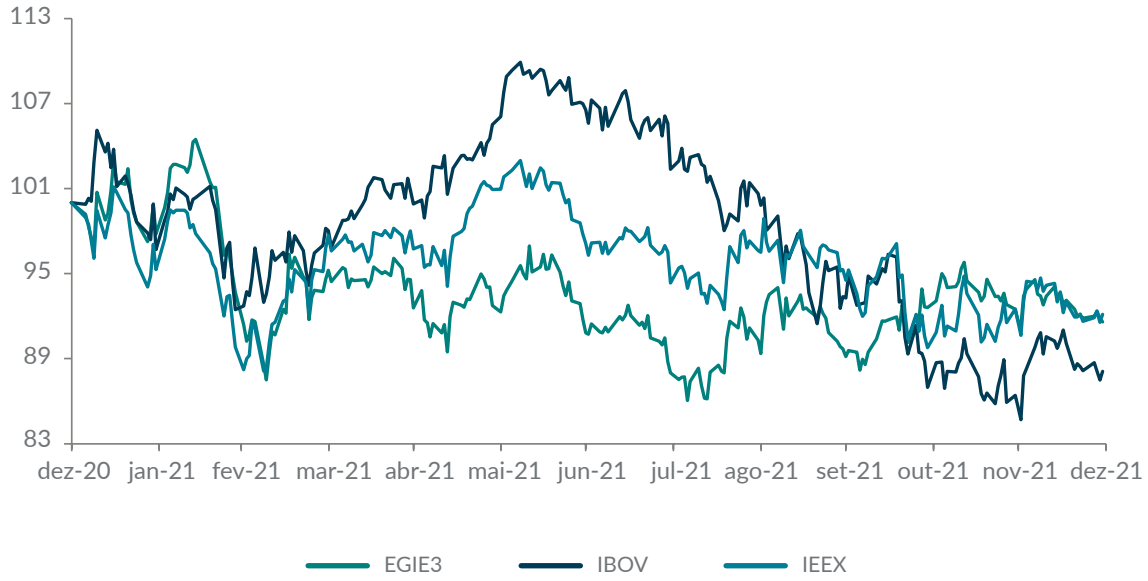
Capital markets and share performance

ENGIE Brasil Energia's shares are traded on the B3 under the EGIE3 symbol. On the United States Over-The-Counter (OTC) market, the Company's Level 1 American Depositary Receipts (ADR) are traded under the EGIEY Code, one ADR being equivalent to one common share.

ENGIE Brasil Energia's shares traded on B3 depreciated 8.4% in 2021, while the IEEX and the Ibovespa both closed down 7.9% and 11.9%, respectively. The average daily volumes traded were R$ 60.2 million, a decrease of 25.8% compared with 2020 when trading turnover was R$ 81.1 million.

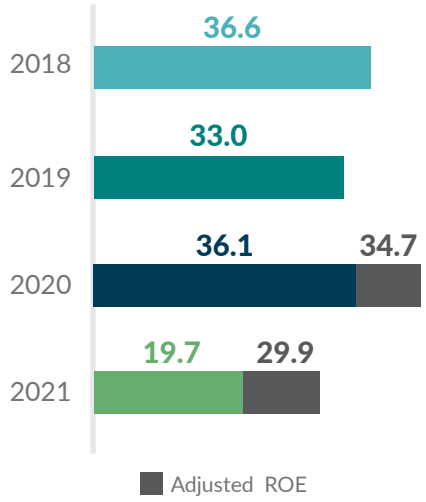
On the last trading day in December 2021, the closing price of the Company's shares was R$ 38.41/share, translating into a market capitalization of R$ 31.3 billion.

EGIE3 vs. Ibovespa vs. IEEX (Base 100 – 12.31.2020)



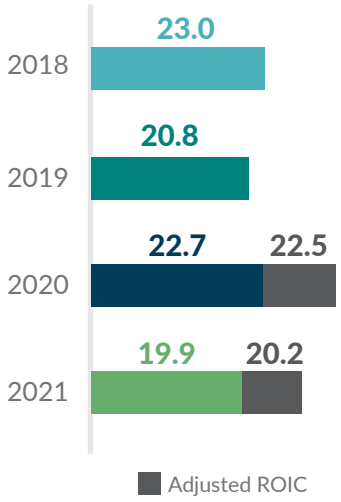
EGIE3 = R$ 38.41
IEEX = 76,305
Ibovespa = 104,822

ROE* - Return On Equity (%)



* ROE: net income of the past 4 quarters / shareholders' equity. Adjusted ROE disregards non-recurring.

ROIC** - Return Over Invested Capital (%)



** ROIC: effective tax rate x EBIT / invested capital (invested capital: debt – cash and cash equivalents – deposits earmarked for debt servicing + SE). Adjusted ROIC disregards non-recurring.

Ratings

In 2021, Fitch Ratings reaffirmed the Company's National Long-Term Rating at 'AAA(bra)', stable outlook, and its international rating at 'BB' with negative outlook, as a result of the threshold imposed by the sovereign rating, but still one notch above it.

Fitch Ratings Agency	Rating
Domestic Rating	AAA(bra)
International Rating – Issues in Reais	BBB-
International Rating – Foreign Currency issues	BB
6th debenture issue rating, due 2024	AAA(bra)
7th debenture issue rating, due 2026	AAA(bra)
9th debenture issue rating, due 2029	AAA(bra)



7

THE REPORT

Reporting profile

Stakeholder engagement

Relevant issues

GRI/SASB summary

Assurance letter

Reporting profile

[GRI 102-3; 102-45; 102-50; 102-51; 102-52; 102-53; 102-54; 102-56]

In accordance with the Global Reporting Initiative (GRI), this edition of the Sustainability Report presents a broad range of information on the activities of ENGIE Brasil Energia, in this way, clarifying our business model, governance structure and corporate practices, among other aspects relevant to competitive strategy. In addition, the Report provides data on the Company's performance in the financial, operational, environmental, and social spheres – for the period from January 1 to December 31, 2021 – allowing stakeholders to accompany the evolution of results.

Thus, the information herein reported relates to ENGIE Brasil Energia, with registered offices in Florianópolis (SC), and to the subsidiaries which incorporate the majority of its revenues in the period – in compliance with the **Management Report and Financial Statements 2021**, published in February 2022.

This Report abides by GRI guidelines contemplated within the "Essential" scope, as certified by an independent external review conducted by BVQI do Brasil Sociedade Certificadora (see the Letter of Assurance issued by the auditors). In addition to the disclosures proposed by the GRI, the Report considers the report recommendations of other global organizations such as the Sustainability Accounting Standards Board (SASB), Task Force on Climate-Related Financial Disclosures (TCFD), International Integrated Reporting Council (IIRC), the United Nations Global Compact and the World Economic Forum. The alignment of the Report to these recommendations has the purpose of meeting the interests of different groups of stakeholders, assuring relevance and transparency to the published information.

Publication and contact

Our Sustainability Reports are published annually in the Company's website. The last edition for the year 2020 was published in April 2021 and continues accessible – as do the editions for preceding years.

For each reporting cycle, the production of the Report involves various areas of ENGIE Brasil Energia. On a multidisciplinary basis, our teams prepare analysis relative to different perspectives of the business in the context of sustainability.

The Investor Relations area is responsible for coordinating the process as well as conducting the dialog with the various stakeholders as to the Report's content. **Thus, considerations on the publication may be sent by email ri.brenergia@engie.com.**

Stakeholder engagement

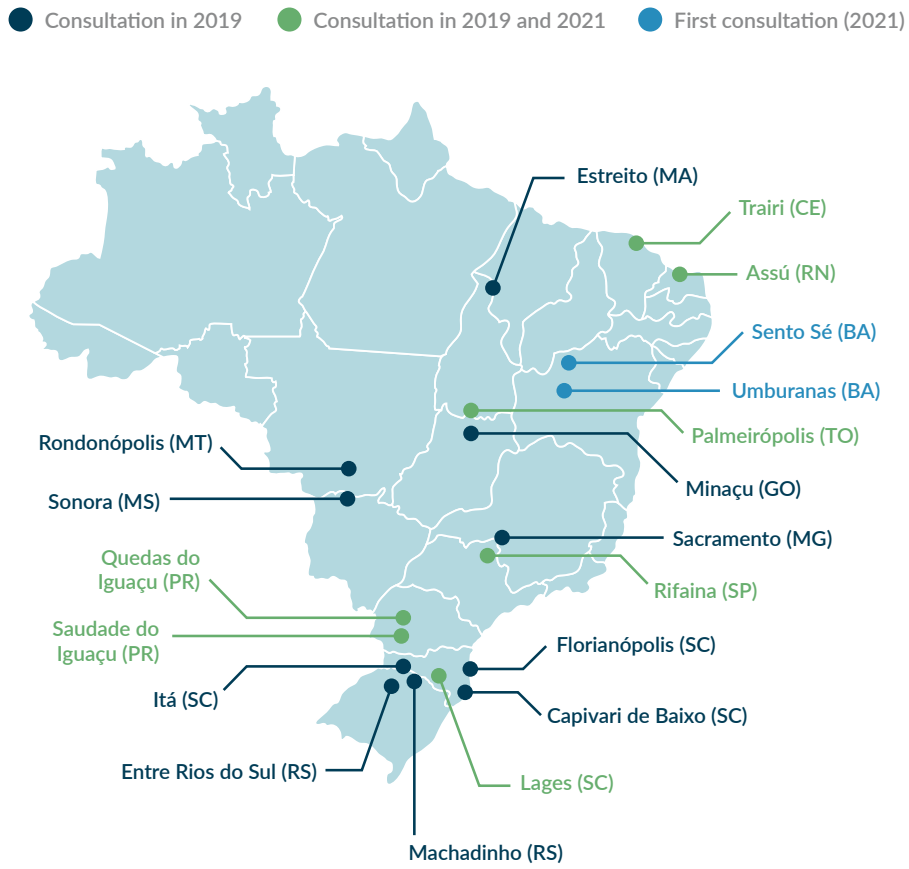
[GRI 102-40; 102-42; 102-43; 102-44; 413-1; 413-2]

In addition to the Company's strategic vision, the themes and aspects highlighted in this Report are based on the context of sustainability obtained from interactions with our stakeholders. Combined with different stakeholder contact platforms – which range from public hearings to discussions in sectoral forums, as well as meetings with investors and surveys conducted with employees and clients – ENGIE Brasil Energia adopts practices of engagement dedicated to the definition of materiality for sustainable management.

Still restricted by the constraints of the pandemic, in 2021, these practices focused on listening to local communities through facilitated dialogs and structured interviews with a sample group – conducted with the support of a specialized consultancy during the months of November and December. These activities involved a total of 93 people, in seven states, living in areas adjacent to nine operating assets – all in the energy generation segment.

One of the key objectives of the dialog was to register the evolution of sustainability in the locations where the Company operates – comparing challenges, impacts and opportunities mentioned by the communities in 2021 with those registered two years previously when there was a broad-based process of engagement in which about 600 people from different regions of the country participated.

Engagement 2021



2021

93
People engaged

7
Brazilian states

9
Assets involved

Using the same method adopted in 2019 through the medium of dialogs and interviews, participants were able to express their perceptions on the challenges – enhanced by the pandemic - facing the local community, list the positive and negative impacts from the presence of the Company in the region and suggest initiatives for driving our contribution to sustainable development.

Among the participants in the meetings and interviews were community leaders and representatives of third sector entities, suppliers, educators, and public bodies. The decision as to which stakeholders should be included in this process was based on frequency of contact as well as the relevance of each group to the business according to guidance provided by ENGIE Brasil Energia's Sustainability Forum.

The results of the consultation with the sample group were discussed in the Company's Sustainability Forum which during 2022 will address the initiatives to be coordinated by different areas in response to the challenges identified. In parallel, the Company plans to extend the dialog to the other communities where it is located as part of a project with a wider scope focused on stakeholder management.

Main impacts of the Company's activities identified in the sample group

POSITIVE

- Generation of jobs, income and opportunities
- Tax collection
- Improvement in local infrastructure
- Generation of renewable energy
- Care for the environment
- Socio-environmental projects to the benefit of the community

NEGATIVE

- Change in environmental conditions: impact on fauna and flora, noise, emissions, countryside
- Disorganized growth of the municipalities during works/ implementation of projects
- Resettlement of communities for the installation of projects (hydroelectric plants)
- Restrictions on community access (local roads, close to wind farms)

At the end of 2021, in an effort to engage a wider audience not included in the sample group, the Company launched a **complementary consultation** through an online platform in which 18 respondents participated. The result of this consultation was included in the materiality analysis described hereafter.

> **The sustainability forum evaluated the results of the sample group to prepare an action plan.**

Relevant issues

[GRI 102-46; 102-47; 102-49]

In addition to the aspects and impacts identified from the interaction with stakeholders, the definition of themes to be reported in this edition of the Report are based on the revision of materiality and anchored in the combination of the internal and external context as shown in the following infographic.

Basis of materiality

Internal context

- Purpose and pillars
- Competitive strategy
- Non-financial goals
- ESG commitments
- Policies and practices
- Long-term vision

External context

- Vision of the engaged stakeholders
- Regulatory scenario of the activities
- Market tendencies
- Positioning and commitments of sector players
- Reference documents / global frameworks
- Requisites for ratings with focus on ESG
- Good corporate practices



For the 2021 reporting cycle, the material themes were redistributed around four axes similar to what was published in 2020 grouped according to thematic affinity – despite the Company considering the majority inseparable one from the other. In all, these axes combine 15 relevant topics, highlighted in this Report and aligned to the Sustainable Development Goals (SDGs) as reported by the United Nations[7].

[7] The Agenda 2030 goals to which the Company has been contributing, are itemized together with the GRI and SASB indicators in the opening of the topics showing related initiatives.

Material topics - 2021

Axis	Theme
Integral and consistent businesses 	Ethical Conduct / Compliance
	Management of risks and opportunities
	Economic-financial and operational performance
	Fostering value chain sustainability
Acceleration of the transition to a carbon neutral economy 	Decarbonization of proprietary operations and that of clients
	Innovative and sustainable solutions for driving the transition
	Mitigation and adaptation to climate change
Care with people 	Fair energy transition
	Employee health, safety, well-being and development
	Promotion of human rights and of diversity, equality and inclusion
	Support for sustainable development of the communities
Conservation of the Planet 	Solid waste
	Water and effluent
	Biodiversity
	Energy

Related indicators

On the basis of the defined material themes, the performance indicators to be monitored and reported in this publication were selected. Hence in this cycle, we continue reporting disclosures proposed by the **Global Reporting Initiative** (GRI), **Sustainability Accounting Standards Board** (SASB) – CDSB Framework and Electric Utilities Power Generators Standard (2018).

After the GRI/SASB Content Index we show the indicators selected by theme.

Axis	Theme	GRI	SASB
Integrated and consistent businesses	Ethical conduct / Compliance	102-17; 205-1; 205-3	
	Management of risks and opportunities	102-15	
	Economic-financial and operational performance	201-1; EU1; EU2	
	Fostering value chain sustainability	308-1; 308-2; 414-1; 414-2	
Acceleration of the transition to a carbon neutral economy	Decarbonization of proprietary operations and those of clients	103-1; 103-2	
	Innovative and sustainable solutions for driving the transition	G4-EU8	
	Mitigation and adaptation to climate change	305-1; 305-2; 305-3; 305-4; 305-6; 305-7	IF-EU-110a.1; IF-EU-110a.2; IF-EU-110a.3; IF-EU-120a.1;
Care with people	Fair energy transition	103-1; 103-2	
	Employee health, safety, wellbeing, and development	403-3; 403-6; 403-9; 404-1	
	Promotion of human rights and diversity, equality and inclusion	405-1; 406-1;	
	Support for the sustainable development of the communities	413-1;	
Conservation of the Planet	Solid waste	306-1; 306-2; 306-3; 306-4; 306-5	IF-EU-150a.1; IF-EU-150a.2
	Water and effluent	303-1; 303-2; 303-3; 303-4; 303-5	IF-EU-140a.1; IF-EU-140a.2; IF-EU-140a.3
	Biodiversity	304-1; 304-3	
	Energy	302-1; 302-3	

GRI/ SASB Summary

GRI Content Index [GRI 102-55]

	Disclosure	Description	Page	Omissions / Justifications
Organizational profile				
GRI 102: General Disclosures 2016	102-1	Name of the organization	12	
	102-2	Activities, brands, products, and services	12; 37	
	102-3	Location of headquarters	155	
	102-4	Number of countries in which the organization operates	12	
	102-5	Ownership and legal form	12	
	102-6	Markets served	12; 135	
	102-7	Scale of the organization	9; 12	
	102-8	Information on employees and other workers	66; 173	
	102-9	Description of the organization's supply chain	111	
	102-10	Significant changes to the organization and its supply chain in the period	111	
	102-11	Precautionary principle approach	54; 79	
	102-12	External initiatives embraced or endorsed	29; 176	
	102-13	Membership of domestic or international associations	176	
Strategy				
GRI 102: General Disclosures 2016	102-14	Statement from the most senior decision-maker	2	
	102-15	Key impacts, risks, and opportunities	54	
Ethics and integrity				
GRI 102: General Disclosures 2016	102-16	Values, principles, standards, and norms of behavior	21; 28	
	102-17	Mechanisms for advice and concerns about ethics	28	

Continue...

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	Disclosure	Description	Page	Omissions / Justifications
Governance				
GRI 102: General Disclosures 2016	102-18	Governance structure	21	The composition and attributions of the governance bodies can be consulted on our website.
	102-22	Composition of the highest governance body and its committees	21	The composition and attributions of the governance bodies can be consulted on our website.
Stakeholder engagement				
GRI 102: General Disclosures 2016	102-40	List of engaged stakeholders	156	
	102-41	Percentage of employees covered by collective bargaining	66	
	102-42	Identifying and selecting stakeholders	156	
	102-43	Approach to stakeholder engagement	156	
	102-44	Key topics and concerns raised	156	
Reporting practices				
GRI 102: General Disclosures 2016	102-45	Entities included in the consolidated financial statements	155	
	102-46	Defining report content and topic Boundaries	158	
	102-47	List of material topics	158	
	102-48	Explanation of the consequences of any restatements of information in previous reports	-	No restatements were required
	102-49	Material changes from previous years as concerns material topics, limits on topics addressed	158	
	102-50	Reporting period	155	
	102-51	Date of most recent report	155	
	102-52	Reporting cycle	155	
	102-53	Contact point for questions regarding the report	155	
	102-54	Reporting assumptions in accordance with the GRI Standards	155	
	102-55	GRI Content Index	161	
	102-56	External assurance	155; 168	

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	Disclosure	Description	Page	Omissions / Justifications
Management Approach				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its boundary	16; 28; 32; 42; 54; 61; 68; 72; 83; 89; 93; 94; 96; 101; 111	
	103-2	The management approach and its components	16; 28; 32; 42; 54; 61; 68; 72; 83; 89; 93; 94; 96; 101; 111	
	103-3	Evaluation of the management approach	16; 28; 32; 42; 61; 68; 72; 83; 89; 93; 94; 96; 101; 111	
Economic performance				
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	9; 101; 135	
	201-2	Financial implications and other risks and opportunities due to climate change	37; 42; 54; 96	
	201-4	Financial assistance received from government	135	
Anti-corruption				
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	28; 111	
	205-3	Confirmed incidents of corruption and actions taken	28	
Energy				
GRI 302: Energy 2016	302-1	Energy consumption within the organization	93; 181	
	302-3	Energy intensity	93	
Water and effluent				
GRI 303: Water and effluent 2018	303-1	Interactions with water as a shared resource	89	
	303-2	Management of water discharge-related impacts	89	
	303-3	Water withdrawal	89; 180	
	303-4	Water discharge	89; 180	
	303-5	Water consumption	89; 180	
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	83; 178	
	304-3	Habitats protected or restored	83	

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	Disclosure	Description	Page	Omissions / Justifications
Emissions				
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	96	
	305-2	Energy indirect (Scope 2) GHG emissions	96	
	305-3	Other indirect (Scope 3) GHG emissions	96	
	305-4	GHG emissions intensity	96	
	305-6	Emissions of ozone-depleting substances (ODS)	183	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	183	
Waste				
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	94	
	306-2	Management of significant waste-related impacts	94	
	306-3	Waste generated	94	
	306-4	Waste diverted from disposal	182	
	306-5	Waste directed to disposal	182	
Supplier Environmental Assessment				
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	111	
	308-2	Negative environmental impacts in the supply chain and actions taken	111	
Employment				
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	66; 173	
Occupational Health and Safety				
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	72	
	403-3	Occupational health services	72	
	403-6	Promotion of worker health	72	
	403-8	Workers covered by an occupational health and safety management system	72	
	403-9	Work-related injuries	72; 175	

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	Disclosure	Description	Page	Omissions / Justifications
Training and Education				
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	76; 176	
	404-3	Percentage of employees receiving regular performance and career development reviews	76	
Diversity and Equal Opportunity				
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	68; 173	
Non-discrimination				
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	28	
Human rights assessment				
GRI 412: Evaluation of Human Rights 2016	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	28	
Community				
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	101; 156	
	413-2	Operations with significant actual and potential negative impacts on local communities	101; 156	
Supplier social assessment				
GRI 414: supplier social assessment 2016	414-1	Percentage of operations with programs in place to engage local communities, evaluate impacts, and/or foster local development	111	
	414-2	Operations with significant actual and potential negative impacts on local communities	111	
Sectorial Disclosures				
GRI G4: Electric sector 2014	G4-EU1	Installed capacity, broken down by primary energy source and regulatory regime	12; 37; 131	
	G4-EU2	Energy input into the grid, broken down by primary energy source and regulatory regime – net energy production	131	
	G4-EU3	Number of residential, industrial institutional and commercial consumer units	135	
	G4-EU8	Electric energy research and development and sustainable development promotion	61	
	G4-EU11	Average thermal plant efficiency by energy source and regulatory system	131; 181	
	G4-EU30	Average plant uptime factor by energy source	131	

SASB Content Index

Disclosure	Metric	Page	Omissions / Justifications
IF-EU-110a.1	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	96	
IF-EU-110a.2.	Greenhouse gas (GHG) emissions associated with power deliveries	96	
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	96	
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.
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	183	
IF-EU-140a.1.	Total water withdrawn, total water consumed, percentage of each in each region under hydro stress	89	
IF-EU-140a.2	Number of cases of water-related noncompliance	89	
IF-EU-140a.3	Description of water-management risks and discussion of mitigating strategies and practices	89	
IF-EU-150a.1.	Quantity of coal combustion waste generated and percentage recycled	94; 182	
IF-EU-150a.2	Total number of withheld coal combustion waste, broken down by potential hazard rating and structural integrity evaluation	94	
IF-EU-240a.1	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	9	Partial. ENGIE Brasil Energia does not supply residential customers (due to regulatory restrictions) and does not publicly breakdown average prices to commercial and industrial clients.
IF-EU-320a.1	Total rate of reportable incidents, fatality rate and frequency rate	72; 175	

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Disclosure	Metric	Page	Omissions / Justifications
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.
IF-EU-420a.2	Percentage electricity load served by smart grid technology	131	Both at the Generation Operations Center (COG) and also the Transmission Operation Center (COT) in Florianópolis, and at the Plants where operations are conducted in loco, ENGIE employs differentiated technological resources that ensure the reliability, safety and efficiency of the operation and consequently, of the grid. However, grid operations are the responsibility of the ONS (National Electric System Operator).
IF-EU-420a.3	Customer electricity savings from efficiency measures, by market		N.A. This is not within the commercial scope of ENGIE Brasil Energia.
IF-EU-540a.1	Total number of nuclear power units, broken down by U.S. Nuclear Regulatory Commission (NRC) Action Matrix Column		N.A.
IF-UE-540a.2	Description of efforts to manage nuclear safety and emergency preparedness		N.A.
IF-EU-550a.1	Number of incidents of non-compliance with physical and/or cybersecurity standards or regulations	54	
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		N.A. Related to Electric Energy Distributors.
IF-EU-000.A	Number of: (1) residential, (2) commercial, and (3) industrial customers served	135	Partial
IF-EU-000.B	Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers	135	
IF-EU-000.C	Length of transmission and distribution lines	37; 42	
IF-EU-000.D	Total electricity generated, percentage by major energy source, percentage in regulated markets	16; 42	
IF-EU-000.E	Total wholesale electricity purchased		2021: 11,100,887 MWh / 2020: 14,225,279 MWh (for portfolio composition and trading).

INDEPENDENT ASSURANCE STATEMENT – BUREAU VERITAS

INTRODUCTION

Bureau Veritas Certification Brazil (Bureau Veritas) was engaged by ENGIE Brasil Energia S.A. (ENGIE), to conduct an independent assurance of its Sustainability Report of 2021 (hereinafter referred to as the Report).

The information disclosed in the Report is ENGIE's management sole responsibility. Our responsibility is defined in the following scope.

SCOPE OF WORK

The scope of this verification encompassed the standards and Principles[1] of the Global Reporting Initiative™ for Sustainability Reports and refers to the period from January 1st. to December 31st., 2021.

ENGIE AND BUREAU VERITAS RESPONSIBILITIES

The elaboration, presentation and content of the Report are ENGIE's management sole responsibility. Bureau Veritas is responsible for providing an independent opinion to Stakeholders, pursuant to the scope of work defined in this statement.

METHODOLOGY

The assurance work covered the following activities:

1 . Interviews with personnel responsible for the material issues and content of the Report;
2. Remote verification regarding corporate and operational processes (verification of material indicators and information sampling);
3. Review of documentary evidence provided by ENGIE for the Reporting Period (2021);
4. Evaluation of the systems used for data collection;
5. Review of stakeholder engagement activities carried out by ENGIE;
6. Evaluation of the system used to define material issues included in the Report, taking into account the sustainability context and the scope of the information published.

1. Materiality, Stakeholder Inclusiveness, Sustainability Context, Completeness, Balance, Comparability, Accuracy, Periodicity, Clarity, and Reliability

The level of verification adopted was Limited, according to the requirements of the ISAE 3000 Standard[2], which were incorporated to the internal assessment protocols of Bureau Veritas.

LIMITATIONS AND EXCLUSIONS

Excluded from the scope of this work was any assessment of information related to:

- Activities outside the defined reporting period;
- Statements of position (expressions of opinion, beliefs, goals, or future intentions) on the part of ENGIE;
- Accuracy of economic and financial data contained in this Report which has been taken from financial statements verified by independent financial auditors;
- Inventory of Greenhouse Gas (GHG) emissions, including energy data;
- Data and information regarding related companies that are not under operational control of ENGIE.
- Data from ENGIE Geração Solar Distribuída (EGSD).

The following limitations apply for this assurance engagement:

- The principles of Accuracy and Reliability were reviewed on a sample basis, exclusively against the information and data related to the material issues presented in the Report;

OPINION ON THE REPORT AND THE VERIFICATION PROCESS

- ENGIE's Materiality Study has been reviewed for the 2021 cycle. The development of this study included five key steps: Stakeholder mapping; Contextual analysis; Community dialogue; Complementary consultation and Revision of the Materiality Matrix.
- For the 2021 reporting cycle, the material issues were redistributed into four axes similar to those published in the previous year and arranged according to common themes. In total, these axes bring together 15 relevant topics
- In our opinion, ENGIE's Report presents the impacts of the company's activities in a balanced way;
- ENGIE has demonstrated an appropriate method of data collection and compilation regarding the GRI Reliability Principle;
- Regarding health and safety information, we recommend integrating the internal control with Excel and the SE Suite system, i.e., the system should reflect the same value and assumptions of the spreadsheet used internally (such as total accidents and working hours).
- The inconsistencies found in the Report, were adjusted during the process and were satisfactorily corrected.

[2] International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information

CONCLUSION

As a result of our assurance nothing has come to our attention that would indicate that:

- The information presented in the Report is not balanced, consistent and reliable;
- ENGIE has not established appropriate systems for the collection, aggregation and analysis of quantitative and qualitative data used in the Report;
- The Report does not adhere to the Principles for defining report content and quality of the GRI Standards for sustainability reports and does not meet its Core level.

DECLARATION OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas Certification is an independent professional services firm specializing in Quality, Health, Safety, Social and Environmental Management, with more than 185 years' experience in independent assessment.

Bureau Veritas implemented and follows a Code of Ethics throughout its business, in order to assure that its staff preserve the highest standards in the performance of their activities. We are particularly attentive to avoid conflicts of interest.

The assessment team has no links with ENGIE, other than the independent verification of the Sustainability Report. We understand that there is no conflict between other services carried out by Bureau Veritas and this verification performed by our team.

The team that conducted this verification for ENGIE has extensive knowledge in information verification and systems involving environmental, social, health, safety and ethical issues, which combined with the expertise in such areas, gives us a clear understanding of the presentation and verification of good corporate responsibility practices.

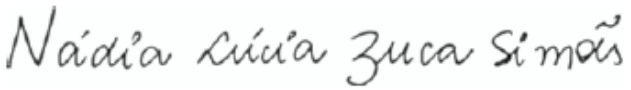
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São Paulo, April 12, 2022.



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(guaranteed anonymity)

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Customers
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Credits

General coordination
Investor Relations (RCI)

GRI Consultancy, text and editing
We Sustentabilidade

Graphic design and layout
L7 Design
Credit cover: ENGIE / MIRO / Meyssonnier Antoine

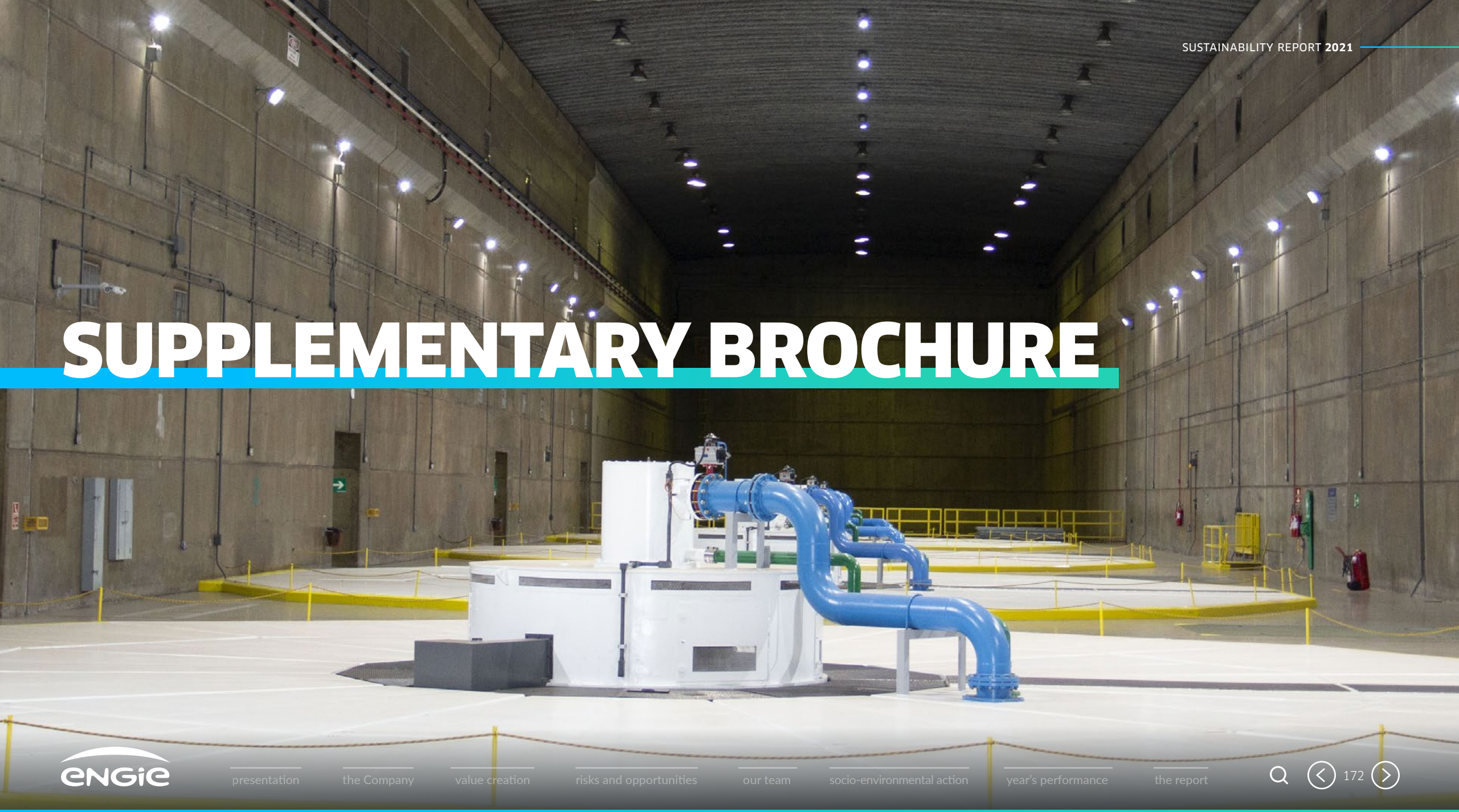
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SUPPLEMENTARY BROCHURE

Employee profile

[GRI 102-8; 401-1; 405-1]

Governance body members by gender

	Male	Female	Under 30	Between 30 and 50	Over 50
Board of Directors	78%	22%	0	0%	100%
Executive Board	88%	12%	0	63%	38%

Note: In the Board and Executive Board there is no people with special needs.

Number of employees in 2020, by employment type and gender

	Male	Female
Permanent	860	261
Temporary	45	23
Apprentices	3	9
Total	**908**	**293**

SNP employees, by gender

SNP employees	Number	Percentage
Male	22	63%
Female	13	37%
Total	**35**	

Admissions and terminations, by gender

[GRI 401-1]

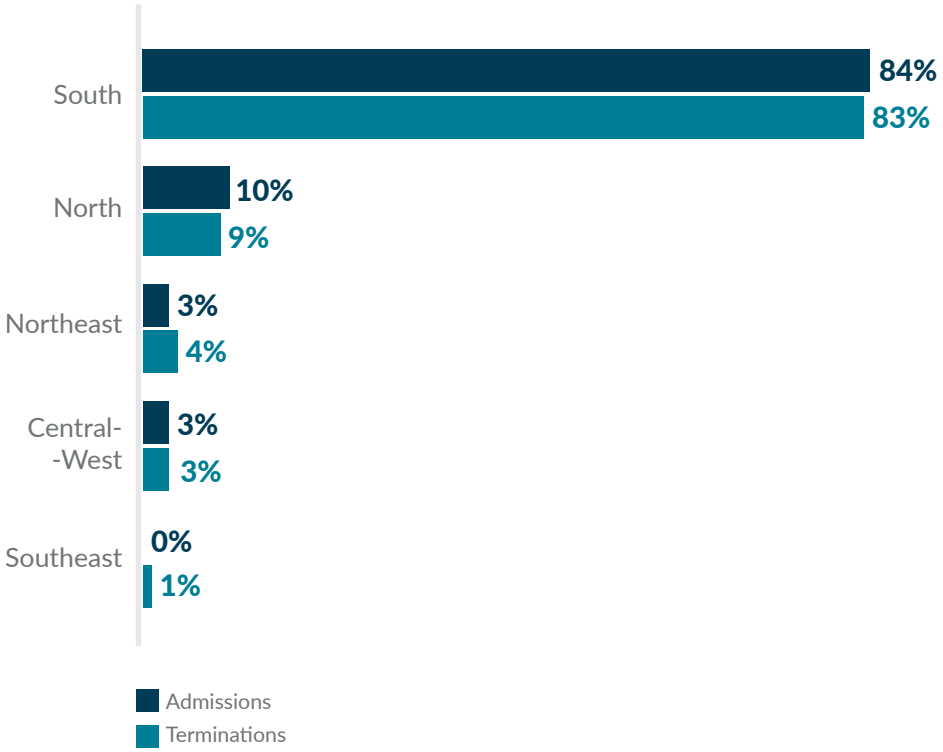
	Female	Male
Admission by gender	45	121

	Female	Male
Terminations by gender	45	150

Admissions and terminations, by region



Percentage of admissions and terminations, by region



Turnover rate

2019	2020	2021
7.8%	13.1%	15.0%

Turnover rate by gender

Female	Male
3.75%	11.28%

Turnover rate by region

North	Northeast	Central-West	Southeast	South
1.4%	0.5%	0.4%	0.1%	12.6%

Turnover by age group

	Terminations	Admissions	Rate
Under 30	33	69	25.8%
Between 30 and 50	116	88	11.8%
Over 50	46	9	19.5%

Health and safety at work

[GRI 403-9]
[SASB IF-EU-320A.1]

Work-related accidents except ENGIE Geração Solar Distribuída

Direct employees	2019	2020	2021
Number of hours exposed to risk	2,338,743	2,420,548	2,680,926
Number of work-related and commuting accidents with and without time off work	7	5	2
Number of lost days – work related accidents with time off work	0	15	0
Number of fatal accidents	0	0	0
Employees of contracted companies			
Number of hours exposed to risk	8,603,756	17,660,961	33,455,292
Number of work-related and commuting accidents with and without time off work	55	102	223
Number of fatal accidents	0	0	9

Work related accidents - ENGIE Geração Solar Distribuída

Direct employees	2019	2020	2021
Number of hours exposed to risk	215,037	174,088	103,706
Number of work-related and commuting accidents with and without time off work	1	0	1
Number of lost days – work related accidents with time off work	65	0	11
Number of fatal accidents	0	0	0
Employees of contracted companies			
Number of hours exposed to risk	126,073	97,396	64,191
Number of work-related and commuting accidents with and without time off work	4	0	0
Number of fatal accidents	0	0	0

Training

[GRI 404-1]

Average number of hours of training

Average by gender	2019	2020	2021
Male	56.5	47.2	60.0
Female	35.8	26.1	17.8
Average by functional category			
Executives	N.D.	0.24	0.15
Management	34.4	45.4	26.4
Analysts, engineers and experts	41.0	26.9	40.9
Operators, technicians	66.2	52.9	70.0

In the light of updated methodology, data for 2020 and 2019 was adjusted..

Evolution on number of hours of training



In the light of updated methodology, data for 2020 and 2019 was adjusted.

Commitment to outside initiatives

[GRI 102-12; 102-13]

Below, we list initiatives and entities in which the Company participates:

- Brazilian Association of Electric Energy Generation Companies (Abrage);
- Brazilian Wind Power Association (ABEEólica);
- Brazilian Maintenance Association (Abraman);
- Brazilian Association of Electric Energy Trading Agents (Abraceel);
- Santa Catarina State Association of Energy Producers (Apesc);
- Brazilian Association of Independent Electric Energy Producers (Apine);
- Electric Energy Trading Chamber (CCEE);
- Electric Energy Research Center (CEPEL);
- Canoas River Watershed Management Committee;
- Cantuquiriguaçu Territory Development Council (Condetec);
- National Hydro Resources Council (CNRH);
- Santa Catarina State Hydro Resources Council (CERH-SC);
- Paraná State Hydro Resources Council (CERH-PR);
- Santa Catarina State Environment Council;
- National Industrial Confederation (CNI) Environment and Sustainability Theme Council;
- International Electric Community
- Electric Power Research Institute (EPRI/EUA);

- Energy Research Company (EPE);
- Santa Catarina State Industrial Federation (Fiesc);
- Business Management Committee Foundation (Funcoge);
- Acende Brasil Institute;
- Tocantins River Watershed Crisis Room, coordinated by the National water Agency (ANA);
- Supplementary Pension Society (PREVIG);
- Eletrosul Pension and Welfare Foundation (ELOS); and
- Health Care Association (Elosaúde).

At the global level, the ENGIE Controlling Entity is signatory to the Carbon Disclosure Program (CDP), the United Nations (UN) Global Compact, biodiversity protection initiative, Act4nature, and several initiatives 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-level influence on the regulatory conditions for massive and competitive construction of solar generation; and
- Science Based Targets (SBT).



Biodiversity

[GRI 304-1]

List of Conservation Units within a radius of 15 kilometers of the Plants operated by the Company[8].

Plant	Total Concession Area (ha)	Conservation Unit (UC)	UC Area (ha)	Category	Biome	UF
UHIT	18,992.53	Parque Natural Municipal do Apertado	22.43	PARK	Atlantic Rain For.	RS
		Parque Natural Municipal Mata Rio Uruguai Teixeira Soares	429.12	PARK	Atlantic Rain For.	RS
		Parque Natural Municipal Centenário	3.2	PARK	Atlantic Rain For.	RS
		Parque Estadual Fritz Plaumann	733.36	PARK	Atlantic Rain For.	SC
UHMA	17,733.81	Parque Estadual de Espigão Alto	1,443.68	PARK	Atlantic Rain For.	RS
		Parque Natural Municipal Mata Rio Uruguai Teixeira Soares	429.12	PARK	Atlantic Rain For.	RS
		Parque Natural Municipal Centenário	3.2	PARK	Atlantic Rain For.	RS
		Parque Estadual Rio Canoas	571.38	PARK	Atlantic Rain For.	SC
UHPF	15,932.31	Parque Estadual do Papagaio-Charão	1,023.28	PARK	Atlantic Rain For.	RS
		Parque Natural Municipal Sagrisa	1,425.00	PARK	Atlantic Rain For.	RS
UHSS	21,978.98	Rio dos Touros Ecological Station	356.9	ESEC	Atlantic Rain For.	PR
UHCB	16,859.94	Patrimônio Natural Serra do Tombador Private Reserve	141.71	RPPN	Cerrado	TO
		Lago de São Salvador do Tocantins, Paranã e Palmeirópolis Environmental Protection Area	14,587.11	APA	Cerrado	TO
		Pouso Alto Environmental Protection Area	77,274.86	APA	Cerrado	GO
UHSA	17,223.42	Lago de São Salvador do Tocantins, Paranã e Palmeirópolis Environmental Protection Area	14,587.11	APA	Cerrado	TO
		Lago de Peixe/Angical Environmental Protection Area	7,628,66	APA	Cerrado	TO
PHRO	47.68	Parque Estadual Dom Osório Stoffel	13,068,03	PARK	Cerrado	MT
PHJG	205.2	Parque Estadual Dom Osório Stoffel	13,068.03	PARK	Cerrado	MT
UEMU	229.64	Dunas da Lagoinha Environmental Protection Area	1,320.88	APA	Caatinga	CE
		Estuário do Rio Mundaú Environmental Protection Area	9,222.38	APA	Caatinga	CE

[8] Some conservation units are described more than once since they are included in 15km radius of more than one plant in the same region.

Plant	Total Concession Area (ha)	Conservation Unit (UC)	UC Area (ha)	Category	Biome	UF
UTFE	3.68	Parque Estadual de Porto Ferreira	681.42	PARK	Atlantic Rain For.	SP
		Reserva Particular do Patrimônio Natural Sítio Kon Tiki	11.89	RPPN	Atlantic Rain For.	SP
UHET	55,946.15	Chapada das Mesas National Park	16,599.37	PARK	Cerrado	MA
		Monumento Natural das Árvores Fossilizadas	18,018.99	MONA	Cerrado	TO
UHMI	5,033.03	Parque Estadual Pau Furado	2,181.80	PARK	Cerrado	MG
		Reserva Particular de Patrimonio Natural - RPPN JACOB	358.33	RPPN	Cerrado	MG
UHJA	3,469.24	Parque Estadual das Furnas de Bom Jesus	2,063.10	PARK	Cerrado	SP
CTJL	357.07	Baleia Franca Environmental Protection Area	8,534.08	APA	Atlantic Rain For.	SC
ASSÚ V	157.22	Açu National Forest	225.02	FLONA	Caatinga	RN
UECC	107.41	Estuário do Rio Mundaú Environmental Protection Area	1.558,78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.80	APA	Caatinga	CE
UESS	197.24	Estuário do Rio Mundaú Environmental Protection Area	1,558.78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.88	APA	Caatinga	CE
UEFL	74.1	Estuário do Rio Mundaú Environmental Protection Area	1,558.78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.80	APA	Caatinga	CE
UEGU	75.65	Estuário do Rio Mundaú Environmental Protection Area	1,558.78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.80	APA	Caatinga	CE
UEOV	185.38	Estuário do Rio Mundaú Environmental Protection Area	1,558.78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.80	APA	Caatinga	CE
UESM	118.33	Estuário do Rio Mundaú Environmental Protection Area	1,558.78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.80	APA	Caatinga	CE
UETR	37.71	Estuário do Rio Mundaú Environmental Protection Area	1,558.78	APA	Caatinga	CE
		Dunas da Lagoinha Environmental Protection Area	1,320.80	APA	Caatinga	CE
CECL	14,643.20	Boqueirão da Onça National Park	346,908.10	PARNA	Caatinga	BA
		Boqueirão da Onça Environmental Protection Area	505,694.33	APA	Caatinga	BA
CEUM	7,796.52	Boqueirão da Onça Environmental Protection Area	505,694.33	APA	Caatinga	BA

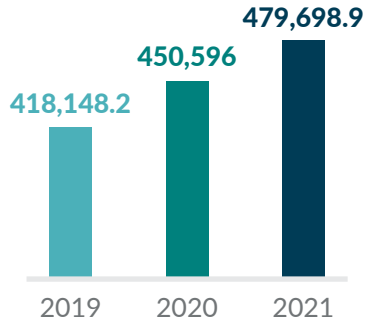
Water

[GRI 303-3; 303-4; 303-5]

Total water withdrawn by source (in ML)

	2019	2020	2021	Variation 2020/2021
Surface waters (includes wetlands, rivers, lakes and rainwater)	425,982.0	458,089.2	486,271.8	6%
Groundwater	12.8	14.1	13.2	-7%
Third party water (municipal water supply or other water supply companies)	2,138.8	2,163.4	2,214.3	2%
Total	**428,133.6**	**460,266.7**	**488,499.3**	**6.1%**

Volume thermal discard planned (in ML)



Total discarding of water (in ML)

	2019	2020	2021	Variation 2020/2021
Surface water (includes wetlands, rivers and lakes)	416,246.3	448,718.9	479,704.5	6.90%
Third party water (total)	1,907.9	1,881.2	1,561.1	-17.0%
Total	**418,154.2**	**450,600.1**	**481,265.7**	**6.8%**

Water volume used in thermoelectric plants (in ML)

Procedure	2019	2020	2021	Change 2020/2021
Processing	5,847.87	5,670.12	4,931.91	-13%
Cooling	420,759.46	454,575.67	483,543.29	6%
Total	**426,607.33**	**460,245.79**	**488,475.20**	**6%**
Consumption*	8,459.08	9,649.80	7,215.77	-25%

* Water consumption does not make up the total, since it is part of the volume used in cooling.

Energy

[GRI 302-1; G4 EU11]

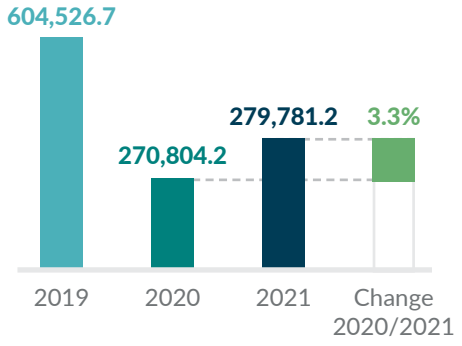
Energy consumption – non-renewable sources (GJ)

	2019	2020	2021	Change 2020/2021
Diesel fuel	209,448.19	217,656.00	253,512.00	16.5%
Fuel oil	121,905.74	21,744.00	0.00	-
Coal	48,926,974.19	58,714,992.00	54,632,124.00	-7.0%
Total	**49,258,328.12**	**58,954,392.00**	**54,885,636.00**	**-6.9%**

Energy consumption – renewable sources (GJ)

	2019	2020	2021	Change 2020/2021
Wood biomass	2,195,229.60	1,283,031.33	953,244.00	-25.7%
Sugarcane biomass	10,064,558.51	10,083,854.97	8,672,616.19	-14.0%
Total	**12,259,788.11**	**11,366,886.30**	**9,625,860.19**	**-15.3%**

Grid electricity consumption (GJ)



Average efficiency – Thermal power plants

Thermal Plant/Unit		2019	2020	2021	Change 2021 x 2020	Specific Consumption (ton. coal/MWh) 2021	Specific Consumption (ton. coal/MWh) 2020
Jorge Lacerda Complex (coal)	UTLA 1	24.9%	26.1%	N.A.	N.A.	N.A.	0.72
	UTLA 2	29.6%	29.9%	N.A.	N.A.	N.A.	0.64
	UTLB	28.3%	28.7%	N.A.	N.A.	N.A.	0.67
	UTLC	33.5%	33.9%	N.A.	N.A.	N.A.	0.56
	Total CTJL	**30.3%**	**30.8%**	**N.A.**	**N.A.**	**N.A.**	**0.62**
Pampa Sul (coal)		36.3%	35.2%*	35.4%	0.2 p.p.	**0.91**	**0.89***
Ibitiúva (biomass – sugarcane bagasse)		25.9%	25.5%	**24.7%**	-0.8 p.p.	N.A.	N.A.
Ferrari (biomass – sugarcane biomass)		18.7%	19.0%	**19.5%**	0.5 p.p	N.A.	N.A.
Lages (biomass - wood)		23.2%	21.7%	**19.9%**	-1.8 p.p.	N.A.	N.A.

* Data adjusted following methodological update.

Waste

[GRI 306-4; 306-5]
[SASB IF-EU-150A.1]

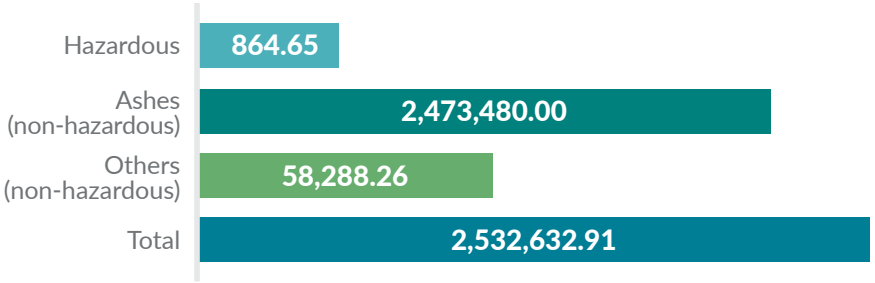
Waste not allocated for final disposal

Hazardous waste (t)				
Disposal	**2019**	**2020**	**2021**	**Change 2020/2021**
Re-use	34.54	59.93	**51.46**	-14.1%
Recycling	40.51	180.74	**55.41**	-69.3%
Co-processing	280.88	127.68	**205.58**	61.0%
Total	**355.93**	**368.35**	**312.45**	**-15.2%**

Non-hazardous waste (t)				
Disposal	**2019**	**2020**	**2021**	**Change 2020/2021**
Re-use	14.4	5,850.47	**5,593.84**	-4.4%
Recycling	843,551.91	1,139,623.17	**972,918.90**	-14.6%
Composting	284.21	131,783.80	**92,465.38**	-29.8%
Degraded areas recovery	1,219,643.41	817,593.00	**1,010,010.98**	23.5%
Co-processing	41.36	95.26	**177.95**	86.8%
Total	**2,063,535.29**	**2,094,945.70**	**2,081,167.05**	**-0.7%**

Total weight of generated wastes (t)

Table considers discarded waste (except that sent for storage)



Waste allocated for final disposal

Hazardous waste (t)				
Disposal	**2019**	**2020**	**2021**	**Change 2020/2021**
Incineration (mass burning)	0.01	0.34	**0.85**	150.0%
Landfill	163.86	149.11	**551.35**	269.8%
Local storage	30.95	56.03	**30.78**	-45.1%
Total	**194.82**	**205.48**	**582.98**	**183.7%**

Non-hazardous waste (t)				
Disposal	**2019**	**2020**	**2021**	**Change 2020/2021**
Landfill	614.24	431,483.14	**450,601.11**	4.4%
Local storage	119.41	8.06	**6.17**	-23.4%
Total	**733.65**	**431,491.20**	**450,607.28**	**4.4%**

Atmospheric emissions

[GRI 305-6; 305-7]
[SASB IF-EU-120A.1]

NOX, SOX and other significant atmospheric emissions (t)*				Change 2020/2021	Percentage emissions in densely populated areas
	2019	2020	2021		2021
NOx	11,766.04	15,834.81	17,795.34	12.4%	82.3%
SOx	119,984.76	112,551.33	97,215.82	-13.6%	94.8%
Persistent organic pollutants (POP)			Not measured		
Volatile organic compounds (VOC)			Not measured		
Hazardous atmospheric pollutants (HAP)			Not measured		
Particulate material (PM)	2,820.39	2,978.21	4,530.39	52.1%	39.46%
Lead (Pb)			Not measured		
Mercury (Hg)	0.10	0.16	0.13	-16.90%	42.28%

* Sampled data.

Intensity of NOx, SOx and other atmospheric emissions by total net generation (Kg/MWh)*				Change 2020/2021	Percentage emissions in densely populated areas
	2019	2020	2021		2021
NOx	0.27	0.47	0.49	3.9%	82.3%
SOx	2.80	3.31	2.67	-19.4%	94.8%
Persistent organic pollutants (POP)			Not measured		
Volatile organic compounds (VOC)			Not measured		
Hazardous atmospheric pollutants (HAP)			Not measured		
Particulate material (PM)	0.07	0.09	0.12	38.1%	39.46%
Lead (Pb)			Not measured		
Mercury (Hg)	0.00	0.00	0.00	0.0%	42.28%

* Sampled data.

Emission of Ozone Depleting Substances (ODS) — tCO_2e

ODS	Operational Control	Equity Stake	Operational Control	Equity Stake	Operational Control	Equity Stake
	2019		2020		2021	
HCFC (R-22)	324.2	382.6	194.4	216.2	194.3	213.4

Intensity of NOx, SOx and other atmospheric emissions from all combustion plants (Kg/MWh)*

	2019	2020	2021
NOX	2.31	2.79	3.46
SOX	23.59	19.86	20.59
Particulate material (PM)	0.55	0.53	0.88

* Sampled data.


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