



2024 Integrated REPORT





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Interactive
summary

MESSAGE FROM THE PRESIDENT

GRI 2-22

In 2024, we celebrated seven decades of operations in line with the development of both the state of Paraná and Brazil, consolidating our position as a fully renewable energy generation¹ Brazilian company, combining tradition and innovation to face the challenges of an ever-changing sector. In that sense, we are committed to supporting sustainable development and strengthening our position as an essential pillar for the Brazilian power sector, as well as the communities we serve.

In this past year, we celebrated the concession renewal of our three largest hydroelectric power plants for another 30 years, focused on the Company's upcoming centenary. This is more than just an operational achievement; it is a long-term guideline that reinforces our strategic view to ensure Copel's perpetuity.

With 64% of our generation capacity guaranteed by these assets, we will continue to offer clean, reliable energy under the highest sustainability standards.

Our operational performance excellence reflects this strategic view. We have a fully renewable energy generation matrix, which is a competitive edge that not only adds value to our image but also enhances the positive perception of our stakeholders, attracting investors and reinforcing our presence in the sector. We remain focused on managing our assets, prioritizing operational availability and efficiency to meet the growing demand for sustainable, reliable high-quality energy at the highest standards.

We support the communities where we operate through initiatives that foster social, economic and environmental development.



In the year in which we celebrated our 70th anniversary, we consolidated our position as a Brazilian company generating 100% renewable energy, as well as celebrating the renewal of the concessions for our three largest plants for another 30 years.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.



The new organizational structure has brought greater flexibility and agility to our operations, allowing us to compete more effectively in a dynamic market.

We must emphasize programs that raise awareness among our workforce, value inclusion and well-being and share values with our stakeholders, such as EletriCidadania, EducaODS and Cultivar Energia. These programs directly contribute to the development of the population served by them and, consequently, the communities where they live and reinforce our role as an agent of social change.

We understand that Copel's success is directly related to the talent and dedication of our people. Our new organizational structure has brought greater flexibility and agility to our operations, allowing us to compete more effectively in a dynamic market. We value our talents and seek to offer a safe, healthy and encouraging workplace, with initiatives focused on mental health and occupational safety, both for direct employees and contractors.

Innovation and digital transformation remain our strategic pillars. We have moved forward in projects focused on cybersecurity, investing in the development of technologies to strengthen system and data protection. We understand that awareness is essential to mitigate risks, therefore we have reinforced education programs aimed at employees, ensuring that they are prepared for the challenges of the digital environment.

Another important achievement was an asset swap with Eletrobras, reflecting our responsibility to simplify structure and maximize value. In the governance front, we continue to seek the highest ethical and integrity standards, geared towards migrating to the Novo Mercado listing segment by unifying our shares and adopting the “one share-one vote” model. These changes reinforce our transparency, enhance the liquidity of our securities and consolidate investor trust.

We are aware of the challenges ahead, from the need to improve our organizational culture to adapting to climate change, which make serving our customers and operating with resilience more complex. We have prepared our Company for the opening of the energy

market, a movement that will bring new opportunities, but will require speed and innovation, without loosening commitment to our values.

I would like to thank each employee, partner, community and customer that has contributed to our success. Together we will keep fostering sustainable development and shaping a more prosperous and inclusive future for all.

Enjoy your reading!

Daniel Pimentel Slaviero
Copel's President

ABOUT THIS REPORT

GRI 2-1, 2-2, 2-3, 2-5, 2-14

The Integrated Report of Companhia Paranaense de Energia (Copel) presents the Company's key results and initiatives in a clear and accessible way, emphasizing its commitment to transparency and corporate responsibility. It was prepared based on the best Integrated Reporting practices, consolidating the Company's financial and non-financial information for the fiscal year from January 1 to December 31, 2024.

The report's content was defined based on the materiality assessment and

includes the Company's management approach, business model and performance in the human; intellectual; social and relationship; natural; manufactured; and financial capitals, according to the Integrated Reporting Framework. The Company also follows the GRI Standards, including GRI G4 (Electric Utilities Sector Disclosures), and the reporting frameworks of the International Financial Reporting Standards (IFRS) foundation and the Sustainability Accounting Standards Board (SASB).

Reading tools

GRI 2-1, 2-6
Content

DJSI/CSA
Information from Dow Jones and S&P Global

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SDGs



Supplementary reports

- Management Report and Financial Statements
- Copel's Materiality Report
- 20F Report
- Reference Form

Disclosures from Wholly Owned Subsidiaries

- Annual Socio-Environmental and Economic-Financial Responsibility Report of Copel Generation and Transmission
- Annual Socio-Environmental and Economic-Financial Responsibility Report of Copel Distribuição

Based on all these frameworks, the report presents the Company's consolidated vision, which is complemented by detailed information on the performance of its wholly-owned subsidiaries Copel Distribuição S.A. and Copel Geração e Transmissão S.A. Both subsidiaries also publish their own social and environmental responsibility and economic and financial performance reports. This structure attests to the methodological consistency between the group's companies and provides a comprehensive portrait of Copel's activities.

The Integrated Report is assessed by the Executive Board and the Sustainable Development Committee, and approved by the Board of Directors, as set forth in Copel Holding Company's Bylaws. The Materiality Report, prepared every two years and revised every year, follows the same process.

Copel's Integrated Report is submitted to independent limited assurance by PricewaterhouseCoopers Brasil Ltda.,

which follows technical rules in force. The Assurance Report, issued at the end of this process, is attached hereto.

Financial data collected from the Financial Statements correspond to Copel Holding Company and its wholly-owned subsidiaries, majority and non-majority owned subsidiaries and associates companies. Non-financial information also covers the Copel Holding Company and its wholly owned subsidiaries, providing details on key social, environmental and governance indicators. Whenever necessary, exclusion of information or change in scope will be clearly stated and justified.

The adopted methodology does not require adjustments to minority interest or shareholdings in which Copel is not the controlling shareholder. Important corporate processes, such as mergers, acquisitions and disposals, are duly emphasized in the report.

The document also considers:

- Technical Guidance OCPC 09, as per CVM Resolution 14;
- International Accounting Standards (IFRS) for Financial Statements;
- Generally Accepted Accounting Principles (BR GAAP);
- Stakeholder Capitalism Metrics;
- Communication on Progress to the United Nations (UN) Global Compact, on specific targets related to the Sustainable Development Goals (SDGs); and
- S&P Global's Corporate Sustainability Assessment (CSA) indicators.



Contact us

Queries, suggestions or requests for additional information about this report can be sent to the email relato.integrado@copel.com.

MATERIALITY ASSESSMENT

GRI 3-1, 3-2

The Integrated Report was prepared according to the 2023 materiality study, which was submitted to a revision by the Sustainable Development Committee and the Board of Directors in 2024, when said bodies approved maintaining the current material topics for another year.

Material topics represent a company's most significant impacts on the economic, environmental and social dimensions, and, therefore, are essential

inputs for the Company's Strategic plan, indicating operational priorities to be cascaded to all of Copel's areas and operations. They act as important guidelines for the Company and directly contribute to Copel's risk management.

This process reflects the Company's commitment to prioritizing strategic topics for its business and stakeholders. To ensure a comprehensive approach, the analysis combined sector studies,

a wide consultation with Copel's stakeholders, sustainability assessments, national and international benchmarking studies, in addition to alignment with the Company's strategic plan and risk portfolio, as well as with international standards and rules.

The corporate stakeholder mapping followed the AA1000 methodology focused on equalizing terms and understanding. The materiality assessment included the consultation of 6,900 representatives of all of Copel's priority stakeholder groups, which were broken down to ensure a more precise analysis of Copel's stakeholder relations, including regulators, sector entities, own employees and contractors,

The adoption of dual materiality, which allows ESG issues and their financial impacts to be read together, has strengthened the integration between strategy, risks and opportunities and increased internal engagement with sustainability.

investors, communities, among others. The expressive participation of stakeholders was an advancement in this cycle: the largest consultation ever carried out in the Company in a materiality process, with emphasis on customers. Overall, 3,595 customers from 276 municipalities in the state of Paraná participated, ensuring a diversified geographical and statistically representative view.

Another important aspect was the adoption of double materiality, which allows assessing ESG matters together with their financial impacts. Financial impacts were mapped according to Copel's risk matrix. This approach strengthened the integration between strategy, risks and opportunities and enhanced internal engagement with

sustainability. The assessment identified 34 topics considered material for the Company. To facilitate their use, according to GRI guidelines, the topics were organized in groups. Compared to the previous materiality matrix, two topics were added: Community safety, with high priority for stakeholders and in terms of financial impact; and Sustainable sourcing. Read more details in the [2023-2025 Materiality Report](#).



SUSTAINABILITY PORTAL

For more information on the topic, please visit Copel's Sustainability Portal.

Material topics

GRI 3-2

The material topics used in Copel's 2024 Integrated Report are divided into ten priority groups, reflecting the Company's strategic aspects.

Each group and their respective material topics are as follows:



These topics guide Copel's strategic actions and serve as a basis for setting monitoring indicators and targets, ensuring transparency and accountability.

Impact study

GRI 3-3

Material topics and aspects	GRI disclosure	Impacts
 Energy Sector Transformation - Electrification - Innovation - New business opportunity - Cyber and information security - Energy efficiency - Operational efficiency - Clean energy generation - Investments in power transmission and distribution infrastructure	GRI 302: Materials 2016 GRI 418: Customer Privacy 2016 GRI G4: Electric utilities sector disclosures RR-ST-410a.1 - Management of energy infrastructure integration & related regulations RR-ST-410a.2 - Management of energy infrastructure integration & related regulations RR-ST-000.B - Activity metrics IF-EU-550a.1 - Grid resilience IF-EU-550a.2 - Grid resilience	Actual positive impacts include improvements in services and asset management, greater operational efficiency, modernization of substation protection systems, use of space for renewable energy and expansion of access to clean energy. Other such impacts include reduction in costs, technical losses, energy consumption and greenhouse gas emissions. In terms of cybersecurity, there is greater awareness and security, as well as trust between customers, employees and the Company. Potential positive impacts encompass the creation of skilled jobs; the development of new technologies; collaborations with startups and innovation programs; the strengthening of strategic partnerships; the modernization and expansion of the electricity infrastructure; and a reduction in the use of inputs and natural resources. The development of new businesses can increase Copel's financial resilience. Potential negative impacts include the demand for natural resources and greenhouse gas emissions during the electrification process. Operational failures could cause social, environmental and reputational impacts, with legal risks. Allocating funds to projects that do not result in viable solutions could lead to financial losses, increased costs for implementing the projects and the cancellation of contracts. In cyber and information security, if the topic is not properly managed, there could be data loss, theft of intellectual property, extortion and disruption of critical services.

SDGS

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Capitals



 Please read more on managing this topic on page 123.

Label:

Financial Capital

Manufactured Capital

Intellectual capital

Natural Capital

Social and Relationship Capital

Human Capital

Material topics and aspects

GRI disclosure

Impacts



Environmental Commitment

Commitment to biodiversity
Eco-efficiency
Climate change
Environmental responsibility
Water stewardship

GRI 301: Materials 2016
GRI 303: Water and effluents 2018
GRI 304: Biodiversity 2016
GRI 305: Emissions 2016
GRI 306: Waste 2020
GRI G4: Electric utilities sector disclosures
IF-EU-110a.2 - Greenhouse gas emissions & energy resource planning
F-EU-110a.3 - Greenhouse gas emissions & energy resource planning
IF-EU-140a.1 - Water Management
IF-EU-140a.3 - Water management
RR-ST-160a.1 - Ecological impacts of project development
RR-ST-160a.2 - Ecological impacts of project development

The actual positive impacts come in various forms: enhanced scientific knowledge about physical and chemical environmental parameters, as well as local fauna and flora; making water and scientific data available to other users; and conserving protected areas.

For the generation business, there is the regularization of flows and the generation of renewable power combined with a reduction in the consumption of natural resources.

In transmission, the adoption of technologies and new construction and inspection methods contribute to reducing greenhouse gas emissions and preserving vegetation in the easement routes. There are also reputational benefits from good practices.

Potential positive impacts include attracting investment, restoring ecosystems, conserving soil, water and air quality and encouraging research into new, effective low-carbon energy sources.

There are actual or potential negative impacts inherent in the Company's operations, especially when new projects are implemented, mainly: reduction in vegetation cover; loss or fragmentation of natural habitats and ecosystem services; changes in animal population dynamics; damage or accidents to fauna; generation of waste; and air emissions.

In the financial dimension, the costs of environmental mitigation and compensation; the possibility of receiving fines and sanctions, as well as damage to the Company's reputation in case of non-compliance with current legislation; and the delay or embargo of works to implement projects, must be taken into account.

SDGS



Capitals



 Please read more on managing this topic on page 166.

Label:



Financial Capital



Manufactured Capital



Intellectual capital



Natural Capital



Social and Relationship Capital



Human Capital

Material topics and aspects	GRI disclosure	Impacts
 Corporate Governance Regulatory environment Sustainable development Corporate strategy Risk and opportunity management Integrity Transparency Corporate governance	GRI 205: Anti-corruption 2016 GRI 206: Anti-competitive behavior 2016 GRI 415: Public policies 2016	Actual or potential positive impacts of proper management of this topic are transparency, protection for shareholders and investors, regulatory compliance, lower capital costs, business continuity and growth, as well as attracting new investors and shareholders. As Copel is a large company, the successful execution of its Corporate Strategy has a direct positive impact on sustainable development and the quality of life of the population. In case of flaws in corporate governance, there may be negative financial impacts, including the possibility of a reduction in market value, fines and penalties. Potential negative operational impacts are failures in processes and market practices. The potential negative impacts to the Company's reputation are reduced trust and damage to its image.

SDGS

5 GENDER EQUALITY

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

Capitals








[Please read more on managing this topic on page 68.](#)

Label:


Financial Capital


Manufactured Capital


Intellectual capital


Natural Capital


Social and Relationship Capital


Human Capital

Material topics and aspects

GRI disclosure

Impacts



Social Commitment

Commitment to human rights
Commitment to communities
Stakeholder engagement
Social responsibility

GRI 202: Market presence 2016

GRI 203: Indirect economic
impacts 2016

GRI 411: Rights of Indigenous
peoples 2016

GRI 413: Local communities 2016

GRI G4: Electric utilities sector
disclosures

Actual positive impacts include strengthening the energy security of communities, and increasing tax revenue for the municipalities through tax collection and the receipt of financial compensation for the use of water to generate electricity. Potential positive impacts, in turn, include income generation, with an increase in commercial and service activities in the communities; improvements in education, health and sanitation services, due to investment in community initiatives; and local development through government partnerships for the implementation of public policies.

Actual negative impacts identified include nuisances to local communities caused by vehicle traffic and noise, the generation of waste and changes to the landscape surrounding projects being implemented. For the business, potential negative impacts are related to fines, regulatory sanctions, loss of licenses and damage to the Company's image due to non-compliance with environmental and/or labor standards. For the community, potential negative impacts include interference in their way of life, the possibility displacement of population due to the implementation of new projects and exposure to risks of violations to human rights due to proximity to the construction sites.

SDGS



Capitals



 Please read more on managing this topic on page 194.

Label:



Financial
Capital



Manufactured
Capital



Intellectual
capital



Natural
Capital



Social and
Relationship Capital



Human
Capital

Material topics and aspects

GRI disclosure

Impacts



Well-being, Health and Safety for the Workforce

GRI 403: Occupational health and safety 2018

GRI 410: Security practices 2016

GRI G4: Electric utilities sector disclosures

IF-EU-320a.1 (1) - Workforce health and safety

As a result of the Company's programs, the positive impacts identified, classified as actual or potential, include a reduction in the accident rate and improvement in health for employees and their families. Promoting a healthy and safe environment increases engagement and productivity, strengthens stakeholder trust and improves corporate image, in addition to increasing talent retention.

Actual or potential negative impacts arising from poor management of this topic are related to serious accidents, fatalities and absenteeism due to work-related illnesses. In the financial dimension, impacts are related to costs of work-related accidents, fines and penalties due to non-compliance with safety standards, reduced productivity due to accidents or sick leave, damage to the Company's image and possible changes in legislation that lead to an increase in compliance requirements and costs.

SDGS



Capitals



 Please read more on managing this topic on page 271.

Label:



Financial Capital



Manufactured Capital



Intellectual capital



Natural Capital



Social and Relationship Capital



Human Capital

Material topics and aspects	GRI disclosure	Impacts
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People Management

Developing the workforce
Diversity, equity and inclusion
People management

GRI 401: Employment 2016
GRI 402: Labor relations 2016
GRI 404: Training and education 2016
GRI 405: Diversity and equal opportunities 2016
GRI 406: Non-Discrimination 2016
GRI 407: Freedom of association and collective bargaining 2016
GRI G4: Electric utilities sector disclosures

Actual positive impacts of proper people management at the Company include increased internal job opportunities, such as mobility and career transition, greater freedom for new hires and leadership development, as well as adaptation to changes and technological innovations. For Copel, the potential positive impact is talent retention; while, for employees, they include greater satisfaction and quality of life, especially if good diversity and inclusion practices are observed. The transformation of Copel into a corporation can lead to positive changes in the Company's culture.

The actual or potential negative impacts, in the event of poor people management are the imbalance between development and rewards, lack of alignment with organizational strategies, high costs of implementing new management processes, work-related illnesses and low employee engagement. If good diversity and inclusion practices are not observed, potential negative impacts are related to worsening mental health and reduced satisfaction of employees.

SDGS



Capitals



 Please read more on managing this topic on page 247.

Label:



Financial Capital



Manufactured Capital



Intellectual capital



Natural Capital



Social and Relationship Capital



Human Capital

Material topics and aspects

GRI disclosure

Impacts



Economic and Financial Performance

Sustainable investment
Economic and financial performance

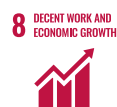
GRI 201: Economic performance
2016

Proper management of this topic leads to actual or potential positive impacts, such as increased investment capacity and greater returns for shareholders, considering share price and the distribution of dividends. For employees, there is an improvement in variable compensation, as well as in profit sharing.

In terms of sustainable investments, there are benefits for the Company and its stakeholders, such as improved service quality and faster energy supply. There has also been a reduction in greenhouse gas emissions, operating costs and work-related accidents thanks to projects such as smart grids.

The potential negative impact of poor management of this topic is a reduction in net income and shareholder return. Tariff adjustments and revisions can affect the Company's economic and financial performance. There is also damage to Copel's reputation and image if it does not meet sustainable investment commitments. There are actual negative environmental and social impacts from the implementation of renewable projects.

SDGS



Capitals



 Please read more on managing this topic on page 154.

Label:



Financial
Capital



Manufactured
Capital



Intellectual
capital



Natural
Capital



Social and
Relationship Capital



Human
Capital

Material topics and aspects

GRI disclosure

Impacts



Customer Satisfaction

Customer satisfaction
Affordable electricity

G4 GRI: Electric Utilities Sector
Disclosures

IF-EU-240a.3 - Energy affordability

IF-EU-240a.4 - Energy affordability

IF-EU-000.A - Activity metrics

Proper management of this topic expands accessibility and makes service more efficient, as well as reduces power outages and the economic losses related thereto. For consumers, it improves service quality and their quality of life. It also increases customer trust and provides reputational gains for the Company. As a result of the return of PIS/COFINS credits in 2024, consumers enjoyed financial benefits: the average Annual Tariff Adjustment was 0.00%, when it would have been 7.87%.

The topic's potential positive impacts include innovation and a leading position in the sector, greater energy security, the development of new technologies that increase grid efficiency and resilience, process optimization and cost reduction.

Actual negative impacts are the consumption of energy and natural resources in innovation processes, as well as the generation of waste. If this topic is not properly managed, potential negative impacts include an increase in the number of complaints; failures in capital allocation and in the schedule of Development and Innovation Projects; lack of investments; and reputational and compliance risks. There is also the possibility of changes in the regulatory environment that may impact customer satisfaction.

SDGS

7 AFFORDABLE AND
CLEAN ENERGY



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



10 REDUCED
INEQUALITIES



16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



Capitals



Please read more on managing this topic on page 222.

Label:



Financial
Capital



Manufactured
Capital



Intellectual
capital



Natural
Capital



Social and
Relationship Capital



Human
Capital

Material topics and aspects

GRI disclosure

Impacts



Sustainable Sourcing

GRI 204: Procurement practices 2016

GRI 308: Supplier environmental assessment 2016

GRI 408: Child labor 2016

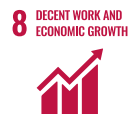
GRI 409: Forced or compulsory labor 2016

GRI 414: Supplier social assessment 2016

Poor management of this topic leads to potential negative impacts related to hiring suppliers that may violate labor, environmental or human rights, as well as Copel's ESG commitments, resulting in financial and reputation damage for the Company. There are also activities carried out by suppliers whose actual negative environmental impacts are inherent in their activities, such as network construction and maintenance.

The actual positive impacts of proper supplier management are the development of suppliers, focused on local suppliers and small- and medium-sized companies, as well as the expansion of Copel's influence on the sustainable development of the regions where it operates, insofar as the Company guides and engages these stakeholders in good ESG practices. There are also potential positive impacts on Copel's image and reputation.

SDGS



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Capitals



[Please read more on managing this topic on page 234.](#)

Label:



Financial Capital



Manufactured Capital



Intellectual capital



Natural Capital



Social and Relationship Capital



Human Capital

Material topics and aspects	GRI disclosure	Impacts
 Community Safety	GRI 416: Consumer health and safety 2016 GRI 417: Marketing and labeling 2016 GRI G4: Electric utilities sector disclosures	Considering all of the Company's businesses, actual positive impacts identified include improved relations with communities and strengthened safety culture. For hydroelectric power generation, they refer to making the municipalities and departments in charge of disaster response (defesa civil, in Portuguese) better equipped and have better knowledge of the hydrological status of the rivers where Copel operates reservoirs, through real-time information available on Copel's website. Greater engagement of several players makes it possible for the community to quickly organize itself, even in situations that do not involve Copel. On the other hand, there are different actual or potential negative impacts inherent in Copel's business, depending on the lifecycle and location of projects. In hydroelectric power generation, the impact is mainly related to the population's coexistence with dam structures. In the case of management failure that leads to the materialization of the risk of a breach, the possible impacts are associated with loss of life and material damage to the community located in the potentially affected areas. For the business, potential impacts include loss of licenses, sanctions by inspection bodies, damage to image, interruption of activities, losses in operating results and deterioration in the Company's financial conditions. For the transmission and distribution business, the potential impact on the safety of the population is related to the risk of electric shock, in the event of contact with the energized components of transmission lines.

SDGS

3

GOOD HEALTH AND WELL-BEING



11

SUSTAINABLE CITIES AND COMMUNITIES



13

CLIMATE ACTION



16

PEACE, JUSTICE AND STRONG INSTITUTIONS



Capitals



Please read more on managing this topic on page 231.

Label:



Financial Capital



Manufactured Capital



Intellectual Capital



Natural Capital



Social and Relationship Capital



Human Capital

ABOUT COPEL

- The year 2024 at a glance
- Company profile



Interactive
summary



THE YEAR 2024 AT A GLANCE



Cybersecurity

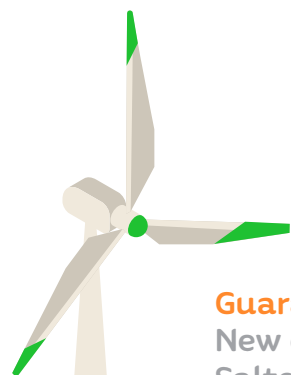
Creation of the Cybersecurity and Information Security Committee.



In 2024, **5,735 employees**

including direct employees, contractors and interns — participated in cybersecurity training, totaling

5,263.8 hours of training.



Guaranteed clean energy generation.

New concession agreements for the Salto Caxias, Segredo and Foz do Areia hydroelectric power plants, ensuring another 30 years of operation for

64% of the Company's installed capacity.

Challenges and opportunities

Adaptation to climate change, opening of the market and evolution of Copel culture.

Investments and agreements



BRL 2.5 billion

invested in 2024, 98,9% of which in electric assets.

BRL 5.5 billion

in strategic agreements with Eletrobras.

Retention and attraction



Valuing talents and employee well-being take priority.

Approval of the **Long-Term Incentive Plan** (ILP, in Portuguese) as an essential mechanism for talent attraction and retention.



Copel's modernization and commitment.

Celebrating 70 years of operations, Copel reached its goal of **100% renewable** energy ahead of schedule¹.



Governance and transparency

High ethical standards, transparency and liquidity aiming at listing in the Novo Mercado segment.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

THE YEAR 2024 AT A GLANCE



Innovation

3rd Copel Hackaton,
with 220 students and
18 universities from the
state of Paraná



**Inauguration of the
Copel Volt Room**
in the Senai Habitat
Innovation Hub.



Integrated Innovation
Week gathered 6,852
participations and
mobilized

1,689
employees.



Copel Volt Multiparceiros

the Company stood out
in MCTI/ABDI's Conecta
Startup Program, with
three proofs of concept
carried out with startups.



Creation of the Innovation Strategic Forum Subcommittee,

reporting to the
Investment and
Innovation Committee.



**Published the
Innovation
Policy.**

Economic and financial performance

In 2024, Copel implemented
share buyback
programs
and paid extraordinary
dividends.

Positive

BRL 48 million
change in financial result.

Consolidated net
income totaled



BRL 2,799.4
million, moving up
by 20.3% from 2023.

Net operating
revenue of



BRL 22,651.1
million, up
by 5.5% from 2023.

Sustainable energy matrix

Sale of Compagas (gas
distribution company)
with equity value of

BRL 906
million

In line with its
strategic guideline of
decarbonizing
its portfolio, Copel carried out
the strategic divestment of
non-renewable assets.

Customer benefits



Copel Mercado Livre's
solutions provide savings
of up to

35% to customers.

COMPANY PROFILE

GRI 2-1, 2-6 7 9

In 2024, Copel reached a milestone: 100% renewable energy generation.¹

The year 2024 represented a milestone for Copel: 100% of its energy¹ generation came from renewable sources. This effect reinforces its commitment to sustainability and consolidates its prominent position in the Brazilian power sector, in a 70-year history of innovation and socio-environmental responsibility. As a publicly held company, Copel's shares are traded in the São Paulo (B3), New York (NYSE) and Madrid (Latibex) stock exchanges, enhancing its presence in global financial markets and making it more attractive to investors.

¹ In February 2024, the Figueira Thermal Power Station went into hibernation, making all the energy generated by Copel 100% renewable.

Having completed another year as a corporation with no controlling shareholder, Copel remains committed to good corporate governance practices, sustainable development and market competitiveness. In addition to important partnerships and equity interests in strategic assets, its corporate structure has four wholly-owned subsidiaries.

- Copel Geração e Transmissão S.A. (Copel GeT)
- Copel Distribuição S.A. (Copel DIS)
- Copel Comercialização S.A. (Copel Mercado Livre)
- Copel Serviços S.A. (Copel Serviços)

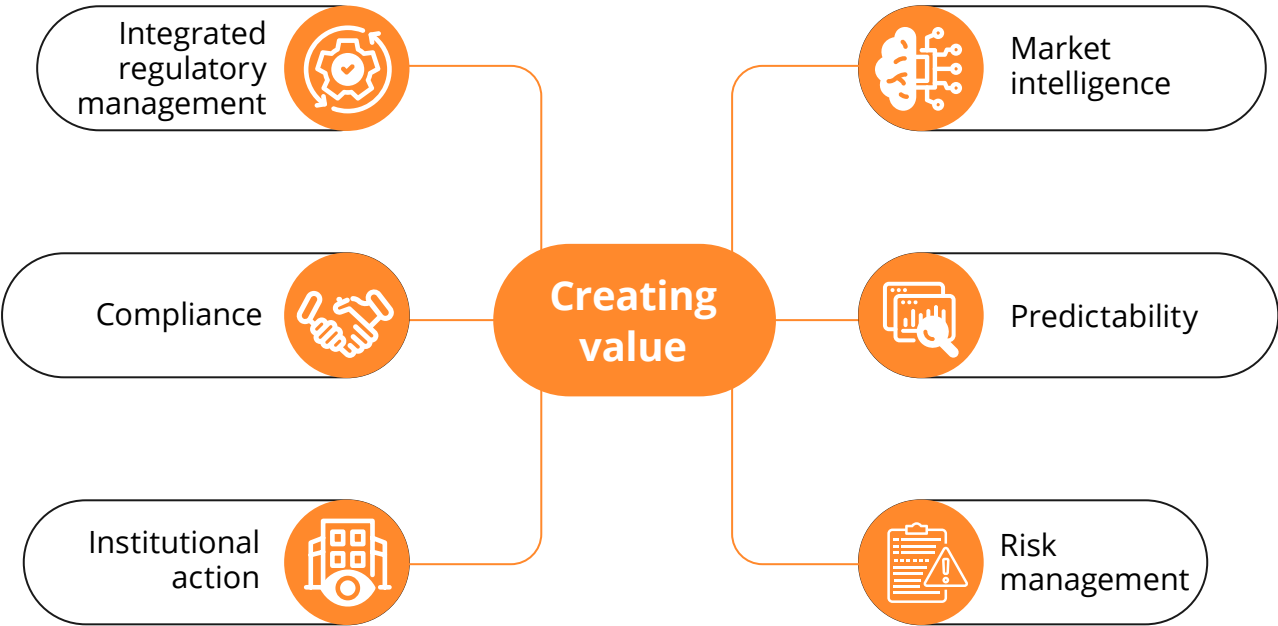
70 years 
of innovation and social and environmental responsibility

Throughout this report, the terms “Copel” and “Company” refer to the Copel Group’s consolidated information, while “Copel Holding Company” refers exclusively to Copel as an independent entity, not related to its subsidiaries.

Copel is one of the largest companies and one of the most recalled brands in Paraná. Its energy distribution business serves 99% of the state, supplying energy to approximately 5.19 million consumer units in the residential, commercial and industrial segments. The Company has its own power plants and transmission lines across ten Brazilian states and produces 100% of its energy from renewable sources¹. Moreover, the trading company has a portfolio of approximately 1,529 customers in 22 Brazilian states.

The Company has 4,389 direct employees (87% operational and 13% corporate) and 11,718 contractors working in essential operation and maintenance positions.

Leading role in the regulatory field as a value driver



99% of Paraná's territory served

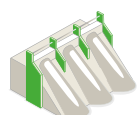
5.19 million of consumer units served

4,389 own employees

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

COPEL IN BRAZIL

Strategic operation with nationwide relevance



Generation

Installed capacity¹

6.6 GW

Net generation

29,373.30 GWh

- Renewal of the Salto Caxias, Segredo and Foz do Areia HPPs concessions for another 30 years. These plants account for 64% of Copel's installed capacity.
- Completion of the divestment of the Araucária Gas-Fired Power Plant (Uega).
- Progress in the divestment of 13 small-scale assets.
- Progress in the asset swap with Eletrobras.

¹ The Figueira thermal power plant (hibernated) represents 0.3% of the matrix.



Transmission

8 Presence states

3.3 %

Market Share in Brazil

9,600 km*
Transmission lines

* Includes equity interest.



Distribution

Brazil's **4th** largest distribution company **Concession renewed until 2045**

394 municipalities served in Paraná and 1 in Santa Catarina



403 substations



Distribution lines
214,607 km

5.19 million
Consumer units

Low delinquency rate:
only 1.05%



Energy trading

Volume traded

2.7 GWm

Revenue

BRL 3.57 billion

I-RECs sold

6.4 million
from 2021 to 2024

(avoiding the emission of nearly 550,000 metric tons of CO₂)

58%
for energy sold comes from own renewable generation

+1.500
customers

COPEL IN BRAZIL

Presence in 
23 states

and in the Federal District.
Copel GeT and Copel DIS are present in 10 Brazilian states and Copel Mercado Livre is present in 22 states and the Federal District

Business share (Net Operating Revenue)



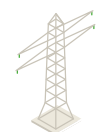
Trading

BRL 3,568,463



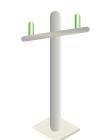
Generation

BRL 3,477,696



Transmission

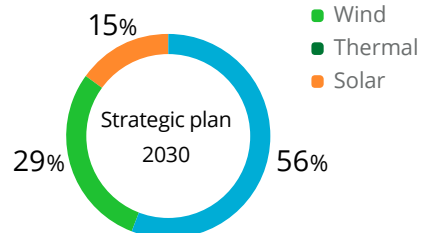
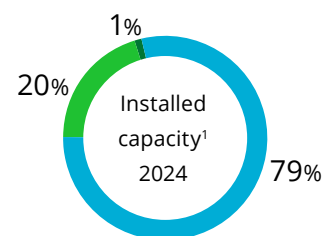
BRL 1,144,481



Distribution

BRL 17,030,454

Energy matrix (%)



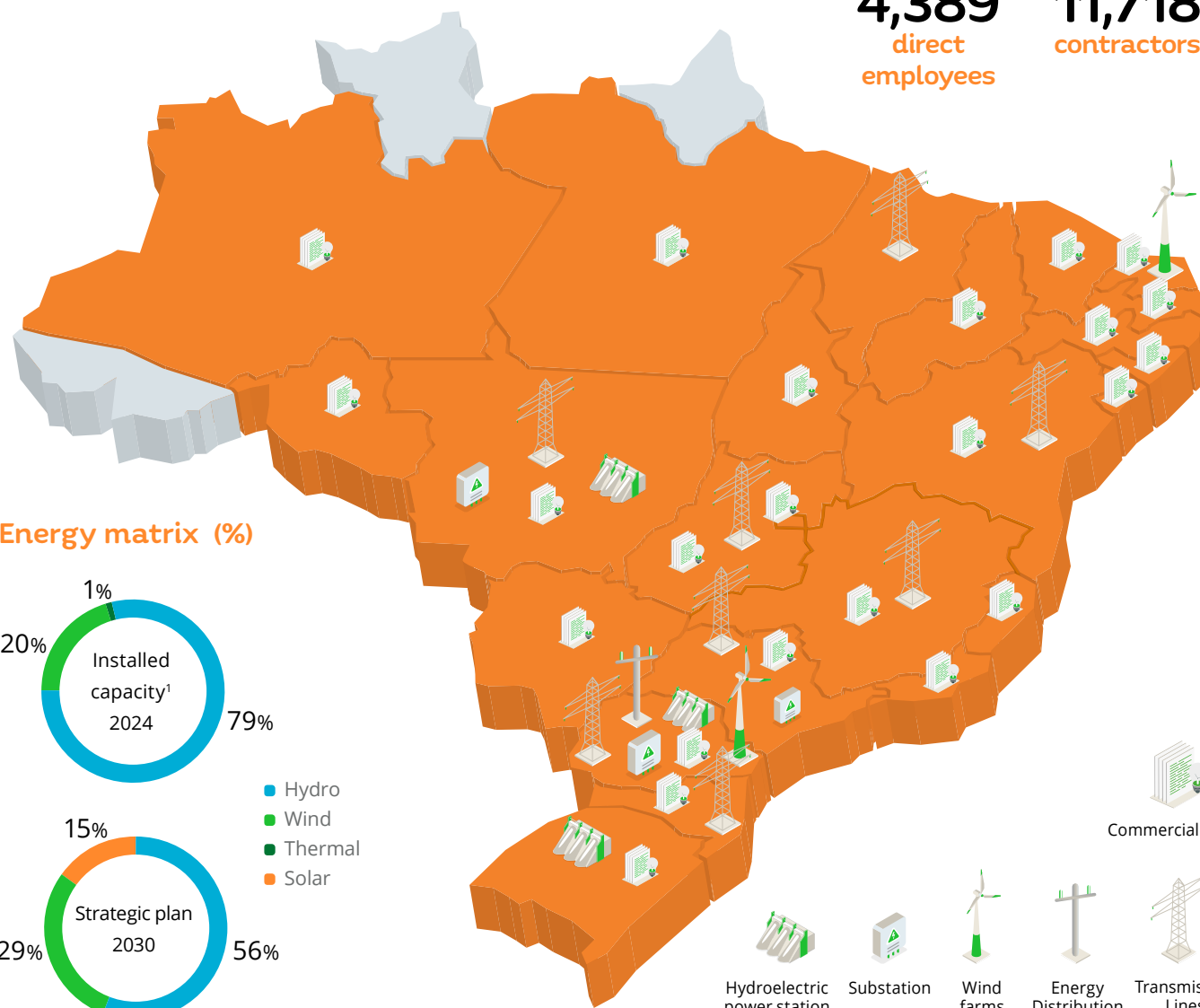
- Hydro
- Wind
- Thermal
- Solar



Workforce:

4,389
direct
employees

11,718
contractors



Commercialization

Hydroelectric power station

Substation

Wind farms

Energy Distribution

Transmission Lines

¹ The Figueira thermal power plant represents 0.3% of the matrix.

Strategic framework

Copel operates based on the guidelines expressed in its Strategic Framework, which guides its management and directs all the Company's actions and decisions, ensuring that its activities are aligned with the interests of its stakeholders, focusing on the contemporary challenges of the power sector and sustainable development.



Mission

Provide energy and solutions for sustainable development.



Vision

Be an industry-leading player in our business segments while creating sustainable value.

Values

Principles that guide the Company's conduct:



Responsibility

Managing the organization sustainably, respecting the rights of all stakeholders, including future generations, and committing to preserving all forms of life.



Transparency

Accountability Company's for the organization's decisions and achievements, communicating both positive and negative aspects to all stakeholders.



Ethics

A collective pact that guides individual behaviors in line with shared goals.



Health and safety

A wholesome work environment in which workers and managers collaborate to achieve continuous improvement in health, safety and well-being.



Respecting people

Showing consideration for others.



Dedication

Wholehearted engagement in work, supporting the organization's goals.



Innovation

Turning ideas into processes, products, or services to enhance existing ones or create something new and better.

Generation and transmission

GRI 2-6, GRI G4-EU1, EU2, EU10

Copel Geração e Transmissão (Copel GeT), a wholly-owned subsidiary of the Copel Holding Company, is responsible for comprehensive power generation and transmission operations, with a diversified, well-structured portfolio to meet the demands of customers from different regions of the country. In 2024, it achieved 100% renewable energy generation¹.

On December 31, 2024, Copel operated 62 own power plants and held equity interest in another 12, with a portfolio comprising 26 hydroelectric, 47 wind and 1 thermal power plant, with total proportional installed capacity and guaranteed capacity of 6,572.8 MW and 2,904.3 average MW, respectively. During the year, Copel divested some assets (see [Asset divestment](#)) and ensured that its largest hydroelectric power plants remained in its portfolio (see [Strategic priorities](#)), ensuring greater operational efficiency and strategic capital allocation, allowing the company to focus its efforts on priority assets, such as the Iguaçu River hydroelectric plants.

The strategic management of Copel's portfolio is aligned with the guidelines of the Brazilian electricity sector and its regulatory dynamics. In this sense, the Federal Government is responsible for planning the expansion of generation capacity in the national interconnected system, ensuring that the energy matrix remains diversified and sustainable, thus promoting energy security in the country.

Copel GeT's operations are consolidated in the Generation and Transmission Operation Center (COGT, in Portuguese), located in Curitiba, which relies on advanced technologies to monitor and control activities, ensuring high reliability and security in energy supply. Copel GeT offers Proprietary Engineering services to both its own projects and its strategic partners, covering project approval, material and equipment inspections, supervision of works, commissioning and operation of power plants.



6,572.8 MW
total proportional installed capacity

2,904.3 MW
physical guarantee

¹ The Company's asset register still includes the Figueira thermal power plant, that represents 0.3% of the matrix. This plant is part of a project to divest 13 assets, whose purchase and sale agreement was signed in 2024, but which have not yet been fully transferred to the new owner. In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

Installed capacity by energy source¹ (MW) | GRI G4 EU1

Source	2022	2023	2024
Wind	922.8	1,183.4	1,183.5
Hydroelectric	5,369.4	5,370.4	5,369.3
Thermal	413.1	413.1	20.0
Total	6,705.3	6,966.9	6,572.8

¹Data refer to Copel. The Figueira thermal power plant represents 0.3% of the matrix.

Net energy generation (GWh)^{1 2} | GRI G4-EU2

Category	2022	2023	2024
Hydroelectric Power Plants	23,682.2	23,769.5	25,763.2
Thermal Power Plant ³	204.3	40.1	2.3
Wind Power Plan	2,901.3	4,257.5	3,607.8
Total	26,787.8	28,067.1	29,373.3

¹ Considers the volume generated by Copel GeT's operations and by the power plants in which the Copel Holding Company has a direct stake: Elejor, Uega, Foz do Chopim, Voltalia and Dona Francisca.

² Hydroelectric power plants with an installed capacity of more than 50 MW account for the largest share of Copel's total generation. The plants are coordinated centrally by the National Electricity System Operator and according to reservoir conditions and system demand.

³ The purchase and sale agreement for the divestment of 13 assets, which includes the Figueira thermal power plant, was signed in 2024, but the assets have not been transferred yet.

Marketshare

Main products (%)	Brazil	Southern Region	Paraná
Electric power generation ¹	3.0 ²	19.7 ³	47.4 ³
Electrical power transmission ⁴	3.3	12.6	24.7
Electricity distribution ⁵	6.5	35.2	97.4
Commercialization of electric energy ⁶	1.6	-	-

¹ Copel Geração e Transmissão's consolidated installed capacity. Reference Dec/24, according to the latest data available at CCEE.

² Only the portion of the Itaipu Power Plant belonging to Brazil is considered.

³ The Itaipu Power Plant is not considered in the South region.

⁴ The market refers to the Permitted Annual Revenue - RAP.

⁵ Distribution wire market, for Brazil and the South region, the calculation is made based on the Monthly Electric Energy Consumption - EPE. For Paraná, the data is estimated.

⁶ In comparison with other traders. Due to the nature of the activity, measured only at a national level. Reference December/2024, according to the latest data available at CCEE.



LEARN MORE

For additional information, click here to access **Copel GeT's Social and Environmental Report**.

In the transmission segment, Copel GeT operates in eight states, representing 3.3% of the domestic market. Its infrastructure covers 9,600 km of transmission lines, taking into account its equity interests, and a set of 53 grid substations, which guarantee the reliability and efficiency of the power system.

Distribution

GRI 2-6

In total, Copel DIS fully serves 394 municipalities in Paraná and 1 municipality in Santa Catarina (urban area served).

Copel Distribuição S.A. (Copel DIS) is Copel's wholly-owned subsidiary responsible for electricity distribution to residential, commercial, industrial, rural and public sector customers, standing out for its diversity of energy needs and profiles. For the 5,189,231 consumer units (captive consumers) in Paraná, Copel DIS is responsible for purchasing and supplying energy. The company also distributes energy to free customers.

Customer satisfaction is a strategic pillar and a material topic for the company, which is why it continually invests in innovative technologies, such as smart grids and digital meters, as well as improving its service channels. Copel DIS develops energy efficiency programs, promoting the conscious use of energy through educational projects, donations of more efficient equipment and the replacement of light bulbs in communities.

Committed to sustainability, Copel DIS adopts practices to reduce the environmental impacts of its operations, such as efficient waste management and the protection of sensitive areas. These initiatives are aligned with the Copel group's strategic goals and reinforce the subsidiary's commitment to sustainable development.

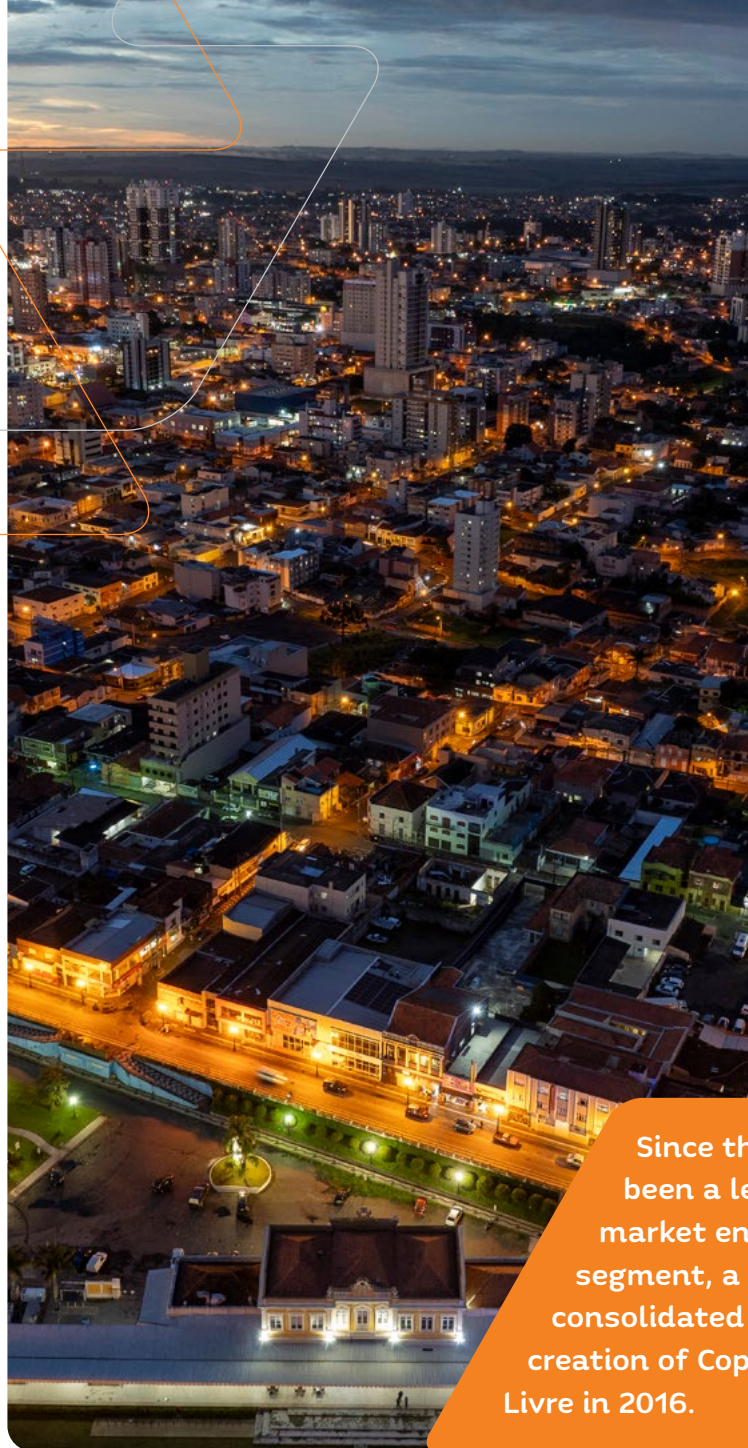
Through efficient, customer-centered management, Copel DIS reaffirms its role as one of the country's leading power distribution companies, contributing to the well-being of society and the development of the regions it serves.



LEARN MORE

For additional information, click here to access **Copel DIS's Social and Environmental Report**.





Energy Trading

GRI 2-6

Copel has consolidated its leadership in the free market energy trading segment since the 1990s, when it became a pioneer in supplying energy under this model in Brazil. With the creation of Copel Mercado Livre in 2016, the Company reinforced its position as one of the largest traders in the sector, offering innovative and customized solutions to meet the different market demands.

Buying and selling energy and providing consultancy services, Copel Mercado Livre serves sectors such as agribusiness, commerce, industry, services, the public sector and other trading companies.

In 2024, it sold 2.7 average gigawatts of energy, serving more than 1,500 customers in 22 Brazilian states and the Federal District, representing a 4% increase on the previous year. This expansion reflects the growth of the free energy market, which saw a record number of migrations in 2024, with small- and medium-sized companies accounting for approximately 74% of new consumers.

In response to the Ministry of Mining and Energy's Ordinance 50/2022, which expanded access to the free energy market to Group A consumers (medium and high voltage) starting in 2024, Copel Mercado Livre placed innovation as one of its pillars throughout the year. The

Since the 1990s, Copel has been a leader in the free market energy trading segment, a position it consolidated with the creation of Copel Mercado Livre in 2016.

2.7
average
gigawatts

was the sale of energy recorded in 2024, serving more than 1,500 customers in 22 Brazilian states and the Federal District, representing an increase of 4 per cent over the previous year.

modernization of its digital platform and the implementation of a new operational management system have increased efficiency in contract management, and consumption measurement and forecast. The trading company began a project to update its Customer Relationship Management (CRM), aimed at improving service and tailoring the experience of customers interested in migrating to the free energy market. With fully digital processes, the contracting journey has become even more agile, secure and accessible.

Service quality was reflected in the customer satisfaction index, which reached 74.9 on the Net Promoter Score (NPS), an increase of 8.08% compared to 2023. This achievement reinforces the Copel commitment to excellence and continuous evolution in customer experience.

Copel Mercado Livre continues to contribute to the energy transition by selling 100% renewable energy, generated at the Company

own plants. In 2024, 3.1 million MWh were traded with I-REC certification, allowing companies to neutralize their Greenhouse Gas emissions within the GHG Protocol Program and align their operations with the Sustainable Development Goals (SDGs). Currently, 82 companies already use energy certified by Copel Mercado Livre, consolidating the Company as a strategic partner in the search for a more sustainable future.

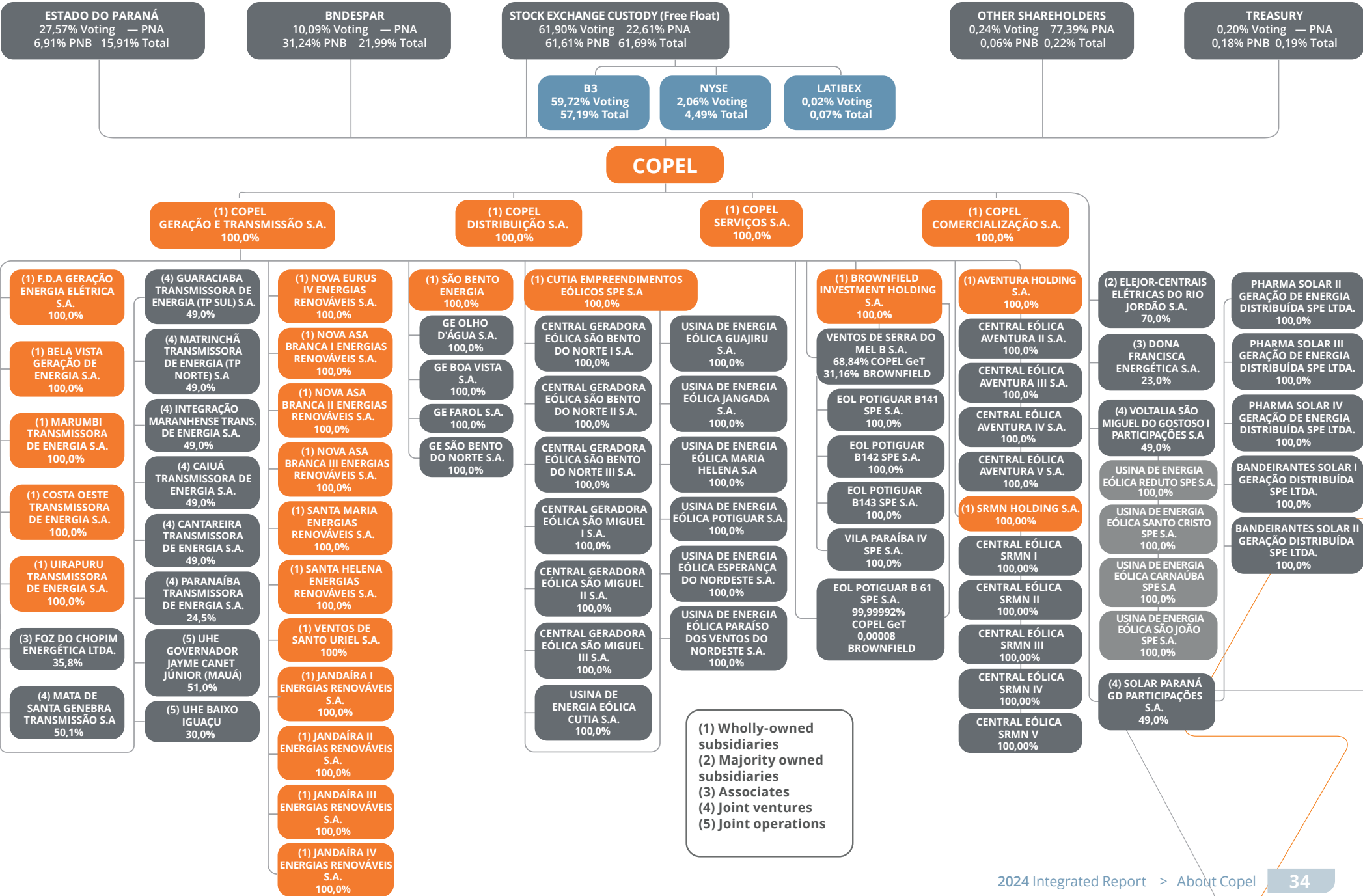
Looking towards the future, Copel Mercado Livre plans to consolidate its presence in the domestic market and in the development of innovative solutions to meet the new demands of the power sector. With a business model underpinned by innovation and reliability, the company continues to strengthen its position as one of the largest energy traders in the country, creating value for customers and for the Brazilian power sector.



In line with the search for a more sustainable future, 100 per cent of the energy sold by Copel Mercado Livre comes from renewable sources.

74.9
on the Net Promoter Score (NPS)

BRL 3.1 million
of MWh commercialised in 2024 with I-REC certification



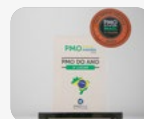
Main recognitions



Copel received the Best in Management award from the National Quality Foundation (FNQ, in Portuguese) in the bronze category in 2024.



Copel DIS won the “Best Project Manager” and “Best Project in the State of Paraná” awards for its Smart Grid Project.



Copel GeT won the award for best Project Office (PMO Copel GeT) in Paraná and best PMO manager of the year.



VOL Award: “Best corporate volunteering management practices” category



Reporting Matters Brasil (CEBDS) Copel is among the 15 companies that obtained the highest scores in the evaluation of their reports. The aim of the Brazilian Business Council for Sustainable Development (CEBDS, in Portuguese) is to help improve corporate reporting practices. Aspects assessed: completeness, operational context, materiality, alignment, stakeholder engagement, external assurance, balance, sustainability governance, strategy, partnerships and collaborations, implementation and control, targets and commitments, performance, easy access, attractive design and impact.



Copel is among the eight Brazilian companies listed in the **Carbon Clean 200**, an international ranking of the 200 publicly traded companies that stand out the most in global energy transition, considering revenue from clean sources.



Energy Summit Awards - Winner in the Investment Funds category.



National Quality of Life Award (PNQV, in Portuguese) — Gold category



PMI-PR 2024 Summit - Project Management Institute (PMI)

Recognitions



In September 2024, for the fifth consecutive year, the Company received the **GHG Protocol Gold Seal** (referring to the 2023 Emissions Inventory), consolidating its position among companies that measure and manage their emissions with excellence.



Sesi SDG Seal Copel DIS: “Apartamento Didático – Basic Electricity Course for Women” project.
Copel Holding Company: Copel’s 2030 Carbon Neutrality Plan.
Copel Mercado Livre: Trading of renewable energy certificates.



Copel received the most important accolade, the **Paraná Plus Climate Seal**, for companies that submit their Emissions Inventories for verification by an independent audit, accredited by Inmetro, confirming a reduction in emissions.



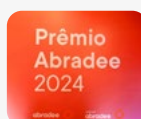
Anefac 2024 Transparency Award - National Association of Finance, Administration and Accounting Executives – “Companies with Net Revenue above BRL 20 billion” category for the ninth time.



Sustainability Yearbook 2025 – Copel was included for the first time in the Guide of the 780 most sustainable companies, based on S&P Global’s 2024 CSA score.



Sesi SDG Award - Copel GeT was a finalist in the Environmental Category - Large Industry, with the Methodology for Launching Cables with the Use of Drones on Overhead Transmission Lines project.



2024 Abradee Award In 2024, Copel DIS won in the Innovation Management category and came in second among distribution companies in the South region.



500 Largest Companies of the South Award - Amanhã magazine - fifth place in the South region and first place in Paraná.



Aneel Ombudsman Award - The Ombudsman’s Office was elected the best in **Brazil for the fourth time.**

STRATEGY AND OUTLOOK

- Sector overview
- Business model
- Sustainability management
- Stakeholder engagement



Interactive
summary



SECTOR OVERVIEW

From where it is generated to the point of consumption, electricity goes through a complex path that involves a long chain of agents.

All over Brazil, energy comes from different sources. Once generated, it is transported through long transmission lines and finally distributed through local grids (substations) until it reaches the end customer, whether industrial, commercial or residential.

At each stage, this journey entails a lot of planning, which has led to greater diversification of the energy matrix and remarkable progress in new technologies.

Currently, the Brazilian power system is properly meeting the growing electricity demand, which ended 2024 with additional 10.85 gigawatts (GW) in the generation matrix. This figure exceeds Aneel's forecast for the year by 0.75 GW, leading to the

largest expansion since measurement began, in 1997.

In 2024, the total number of power plants installed came to a record high for a year: 301 new plants started operating, in 16 states, including 147 photovoltaic solar plants (5.63 GW) and 121 wind farms (4.26 GW). As a result, the share of so-called renewable plants came to 84.95% of the total assets in operation, considering the entire Brazilian power sector.

Therefore, on January 7, 2025, Brazil had 208.93 GW of inspected power capacity (including plants in operation and under construction), according to Aneel's Generation Information System (Siga, in Portuguese) data.

The strengthening of renewable sources has been one of the main factors in the transformation of the sector,



301 new plants came on stream in Brazil's electricity sector in 2024

84.95% of the assets in the Brazilian electricity sector are renewable plants

complemented by the decentralization of the system and the blossoming of the Free Energy Market, whose main trends are the adoption of smart management mechanisms (smart grids and artificial intelligence), the integration of distributed energy resources and the modernization of distribution grids.

The trend towards decentralized generation, for example, has opened up room for small producers and consumers with micro and mini-generation systems. Processes digitalization, in turn, allows for greater network control.

The biggest bottleneck is still in transmission, which is why auctions have sought to expand capacity. In just one of them, held in September 2024, 783 km of new lines and substations were auctioned off. Between June 2023 and April 2024, nearly 17,000 km had already been approved.

As points of contact with end consumers, distribution companies have the challenge of ensuring reliable supply — in a landscape in which household

consumption rose to 176,425 GWh in 2024, up by 7.1% from 2023. However, in March, the National Interconnected System (SIN) signaled a surplus of energy, with surpluses declared by distribution companies in the New Energy Surplus and Deficit Compensation Mechanism (MCSD, both acronyms in Portuguese). Therefore, it is important to note that, alongside the growth of Distributed Generation (DG) and the migration of consumers to the free market, these surpluses indicate an expectation of low demand in the next auctions, except for any specific issues declared by distribution companies.

In any case, in an increasingly dynamic electricity ecosystem, the good prospects attract investors and companies while fostering regulatory improvements aimed at making the system more effective and at developing new business models.



Key factors for recognition

Copel has consolidated its position as an integrated, renewable company based on phased Strategic plan. The first phase, focused on structuring efficiency, was successfully completed and prepared the Company for a new cycle aimed at operational efficiency and then expansion. Adaptation to the corporation model and the renewal of its main concessions were

essential steps in this process, ensuring soundness and revenue predictability for the coming years.

In the relationship with the market, Copel has strengthened its transparency-based, close relationship with investors, enhancing its participation in roadshows and international conferences. The Investor Relations team devoted its efforts to strengthening dialog with financial institutions and presenting the Company's financing thesis based on its assets' predictability, its efficient corporate governance and its ability to create value.

The commitment to sustainability also was a central pillar in Copel's strategy. The divestment of thermal assets and exclusive focus on renewable sources have consolidated the Company as a

benchmark in the Brazilian power sector. With a fully renewable energy generation portfolio¹, comprising hydro and wind power, the Company reinforced its adherence to ESG guidelines and the global decarbonization movement, while maintaining its competitiveness and operational efficiency.

Capital allocation discipline was another important factor for Copel's results, directing investments to strategic projects such as smart grids and automation systems, which boost operational reliability and efficiency, with emphasis on one of the largest smart meter parks in Brazil. Beside that, some initiatives, such as the share buyback program and the payment of extraordinary dividends, attest to the Company's commitment to creating value for its shareholders, balancing growth and financial return.

¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.



Strategic priorities

Copel is an integrated power company recognized for its high operational efficiency and for having the lowest default rates in the industry.

One of its key strategic moves in 2024 was the renewal for another 30 years of its three most important hydroelectric power plants' concessions — Foz do Areia, Segredo and Salto Caxias —, which would expire in the coming years (Foz do Areia HPP's concession expiring in 2024). In line with the Company's strategic risk management and materiality, the early renewal ensures operational predictability and energy security in the state of Paraná. The renewal included

the payment of a BRL 4.1 billion fee and guaranteed that a strategic 4,176 MW-asset remained in the portfolio, enabling future capacity expansions.

The concession renewals strengthen Copel's position as a reference for sustainability, renewable energy and operational efficiency in the power sector.

Copel sold its stake in the Araucária Gas Power Plant (Uega) ([see more on page 42](#)), enabling the company to redirect its resources to areas more aligned with its core competencies and decarbonization strategy. The operational condition of the asset, which did not fit in with the search for maximum efficiency characteristic of the Company's business model, was a decisive factor. The divestment decision allowed a specialized operator to take over the asset, boosting its results.

In line with the company's materiality and strategic risk management, the anticipation of renewals guarantees Paraná's energy security

30 years **Renewal of contracts for Copel's three most important hydroelectric plants**



Decarbonization - divestment

In 2024, Copel GeT signed a sale agreement with Electra Hydra/Intrepid for 13 small-scale generation assets, including the Figueira Thermal Power Plant, totaling an installed capacity of 118.7 MW. The estimated transaction value was BRL 450.5 million. The sale also included the assumption of BRL 21.4 million in debts with the Brazilian Development Bank (BNDES, in Portuguese).

The sale of Uega, in which Copel GeT and Copel Holding Company held an 81.2% stake (60.9% and 20.3%, respectively), reinforces the Company's sustainable growth and is aligned with its 2030 Vision. The

plant was sold to Âmbar Energia S.A. The completion of Uega's full divestment was announced in July 2024, and the transaction value equivalent to Copel's equity interest was BRL 320.7 million.

Copel has completed the divestment of its 51% stake in Companhia Paranaense de Gás (Compagas) by 2024, putting all of its shares up for sale. The Company received 40% of the equity value of BRL 906.0 million, restated according to the agreement considering the reference date of December 31, 2023. Additional installments will be settled by September 2026.

The expansion of the portfolio of new digital products and services reflects Copel's commitment to innovation and modernization in the electricity sector.

Starting in 2025, Copel will begin a new strategic cycle, consolidating its position in the sector through investments and divestments, in addition to developing new products and services. The Company will focus on market intelligence and opportunity mapping, driving innovation with a new platform aimed at transforming customer experience. At the same time, it will conduct a process review focused on efficiency and performance, to ensure greater competitiveness and

operational soundness based on digital transformation.

In 2026, Copel plans to move forward with the implementation and dissemination of its strategy, seeking competitive advantages in identified opportunities. Digitalization will be an essential pillar for this period, with the expansion of a new digital product and service portfolio, reinforcing its commitment to innovation and the modernization of the power sector, including the implementation of new tools.

Strategic plan

Copel's strategic plan is underpinned by the 2030 Vision, launched in 2022, which aims to strengthen the Company's sustainable growth through actions that promote energy transition, energy matrix decarbonization and investments in technology and infrastructure.

In addition to the concession renewal for its three largest power plants, another important strategic aspect is its commitment to net zero

and climate resilience. The Company's wholly owned subsidiaries structured their Climate Change Adaptation Plans, which map risks and opportunities to ensure energy security and operational continuity in the face of extreme weather events. Copel's power generation, which became 100% renewable during the year 2024¹, is made up of 88% hydro and 12% wind, and investments in innovation and technology reinforce this commitment and position it competitively in a sector that is constantly changing.

¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.



The Strategic plan stages reflect Copel's evolution toward efficiency and sustainability, with prioritized goals, actions, and investments aligned to long-term objectives and materiality priorities.

The strategic plan encompasses three transformational waves:

1^a wave

Structuring Efficiency (2024 and 2025)

Organizational restructuring

- Voluntary Redundancy Program
- Opening of nearly 900 internal job transition opportunities (promotions and career transition)

Adaptation to the private corporation model

- Process revision
- Organizational structure optimization
- Operation digitalization (eliminating legacies from the state-owned company era and preparing for future challenges)

2^a wave

Operational efficiency (2025 and 2026)

Consolidation of optimized processes

Productivity increase

- Search for scalable results
- Development of sustainable solutions

100% renewable energy matrix

Investments in technology and innovation

3^a wave

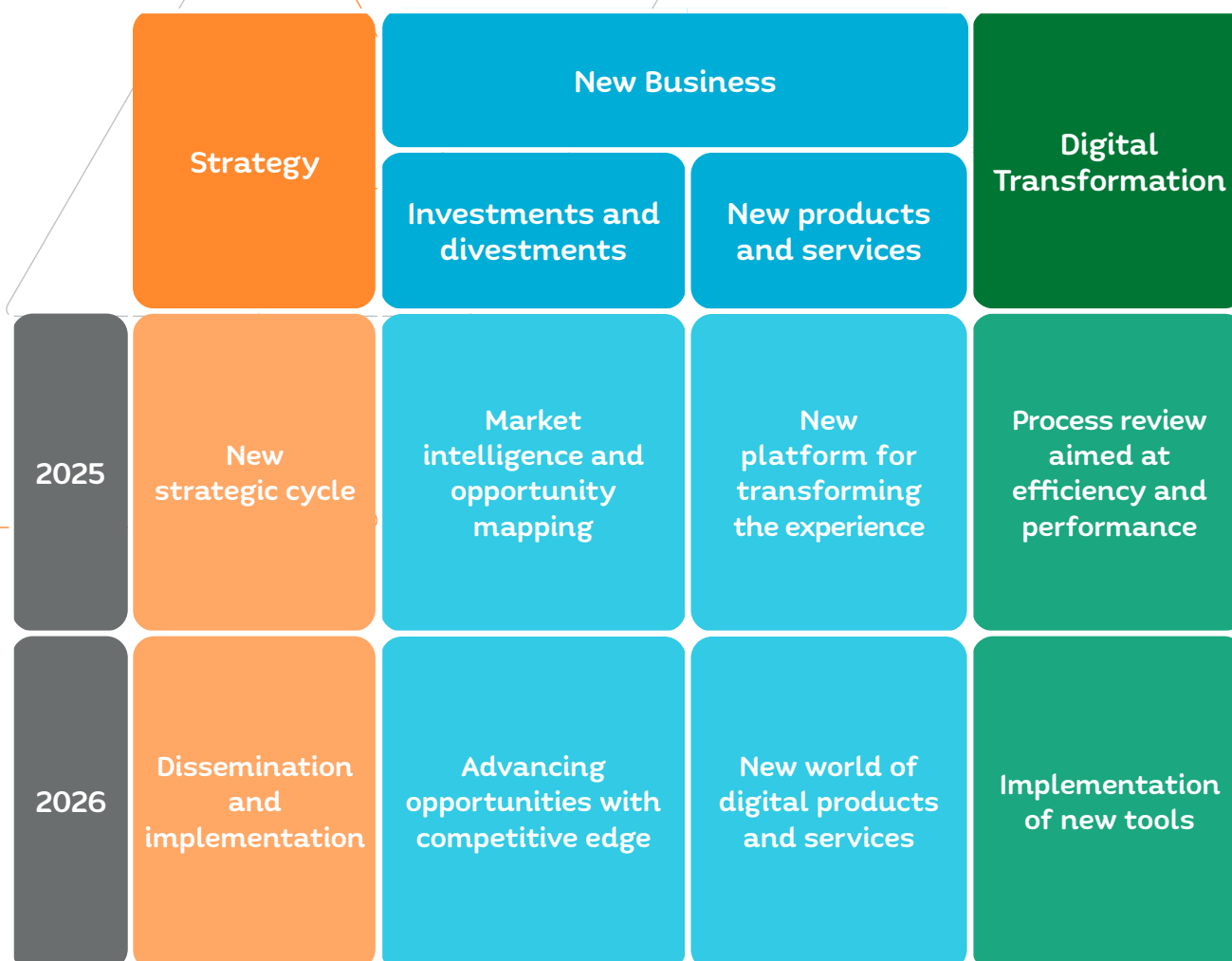
Expansion (2026 to 2030)

Organic expansion

- Value creation
- Portfolio synergy
- Investments in renewable generation
- Highly efficient transmission
- Exploring new markets
- Strategic partnerships

Inorganic expansion

- Sustainability engagement
- Positive impact with the communities and stakeholders



Progress in ESG

Copel celebrated 70 years of operation with an important milestone: the complete decarbonization of its energy matrix. Now, 100% of its generation comes from hydro and wind sources¹, highlighting its leadership position in the sustainable development of both Paraná and Brazil.

In 2024, Copel was internationally recognized for its commitment to sustainability by joining, for the first time, the S&P Global Sustainability Yearbook, which features the 780 most sustainable companies in the world. This recognition highlights the Company's progress in ESG practices and its alignment with the highest global standards in the power sector.

Copel also advanced into the group of the three top-performing Brazilian energy companies in the Corporate Sustainability Assessment (CSA), which underpins the Dow Jones Sustainability Index (DJSI).

¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

It is important to note that, for decades, Copel has been a pioneer in building large hydroelectric power plants and using renewable energy sources. Since the 1960s, it has invested in clean, sustainable generation, standing out for the implementation of strategic hydroelectric power plants and being in the forefront of wind generation in Brazil. In 2023 and 2024, it boosted innovation in low carbon solutions aimed at energy transition, testing a pioneering structure for producing green hydrogen.

Copel was the first company in the power sector to join the Global Compact, which is why, in addition to developing mandatory social programs in the context of environmental licensing, it carries out actions to raise awareness, disseminate knowledge and share practices, as well as initiatives to promote the safe use of energy and mobilization campaigns for citizenship issues, valuing diversity and fighting gender-based violence.

The Company's commitment to sustainability is reflected in initiatives and achievements such as receiving the GHG Protocol Program's Gold Seal; joining S&P Global's Sustainability Yearbook; celebrating 20 years of the EletriCidadania program; establishing long-term incentives with ESG-related targets for senior management; and being included in the Reporting Matters study (by CEBDS), listed among the 15 companies with the highest score in sustainability report quality.

The Company keeps innovating with the Smart Grid Program, which has already installed one million smart meters, substantially reducing CO₂ emissions.





Expansion of training and development programs to meet the challenges of an increasingly dynamic and competitive sector.

Copel as a corporation

The year 2024 marked the first full cycle of Copel's consolidation as a corporation — a publicly held company without a controlling shareholder — bringing increased agility and competitiveness to its business environment.

The transition to a corporation led to profound changes in organizational culture, as previously mentioned. To support this, Copel has invested in the transformation of internal processes and the modernization of its administrative structure, resulting in faster and more efficient decision-making. Training and development programs were enhanced, focused on building employee capacity to face the challenges of an increasingly dynamic and competitive sector ([read more on the New Way of Being Copel on page 256](#)).

Capital allocation

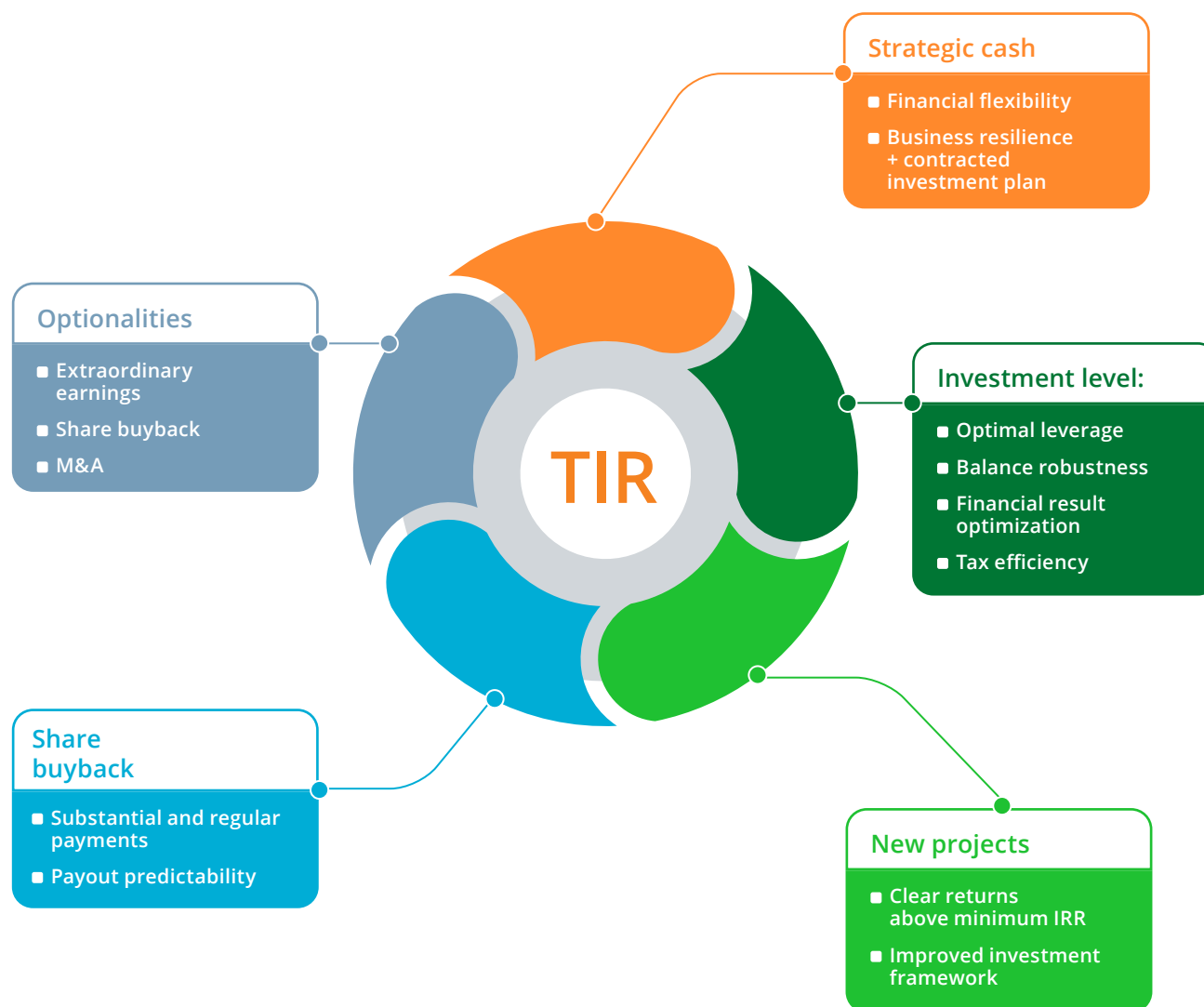
Copel's strategy is based on continuous investments in the expansion and quality improvement of its assets, which guarantees operational efficiency and excellence in service provision. Investment proposals are analyzed by an independent advisory body that advises and recommends decisions to the Board of Directors ([read more in Investment and Innovation Committee, on page 80](#)).

In 2024, investments totaled BRL 2,503.8 million, 87.7% of which was invested in Copel Distribuição (98.9% allocated to electric assets and 1.1% to non-electric assets and other investments).

In late 2023, Copel had already approved the creation of Copel Ventures I, a corporate venture fund aimed at energy and technology startups ([read more in Innovation projects, on page 130](#)).



Capital allocation manifesto



Payment of extraordinary dividends

The Company declared and paid BRL 1,085.1 million for the 2024 fiscal year. In line with the Dividend Policy, the Board of Directors proposes the payment of extraordinary dividends of BRL 1,250.0 million for resolution by the Annual Shareholders' Meeting of April 24, 2025, with payment expected by June 2025.

10%

Up to of common shares and class B preferred shares



The Company exercises capital allocation optionality with high value creation for its shareholders.

For 2025, the approved investment budget increased by 23.5%, amounting to BRL 3.0 billion. Power distribution remains the main allocation front, with BRL 2.5 billion, aimed at infrastructure modernization and network expansion, directly benefiting end consumers. BRL 464 million will be allocated to the generation and transmission business, for structure enhancement.

BRL 3 billion
for investments in 2025.

BRL 2.5 billion
or infrastructure modernization and network expansion

BRL 464 million
for structural improvements in generation and transmission

Business model

Capitals - Inputs

- Capital Natural**
- Use of water resources to generate electricity
 - Climate Change
 - 100% energy** renewable¹
 - Changes to habitats** in the Atlantic Forest, Cerrado, the Amazon and Caatinga due to the implementation and operation of power generation, transmission and distribution projects

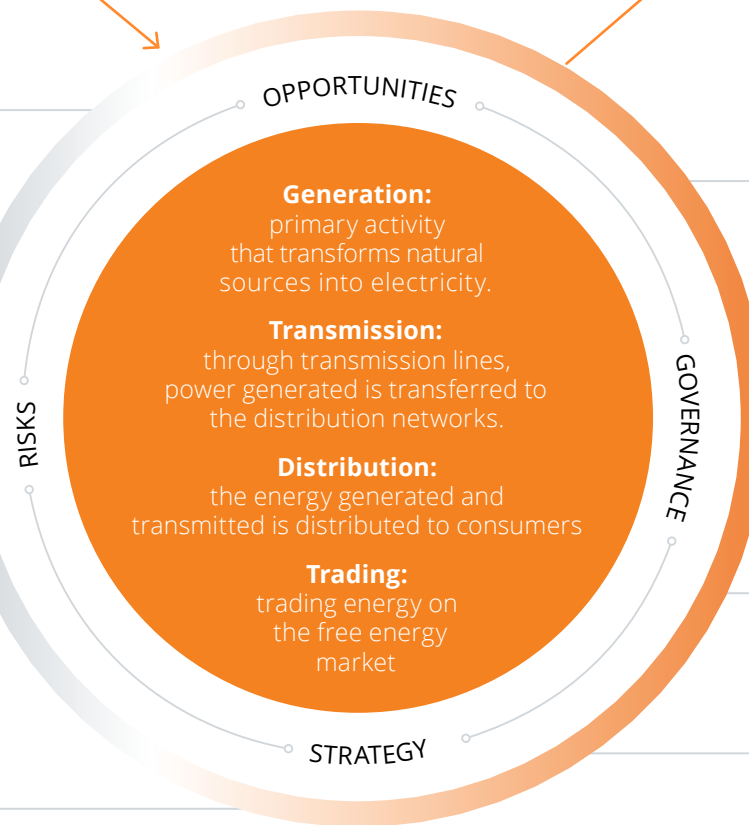
- Social and relationship capital**
- 2,805** suppliers with current contract(s)
 - 5.2 million** consumers
 - stakeholder relation and engagement mechanisms:
 - Social programs
 - Corporate volunteering
 - Community engagement

- Human capital**
- New Way of Being Copel
 - 4,389 employees** direct
 - 100% of employees** and contractors covered by occupational safety management system
 - Training and career transition programs
 - Commitment to diversity, with defined targets

- Intellectual capital**
- Integrated business structure (generation, transmission, distribution and trading)
 - Volt — Copel's open innovation program
 - Research & Development (R&D) projects
 - Investment in startups to develop innovation projects
 - Integrated innovation model being implemented, with the Strategic Innovation Forum reporting to the Investment and Innovation Committee

- Manufactured capital**
- 26 power plants** hydroelectric
 - 47 clusters** wind
 - 9,600 km of transmission lines** and 214,607 km of distribution lines
 - 53 substations** with transformation capacity of **20,962 MVA** sale of **2 thermal assets**
 - sale of **2 assets** thermal

- Financial capital**
- BRL 2.5 billion** in CAPEX
 - BRL 32 billion** in gross revenue
 - BRL 18.9 million** in operating costs and expenses



Mission
Provide energy and solutions for sustainable development

Vision
Be an industry-leading player in our business segments while creating sustainable value.

Outputs

- Capital Natural**
- Regional rainfall variability, with a trend of increased rainfall in the southernmost part of Brazil and shortage in other regions, can have an impact on hydropower generation
- * Scope 1: **17,317.97 tCO₂e**
 - * Scope 2: **229,169.37 tCO₂e**
 - * Scope 3: **3,149,230.2 tCO₂e**
- 365,079.4 GJ of energy** consumed by the Company
- 24,688 hectares** of protected areas surrounding generation reservoirs

- Social and relationship capital**
- 63.9%** spent on local suppliers
- +32,000 hours** of volunteering work through the EletriCidadania Program, since its creation in 2024
- R\$ 9.8 milhões** gastos com iniciativas sociais externas
- Pesquisa Abradee de Satisfação - Cliente Residencial - 79,1%**
- DER 113,4**
- FER 4,0**

- Capital humano**
- BRL 1.1 billion** spent on personnel and management fees
- 0 high-consequence** com consequência grave, e 1 fatalidade de empregado terceirizado
- 615 profissionais** reenquadrados em suas posições funcionais
- 13,9% de mulheres** na alta liderança

- Capital intelectual**
- Recognized as a standout company in the **2024 Conecta Startup Brasil**
- Copel Ventures I: BRL 150 million** by 2033
- Voted the best distribution company in ABRADÉE awards' innovation ranking

- Manufactured capital**
- 94%** availability of generation plants
- 29.373,30 GWh** generated
- 2,5%** transmission losses
- 5,6%** technical distribution losses
- DEC 7.9**
- FEC 5.4**

- Financial capital**
- BRL 2.8 billion** in net income, up by **20.3%** from 2023
- BRL 22.7 billion** in net operating revenue, up by **5.5%** from 2023
- BRL 13.2 billion** debt (0.51 related to equity)

Stakeholders Impacted

Society and Communities

Workforce, Regulators and Sector Entities, Suppliers and Partners, Society and Community

Shareholders, Workforce

Shareholders, Workforce, Suppliers and Partners

Shareholders, Workforce, Suppliers and Partners, Customers, Regulators and Sector Entities, Society and Communities

Shareholders, Lenders, Workforce, Suppliers and Partners, Customers, Regulators and Sector Entities, Society and Communities

¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

SUSTAINABILITY MANAGEMENT

GRI 3-3 Material Topic: Corporate governance 7 8 9 11 12 13 16 17

Copel adopts an integrated approach to sustainability management, ensuring that it is incorporated across the board into its strategy and operations.

The Copel Holding Company establishes comprehensive corporate guidelines, disseminating them through policies and standards that ensure alignment in all areas of the Company and its subsidiaries. Each subsidiary adopts specific actions and carries out continuous monitoring to align with social and environmental compliance and best market practices.

Responsibility for managing social and environmental impacts is shared among Copel's various areas and subsidiaries, which rely on technical support from specialized personnel.

The Board of Directors is the highest governance body responsible for making strategic decisions, approving and monitoring policies related to sustainability, climate change, people management, occupational health and safety, as well as deciding on other matters on the ESG agenda, such as sustainable sourcing, private social investment, eco-efficiency and human rights.

The Sustainable Development Committee (CDS, in Portuguese), an independent, permanent advisory body, advises the Board of Directors on decisions related to sustainability management ([read more in Advisory Committees, on page 79](#)).

Global references

Copel is also adapting to the new standards set by the International Sustainability Standards Board (ISSB), which strengthen the connection between the Company's sustainability information and its financial statements. With the goal of aligning its practices with leading global references, a dedicated committee was established to meet the requirements of the new ISSB standards and to promote greater transparency in its relationship with investors.

Sustainability Policy

In 2024, Copel integrated several topic-specific policies into a single Sustainability Policy, which addresses the following themes in one structured document: Environment, Biodiversity, Human Rights, Stakeholder Engagement, Private Social Investment, and Climate Change. Each of these topics now constitutes a dedicated chapter within the Sustainability Policy, ensuring a more integrated ESG approach. This reformulation strengthens the Company's environmental and social governance, streamlines the implementation and monitoring of its guidelines, and promotes greater transparency and efficiency in sustainability management. For further detail on the Sustainability Policy and other corporate documents, please visit the Bylaws, Policies and Regiments section of Copel's Investor Relations website.

Copel monitors its sustainability performance through specific indicators and internal and external evaluations, which allows comparisons with sector peers and the continuous improvement of its ESG practices. In this sense, it uses benchmarks such as the Corporate Sustainability Index (ISE B3, in Portuguese), S&P Global's CSA and the CDP's climate change questionnaire. The results of these assessments guide improvements to the Company's processes and strategies.

In 2023, Copel joined the Brazilian Business Commitment to Biodiversity of the Brazilian Business Council for Sustainable Development (CEBDS, in Portuguese), reaffirming its commitment to environmental preservation and valuing biodiversity as part of its sustainability agenda.

Since the launch of its 2030 Vision three years ago, environmental, social and governance challenges have been openly included in the Company's strategic agenda. Targets include reducing GHG emissions and offsetting residual emissions by 2030 for assets under operational control (Scope 1), as well as committing to corporate integrity and progress in diversity and customer satisfaction initiatives.

The Neutrality Plan, which initiated the studies underlying the Climate Adaptation Plans for Copel DIS and Copel GeT, deepens the analysis of climate change impacts on the Company through 2050. The Plan also complies with Copel's Sustainability Policy, strengthening its guidelines for sustainable and integrated management of these issues.

Progress made in 2024

Copel has several commitments and guidelines related to Sustainable Investment, mainly:

- Commitment to 100% renewable energy
- Net Zero Ambition
- Sustainability Policy
- Investment and Innovation Policy
- Sustainable Development Committee
- Investment Committee
- Global Compact
- 2030 Agenda
- Internal rules on Human Rights Due Diligence

Strategic initiatives include:

- 1. The Smart Grid Program**, - with the investment of BRL 820 million in smart solutions to serve 1.5 million consumer units by 2025, reducing traveled distance in the program's coverage area and translating this reduction in metric tons of CO₂ avoided.
- 2. Pursuing the goal of having a fully renewable¹**, portfolio (already achieved) and reducing scope 1 emissions by 2030.
- 3. Construction of solar farms to supply 100%** of the Company's own electricity consumption by 2030.

On the regulatory, social and environmental front:

- 1. Progress in managing environmental and social impacts** during construction works, including the implementation of measures to control waste, mitigate noise and reduce greenhouse gas emissions.
- 2. Maintenance of a satisfactory level of compliance**, minimizing the risk of receiving fines and sanctions.
- 3. Use of management tools to create improvement opportunities** such as the Critical Analysis Meetings (RAC, in Portuguese), for which action plans are drafted.
- 4. Promotion of organizational learning** through post-deployment reviews, in which improvement suggestions are integrated into policies and operational practices.

¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

ESG goals - Corporate DJSI/CSA

Indicator	2024 Performance	2025 Target	2027 Target	2030 Target
100% renewable generation portfolio (%) ¹	100	100	100	100
EV light fleet (hybrid) (%)	18.8	15	30	50
Administrative centers with WELL Certification (%)	0	30	50	100
Fatalities among direct employees (number)	0	0	0	0
Fatalities among contractors (number)	1	0	0	0
Employee performance review (%)	96.9	100	100	100
Employees trained in occupational safety and health (operations with significant risks) (%)	100	100	100	100
Retention rate of women post-pregnancy (%)	100	100	100	100
% of variable compensation linked to ESG performance	30	30	30	30
Women in senior management positions (2022 baseline) (%) ²	13.9	40% increase in the number of women in senior management positions by 2025		
Employees trained in anti-corruption practices, cybersecurity and Code of Conduct (%)	98	100	100	100
Reduction in Scope 1 emissions (2017 baseline) (%)	92	20	50	100

¹In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

² The Senior Leadership considers the positions of Board of Directors, Executive Board and level 6 (Superintendents and Assistant Directors).

ESG goals – Copel Distribuição

Indicator	2024 Target	2024 Performance	2025 Target	2030 Target
ISO 14001 Certification in distribution infrastructure provisioning process		No	Yes	Yes
Energy Efficiency Program (PEE, in Portuguese) — energy saved (MWh)	21,624.85	19,651.28	18,655.27	22,406.57
Employees trained in occupational safety and health (operations with significant risks) (%)	100	99.03	100	100
Abradee's Customer Satisfaction Index (ISQP) ¹ (score)	81	79.10	80	85

1. Abradee's Perceived Quality Satisfaction Index.

ESG goals – Copel Generation and Transmission DJSI/CSA

Indicator	2024 Target	Performance 2024 ³	2025 Target	2030 Target
Native vegetation coverage in reservoir APPs ² (%)	- ¹	85.7	84	87
Cultivar Energia Program – beneficiary families (number)	- ¹	378	350	600
Waste disposal rate at operational units (%)	79	78	80	85

¹ There was no target for 2024.
² % of the APP that can be recovered with native vegetation cover (excluding mining, security, rocky areas, irregular occupations, roads and accesses, etc.).
³ The target of 600 beneficiary families is to be achieved by 2030. In 2024, the partial (phased) target was exceeded.



Copel's ESG journey

See below certain milestones on the sustainability journey that reinforce Copel's continuous progress.



¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

Copel and the SDGs

Copel's initiatives towards sustainable development are underpinned by its voluntary commitments, especially the UN's Global Compact 2030 Agenda — Transforming our World.

Copel's key indicators and corporate goals, as well as those of its subsidiaries, are aligned with the prioritized SDGs and the Company's Strategic Plan. By monitoring indicators, the Company is able to set expected performance levels and results.

Priority SDGs for Copel

Copel adopts the SDGs prioritized by the Brazilian power sector (7, 8, 9, 11 and 13) and includes SDG 4 among its priorities:



The prioritized SDGs are reflected in Copel's Strategic plan, its key indicators and its corporate targets.

EducaODS Program



Created in 2017, this program aims to establish guidelines, raise awareness, disseminate knowledge and engage stakeholders in actions related to the SDGs, strengthening management, culture and education for sustainability.

EducaODS gathers Copel's initiatives related to compliance with the 2030 Agenda, aligning the Company's voluntary commitments, strategic framework and organizational values.

The program reinforces Copel's corporate strategy and goal of expanding and disseminating best ESG practices. All of its subsidiaries have initiatives aimed at increasing the knowledge and awareness among internal and external stakeholders about Copel's connection with the SDGs and sustainable development.

EducaODS is integrated with Copel's corporate sustainability programs, such as Climate Change, Eco-efficiency, Waste

Management, Cultivar Energia (Community Gardens), Human Rights, Diversity, Accessibility and EletriCidadania (Corporate Volunteering).

As it is directly linked to several actions targeted at fostering a culture of sustainability, the EducaODS Program contributes to achieving Copel's and the power sector's priority SDGs (7, 8, 9, 11 and 13), as well as SDG 4, which is considered an instrument for disseminating knowledge in favor of sustainable development.

Copel's sustainability course

In October 2024, Copel launched the first edition of its sustainability course. Aimed at spreading the concepts and culture of sustainable development, in line with the Company's strategic goals, the course seeks to broaden knowledge and promote people's engagement with sustainability.

Comprising content such as basic notions, the environmental and social dimensions, corporate governance and sustainability management, it is permanently available to the internal stakeholders. In 2024, 1,600 participants completed the training; and, in 2025, the Company expects to make the course available to external stakeholders through its Sustainability Portal.



Engagement and commitment Copel: 656 employees took part in the ESG Integrated Week.

ESG Integrated Week

One of EducaODS’s main initiatives in 2024 was the ESG Integrated Week, derived from the SDG in Practice seminar, held in 2023. The event’s aim was to spread knowledge about sustainability, strengthen understanding of ESG aspects and promote interaction between employees, suppliers, partners and other stakeholders. The agenda included talks on risks, anti-corruption practices, diversity, conscious consumption, ESG purpose and energy transition.

During the event, the Company shared good environmental, social and governance practices, highlighting their relevant contributions to each ESG criterion. In addition to the

lectures, there were cultural activities led by Syrian refugees, in partnership with the Company’s Migration and Refuge Project.

The closing lecture was “ESG and Purpose,” and it was followed by a debate on energy transition, with the participation of specialists from the Company’s businesses, the Board of Directors and the Sustainable Development Committee. A total of 656 employees attended the event.

The ESG Integrated Week is a strategic space for exchanging experiences, engaging stakeholders and encouraging reflections that reinforce Copel’s commitment to the ESG agenda.



STAKEHOLDER ENGAGEMENT

GRI 3-3 – Material Topic: Social commitment2-29, G4-EU19, Social and relationship capital 

At Copel, Stakeholder Engagement aims to build long-term relationships that create value for both the Company and stakeholders in line with its mission, vision, and values. This commitment is reflected in an ongoing, transparent, and constructive dialogue with shareholders, customers, employees, suppliers, communities, and other stakeholders, promoting greater alignment between stakeholder expectations and business strategies.

To structure this relationship, Copel carries out the mapping and periodic review of its stakeholders, in addition to establishing engagement processes and methodologies tailored to the impact and relevance of the topics addressed. The materiality assessment is one of the main instruments used, ensuring that stakeholders' perceptions and priorities are integrated into the Company's strategic

decision-making. Based on this active listening, the Company improves its ESG practices and implements adjustments in its governance and operations to strengthen its resilience and competitiveness in the power sector.

The Stakeholder Engagement guidelines, approved by the Board of Directors and included in a specific chapter of the Sustainability Policy, guide the relationship with stakeholders and the continuous monitoring of their demands and concerns. The main challenges identified by these stakeholders are reported to the respective responsible departments, in accordance with corporate governance, in order to assess the responses and solutions adopted to address them, with the purpose of ensuring a structured process of continuous improvement.



Stakeholder participation occurs in many ways, from public consultations and hearings to frequent interactions through digital platforms and in-person meetings. In the deployment of infrastructure projects, the dialogue involves local communities and groups affected by the Company's operations, who participate in public consultations organized by the licensing authority, in addition to obtaining permits, licenses, and environmental clearances.

Copel also maintains an ongoing relationship with environmental agencies, regulators, and institutional partners such as the Brazilian National Foundation for Indigenous Peoples (Funai), the Palmares Cultural Foundation (FCP), the Brazilian National Water and Sanitation Agency (ANA), the Brazilian National Institute for Colonization and Agrarian Reform (Incra), the Institute of National Historical and Artistic Heritage

(Iphan), and the Paraná's Instituto Água e Terra (IAT; all acronyms in Portuguese). Collaboration with universities and research centers allows for the exchange of technical knowledge and contributes to sustainable and innovative solutions, while municipal and state executive branches participate in the regulation and implementation of the Company's projects.



PORTAL SUSTENTABILIDADE
For more information on the Sustainability Portal, [click here](#).

Sustainability Portal

involving

138,244
users

from 65 countries, which represents a 431% increase in users compared to 2023 (32,108), and a 214% increase in events compared to 2023 (283,821).

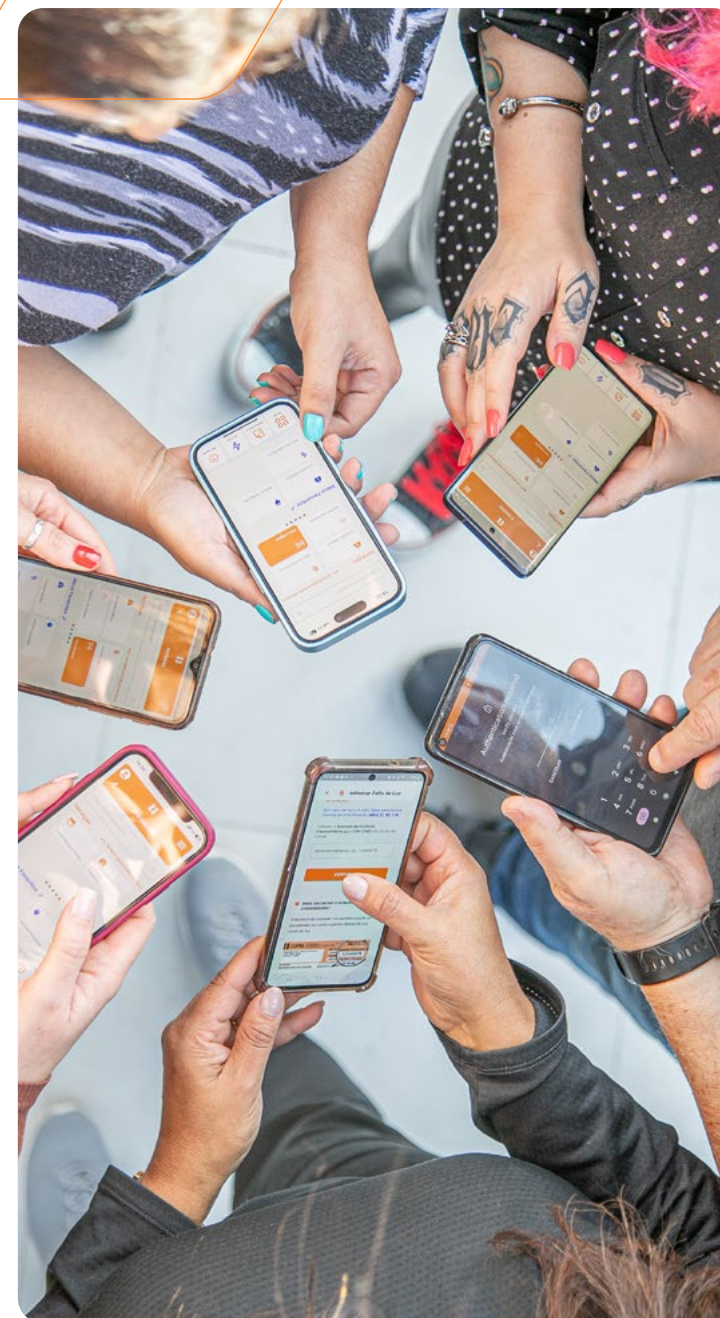


Copel's engagement flow follows four main stages: stakeholder mapping, corporate strategy, operation, and reporting and monitoring. Stakeholder feedback is periodically analyzed and incorporated into strategic and operational plans, allowing adjustments to corporate policies and the development of actions that strengthen transparency, eco-efficiency, human rights, accessibility, and social inclusion.

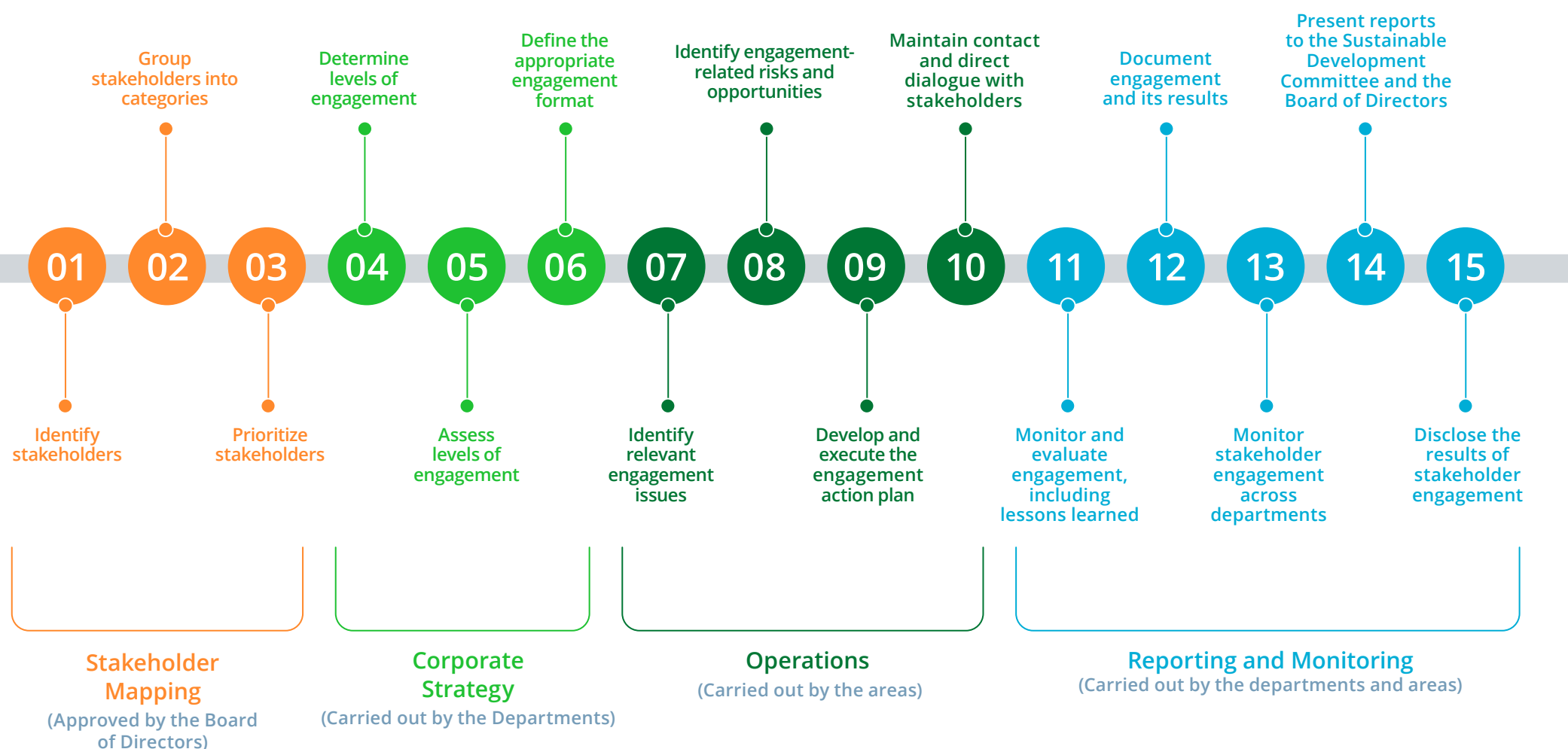
The Company invests in expanding its communication channels, prioritizing interactive and accessible platforms that increase stakeholder participation and ensure greater transparency regarding corporate actions and commitments. In addition to the Sustainability Portal, which provides detailed information on the Company's ESG projects and practices, Copel seeks to expand the use of digital spaces and social media to strengthen interaction and monitor stakeholder perceptions.

The challenges pointed out by stakeholders and the actions taken by the Company to solve them are reported in the main institutional documents, such as the Integrated Report and the social and environmental reports of the wholly-owned subsidiaries. These records allow sector comparisons, impact measurement and monitoring of the evolution of the Company's initiatives, which guarantees a continuous process of improvement and innovation.

Copel's set of goals follows the guidelines of its Strategic Planning, unfolding vertically and horizontally within the organizational structure. Performance analysis, based on ESG and financial indicators, allows the company to monitor its progress, identify opportunities for improvement and reinforce its commitment to governance and sustainability.



Stakeholder Engagement Flow



Copel Day

As part of its stakeholder engagement strategy, Copel promotes initiatives that strengthen relationships with its stakeholders, ensuring transparency and strategic alignment. One of the highlights in this process is Copel Day, an event aimed at investors that provides a platform for sharing the Company's results, outlook, and strategic guidelines ([more details in Strategic plan, on page 43](#)).

Copel Day 2024 reinforced the foundational pillars of Copel's journey: transparency, value creation, and consistency. The Company's executives also presented details of the approach based on the efficient use of resources, which has strengthened the financial structure and maximized returns for shareholders.



Stakeholder mapping

GRI 2-29

Copel periodically maps stakeholders for the Holding Company and its subsidiaries, based on the AA1000SES Standard and its corporate policies. The most recent review took place in 2024 and identified the stakeholders that most influence or are most influenced by the Company:





Shareholders and investors

As holders of the Company's capital stock, shareholders focus on investment prioritization, economic growth, sustainable development, and business longevity. As a result, Copel must create value and returns. The relationship is primarily managed through the Investor Relations department, which follows its own corporate policy, offers dedicated communication channels, and adheres to governance practices aligned with best market practices.



Customers and consumers

In addition to shaping the Company's perception and reputation, customers and consumers have the ability to choose how they consume and are directly affected by the products and services they are provided. Copel is committed to delivering clean energy, high-quality services, prompt customer support, and affordable rates. The relationship with this group is primarily maintained through Copel Distribuição and Copel Mercado Livre, which offer virtual and in-person service channels, dedicated phone lines, email, and mobile applications to facilitate customer contact.



Employees

Employees are essential stakeholders, both influencing and being influenced by the Company's activities, and include both direct employees and contractors ([this report provides a detailed discussion on people management starting on page 247](#)). Copel employs various communication channels to strengthen its relationship with employees, ensuring they are well-informed and that their needs and expectations are acknowledged. The Company promotes freedom and confidentiality in communications, using channels such as the Ethics Advisory Committee (COE, in Portuguese), the Ombudsman's Office, and the Whistleblowing Channel. Engagement also occurs through internal communication initiatives, interaction, and information sharing, such as the intranet.

**Renewable energy,
excellent services,
communication channels:
Copel's commitment to
its stakeholders.**



Society and communities

Society, composed of local communities and the general population, may be directly or indirectly impacted by the Company's operations, especially with respect to the environment. Copel is mindful of the impacts of its projects, conducting environmental, social, and economic studies as part of the licensing process. These studies form the basis for programs to mitigate negative impacts and enhance positive ones ([read more on page 208](#)).

The relationship with communities is managed through wholly-owned subsidiaries, which offer virtual and in-person channels, dedicated phone lines, email, and mobile applications.



Partners and suppliers

Partners and suppliers, responsible for supplying raw materials, equipment, inputs, services or technical support, have their performance closely linked to the quality and efficiency of Copel's operations. The ongoing relationship with such group is maintained through the supply management teams and the managers of each contract. In addition to direct contact with buyers and contract managers, the Company provides virtual and in-person communication channels, dedicated phone lines, email, and pages on its website and the Sustainability Portal, offering relevant information to this audience.



Government, regulators, and sector entities

Responsible for drafting laws, regulations, and policies, these entities exert considerable influence on the Company's operations and regulatory compliance. Copel engages in hearings, public consultations, inspections, and the receipt of guidance to ensure its activities remain in full compliance. The relationship is also maintained through official channels of governmental and sectoral entities, as well as the Company's own channels.



COMMUNICATION CHANNELS

To learn more about the communication channels between Copel and its stakeholders, please visit the [Copel Sustainability Portal](#).



Voluntary commitments

The Company's voluntary commitments are a public expression of its engagement with ESG initiatives, aligned with its strategic framework, to support the achievement of shared goals.

The Company's voluntary commitments are presented below, organized by their respective adhesion dates:

Voluntary commitments		Adoption
	United Nations (UN) Global Compact	07/12/2000
	Paraná Council of Social Responsibility (former Paraná Council of Corporate Citizenship)	12/02/2004
	Women Empowerment Principles — WEP (UN)	05/27/2010
	Business Contribution to the Promotion of a Green and Inclusive Economy (UN)	05/11/2012
	Call to Action for Governments to Fight Corruption	12/02/2014
	Business Pact for Integrity and against Corruption (Ethos Institute)	07/22/2015
	National "We Can" (Nós Podemos) Movement (UN)	03/08/2016
	Network of Companies for Learning and Eradication of Child Labor (ILO and Ministry of Employment)	11/26/2016
	Principles for Responsible Management Education — PRME (UN)	11/16/2018
	Business for Climate Positioning (CEBDS)	08/31/2021
	Net Zero Ambition Movement (UN)	04/12/2022
	Stakeholder Capitalism Metrics (World Economic Forum — WEF)	05/10/2022
	100% Transparency Movement (UN)	10/11/2022
	Brazilian Business Commitment to Biodiversity (CEBDS)	06/16/2023

CORPORATE GOVERNANCE

- The first year of corporate governance after the transformation into a corporation
- Leadership structure
- Ethics and integrity
- Integrated corporate risk management
- Regulatory environment



Interactive
summary

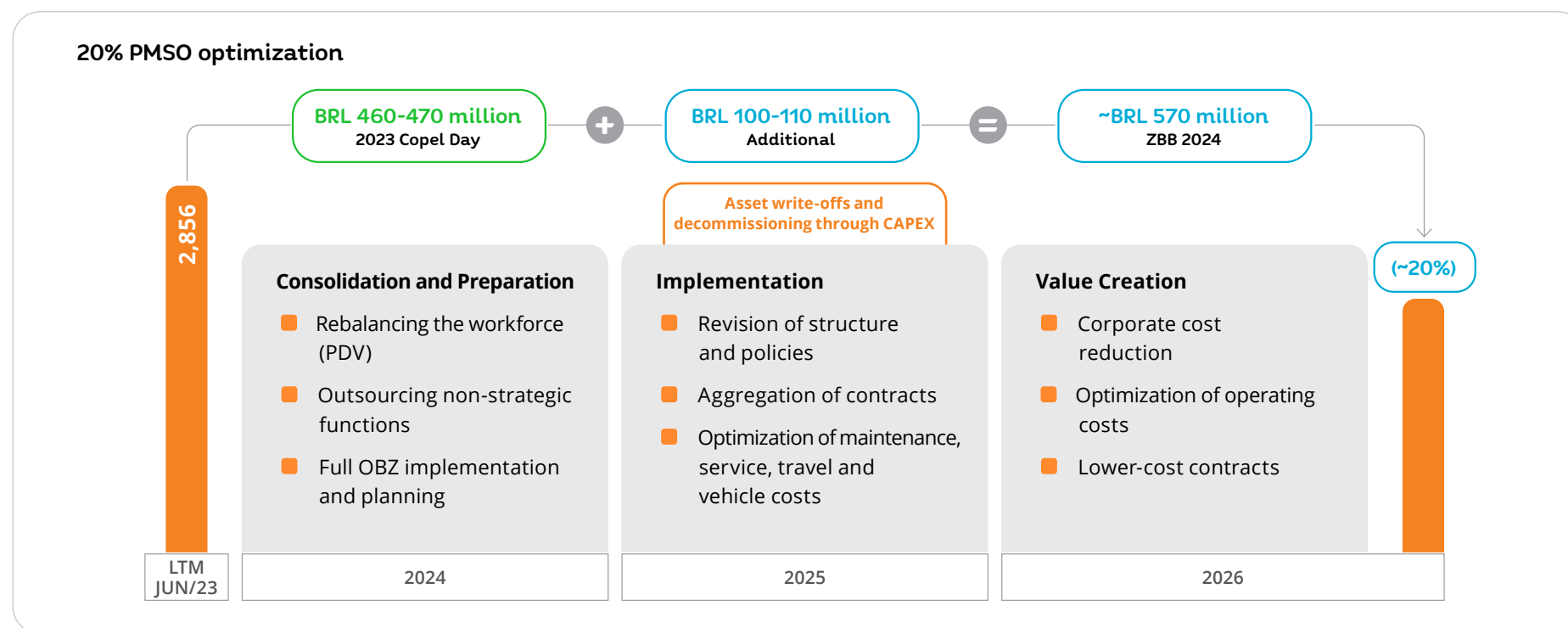


THE FIRST YEAR OF CORPORATE GOVERNANCE AFTER THE TRANSFORMATION INTO A CORPORATION

GRI 3-3 Material Topic: Corporate governance

The transition to the corporation model has given the Company more freedom to define its strategies, agility in the management of its human resources and optimized internal processes, thus ensuring a more competitive position in the power sector.

As it reviews and automates processes, Copel has been implementing zero-based budgeting, with the goal to significantly reduce costs by around BRL 100 million between 2024 and 2026.





**Fitch Ratings:
Copel maintains
top rating**

The Company, already listed in New York and Madrid, emphasizes the need to get closer to international investors in order to strengthen its investment story, especially in a context of stress in the Brazilian market. In its first year as a corporation, Copel maintained Fitch Ratings' highest rating.

In 2024, Copel's Bylaws were amended for the first time after the Company was transformed into a corporation. After a comprehensive benchmarking process, governance has been modernized, taking forward the Company's process in recent years, including:

- Adjustments to the powers of the Shareholders' Meeting, (i) allowing it to resolve on any matters submitted to it by the Board of Directors; and (ii) reinforcing the powers provided for in Federal Law 6,404/1976 (art. 120);
- Adjustment to the composition and job titles of the Copel Holding Company's Executive Board, aligning executive functions with best national and international practices;
- Adjustment to the percentage of independent members on the Board of Directors, aligning the statutory rule with the practice already adopted by the Company. As a result, the Bylaws now stipulate that the Board of Directors must be composed of a majority of independent members;
- Variable composition of members of the Board of Directors — between seven and nine members —, allowing the body to adapt to the Company's reality, structuring it to fully meet demands, such as participation in statutory and non-statutory committees, according to the competencies required for each body;
- Adoption of a non-permanent Oversight Board, in line with market practices. In this regard, it should be noted that the installation of the Oversight Board may be requested by shareholders holding 2% of common shares or 1% of preferred shares, in accordance with CVM Resolution 70/2022;
- Inclusion of a provision in the Bylaws addressing the exercise of positions in the Company's Executive Board on a full-time and exclusive dedication basis.

Social outlook

GRI 3-3 Material Topic: Corporate governance

Despite the structural change, the definition of electricity tariffs continues to be regulated by the Brazilian Electricity Regulatory Agency (Aneel, in Portuguese), without any change in the pricing criteria. Copel has continued to implement social initiatives, such as the social tariff and the night-time irrigation program, in accordance with the guidelines established by the state and federal governments, ensuring the maintenance of benefits for the population served.

In the context of sustainable development, stakeholder engagement is essential to support the necessary measures, such as the promotion of an ongoing dialogue with local communities, municipal authorities, and consumer councils; satisfaction and supplier surveys; meetings with industry bodies and entities; and conversations with civil society organizations, in order to understand concerns, needs and expectations.

Evolution of the organizational structure

Considering the guidelines established by the Copel Holding Company, the Company's departments began to review processes and adjust policies to ensure greater efficiency, with the aim of modernizing the organizational structure, streamlining internal flows and maintaining the commitment to corporate governance and transparency. The review and streamlining of internal policies underpin the importance of governance as a pillar of the strategy.

With regard to people management, the processes were adapted and became more flexible after the Company was transformed into a corporation, while there was also a 25% reduction in the workforce through the Voluntary Redundancy Program. At the same time, new leaders joined the C-Level, bringing different perspectives to the running of the business.

In light of this, Copel identified the need to revisit the organizational structure and started this review in October 2024, with the support of a consulting firm experienced in similar projects. This process is scheduled to be completed by May 2025. The main expected results include an organizational chart that is aligned with the Company's current situation and supports cultural transformation; orientation towards metrics-based management of the organizational structure; identification of synergies; and improved operational efficiency.



C-level with different perspectives and new leaders to contribute to running the business.

Updates

Historically, Copel used to adopt specific policies for almost every situation. Currently, the focus is on identifying which policies are indeed necessary for the efficient running of the business. In this scenario, the procurement policy, for example, was reformulated in 2024, with the aim of adapting to changes in the sector and the Company's new operational reality.

During the year, the Sustainability and Integrity policies were revised to incorporate other policies and standards, facilitating the Company's internal flows, in accordance with the project to update corporate policies approved by the Board of Directors (CAD, in Portuguese).

As a result, the Sustainability Policy, which includes ESG practices, now features chapters that incorporate the content of the former climate change, private social investment, human rights, environmental, biodiversity and stakeholder engagement policies ([read more about the Sustainability Policy on page 51](#)).

Copel also strengthened its governance and risk management by keeping its guidelines up to date, including the following Policies on Related-Party Transactions; Integrity; Sustainability; Dividends; Appointment; Performance Review for Statutory Bodies; Corporate Governance; and Investments.

Updating Corporate Policies:
 adapting to changes to gain
 efficiency and improve
 Copel's internal flows.

Governance and impact management

GRI 3-3 Material Topic: Corporate governance

As part of the management measures designed to strengthen positive impacts and prevent and mitigate negative impacts related to the material topic of Corporate Governance, Copel has structured and approved corporate policies at the Board of Directors, set up the Statutory Audit and Ethics Committees and strengthened its Internal Audit team. The Company has also improved its structured and monitored risk management and compliance processes, implemented a background check process for nominating members of senior management and defined levels of statutory, regulatory and standard approval. Copel's Code of Conduct was revised and approved by the Board of Directors, reinforcing the adoption of the Code of Best Corporate Governance Practices issued by the Brazilian Institute of Corporate Governance (IBGC, in Portuguese) and adherence to B3's Level 2 of Corporate Governance.

In order to remedy negative impacts, the Company maintains an Ombudsman's Office, an active Whistleblowing Channel and a structured Ethics Committee, in addition to applying the Related-Party Transaction Policy and the Integrity Policy, which addresses issues such as conflicts of interest.

Regarding the management of actual and potential positive impacts, Copel has the ISO 37301 certification, continuously monitors information from internal and external audits and monitors its risk rating with rating agencies. The increase in share price and the Company's continued inclusion in B3's ISE sustainability portfolio and in the Dow Jones/CSA classification demonstrate the strength of its governance practices.

S&P Global

Robust governance demonstrated by the valuation of shares, the score in S&P Global's Corporate Sustainability Assessment (CSA) and permanence in the B3 ISE.





To ensure the effectiveness of the adopted measures, Copel conducts constant checks through internal and external audits, following the Internal Audit Annual Work Plan and the External Audit Annual Work Plan. The indicators used to assess progress include the performance indicators linked to the Performance Bonus (PPD, in Portuguese), which measure the progress related to the deficiencies identified by the external audit. If any material deficiencies are identified, there is a direct impact on the variable compensation of executives.

The monitoring of the Whistleblowing Channel by the Ethics Committee and the Statutory Audit Committee, as well as the results of the Ombudsman's Office and the sustainability questionnaires (CSA, ISE and Governance Report), are essential instruments for assessing the Company's governance. The scores obtained on B3's ISE and the CSA, which is fed into the Dow Jones Sustainability Index, are monitored regularly as a benchmark for the evolution of the Company's sustainability and governance practices.

As a result of this continuous monitoring, the Company promotes the modernization of statutory rules, the periodic updating of internal regulations and corporate policies, and the revision of rules related to the limits of authority. The aim of this process is to ensure agile decision-making without compromising sound governance.

Stakeholder engagement played an essential role in defining these improvements. The feedback received indicated the need to reduce the number of Corporate Policies, an initiative that began in 2024 and will continue throughout 2025. The updated policies are published on the investor relations website, the intranet and the Sustainability Portal, as well as communicated to employees via email, ensuring wide transparency. Copel also began to revise the limits of authority, with the aim of standardizing the levels of competence and condensing the topics covered, contributing to reducing bureaucracy at the Company.

The results of the measures adopted are periodically communicated to the internal collegiate bodies and disclosed in external reports, guaranteeing full transparency and adherence to best market practices.

The improvement of corporate governance included the creation of statutory committees,

such as the Sustainable Development Committee and the People Committee, and non-statutory committees, such as the Cybersecurity and Information Security Committee. These bodies play a fundamental role in advising the Board of Directors and strengthening the Company's strategic management.

The implementation of these committees and other governance initiatives has had positive impacts, such as:

- Improving processes, information flow and the Board of Directors' interface with the Executive Board and control bodies;
- Aligning the executives' deliveries with the organizational strategy;
- Strengthening and ensuring the credibility of Corporate Governance, with the disclosure of performance to shareholders and society, reinforcing the support offered to the President;
- Directing the President's actions towards the implementation of the strategic plan;
- Informing decisions related to people management and promoting transparency in management; and

LEADERSHIP STRUCTURE

GRI 3-3 Material Topic: Corporate governance, 2-9, 2-10, 2-11, 2-12, 2-13

5 8 11 16

Copel's corporate governance follows the Code of Best Governance Practices of the Brazilian Institute of Corporate Governance (IBGC, in Portuguese) and is in line with the requirements of the US Securities and Exchange Commission (SEC) and the rules of the São Paulo Stock Exchange (B3). Copel has been a member of B3's Level 2 of Corporate Governance since 2021.

This commitment reflects the high standards of transparency and accountability that guide the Organization's management and strategic decisions.

On October 30, 2024, Copel approved the revision of its Bylaws with changes to its executive governance structure, which was improved by adjusting the composition and job titles of the Copel Holding Company's Executive Board and modernizing the job titles from Chief Executive Officer to

President, Executive Officers to Vice Presidents, and Deputy Directors to Executive Directors. The aim of the update is to promote a more efficient organizational structure that is in line with best market practices.

Another important step forward was the amendment to the Bylaws that enabled a more flexible composition of the Board of Directors, allowing for seven to nine members. Furthermore, there was an adjustment to the percentage of independent members, consolidating a practice already adopted by Copel ([learn more in Board of Directors, on the page 76](#)).

The modernization of governance also included the adoption of a non-permanent Oversight Board, in line with market practices. In this new format, the Oversight Board is installed at the request of shareholders who hold at least 2%



of common shares or 1% of preferred shares, as established in CVM Resolution 70/2022.

A provision was included in the Bylaws stating that the members of the Company's Executive Board must perform their duties on a full-time and exclusive basis, reinforcing the commitment to professionalizing management and maximizing administrative efficiency. All reports on the engagement plan carried out by the areas and departments must also be brought to the attention of the Board of Directors (CAD, in Portuguese) and the Sustainable Development Committee (CDS, in Portuguese). The Sustainable Development Committee supports the CAD on the main issues on the ESG agenda.

The main improvements introduced by the latest amendment to the Bylaws include adjustments to the powers of the Shareholders' Meeting, allowing it to resolve on any matters submitted by the Board of Directors and reinforcing its powers as provided for in Federal Law 6,404/1976. This measure increases transparency and shareholder participation in the Company's strategic decisions.

Copel's current leadership structure is made up of the following levels:

Shareholders' Meeting: It is the highest body that decides on strategic issues and issues of interest to shareholders.

Oversight Board: operates in collegiate and individual terms, with powers and duties set out in Federal Law 6,404/1976 and other applicable legal provisions. The Oversight Boards of the Copel Holding Company's wholly-owned subsidiaries (GET, DIS, COM and SER) are made up of the same members of the Copel Holding Company's Oversight Board. When installed, the Oversight Board is made up of three sitting members and three alternates, elected at the Shareholders' Meeting for a one-year term, with the possibility of re-election. It holds monthly meetings to deal with matters within its competence and analyzes the quarterly and annual financial statements, among other Company operations. The Oversight Board may meet on an extraordinary basis to address matters within its competence.

Board of Directors (CAD, in Portuguese): The Board of Directors is responsible for strategic decisions and ensuring the effectiveness of the Company's long-term management processes. The body is made up of nine Board members elected at the Shareholders' Meeting for a two-year term of office, with the possibility of re-election. The law guarantees preferred shareholders the right to elect a member to the Board of Directors. To do so, they can nominate candidates, present new slates or use part of the members of the slate nominated by Management to make up a new slate.

Based on best governance practices, 88.9% of the members (8 in total) are independent, with the exception of the employee representative. Copel adopts the independence criteria set out in Federal Law 6,404/1976, CVM resolutions and the criteria defined by the Sarbanes-Oxley Act (SOX), due to its listing on the New York (NYSE) and São Paulo (B3) stock exchanges. These criteria are set out in the Appointment Policy, which stipulates that the majority of the Board of Directors must be made up of independent members.

It is important to note that there are no executives on the CAD. This prohibition has existed since 1994, when the positions of Chair of the Board of Directors and President could no longer be held by the same person, thus strengthening the independence of resolutions.

According to the Bylaws, the CAD is responsible for approving the Code of Conduct and the Integrity Program, monitoring corporate governance practices and stakeholder relations. These documents apply to all Copel's wholly-owned subsidiaries, ensuring adherence and consistency in all operations.



SAIBA +
See the numbers of other important positions and commitments of each DAC member, as well as the nature of these commitments in item 7.3 of the Reference Form.

It is also incumbent on the Board of Directors to approve the mapping of stakeholders, in compliance with the AA1000 - Stakeholder Engagement standard.

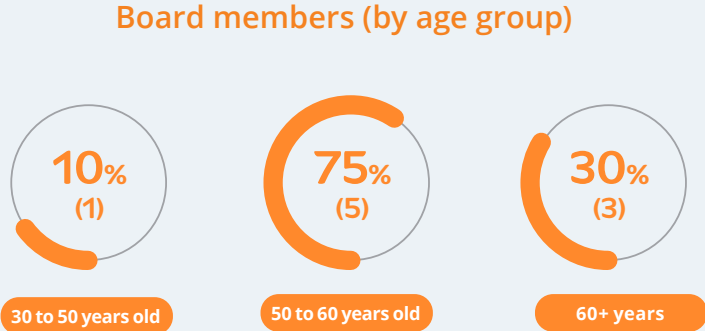
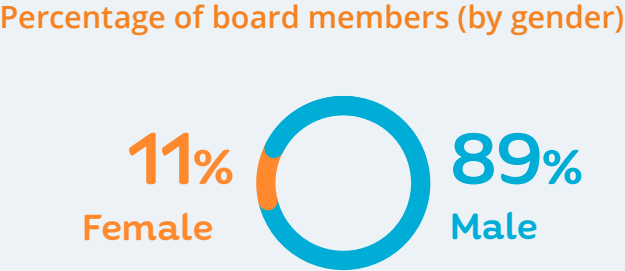
Executive Board: it is made up of the Company's President, five Vice Presidents (Vice President of Finance and Investor Relations; Vice President of Legal and Compliance; Vice President of Strategy, New Business and Digital Transformation; Vice President of People and Management; and Vice President of Regulation and Market), as well as three Executive Directors (Executive Director of Communication; Executive Director of Governance, Risk and Compliance; and Executive Director of Supply). The Executive Board meets ordinarily every two weeks and extraordinarily whenever necessary.



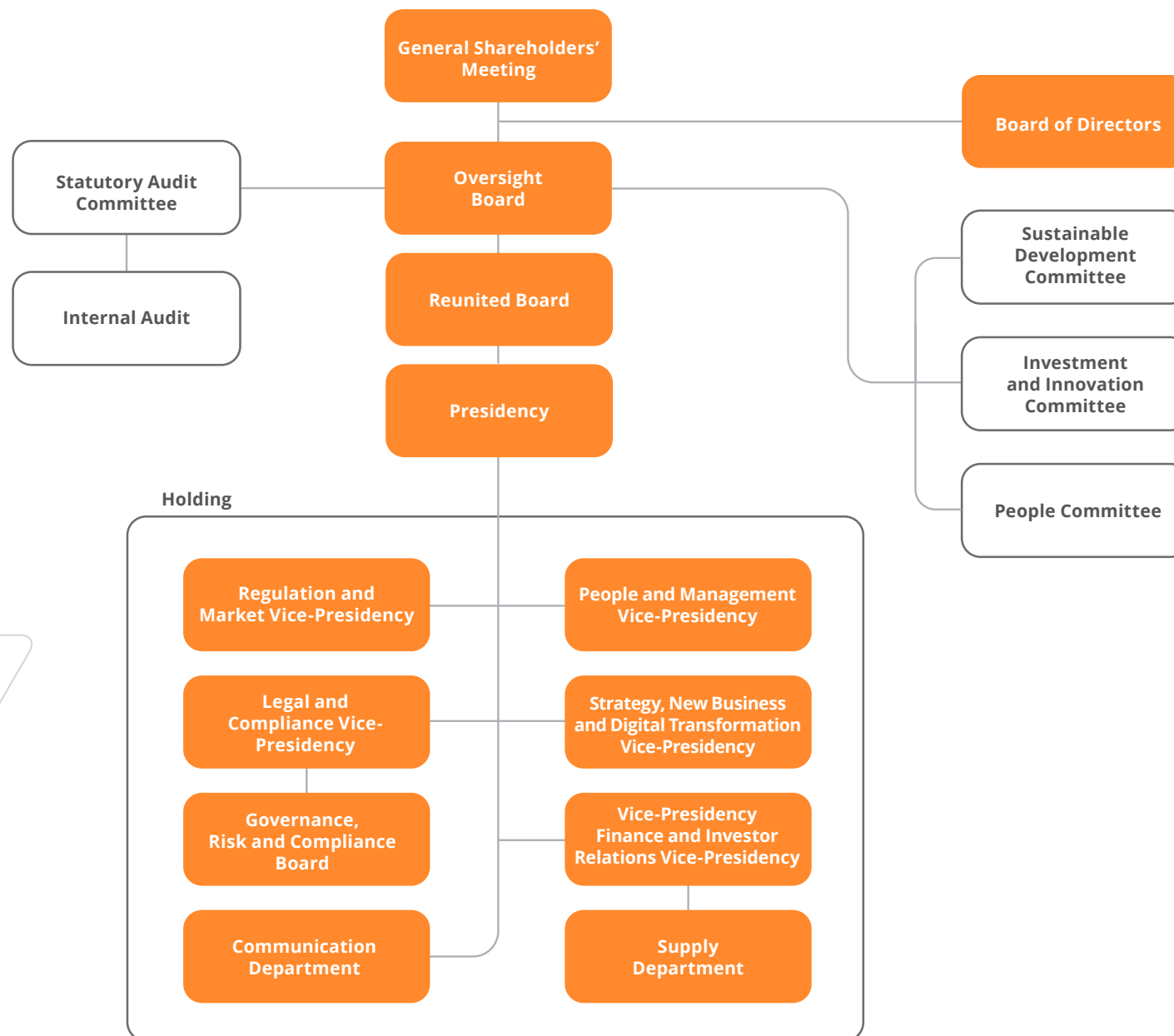
SAIBA +
See the minimum qualifications required for members of the Board of Directors, CAD, Fiscal Council and Committees in Copel's Appointment Policy.

88.9%
of the directors
are independent

99.5%
average attendance at
CAD meetings



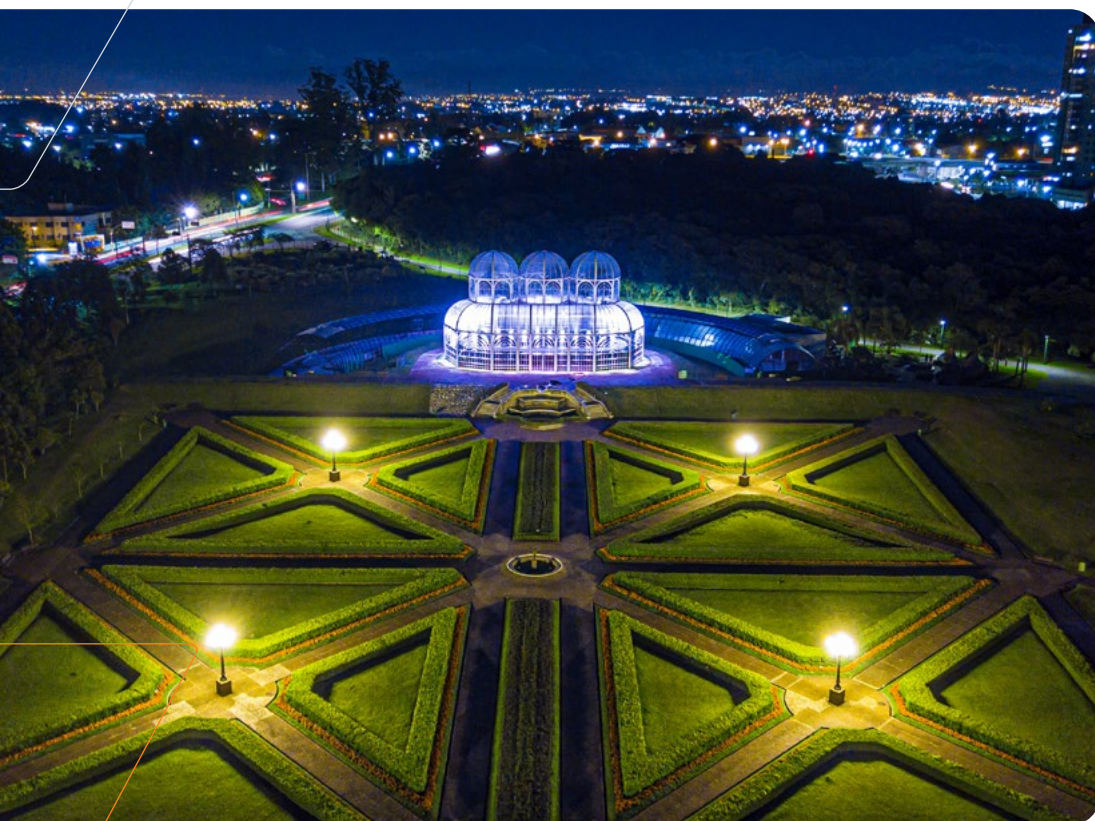
Organizational Chart*



*Organization chart in force on 31/12/2024.

Participation of the State Government

Since the transition to a corporation model, the Paraná State Government has acted as the reference shareholder, holding 15.9% of the Company's shares. In order to preserve strategic interests and the quality of the services provided, the Bylaws include golden shares (special class shares), which grant the State Government veto power on specific issues, particularly related to energy distribution.



Advisory committees

GRI 2-9

The committees linked to the Board of Directors play an essential role in analyzing and making recommendations on strategic matters, contributing to the efficiency of management processes and decision-making in line with the Bylaws. With monthly meetings and extraordinary calls, when necessary, these bodies prepare comprehensive reports on priority topics, which are submitted to the Board of Directors for resolution.

Copel's governance structure has four statutory advisory committees: the Statutory Audit Committee, the People Committee, the Investment and Innovation Committee, and the Sustainable Development Committee. The composition of these bodies was updated after the election of the members for the 2023-2025 term, reinforcing the Company's commitment to the best corporate governance practices. There will be a new election for the advisory committees shortly after the Annual and Extraordinary Shareholders' Meeting to be held in April 2025, for the 2025-2027 period. Copel has non-statutory committees to advise the Board of Directors, such as the Ethics Committee (CDE, in Portuguese) and the Cybersecurity and Information Security Committee (CSCI, in Portuguese), both of which have their own internal regulations.

Statutory Audit Committee

The Statutory Audit Committee (CAE, in Portuguese) is an independent body responsible for auditing, supervising and overseeing and, if appropriate, making recommendations on the Company's activities, ensuring the quality and integrity of the accounting and financial statements; compliance with legal and regulatory requirements; the performance, independence and quality of the work of the Independent Audit firm; the performance and quality of the work of the Internal Audit; and the quality and efficiency of the internal control and risk management systems.

Investment and Innovation Committee

The Investment and Innovation Committee (CII, in Portuguese) is responsible for supporting investment, innovation and divestment strategies, as well as overseeing projects and participation in auctions. Its purpose is to strive for efficiency and the responsible use of resources. It has three independent members.

Sustainable Development Committee

The Sustainable Development Committee (CDS, in Portuguese) monitors trends in sustainability, such as climate change and human rights, and supports the integration of the ESG agenda into the Company's Strategic plan. It has three members, including one independent and one external member.

People Committee

The People Committee (CDG, in Portuguese) is an independent and permanent advisory body to the CAD, whose duties include compensation, people management, organizational culture, diversity, health and safety, and appointment processes, as well as the evaluation and succession of Board and governance members. It is made up of three independent members, one of whom is external, and its characteristics, composition, functioning and powers are set out in specific internal regulations.

Cybersecurity and Information Security Committee

The Cybersecurity and Information Security Committee (CSCI, in Portuguese) was created to strengthen the governance structure and expand digital risk management, complementing the existing committees. Approved in June 2024, the Committee brought a more strategic approach to the issue, reinforcing governance and integration between corporate and business areas. Since 2019, Copel has addressed cybersecurity through internal committees, ensuring continuous monitoring and regulatory compliance.

The CSCI is made up of a member of the CAD; the Executive Director of Governance, Risk and Compliance; the Vice President of Strategy, New Business and Digital Transformation; Copel DIS's Chief Executive Officer; Copel GeT's Chief Executive Officer; and the Head of Information Technology. When necessary, the Copel Holding Company's President and other members of the Executive Board can participate in Committee meetings to support decisions.



Ethics Committee

Copel's Ethics Committee is a body that assists the CAD; its mission is to ensure that the Company is conducted in accordance with ethical principles aligned with corporate values, the Global Compact and good corporate governance practices. Its main responsibilities include overseeing the Whistleblowing Channel, reviewing and providing guidance on the Code of Conduct, and helping update internal policies and standards related to the topic.

The Committee is made up of a CAD member; the Executive Director of Governance, Risk and Compliance; the Vice President of People and Management; and the Vice President of Legal and Compliance. When necessary, the Committee invites the Head of the involved department and Copel's President to assist with decision-making. The Committee's current structure was approved by the Board of Directors in December 2019, but the Company has already had bodies dedicated to the topic since 2005.

Governance in subsidiaries

The wholly-owned subsidiaries Copel DIS and Copel GeT are listed in B3 as category B publicly held companies and have their own Boards of Directors, which are chaired by the Copel Holding Company's President and are responsible for overall planning and steering the business. The members of these Boards are elected by the Shareholders' Meeting for a two-year term of office, with the possibility of re-election. The Copel Mercado Livre and Copel Serviços subsidiaries are privately held.

The Statutory Audit Committee also provides services to the Copel DIS and Copel GeT subsidiaries, ensuring supervision and compliance with internal processes. The People Committee carries out its duties and responsibilities with the Copel Holding Company's subsidiaries, in accordance with the Bylaws of each wholly-owned subsidiary and the internal regulations of the advisory committees.

Appointment of Board members

GRI 2-10

Copel's governance positions are filled in accordance with the guidelines established in the Appointment Policy. The appointed professionals must have proven experience and a profile in line with the responsibilities of the corresponding position. The evaluation criteria include academic background, relevant experience in the industry and possible simultaneous occupations of the candidates. The Appointment Policy and the Bylaws emphasize the importance of diversity, taking into account aspects such as gender, religion, age and race, and the candidate's academic background,

experience in the industry and other occupations. In addition, at least one of the members must have recognized experience in corporate accounting to sit on the Statutory Audit Committee.

CAD members serve in different departments and have responsibilities both inside and outside the Company. The compliance of the selection process is assessed by the CDG. Each candidate undergoes rigorous analysis to verify compliance with the requirements and the absence of

legal impediments, a process conducted by the Governance, Risk and Compliance department. The minimum attendance required of Board members at meetings is 75%. In the process of appointing members of the highest management body, the opinion of legally legitimate stakeholders is also taken into account. Of the 9 members of the Board of Directors, 8 are independent and 1 was elected by the employees. The average term of office as of 12/31/24 was 3 years and 1 month.

Board of Directors of Copel (Holding Company)^{1 2} GRI 2-9

 Marcel Martins Malczewski (chair) Independence Participation in committees: 0 Participation in other boards: 0 Average tenure: 5 (since 05/02/2019)	 Carlos Biedermann Independence Participation in committees: CAE (coordinator) and 7 in other companies Participation in other boards: 5 Average tenure: 5 (since 05/02/2019)	 Jacildo Lara Martins Independence Participation in committees: CSCI (coordinator) Participation in other boards: 0 Average tenure: 1 (since 08/10/2023)	 Pedro Franco Sales Independence Participation in committees: CAE CII Participation in other boards: 2 Average tenure: 0 (since 04/23/2024)	 Fausto Augusto de Souza Employee Representative Participation in committees: CDS Participation in other boards: 0 Average tenure: 3 (since 04/29/2021)
 Marco Antônio Barbosa Cândido (executive secretary) Independence Participation in committees: CII (coord.) Participation in other boards: 4 Average tenure: 7 (since 01/10/2018)	 Geraldo Corrêa de Lyra Junior Independence Participation in committees: CDS (coordinator) Participation in other boards: 0 Average tenure: 1 (since 08/10/2023)	 Marcelo Souza Monteiro Independence Participation in committees: CII CDG Participation in other boards: 1 Average tenure: 1 (since 08/10/2023)	 Viviane Isabela de Oliveira Martins Independence Participation in committees: CGD (coordinator) CDE Participation in other boards: 3 Average tenure: 0 (since 04/23/2024)	

¹ Position as at 12/31/2024. Participation of other boards refers to the boards of other companies.

² Statutory Audit Committee (CAE), Investment and Innovation Committee (CII), Sustainable Development Committee (CDS), People Committee (CDG) and Cyber Security and Information Security Committee (CSCI).

Member participation of COPEL holding company's board of directors (term of office Apr. 2023-Apr. 2025) DJSI/CSA



Fernando Tadeu Perez¹

Number of meetings: 5
Attendances: 5
Absences: 0
% attendance: 100%



Marco Antonio Barbosa Cândido

Number of meetings: 25
Attendances: 25
Absences: 0
% attendance: 100%



Marcelo Souza Monteiro²

Number of meetings: 25
Attendances: 25
Absences: 0
% attendance: 100%



Lucia Maria Martins Casasanta¹

Number of meetings: 5
Attendances: 5
Absences: 0
% attendance: 100%



Fausto Augusto de Souza²

Number of meetings: 25
Attendances: 25
Absences: 0
% attendance: 100%



Viviane Isabela de Oliveira Martins (desde 23/04/2024)

Number of meetings: 16
Attendances: 15
Absences: 1
% attendance: 93.8%



Marcel Martins Malczewski Presidente

Number of meetings: 25
Attendances: 24
Absences: 1
% attendance: 96%



Jacildo Lara Martins

Number of meetings: 25
Attendances: 24
Absences: 1
% attendance: 96%



Pedro Franco Sales (desde 23/04/2024)

Number of meetings: 16
Attendances: 16
Absences: 0
% attendance: 100%



Carlos Biedermann²

Number of meetings: 25
Attendances: 25
Absences: 0
% attendance: 100%



Geraldo Corrêa de Lyra Junior

Number of meetings: 25
Attendances: 24
Absences: 1
% attendance: 96%

¹Participated until 03/20/2024.

²Participated until 04/24/2025.

Development of governance bodies

GRI 2-17

Copel continuously invests in the development of its leadership through an improvement program for members of the Board of Directors, the Oversight Board and the Executive Board. The program is ongoing, with topics updated according to the needs

of the collegiate bodies. From 2022 to 2024, the program included several themes with different partners, covering topics more related to the Company's business, as well as governance, risk and compliance issues

In addition to the training offered, actions were implemented to streamline the decisions of the collegiate bodies and strengthen their integration with the Company's internal areas.

The CAD may call on the Sustainable Development Committee whenever necessary, seeking in-depth studies and clarifications on specific sustainability issues. This collaboration strengthens the Board's resolutions, promoting collective growth and improving the members' expertise in social and environmental issues.

The members of the collegiate bodies are highly qualified professionals whose appointment is conditional on meeting the technical and experience requirements set out in the Appointment Policy. Each collegiate body addresses specific agendas in line with its work agenda, incorporating different perspectives and trends on strategic and relevant topics.



Leadership performance review

GRI 2-18

Copel adopts a strict performance review process for its statutory bodies, which takes place annually in accordance with article 81 of the Bylaws, CVM Instruction 80/2022 and the Annual Performance Review Policy for Statutory Bodies. This process, led by the Board of Directors, has the methodological support of the People Committee and can be carried out with the support of an independent institution, ensuring transparency and fairness.

The review covers the statutory bodies of Copel and its wholly-owned subsidiaries. The Bylaws stipulate that the members of the Board of Directors, the Executive Board and the Oversight Board must be evaluated annually, following previously defined guidelines.

The evaluation model includes both collective evaluations (among peers and of the body as a whole) and individual evaluations (self-evaluation), involving the members of the Company's Board of Directors, Executive Board and Oversight Board.

External consultants are hired to carry out this process, thus strengthening the credibility of corporate governance and guaranteeing a continuous learning environment for members of the Board of Directors, the Oversight Board and the Executive Board.

In addition to the formal evaluation, Copel promotes direct interaction between the Chair of the Board of Directors and its members, encouraging strategic alignment and the exchange of experiences. Board members have access to relevant content, linked to the Company's current and future needs, through events, courses, participation of specialists in the Board's ordinary agendas, and events for interaction between Board members, including dynamic agendas, through which the Board meets at specific locations where the Company operates.

Also in 2024, new competencies were defined for senior leadership, increasing correlation with the changes the Company is currently going through, and a development action was planned in connection with the Leadership Development Program (PDL, in Portuguese), in order to support and assist leaders during the Company's transformation. In partnership with a consulting firm specializing in human capital and governance, the Company carried out an assessment of the strategic pipeline — Executive Directors, assistants and their direct reports. This action included several phases: evaluation stages, feedback, development plans, workshops and mentoring.

For the second half of 2024, the Company prepared a series of talks to be given to all formal leaders and supervisors.

To strengthen the credibility of corporate governance, the leadership assessment process is conducted by an external consultancy, guaranteeing an environment of continuous learning.

Leadership compensation

GRI 2-19, 2-20, 2-21

Copel adopts an integrated view of compensation, which includes benefits, profit sharing and long-term incentives, adjusting its strategy to retain talent, promote performance and align itself with the best corporate governance practices. The compensation strategy was revised to adapt to the new moment as a private company, enhancing adherence to market practices and the creation of long-term value. The update also included the introduction of Long-Term Incentives (LTI) for executives, leaders and key personnel, revising the ratio between fixed and variable compensation and increasing the dependence on sustainable organizational performance.

In the new model, 40% of the compensation of senior executives is linked to LTI, while 30% corresponds to fixed compensation and the rest refers to short-term incentives. This format seeks to encourage a long-term vision, with a stronger alignment between the interests of the leadership and shareholders. The LTI program

is based on forms of financial compensation for executives linked to the Company's performance (performance shares), which are awarded if certain targets are met, such as TSR (Total Shareholder Return, a concept that combines the share price and dividends to measure shareholder return). The program establishes a three-year grace period for calculation and collection, guaranteeing responsible and sustainable strategic decisions. The implementation of this model is gradual and covers other hierarchical levels, adjusting proportions according to responsibilities.

In line with international best practices and in compliance with Section 303A-14 of the NYSE Listed Companies Manual, in 2023, Copel introduced a clause in the Compensation Policy that establishes a rule regarding the obligation of management and other related parties to reimburse the Variable Compensation Subject to Recovery (clawback) in case of extraordinary events.



Seeking to stimulate long-term vision and a stronger alignment between the interests of leadership and shareholders, 40% of executive remuneration is linked to LTI.

In 2024, the ratio of compensation between the highest-paid individual (except the CEO) and the other employees was 31.5, while the ratio of percentage increase between the highest-paid individual and the other employees was 8.8.

The information on compensation for the President and executives takes into account

the revised fees and compensation mix approved at the 2024 Annual Shareholders' Meeting. The process was advised by Korn Ferry, a specialized consulting firm that works with companies similar to Copel in size and segment.

The compensation policy ensures the attraction and retention of qualified professionals, promoting an environment of

meritocracy and incentives to obtain better results. The fundamental principles guiding senior management compensation include a focus on results, diligence, transparency, fairness, competitiveness, corporate responsibility and commitment to ESG issues.

The compensation of the Company's Executive Board is structured according to three main components:

Compensation components



Basic compensation represents the fixed portion and is made up of fees that reflect the value of the position, both internally and on the market. It takes into account factors such as individual performance, experience, training and technical knowledge of executives.



Incentives the variable portion of compensation, linked to the achievement and surpassing of strategic, economic, financial and operational targets, including ESG indicators. Payment is conditional on the performance of the Company and its departments, ensuring alignment with the creation of sustainable, long-term value.



Benefits private pension plan, healthcare insurance, food vouchers (representation allowance), among others.

ESG indicators in variable compensation

ESG metrics are part of the variable compensation criteria at all levels of Copel, with the aim of strengthening commitment, staff engagement and meritocracy. Performance in sustainability, occupational health and safety, and internal controls currently accounts for up to 30% of compensation, depending on the level and area of activity.

The ESG metrics applied to the 2024 compensation program were defined as follows:

- Internal controls indicator.
- Occupational health and safety indicator (zero fatalities among own and outsourced employees).
- Indicators related to sustainability aligned with the strategic guidelines for the year.

The compensation of the members of the Board of Directors, the Oversight Board and the Statutory Advisory Committees of the Board of Directors follows a similar structure, consisting of basic compensation (fixed portion corresponding to fees), benefits (such as private pension plan and healthcare insurance) and an Incentives and Strategic Alignment Policy.

In order to strengthen the alignment between leadership and the Company's strategic goals, Copel created the Long-Term Incentive, managed by the Board of Directors with the support of the People Committee. This incentive sets challenging targets linked to organizational performance and risk management, reinforcing the commitment to creating sustainable value.

Compensation guidelines are based on market benchmarks, taking into account salary studies of companies of a similar size, turnover, number of employees and operational complexity. At the same time, Copel promotes the active participation of its stakeholders in the process of defining compensation. The shareholders determine the overall management compensation, which will be subsequently distributed, in accordance with the Company's Compensation Policy.

ETHICS AND INTEGRITY

GRI 2-23, 2-24, 2-27, 3-3 Material Topic: Corporate governance

16

Copel values ethics and integrity, incorporating these principles into its policies and initiatives to ensure legal compliance and excellence in corporate governance.

Ethics and integrity are essential values for Copel, reflected in its policies, programs and initiatives that guide the Company's actions, ensuring compliance with legislation and best corporate governance practices.

All corporate policies go through a rigorous approval process, including validation by the competent committees and final approval by the Board of Directors. These guidelines apply to the Copel Holding Company and its wholly-owned subsidiaries and majority and non-majority owned subsidiaries, respecting corporate procedures. As a recommendation, they also apply to majority and non-majority owned subsidiaries, associates and other shareholdings, with the aim of promoting consistent governance and

strategic alignment across the board. Where appropriate, the guidelines also apply to Copel's suppliers, as a recommendation. In this context, the Governance, Risk and Compliance Department is responsible for ensuring compliance with obligations and risk management, including the management of corporate risks, internal controls and the implementation of topics related to compliance, integrity, the Code of Conduct and the Integrity Program, among other duties defined in its Internal Regulations.

Copel has an Ethics Committee, whose main responsibility is to monitor the process of receiving and investigating complaints made to the Whistleblowing Channel. The Committee periodically reviews the Code of Conduct, issues

CÓDIGO DE CONDUTA





The company is a member of the Transparency Movement 100% of the Global Compact, reinforcing its dedication to accountability and ethical governance, which is reflected in its performance in the B3 Corporate Sustainability Index and its recognition by the Pro-Ethics Seal in two consecutive cycles.

guidelines on its application and collaborates in the revision of internal policies and standards related to ethics and conduct within the organization.

It is important to note that Copel's Integrity Policy was revised in 2024 to reinforce the commitment to preventing corruption, fraud and illicit activities, establishing guidelines for risk mitigation and transparency in institutional relations. The Policy defines the guidelines and responsibilities of employees in relation to integrity. It applies to Copel and

its wholly-owned subsidiaries and majority and non-majority owned subsidiaries, respecting corporate procedures. The Integrity Program includes a robust communication plan and periodic training ([read more in Integrity Training, on page 95](#)), as well as regular compliance alerts sent to the entire Company and its boards, with the aim of disseminating the integrity guidelines among employees. The Integrity Program seeks to prevent, detect and remedy harmful acts such as conflicts of interest, fraud in procurement and payments. The

program covers all employees, members of management and the Oversight Board, and related parties, promoting an organizational culture based on ethics and responsibility.

Copel's Code of Conduct is an essential document for ethical culture and organizational integrity. It covers all employees, members of management and the Oversight Board, interns, apprentices, suppliers, service providers, contractors, associates, majority and non-majority owned subsidiaries, joint ventures

and other stakeholders who have a relationship with the Company. Whenever it is updated, the Code is widely disseminated internally and externally through the Company's institutional website and the Integrity Portal, and all employees sign an acknowledgment form.

Adherence to the Code also extends to suppliers, who, when entering into contracts, receive the Supplier Manual and sign a Statement of Acknowledgment and Commitment, highlighting their shared responsibility for promoting an ethical and sustainable business environment.

Considering the Company's transformation into a corporation, in 2024, the Code of Conduct was revised with the support and approval of senior

management, taking into account best market practices and contributions from employees. The main changes include adaptation to the Company's new legal framework, clearer guidelines about conflicts of interest and updates of the item on information security, incorporating cybersecurity and artificial intelligence topics.

Its guiding principles reflect the values of the Company and the Global Compact, with a focus on integrity, compliance, sustainability, transparency, safety and health, social and environmental responsibility, and respect.

Copel does not lobby and does not contribute to political campaigns, in accordance with Law 9,096/1995, which prohibits

parties from directly or indirectly receiving in any form or under any pretext, any contribution or aid in cash or in kind, including advertising of any kind, from legal entities of any kind. Lobbying is therefore not regulated in Brazil.

The Company has the ISO 37301 certification (Compliance Management System), which sets strict standards for risk management, internal controls and governance. The Corporate Risk Management Policy complements these guidelines by defining mechanisms for continuous risk monitoring, ensuring protection of the Company's value and mitigation of adverse impacts.

In 2024, no significant cases of non-compliance with laws and regulations were identified. The

Company defines as significant cases with an estimated amount above BRL 25 million, ensuring alignment with best governance and transparency practices.



SAIBA +
Please access the the Sustainability Policy.



SAIBA +
Please access the Integrity Policy.



Audit and certification

In the context of Copel's transformation into a corporation, the Company strengthened its internal compliance and risk management processes. As part of this improvement, in January 2025, Copel underwent an independent third-party audit to maintain ISO 37301 and succeeded in maintaining the

certification that attests to the best compliance management practices within the Company.

This audit assessed the Company's adherence to internal regulations and compliance guidelines, identifying opportunities for improvement and

strengthening the integration between control procedures and risk management. ISO 37301, launched in 2021, guides companies towards implementing an organizational culture focused on compliance, promoting behaviors in line with best governance practices.

Conflict of interest and anti-corruption practices

GRI 2-15, 205-1

Copel adopts a rigorous system to prevent, identify and deal with conflicts of interest, in line with best corporate governance practices and in compliance with applicable legislation. The Company has clearly defined guidelines in its Bylaws, internal regulations and the Policy on Related-Party Transactions, establishing principles such as independence, competitiveness, compliance, transparency, fairness and the arm's length principle, ensuring that the decisions made are always in the best interests of the organization.

The Bylaws stipulate that, when a conflict of interest is identified, the involved member must abstain from participating in the discussion and voting on the matter, even if they are representing a third party. The justification for abstention is recorded in the minutes, with details of the nature and extent of the conflict, ensuring transparency and knowledge for all concerned. The management of possible conflicts is supported by the

Integrity Superintendency, which manages risks, governance and compliance. The compliance team conducts internal investigations and prepares reports on the situations identified, which are deliberated on by the Ethics Committee and forwarded to the CAD for follow-up. Any complaints

are received through Copel's Whistleblowing Channel, which operates 24 hours a day and is managed by an external, independent company that specializes in receiving complaints from internal and external stakeholders.

Copel assessed corruption risks in its wholly-owned subsidiaries and classified them into three categories:



Motivation: collusion with customers, suppliers and other employees; conflict of interest, bribery and kickbacks; and bid and price rigging, including overpricing;



Enabler: misuse of assets and resources; violation of internal rules, policies and procedures; theft of physical assets; misuse or leakage of information; document fraud; misconduct by suppliers; information theft or attacks; and overpricing schemes.



Consequence: violation of laws; misappropriation of funds; and fraud in accounting statements.



As a preventive measure, the Company conducts background checks before appointing candidates to positions on statutory bodies. These checks include an analysis of cross-membership in other management bodies; an assessment of potential cross-shareholdings with suppliers and other stakeholders; identification of controlling shareholders; and the monitoring of related parties and their transactions, outstanding balances and registration status. During the term of office, this information remains up to date, guaranteeing compliance and independent decisions.

Copel follows clear guidelines that define roles, duties and responsibilities in its governance structure. The procedures adopted for dealing with conflicts are documented in the Governance Report, in line with the Brazilian Corporate Governance Code. This transparency, combined with preventive measures and detailed records, demonstrates the Company's commitment to integrity, fairness and responsibility in all its operations.

Anti-Corruption Practices

In addition to the Integrity Program and the Code of Conduct, which are essential for preventing and combating corruption, Copel maintains regularly reviewed corporate policies in compliance with national and international legislation, such as the Foreign Corrupt Practices Act (FCPA) and the Sarbanes-Oxley Act, and aligned with the guidelines of the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Every year, Copel's operational processes undergo a risk assessment related to errors or fraud that could impact their financial results. These assessments are accompanied by controls that are rigorously tested by the Internal and External Audits.

Integrity training

GRI 205-2

Copel's Integrity Program is supported by a schedule of periodic training sessions for all teams, integrated into employees' daily activities. To facilitate access to information on integrity, Copel provides content on the Integrity Portal for the internal public and on the Sustainability Portal for the external public. The [Integrity Section on Copel's](#)

[website](#) is available to all stakeholders and provides information on the bodies involved and the integrity actions carried out by the Company. The website offers access to the Integrity Program, the Code of Conduct, the Whistleblowing Channel, Corporate Policies and information on compliance, risks and internal controls.

Governance body members that have been communicated about and received training on anti-corruption^{1, 2} | GRI 205-2

Indicator	2022	2023	2024
Total number of governance body members	45	35	92
Members that have been communicated about	45	35	92
Percentage of members that have been communicated about	100%	100%	100%
Members that have received training	45	9	62
Percentage of members that have received training	100%	25.7%	67.4%

¹ All members are located in the South region.

² Since 2023, the premise has been that the number of reported and trained members takes into account the position held on each of the Holding and Wholly-owned Subsidiaries' boards that have received training, and may even be counted multiple times if the member serves on more than one board.

Employees that have been communicated about and received training on anti-corruption, by employee category¹²³ | GRI 205-2

Employee category	2022				2023				2024			
	Number of employees that have been communicated about	%	Number of employees that have received training	%	Number of employees that have been communicated about	%	Number of employees that have received training	%	Number of employees that have been communicated about	%	Number of employees that have received training	%
Operational staff	18	100%	18	100.0%	17	100%	17	100%	-	-	-	-
Secondary-level technical employees	1,450	100%	1,450	100%	1,395	100%	1,314	94.2%	1,202	100%	1,190	99.0%
Secondary-level employees	3,271	100%	2,984	91.2%	3,107	100%	2,972	95.7%	2,079	100%	2,017	97.0%
University-level employees	1,136	100%	1,083	95.3%	1,285	100%	1,185	92.2%	1,108	100%	1,096	98.9%
Interns	287	100%	94	32.8%	343	100%	324	94.5%	-	-	-	-
Total	6,162	100%	5,629	91.4%	6,147	100%	5,812	94.6%	4,389	100%	4,303	98.0%

¹ All Employees are located in the South region.

² The operational career has no more occupants. Copel's transformation into a corporation has enabled these employees to migrate to other careers within the Company.

³ Interns were not included in this indicator in 2024.

Business partners that have been communicated about anti-corruption policies, by the type of partner¹²³ | GRI 205-2



¹ All Business partners are located in the South region.

² In previous years, communications were linked to the request to answer the integrity questionnaire, a practice aimed at classifying the entire base of active suppliers. In 2024, communications were linked to the delivery of the Prevention of Corruption webinar, a joint effort designed to disseminate integrity practices, and the actions were intensified for a selected audience.

³ The figures take into account formal contracts in force at the end of 2024. For the scope of this indicator, suppliers were considered, with the exception of contracts: Individuals; Collection Services; Leases; Assignment of Use.



Reporting channels

GRI 2-16, 2-25, 2-26, 205-3, 406-1

There are several communication channels through which all stakeholders can report possible violations of ethical principles, internal policies and laws or misconduct.

The  **Whistleblowing Channel** is the main reporting channel. It is dedicated to receiving and handling reports of fraud, irregularities or violations of the Code of Conduct, internal rules and applicable legislation. It receives complaints about moral and sexual harassment, discrimination, corruption, conflicts of interest, information security, financial fraud, misuse of Company resources and human rights violations, among others. The confidential and impartial service is provided by an independent third-party company, which guarantees the anonymity of whistleblowers.

In 2024, Copel registered 434 manifestations (reports) on the Whistleblowing Channel. Considering this total, on December 31, 2024, the reports were classified as follows: 184 unfounded, 51 well-founded, 46 insufficient data, 31

The channel is subject to annual internal and external audits and is available 24/7 at :



website:



<https://www.copel.com/site/institucional/canaais-de-denuncia/>



phone:

0800 643 5665 / 0800 900 8008

doubts clarified, 20 partially well-founded, 16 were classified as out of scope, 9 were related to compliance tests (SOX) and 73 were in progress (under analysis, review or awaiting approval).

434 manifestations
on the Whistleblowing Channel

In the same year, the operations of Copel (Holding) and its subsidiaries were assessed for corruption risks. No cases involving the company’s own employees were identified. In relation to service providers, one case of corruption was identified. The case was reported to the contracted company for investigation. There was no termination or non-renewal of contracts with business partners due to this incident, as the contracted company was responsible for punishing those involved.

See below the main topics of reports received in 2024¹:

Type of reports	Total reports received ¹	Total substantiated reports
Inadequate use of financial resources	1	0
Breach or loss of customer data	1	0
Violation of health and safety policies	1	0
Misuse of the Company's image	1	0
Misuse of company resources	1	0
Corporate security	1	1
Environment	2	1
Discrimination (race, color, sex, religion, etc.)	3	0
Destruction or damage to Company property	4	0
Leakage or misuse of information	4	0
Physical assault	5	0
Favoring of suppliers or customers	5	0
Information security (cybersecurity)	4	0
Environment (pollution, deforestation, etc.)	5	0
Violation of laws — other	6	1
Theft or robbery	6	0
Poor people management	9	0
Fraud	10	0
Corruption	13	1
Violation of labor laws	14	6
Sexual harassment	15	1
Misuse of Company assets/resources	18	7
Behavior	20	1
Other	25	1
Conflict of interests	34	2
Moral harassment	39	0
Query/question	44	0
Misconduct	48	4
Non-compliance with internal policies and procedures	88	25
Money laundering ²	-	-
Insider trading	-	-
Total	427	51

¹ This table shows a difference of 7 reports (totalling 427) when compared to the total number of reports in the Whistleblowing Channel, mentioned on the previous page. This is because these 7 reports were received in 2024 but only classified in 2025, which is why they are not included in the classification in this table.

² Currently, we do not have topics as a predefined category in our system. However, reports whose subjects are related to the topic are handled under the above-mentioned categories. These topics will be included in our predefined category list.



All complaints received through the Whistleblowing Channel are recorded and analyzed by the Ethics Committee, which helps to uphold ethical principles within Copel. The Ethics Committee submits a monthly report to the Statutory Audit Committee (CAE, in Portuguese) on the follow-up of complaints and periodically reviews the Code of Conduct and contributes to the improvement of internal policies. Another way of receiving requests is through participation in public hearings.

Through the [website](#), stakeholders have access to contact channels by business segment. Communications related to the generation and transmission business can be sent to comunicacao.get@copel.com and analyzed by Copel GeT's Integrated Management Department, which generates the records in the GeT Atende system and directs them to the appropriate departments for assistance, processing and/or response. Other channels are disseminated to Copel GeT's stakeholders:

the toll-free number 0800 644 5445 and the WhatsApp (41) service number 9913-7838, also directly handled by Copel GeT's Integrated Management Department.

Information collected by teams in the field and formal requests from stakeholders serve as input for improvement actions, such as adjustments to Copel's website to facilitate access to customer service and the creation of a WhatsApp service channel.

Exclusive channels

For specific cases of energy theft or other irregularities, Copel provides a toll-free number (0800 51 00 116) and offers a [digital form](#), that directs complaints to the most appropriate channels — any reports sent to the wrong sector by mistake are redirected to the appropriate sector, and the whistleblower receives a number so they can follow up on the report.

On Copel’s website, there are, [links to exclusive channels](#) and a WhatsApp service number (41

99137-7838). ([@ comunicacao.get@copel.com](#)) and a WhatsApp service number (41 99137-7838).

Copel has a specialized channel called Compliance Culture, aimed at management, which provides information that complements the Compliance Alerts issued, instructions on the use of integrity mechanisms and specific guidance on one-off or urgent situations. This channel can be used as a support point for queries.



SHAREHOLDERS AND INVESTORS

They have an exclusive e-mail for communication on strategic, financial and operational issues - the channel is also informed on the IR page.

Ombudsman’s Office

Copel also has an Ombudsman’s Office certified by ISO 9001 and recognized by Aneel as one of the best in the sector. If the stakeholder is not satisfied with the service or needs assistance from a higher level, he or she can reach Copel’s Ombudsman’s Office by calling 0800 647 0606, on business days from 8 am to 6 pm, or sending an email to [ouvidoria@copel.com](#).

All communication channels also cover Copel’s suppliers.

INTEGRATED CORPORATE RISK MANAGEMENT

GRI 3-3 Material topic: Corporate governance, 205-1

16

Corporate risk management is an integral part of the Company's strategy and is essential for sustainable growth, profitability and the creation of value for shareholders. Constantly monitored by senior management to identify threats and opportunities, this practice supports decision-making and maximizes results.

The Company has adopted a consolidated methodology, based on international benchmarks such as Coso and the IBGC's Code of Best Corporate Governance Practices. The Integrated Corporate Risk Management Policy defines a risk matrix that establishes the principles for integrated risk management, performance monitoring and setting up an appropriate infrastructure. Revised and approved by the Board of Directors at the end of 2023, the Policy provides for the presentation of periodic reports to the Board and

the Statutory Audit Committee, as well as the definition of monitoring and value protection methodologies.

The Policy's rules apply to corporate areas, wholly-owned subsidiaries and majority and non-majority owned subsidiaries, and they are recommended for Copel's joint ventures, associates and other shareholdings, as well as suppliers.

Risk management is structurally independent of the business areas. The Governance, Risk and Compliance Department (DRC, in Portuguese) coordinates the actions for Copel and its subsidiaries.

Copel's risk management governance follows the Three Lines Model, developed by the Institute of Internal Auditors (IIA), assigning roles and responsibilities to

management levels. The process undergoes annual audits, and the results are reported to Executive Board meeting, the Board of Directors, the Statutory Audit Committee and the Oversight Board. Corrective measures are applied to any problems identified.

The internal audit is responsible for assessing the effectiveness of the risk management process; evaluating the adequacy of the treatment actions and control mechanisms; and recommending process improvements to the risk manager, when necessary.

In addition to internal audits, an external audit is carried out by PricewaterhouseCoopers (PwC). Reports are submitted to the Statutory Audit Committee and the Board of Directors, and any deficiencies identified follow the governance flow for mitigation, ensuring transparency and regulatory compliance.

Corporate risk management process

Pillars of Copel's risk and opportunity matrix (according to risk appetite):



Acting

In accordance with the highest ethical and compliance standards



Ensuring

That the actions adopted are in line with ESG practices, with an emphasis on climate change and social and environmental aspects



Assuring

That occupational safety is strictly observed in all its operations



Improving

The level of Information Technology (IT) and Operations Technology cybersecurity at all times



Not operating

In segments outside its core business



Investing

In businesses that adhere to the Investment Policy and strategic plan, based on decarbonization, integration with scale, capital discipline and innovation

Risk classification

See below the four categories of risks and their implications:

Strategic risk

Related to business decision-making, Strategic plan and the deterioration of the brand in the eyes of the market, clients and regulatory bodies, due to negative publicity.

Consequences:

- Significant economic losses; and
- Reputational damage.

Operational risk

Related to internal processes; information technology; operations technology; social, environmental and climate issues; and transmission, generation and distribution projects.

Consequences:

- Interruptions or failures in operations.

Financial risk

Related to the market, fluctuations caused by price changes (foreign exchange, interest and shares) and disclosures associated with the prospect of issuing incomplete, inaccurate or untimely financial, management, regulatory, tax and statutory reports.

Consequences:

- Lack of liquidity;
- Insufficient funds, cash or other financial assets; and
- Insufficient credit due to difficulty in collecting amounts billed to customers.

Conformity or compliance risk

Related to laws and regulations, fraud and corruption, and the protection of personal data.

Consequences:

- Damage to image; and
- Lawsuits.

Risk governance

- 1 **Guiding document:** : Copel's Integrated Corporate Risk Management Policy defines the principles and guidelines for the corporate risk management process integrated with the strategy and performance to be observed and applied in the Company.
- 2 **Responsibility:** Copel's Integrated Corporate Risk Management activity is linked to the Governance, Risk and Compliance Department (DRC, in Portuguese).
- 3 **Process:** It follows the three-line model recommended by the Institute of Internal Auditors (IIA), with roles and responsibilities assigned to the different management levels.
- 4 **Verification:** The processes are audited by PricewaterhouseCoopers Auditores Independentes (PWC).

Risk management is an essential process for senior management decision-making and Strategic plan. The adopted methodology considers legal, regulatory, social, environmental and reputational factors, with continuous monitoring and reporting practices.

The duties and guidelines inherent in Risk Management at Copel are present in the Bylaws, the Internal Regulations of the collegiate bodies, in Copel's Organizational Standards (NOCs), Corporate Policies (NPCs) and Administrative Standards (NACs, all acronyms in Portuguese).

As defined in the Bylaws, the Board of Directors is responsible for monitoring the effectiveness of the risk management system, with the support of the Statutory Audit Committee, which observes, among other points, the instructions of the Integrated Corporate Risk Management Policy, whose management function is

independent of the business lines. This activity is linked to the DRC, which coordinates compliance actions, corporate risk management and internal controls within the scope of the Copel Holding Company and its wholly-owned subsidiaries, majority and non-majority owned subsidiaries and associates. Copel's risk exposure is reviewed several times a year, through quarterly reports to the Statutory Audit Committee and half-yearly reports to the Board of Directors. The process follows the three-line model recommended by the IIA, with roles and responsibilities assigned to the different management levels.

Risk management practices are audited annually in order to assess the effectiveness of the work. The results are reported to the collegiate bodies: the Executive Board, the Statutory Audit Committee, the Board of Directors and the Oversight Board, and, if any problems are identified, notes are made and action measures are defined to mitigate the audit findings. The process is completed with transparent disclosures to the market.

Management levels and responsibilities

VALUE CREATION AND PROTECTION

- Risk management integrated into all processes.
- Structured, comprehensive and objective approach.
- Structure, processes and resources commensurate with the organization, constant improvement.
- Stakeholder engagement.
- Proactive, preventive, permanent and agile risk management.
- Historical and current information, future expectations and attention to uncertainty in the data.
- Organizational culture strongly influences risk management.
- Cycles of ongoing learning and monitoring improve risk management.

GOVERNANCE BODY

- It operates above the three lines.
- It determines the direction of the organization, defining its vision, mission, values and organizational risk appetite in a comprehensive and transparent manner.

MANAGEMENT

- Managing risks so that the organization can achieve its goals.

AUDIT

- Neutral assessment.

FIRST LINE

- It identifies, analyzes, assesses, treats and manages risks.
- It designs, operates and improves controls, procedures, standards, policies, etc.
- It coordinates risk mitigation strategies.

SECOND LINE

- It establishes metrics, defines goals and processes, transfers expertise, provides support and carries out monitoring, defining acceptable levels of exposure.
- Their roles are not independent.

THIRD LINE

- Internal audit.
- It reports to the governance body.
- It communicates the assessment and advises management and the governance body.
- It implements safeguards.

RISK MANAGEMENT STRUCTURE

- It supports the integrated application of risk management in critical activities and functions.

Label:



Delegates, guides, defines resources and oversees



Accountability and reporting.



Alignment, communication, coordination and collaboration



Three lines IIA



ISO 31000

Risk identification

Copel adopts a structured approach to risk identification, analyzing a set of internal and external events that could impact its strategic goals. This process includes assessing the control environment associated with each risk and checking the mitigating actions already implemented, ensuring that the Company's exposure to possible impacts is reduced. It strengthens its proactive risk management, promoting greater security and operational resilience.



Risk assessment stages

Identifying and responding proactively to events that could impact the strategy and business goals are essential for corporate sustainability. Therefore, Copel's corporate risk management covers several stages, including risk identification, assessment, analysis and review.

The risk assessment process uses quantification criteria such as Capex, Opex and qualitative and quantitative methodologies. The matrix is divided into the strategic, operational and new business categories and uses the GRC Risk Management system (SAP), which centralizes data and tracks changes and advanced simulations.

The procedure also involves communicating and disseminating the identified risks, along with the respective mitigation plans, guaranteeing an integrated and effective approach to risk management.

Assessment of risks in terms of their impact and likelihood

The risks to be managed are prioritized based on their relevance, which results from the assessment of impact and likelihood, according to the predefined criteria validated in the risk methodology. Likelihood is the chance of the event occurring within the expected timeframe to achieve the goal/result. The impact is the result or effect of a risk. There can be a range of possible impacts of financial, operational, image, social and environmental risks ([see classification of risks on page 108](#)).

Risk treatment

It includes planning and performing actions to change the level of risk. This can be changed through response measures that mitigate, transfer or avoid risk.

Monitoring and action plans

Risks are monitored periodically to ensure that information is up-to-date and complete. Action plans to improve the control environment are followed up in accordance with established deadlines. The impact and likelihood criteria are reviewed based on the results obtained, and Key Risk Indicators (KRI) are used to identify the need for new actions to reduce risk exposure.

Strategic risk management

Strategic risks are reviewed periodically during Strategic plan, in a joint effort between the senior management of the Copel Holding Company and its wholly-owned subsidiaries. This process involves identifying and analyzing risks, defining control and contingency plans, and setting up monitoring actions.

Copel's management structure classifies risks into strategic, financial, operational and compliance. For strategic risks, the Company adopts a portfolio approach that prioritizes the main risk categories, using metrics such as share capital, equity and EBITDA, applying quantitative and qualitative techniques.

Risk Management Education

Senior management

Copel has a training program with an annual agenda, the aim of which is to expand and update the risk management knowledge of the members of Senior Management, including the Board of Directors and the Statutory Audit Committee. The most recent training took place in July 2024 and was offered to all board members, directors and some of the other executives, with 88% of the target audience taking part. The content includes:

- Contextualization of methodology and the importance of risk management;
- Integrating risk management with strategy and performance;
- Trends in Risk Management for the Electricity Sector in Brazil and worldwide.

Employees and trainees

In order to strengthen the culture of risk management and integrity, it is mandatory for the workforce to take part in training on this subject. The Integrity Program Cycle 2024 Campaign was completed by 98.6% of employees.

New business risk management

The expansion of businesses related to the Company's corporate purpose and aligned with its strategic plan takes place through the acquisition of equity interests or new businesses, and through participation in bidding processes to obtain concessions or in business auctions in all its areas of operation, with risk assessment being an integral stage in the analysis of these opportunities, in accordance with the Company's acquisition and auction flowcharts.

At the request of the department responsible for business development, risk assessments are drawn up for new businesses, including acquisitions, mergers or disposals intended by Copel. In these cases, the Company adopts a portfolio view that focuses on the main risk categories, using metrics such as Capital Expenditure (Capex) and qualitative and quantitative techniques. At the beginning of the work, the matrix is evaluated and expanded according to the object of study, using the GRC Risk Management system (SAP) as technological support, with Monte Carlo Simulation.

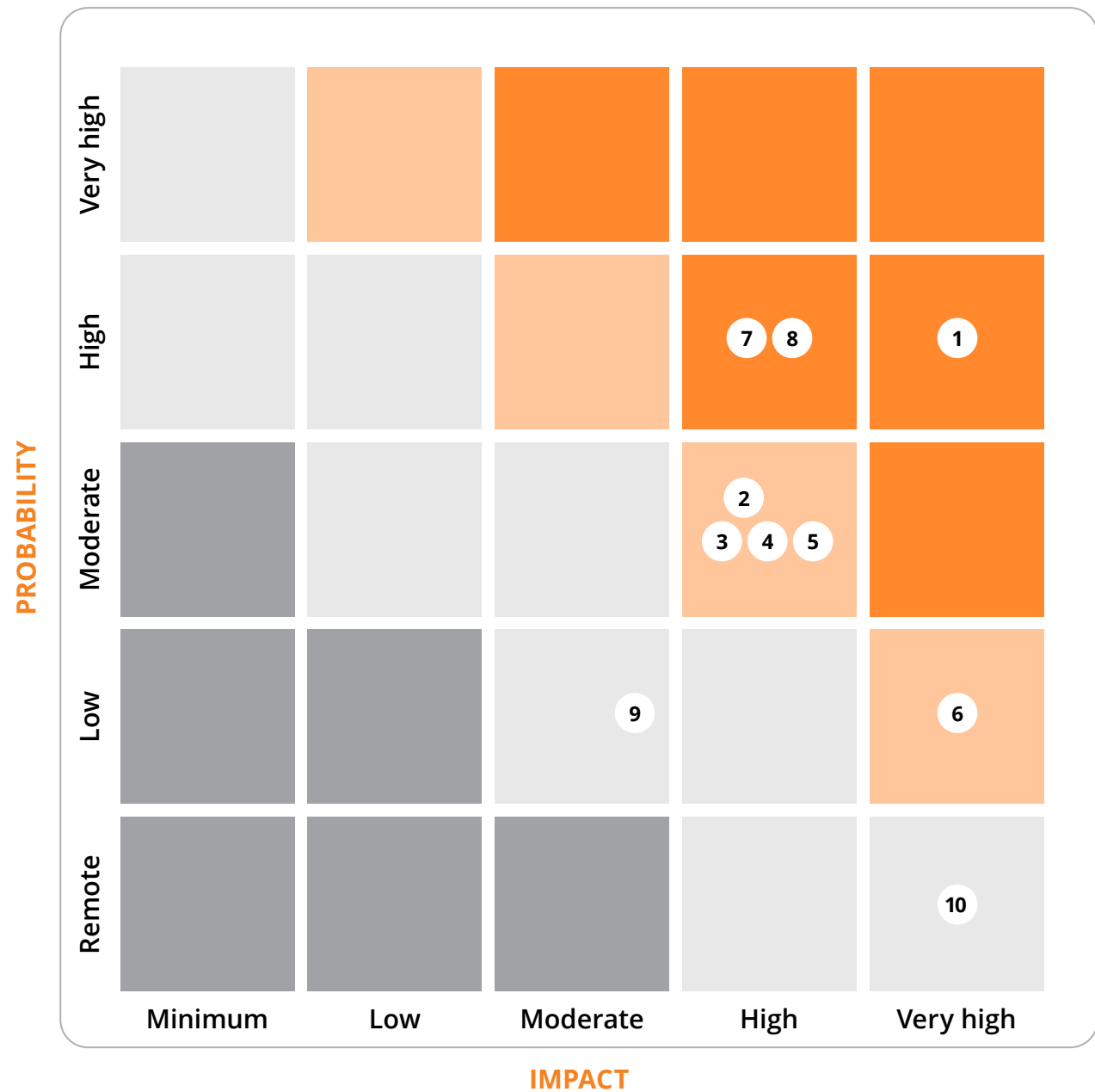


Main risks

The following matrix shows the ten main risks that could impact Copel’s strategic goals, selected from a broader risk portfolio. These risks, together with their mitigation and action plans, are monitored and managed on a regular basis.

The main identified risks are:

- 1 Cybersecurity;
- 2 People management;
- 3 Capital allocation to sustainability;
- 4 Supply chain;
- 5 Ethics, fraud and corruption;
- 6 Litigation;
- 7 Climate change;
- 8 Regulatory;
- 9 Hydrological risk; and
- 10 Dams.



Cybersecurity risk



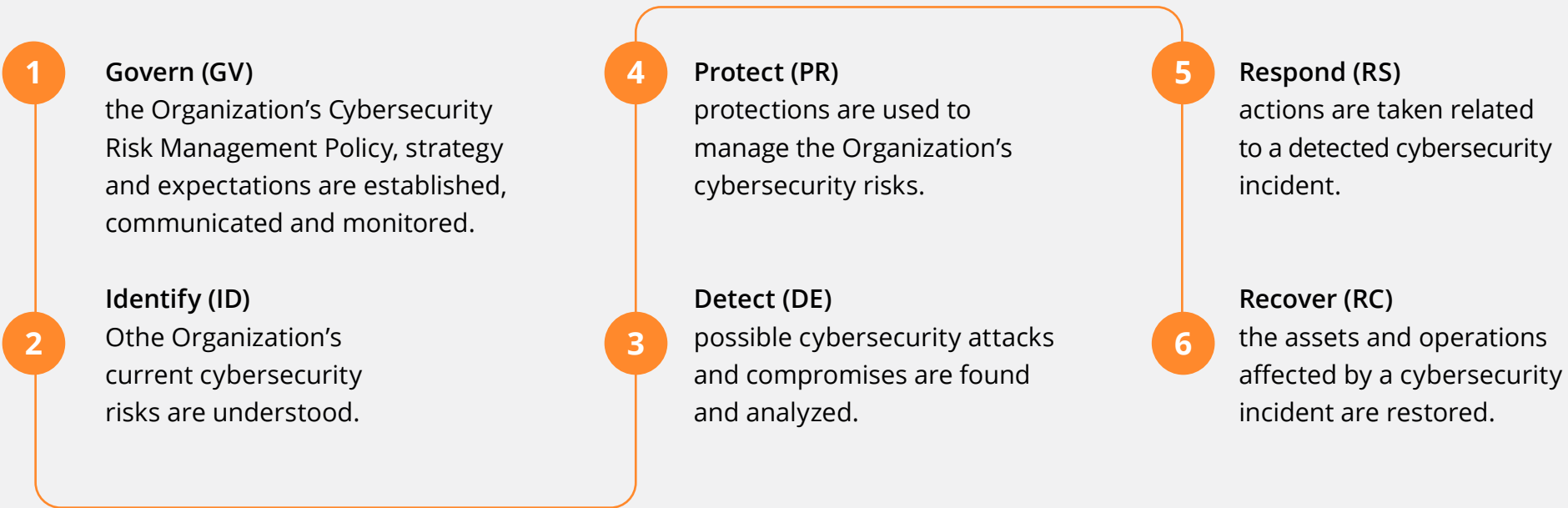
Risk and impacts: cybersecurity risk is the potential risk of loss or damage caused by a cyber incident that actually or potentially compromises the availability, integrity, confidentiality or authenticity of an operation/ information system or the information processed, stored or transmitted by said system.

It can be characterized by the attempted exploitation of an operation/information system vulnerability that constitutes a violation of a standard, security policy, security procedure or use policy.



Actions: an essential part of the Company's strategic plan, aimed at mitigating the risk of cyberattacks by protecting its critical systems and data.

In order to do this, Copel follows the NIST Cybersecurity Framework (NIST-CSF), structuring its actions into six main functions:





Incident prevention and response

Copel has established processes to prevent IT system outages and cyberattacks, and it is prepared to act if such events occur.

There are internal rules and an ongoing mandatory training program for employees to ensure that they act in accordance with the best information protection practices. This includes training on cybersecurity, with a focus on preventing data breaches and information

leaks; security analyses carried out every four months; and phishing and similar tests carried out monthly. Performance in the tests is monitored, and the results serve as input for providing additional training, as well as monitoring the Company's level of maturity in this area. In 2024, 6,200 employees (taking into account direct employees, contractors and interns with access to Copel's network) attended cybersecurity training, totaling 31,800 hours.

Any security incidents are reported in good time to the Information Security team, which responds promptly and establishes measures to prevent recurrence in order to ensure a safe working environment.

Cybersecurity risk is related to the material topic Cybersecurity and Information Security, within the Energy Sector Transformation group ([learn more about materiality on page 8](#)).

People management risk



Risk and impacts: this risk is related to the skills required for the new demands and technologies, together with a possible lack of identification of the new essential functions for the evolving business, which could also have an impact on the retention of management and Board members. The risk includes failure to identify and prepare successors for critical business positions; failure to retain talent (management and Board members, leaders and employees); low leadership readiness for new challenges; culture not aligned with the strategy and low engagement of people; and inefficiency in workforce planning and utilization of personnel. The Company is facing challenges that are causing it to rethink the way the Organization works and the role of its people management leaders.



Actions: to mitigate this risk, Copel prepares people with the necessary skills for future challenges; training and succession of employees in identified critical roles (knowledge management); leadership development, considering the redesign of profiles and competency maps; implementation of assessments and development plans; internal mobility to better leverage the workforce and promote professional development; implementation of actions to strengthen the organizational culture in line with the strategic guidelines established by the Board of Directors (CAD); and monitoring and improvement of the organizational climate (conducting the GPTW survey).

The risk in people management is related to the material topic People Management ([learn more about materiality on page 8](#)).



Risk related to capital allocation to sustainability



Risk and impacts: if Copel does not complete the proposed program of implementing and prospecting for investments, obtaining new business, structuring new services and completing construction on time, the operation and development of the business could be adversely affected. The strategic plan and the Investment Policy define the way the process is conducted and the macro guidelines, with strategic investments directed towards renewable energies, transmission assets and new products/services.



Actions: to mitigate this risk, the Investment and Innovation Committee (CII, in Portuguese) is involved in all discussions regarding the project portfolio and analysis of business opportunities. The Company's portfolio of projects and business opportunities is presented and discussed with the Investment and Innovation Committee every month.

The risk related to capital allocation to sustainability refers to the material topic Sustainable Investments, within the Economic and Financial Performance group ([learn more about materiality on page 8](#)).

Supply chain risk



Risks and impacts: Copel's business is subject to risks related to the supply chain, which can be materially and adversely affected by internal or external economic, political, social, regulatory, weather, environmental and technological events, among others, such as pandemics, border disputes, cyberattacks, natural disasters and armed conflicts, among others.



Actions: to mitigate this risk, Copel has a Supply Committee, with the aim of fostering synergy between Copel and its subsidiaries, as well as a management plan for critical materials (inventories). An integrated working group carries out scenario analyses for the procurement process. The eProcurement platform intensified security and reliability in the management of procurement processes, expenses and other related processes.

The supply risk is related to the material topics Sustainable Supplier Management and Economic and Financial Performance ([learn more about materiality on page 8](#)).

Risk related to ethics, fraud and corruption



Risk and impacts: risk related to the theft of physical assets, illegal sharing of confidential information, misappropriation of funds, conflicts of interest, influence peddling, bribery, kickbacks, collusion with suppliers and customers, among others, which can lead to financial losses, fines, sanctions and penalties from supervisory bodies, as well as deterioration in Copel's image.



Actions: to mitigate this risk, Copel has an integrity program with a robust process for investigating complaints and timely updates. Copel carries out special campaigns and training for contractors based on the fraud and corruption risk matrix. It also classifies its active suppliers. A new version of the integrity training, with general aspects of the Code of Conduct and the Integrity Policy, remains available to all Copel employees and interns.

The risk related to ethics, fraud and corruption refers to the material topics of Integrity, Transparency and Corporate Governance.

Litigation risk



Risk and impacts: Copel may be subject to legal proceedings, mainly relating to civil, administrative, labor and tax claims. The outcome of these lawsuits is uncertain, and, if a lawsuit results in obligations against the Company, this could materially affect its operating results.



Actions: to mitigate this risk, there is a Permanent Committee to monitor contingent liabilities and accounting provisions related to Copel Distribuição, and a Permanent Committee for settlements. These efforts include electronic summons and Legal Controllershship.

Litigation risk is related to the material topic Economic and Financial Performance ([see more on page 8](#)).

Climate change risk

GRI 201-2



Risk and impacts: related to current and future climate change on the Company's operations, such as the effects of severe weather, dam failure and scarcity of natural resources, among others, which may affect the following aspects: i) physical climate risks — the possibility of losses caused by events associated with frequent and severe weather (acute) or long-term environmental changes (chronic), which may be related to changes in weather patterns; ii) transition climate risks — the possibility of losses caused by events associated with the transition to a low-carbon economy, in which greenhouse gas emissions are reduced or offset and the natural mechanisms for capturing these gases are preserved.



Actions: to mitigate these risks, Copel monitors weather conditions in real time. It also has a Contingency Plan for adverse weather events, including actions and measures to be taken to ensure readiness and the ability to respond in cases of severe weather events.

Climate change risk management

Climate change risk management was defined based on Copel's Sustainability Policy, which contains the guidelines on the topic. To adapt to these effects, the Company has been investing in renewable energy generation sources, adjusting to a change in the market by implementing more robust structures in the distribution and transmission networks. It also seeks to improve the system to deal with severe weather events and to adopt actions to manage its Greenhouse Gas (GHG) emissions, such as the Carbon Neutrality Plan, which promotes research, development and innovation, implementing solutions to adapt to climate change. Furthermore, Copel GeT and Copel DIS published their Climate Change Adaptation Plans, including the main risks and vulnerabilities, as well as their impacts and main management and mitigation actions.

Climate change risk is directly related to the material topic of climate change, in Environmental Commitment ([see more on page 8](#)).

Hydrological risk



Risk and impacts: hydrological risk is inherent in hydroelectric power generation. Uncertainty about rainfall patterns and inflow into our reservoirs has impacts not only on hydroelectric generation capacity but also on electricity prices across the entire system. The impact of water shortages and the consequent measures taken by the government to conserve energy could have a material adverse effect on our business, financial condition and operating results. In Brazil, hydrological conditions are often subject to changes due to non-cyclical deviations in average rainfall.



Actions: to mitigate this risk, Copel conducts studies on the contract capacity levels that best suit generation projections (GSF) and dispatch model prices. Energy sales targets are set for the coming year to deliver annual contracts within the horizon of interest. Copel works towards reducing the risk of settling a very large volume of energy at minimum Difference Settlement Prices (PLDs), while seeking protection against unfavorable scenarios of low GSFs and high PLDs.

Regulatory risk is directly related to the material topic Regulatory Environment, in the Corporate Governance group ([see more on page 8](#)).

Regulatory risk



Risk and impacts: regulatory risk encompasses the possibility of adverse impacts arising from the introduction of new regulations or the intensification of existing standards and inspection criteria applicable to the power sector. This risk can manifest itself in several areas, such as tariff changes, environmental regulations, quality standards and continuity and safety at work. Consequences include financial penalties, loss of concessions, need for additional investments and reputational damage, directly impacting the Company's sustainability and competitiveness.



Actions: to mitigate this risk, Copel adopts proactive and adaptive management, with continuous monitoring of regulatory changes and strategic engagement with regulatory bodies. There is continuous monitoring, dissemination and participation in the legislative process (National Congress) and in the rulemaking process of the regulatory body (subsidies, public consultations and public hearings) and the granting authority, including, in some cases, the use of artificial intelligence tools for tracking and performing predictive analyses of new legislation. Terms of Notification and Notices of Violation are monitored in order to verify compliance with deadlines and mitigate impacts.

Hydrological risk management

The management of water resources is essential for Copel, whose power generation comes mostly from hydroelectric sources, with a large share of its operations located in the Iguaçu River basin, in Paraná. Uncertainty about rainfall patterns and inflow into our reservoirs has impacts not only on generation capacity but also on energy prices in the National Interconnected System (SIN, in Portuguese). The main risks include extreme events such as floods and water shortages, as well as possible regulatory changes.

The use of water in hydroelectric plants is non-consumptive, i.e., the volume used is immediately returned to the river in the same quantity and quality. Copel's projects are not located in areas of permanent water stress, although shortages of varying degrees of severity have been recorded in recent years.

Copel adopts a preventive approach, implementing Dam Safety Plans (PSB, in Portuguese) and participating in management groups for the Iguaçu River. The Company maintains the Reservoir Monitoring System, which allows it to monitor water availability in real time, with accessible data on the websites of Copel and the National Water and Sanitation Agency (ANA, in Portuguese). To increase control, it operates a hydrological monitoring network that collects information on river and reservoir levels, as well as rainfall data.

In energy planning and revenue estimation, Copel analyzes historical water availability data, considering cyclical variations and associated risks, including impacts on the Energy Reallocation Mechanism (MRE, in Portuguese) and short-term prices. Corporate risk management takes into account possible changes in industry regulations. To this end, Copel actively participates in strategic forums, such as the Crisis Rooms of the South Region and Paranapanema, the National and State Water Resources Councils and the River Basin Committees, so that changes in water availability are continuously discussed and monitored.

The impacts on business are minimized by the SIN, which integrates several energy sources, including hydro, wind, thermal and solar, ensuring security and balance in supply. To date, risk analyses indicate that there are no significant changes in the short term that could impact the Company. However, Copel continues to participate in the Water Resources and

Operations Technical Groups of the Brazilian Association of Electricity Generating Companies (Abrage, in Portuguese).

Internally, there are rules governing multidisciplinary activities in the reservoirs, coordinated by local committees in each production unit and by the Institutional Reservoir Management Committee. The plants are authorized to use water resources through the Grant of the Right to Use Water Resources, in accordance with the National Water Resources Policy (Law 9,433/1997). The right to use water resources is subject to environmental licensing, guaranteeing the sustainable use of water and the quantitative and qualitative control of this resource.

Hydrological risk is directly related to the material topic Water Resources Management, in the Environmental Commitment group ([see more on page 8](#)).



Dam risk



Risk and impacts: any failure of dams under Copel's responsibility can cause serious harm to affected communities and the Company's business results and reputation. Dams are important for the business, as they are fundamental infrastructure components of hydroelectric power plants, impounding and storing water, which accounts for the majority of energy generation capacity.



Actions: to mitigate this risk, dam structures follow strict safety standards, with checks at all stages — design, construction and operation — to mitigate risks associated with internal and external factors, such as extreme weather events. Copel takes preventive action, according to criteria and procedures aligned with the best engineering practices and current legislation.

To ensure safety, hydroelectric plants adopt the PSB and periodic simulations of the Emergency Action Plan (PAE, in Portuguese), both in accordance with current legislation.

Dam risk is directly related to the material topic Community ([see more on page 8](#)).

Emerging risks

Copel seeks to identify and manage, among its main corporate risks, the possible emerging risks, from a medium- and long-term perspective, that could impact the Company's business. Learn about the main emerging risks mapped by Copel

Risk and impacts		Actions
Consumer choice (portability or self-generation) – Distributed Generation	Customers in Copel's distribution concession area can stop buying energy from the business if they meet regulatory requirements and qualify as free consumers. These customers can also generate power independently or buy energy from generation and trading companies instead of purchasing it from Copel. If the number of customers with these characteristics increases, the Company's revenue and operating results could be affected.	Project for a special tariff for consumer units with distributed micro- and mini-generation to set up a microgrid, aimed at evaluating the use of special power tariffs in order to encourage accessing parties to participate in and set up microgrids to further reduce losses and increase the reliability of energy supply to consumers in the microgrid.
New technologies, AI and cybersecurity	The digital transformation presents many challenges, and the Company may not be able to keep up with the intensification of the digitalization of the power sector and the significant potential for developing solutions in the energy sector, with the advance of technology and the adoption of Artificial Intelligence (AI), to improve both processes and the provision of services to consumers, and to effectively create new products and services, with a view to achieving productivity gains, more affordable prices, greater competition and new markets. Discontinuity in the modernization of digital tools is related to the obsolescence and speed of digital transformation initiatives, in a scenario of constant innovation.	Hiring a consulting firm to provide services to analyze Copel's maturity in digital transformation; Smart grid project
Growing impact of deregulation — regulatory risk	Changes in the laws and regulations governing the Company's operations, which have occurred in the past, may adversely affect its financial condition and operating results. If any other regulations or new laws are passed by the Brazilian government to reduce electricity prices, these new laws and regulations could have a material adverse effect on the Company's operating results.	Monitoring Aneel's public hearings and consultations in order to anticipate measures and contribute to changes in industry regulations; Active participation in regulations, with contributions and proposals for changes in industry regulations submitted to Aneel and the working groups of the Brazilian Association of Electricity Distributor; Monitoring of Terms of Notification and Notices of Violation in order to verify compliance with deadlines and mitigate impacts; The agendas and public meetings of Aneel's Executive Board are monitored, especially those that deliberate on public hearings and consultations, with a view to anticipating actions and proposals for possible decisions and regulations by Aneel and the Mining and Energy Ministry (MME, in Portuguese).
Lack of qualified labor, talent retention and change in the organizational culture	Risk related to the experience required for the new demands and technologies, together with a possible lack of qualified labor for the new roles that are essential for the evolving business, which could have an impact on the retention of employees, leaders and management and Board members. The Company is facing challenges that are causing it to rethink the way the Organization works and the role of its People Management leaders.	Ensuring the necessary experience for new needs and technologies, helping people develop the necessary skills for future challenges; Training and succession of employees in identified critical roles (knowledge management), with leadership development, considering the redesign of the skills profile and map , assessment and development plans; Internal mobility to make better use of staff and develop skills; and Boosting the organizational culture and adapting the organizational structure to the strategy.

REGULATORY ENVIRONMENT

Regulatory compliance is an essential pillar for avoiding sanctions and guaranteeing the legal security of operations. To this end, Copel maintains internal and external audit programs, continuous training on applicable legislation and strict monitoring of legal and environmental requirements. Old projects, implemented before the current environmental requirements, are subject to corrective licensing processes or consent decrees.

The year 2024 was marked by significant regulatory advances in the Brazilian power sector, with the implementation of guidelines and legislation that promoted the modernization of the industry, increased legal certainty and fostered a more competitive environment.

In September, the MME launched Public Consultation 176/2024 to discuss guidelines for the Capacity Reserve Auction in the form of power through energy storage systems. This initiative seeks to increase the security of the electric system, enhance flexibility in SIN's operation and optimize the allocation of risks and costs in the sector. The inclusion of storage systems, such as batteries, represents an important step towards the modernization and diversification of the national energy matrix.

Also in 2024, Bill 576/2021 was approved, establishing the legal framework for the exploration and development of energy generation from offshore sources such as wind, solar or tidal, signed into law by the President on January 10, 2025, through Law 15,097/2025.



In order to ensure regulatory compliance, Copel adopts internal and external auditing programs, as well as monitoring the legal requirements applicable to the sector.

Another highlight is Law 15,103/2025, which establishes the Energy Transition Acceleration Program (Paten, in Portuguese), creating incentives for investments in low-carbon energy in Brazil. The legislation enables low-interest loans for projects, research and technological innovation in the sector, through the Green Fund.

Power Generation

In the generation segment, Provisional Presidential Measure 1,212, of April 9, 2024, amended legal provisions to extend by 36 months the deadline for the start of commercial operations of generation projects whose grants were requested by March 2021. This extension ensured the maintenance of discounts on tariffs for the use of the transmission and distribution systems, benefiting around 600 projects which together could add 25.5 GW of installed capacity to the SIN. The initiative aims to unlock investment and expand the country's energy supply.

Transmission

The power transmission sector went through innovations in 2024. In addition to the continuity of the auctions promoted by Aneel, the first re-bidding of a transmission concession took place, in accordance with the guidelines established by Decree 11,314, of December 28, 2022. This new approach to the renewal of concessions seeks to ensure greater competitiveness and efficiency in the provision of transmission services, benefiting consumers and strengthening the country's power infrastructure.

Energy Trading

In January 2024, Normative Ordinance 50/GM/MME came into force, extending access to the Free Energy Market to Group A consumers. With this flexibility, high- and medium-voltage consumers now have greater freedom to choose their energy supplier. As a result, there was a significant increase in the migration of captive consumers to the free contracting environment, expanding access to the modality to more than 70,000 consumer units.

In 2024, approximately 26,000 consumers migrated to the Free Energy Market, an increase of more than three times compared to 2023, according to data from the Chamber of Electric Energy Commercialization (CCEE, in Portuguese). This expansion gave consumers more freedom of choice and boosted competitiveness in the power sector.



Distribution

Copel is responsible for connecting distributed Micro- and Mini-Distributed Generation (MMDG, in Portuguese) systems to the power grid, ensuring compliance with Aneel regulations and the Company's technical standards. This role is essential to ensure the safety, reliability and quality of the energy supply in its concession area.

By the end of 2024, Copel reached 243,000 Consumer Units (UCs) with Distributed Generation (GD, both acronyms in Portuguese) and a total of 353,000 systems benefiting from the net metering model,

totaling an installed capacity of 3.2 GW. Photovoltaic systems account for most of this total, reflecting the accelerated growth of solar energy in Paraná's energy matrix.

To facilitate new GD connections, the Company has made available a system that allows entrepreneurs to monitor all the steps required to obtain the connection budget in a controlled manner. The Company also offers the Copel Solar Program, allowing interested consumers to enjoy the benefits of distributed generation in an accessible and simplified manner.

The massive adoption of GD can have an impact on voltage regulation and system stability. To mitigate these effects, the Company has continuously invested in developing solutions for monitoring and adapting its infrastructure. The initiatives currently in progress include studies and projects on energy storage systems with batteries, research projects on microgrids and the automation of operating assets, allowing the power grid to be more flexible and resilient in the face of the progress of distributed generation.

Almost all GD systems are composed of
of photovoltaic systems

353 thousand
systems benefit from the energy compensation model

PERFORMANCE

- Energy sector efficiency and transformation
- Economic and financial performance



Interactive
summary



ENERGY SECTOR EFFICIENCY AND TRANSFORMATION

GRI 3-3 material topic: Energy sector transformation



Technological advancements, process automation, digitalization, decentralized power generation, and decarbonization initiatives are driving a rapid and profound transformation in the power sector. The growing concern about climate change and the need to reduce greenhouse gas emissions have fueled government decisions and international agreements. Emerging technologies such as demand-side flexibility and electric mobility are accelerating the transformation of the energy sector and challenging the modernization of the power infrastructure. The expansion of access to the Free Contracting Environment (ACL, in Portuguese) in 2024 and the expected growth of energy markets in the coming years have a direct impact on the Company.

Asset management was a central pillar of Copel's strategy in 2024, when the Company completed strategic asset swap in generation and optimized its portfolio, prioritizing premium assets that combine technical efficiency with market competitiveness. Throughout the year, Copel intensified its pursuit of operational excellence by investing in digitalization, automation, and predictive maintenance to ensure high availability and reliability of generation and transmission assets. In the distribution segment, investments focused on assessing equipment with advanced depreciation, prioritizing replacements and new installations that bring operational gains and improve system reliability.



With a close eye on the Free Energy Market dynamics, Copel proved efficient in precisely timing the sale of its inventory. This strategy allowed the Company to maximize revenue in a year of economic challenges and was widely recognized by industry analysts. Despite maintaining the same transaction volumes as in 2023, the pricing capture strategy had a strong positive impact on commercial performance, ensuring greater revenue predictability for the coming years.

To amplify the societal benefits of reduced energy consumption and education that promotes responsible resource use, Copel encourages new energy efficiency ideas through publicly announced calls for proposals, in line with Aneel's regulations. Still within the scope of conscious consumption, Copel Comercialização's Free Market

customers have access to tools such as virtual consumption monitoring, enabled by telemetry devices installed on meters. This service empowers users with more precise and real-time control over their energy consumption.

New business opportunities, such as the example above, align with Copel's efforts to ensure energy and operational efficiency and reflect the broader transformation of the power sector. Copel also carries out initiatives related to electrification; clean electricity generation; investments in generation, transmission, distribution, and consumption infrastructure; cybersecurity; and, above all, innovation ([read more on page 126](#)).

Copel encourages new energy efficiency ideas through public calls, aiming to enhance the conscious use of energy. In addition, Copel Comercialização's customers have tools to increase control over their energy consumption.

Detection and prevention of cyber actions

In this evolving environment, the Company's ability to ensure cybersecurity and information security is essential. It is worth noting that Copel is one of the leading players in the national landscape, with several projects and initiatives underway.

To handle security incidents, a specialized team follows clear and effective procedures for identifying the causes of potential incidents and adopts measures to continuously strengthen cybersecurity, containing and recovering any compromised data. Copel's information and cybersecurity program includes training, simulations, and state-of-the-art technologies.

KnowBe4 and CrowdStrike Falcon, for example, are advanced tools for continuous infrastructure monitoring, performing regular vulnerability scans and penetration tests (pentests) conducted by external experts.

Cybersecurity governance

In 2024, Copel established the Cybersecurity and Information Security Committee (CSCI, in Portuguese), an advisory collegiate body of the Board of Directors, responsible for ensuring guidance and strategic decisions related to support, processes, and compliance in the areas of cybersecurity and information security, in an equitable manner, taking into account the control, business, and Information Technology areas. The Information Technology Superintendency reports to the Vice Presidency of Strategy, New Business, and Digital Transformation, which is responsible for the implementation and executive management of the strategy. It is incumbent upon the Statutory Audit Committee (CAE, in Portuguese) to oversee the effectiveness of internal controls and risk management, recording its assessments annually.

The Information Security and Cybersecurity Policy and the Privacy and Data Protection Policy establish guidelines to protect both customer and Company information. Both are aligned with the Brazilian General Data Protection Law (LGPD, in Portuguese) and

are reviewed every two years, ensuring that the collected data is processed exclusively for the intended purposes and that the Company maintains sharing protocols, ensuring that any data exchange is carried out with legal basis and appropriate protection measures.

It is worth noting that the Cybersecurity Index of the National Institute of Standards and Technology (NIST) impacts the variable compensation of certain executives, reinforcing the theme's priority in corporate governance. The Company also holds ISO 37301 certification, which enabled the review of a series of practices and standards, enhancing the integration between control processes and risk management. As in previous years, no significant violations of Copel's information security were identified in 2024, nor were there any data leaks or losses. Likewise, there were no fines or penalties related to the subject.

Innovation & research

GRI G4 EU8

Innovation is a key factor for Copel, as it is essential for maintaining a strong position in the markets where it operates. To effectively manage this topic and ensure the proper allocation of resources to innovation and research, the Company has established strict guidelines and processes for the selection, monitoring, and evaluation of proposed projects.

Innovation management governance integrates analysis and decision-making across all hierarchical levels. This system was enhanced in 2024 with the implementation of the Integrated Innovation Project, focused on results and the consolidation of various innovation initiatives within Copel’s structure. With the support of a specialized consulting firm, the Company created the Strategic

Innovation Forum, composed of members from all subsidiaries and led by Copel Holding Company. The Forum meets periodically to discuss innovation initiatives, align efforts with Copel’s strategy, prioritize projects, and monitor results, and reports its activities to the Investment and Innovation Committee (CII, in Portuguese).

The work of the Strategic Innovation Forum and the CII is guided by key tools such as the Innovation Thesis, the Innovation Investment Thesis, and the **Innovation Policy**, aimed at creating synergy between the Company’s initiatives and its overall strategy. As a space for fostering innovation, the forum has contributed to positioning Copel as a benchmark in the energy sector.



Open innovation

Copel has adopted open innovation practices, expanding its reach in the search for innovative solutions to increasingly complex challenges triggered by the advancement of artificial intelligence and extreme climate risks. The Company is part of the group of Brazilian companies that, through the UK-Brazil Innovating to Net Zero in the Electricity Sector (INES) program, coordinated by Energy Systems Catapult, has sought solutions in the United Kingdom to increase the climate resilience of transmission assets. Copel's participation in the INES Program is due to its reputation in the international open innovation landscape.

Externally, the market for open innovation expanded, making Copel's boundaries more permeable.

Another open innovation initiative was the participation in the Conecta Startup Brasil Program, a nationwide initiative aimed at pre-accelerating early-stage startups, offering opportunities for co-creation and engagement with large corporations. Conducted by the Ministry of Science, Technology and Innovation (MCTI, in Portuguese) and the Brazilian Industrial Development Agency (ABDI, in Portuguese), the program is funded by the National Council for Scientific and Technological Development (CNPq, in Portuguese) and

coordinated and executed by Softex, a company focused on promoting public policies.

In the 2024 edition, 50 companies and 100 startups were selected to conduct proof-of-concept projects on topics aligned with MCTI interests, with investments of up to BRL 90,000 and CNPq-funded research grants. Copel participated by launching three challenges, and three different startups carried out proof-of-concept projects throughout the year. Two of them ranked among the program's five winners, and Copel was recognized as a standout company in the edition.



To expand the search for innovative solutions, Copel uses open innovation tools. In addition to taking part in the INES program, it was recognized as the outstanding company in the 2024 edition of Conecta Startup Brasil.

Innovation agenda

The Company's innovation agenda moved forward in 2024, particularly with the consolidation of Copel Volt (read more on page 133) and partnerships with various entities, including startups, educational institutions, and technology institutes. Another highlight of the year was the hackathon, where technology challenges were launched and those partnerships were showcased (read more on page 130), as well as Copel's presence in the SENAI Innovation Hub Habitat².

Copel's initiatives influence its disclosures related to carbon credit allocations and electricity access indicators, demonstrating the Company's commitment to sustainability and the energy transition. Several projects in these areas contribute to reducing greenhouse gas (GHG) emissions, promoting renewable energy, and expanding access to electricity, impacting the reported indicators and reinforcing the transparency of Copel's actions.



The Company's innovation agenda evolved in 2024, with the consolidation of Copel Volt and the Hackathon. Innovation initiatives contribute to reinforcing Copel's sustainable commitment.

² The National Service for Industrial Training (SENAI, in Portuguese) is a Brazilian non-profit, private institution of public interest, with legal personality under private law, and outside of the public administration.





Integrated Innovation Week

As a consolidation of this collective effort toward innovation, Copel held the first edition of the Integrated Innovation Week in October 2024. The event celebrated a culture of innovation and promoted integration among different areas of the Company.

Advancements in digitalization and sustainability, along with strategic partnerships, were brought together during the Week, which combined the InovaDIS and Inov+ GeT initiatives in a knowledge-sharing environment that presented trends and solutions for the future of the power sector.

The event, which has a strong link to SDG 9 – Industry, Innovation, and Infrastructure, engaged 1,689 employees in lectures, panels, workshops, and short courses, and featured prominent figures from the industrial sector in discussions about technology, operational efficiency, and social impact. It was focused on innovation training and awareness, providing knowledge and learning opportunities to all Company employees.

Among the highlights, the Innovation Games challenged internal teams to develop creative

solutions for the power sector's challenges, reinforcing teamwork and contributing to several SDGs. The +DIS_á initiative celebrated the implementation of 165 ideas in 2024, with ten recognized as the best of the year, three of which were selected by Copel DIS's senior management. At Copel GeT, six projects from the Inov+ GeT program completed in the first semester were recognized, with three ranked as top-scoring.

2024 Copel Hackathon

In October, Copel held the third edition of the Copel Hackathon, bringing together 220 students from 18 universities in Paraná. The event broke its record for registrations, with 727 applicants, and aimed to develop innovative solutions for challenges in the power sector, including addressing weather events, customer service, and asset monitoring, based on evaluation criteria that included sustainability requirements.

With 36 hours of intensive programming, participants received guidance from experts to turn their ideas into viable projects. The winning proposals will be integrated into the Company to improve processes and optimize solutions.

The Copel Hackathon reinforces a culture of innovation and sustainability in the power sector, aligning with SDG 4 — Quality Education and SDG 9 — Industry, Innovation and Infrastructure. The

initiative strengthens the connection between Copel and emerging talent, encouraging digital transformation and the development of solutions for a more efficient and sustainable electricity sector.



Innovation projects

GRI G4 EU8

The new innovation governance structure ensures that projects are aligned with Copel's strategic goals and contribute to its sustainable growth, with investments in Research, Development, and Innovation (R&DI) alongside Aneel, in open innovation (Copel Volt), and in corporate venture capital, such as Copel Ventures I ([read more on page 132](#)).



The project portfolio was updated to comply with the new Procedures Manual of the Research, Development, and Innovation Program (PROPDI), a complementary document to the mandatory PDI Aneel standards and guidelines for companies using resources provided by the regulatory agency. The changes focused on the agency's strategic themes and the Ampere Index of the Five-Year Strategic Innovation Plan (PEQuI).

Among the ongoing projects, one highlight is the smart construction management platform, which uses Robotic Process Automation (RPA) and Root Cause Analysis (RCA) to optimize monitoring and reduce costs. Other projects include nationally developed equipment

for charging electric vehicles, smart three-phase overhead networks, a virtual reality simulator for electricians, and methodologies for optimizing infrastructure sharing. Strategic partnerships with startups also enable remote and real-time monitoring of vegetation near transmission lines, helping to prevent power outages and reduce environmental impact.

Copel's innovation initiatives are aligned with its 2030 Vision and the commitments of the Net Zero Ambition Movement, promoting actions to reduce greenhouse gas emissions and to support the transition to a more sustainable energy matrix.

The innovation projects are aligned with Copel's strategic objectives, contributing to its sustainable growth. Among the projects is the intelligent construction management platform.

FIP Corporate Venture Capital

Launched in 2023, the Copel Ventures I investment fund marks a milestone in Copel's innovation strategy. It is Copel's first Corporate Venture Capital (CVC) fund dedicated to investments in energy sector startups. The fund is managed by Vox Capital.

With BRL 150 million in committed capital through 2033, the fund directs investments to early-stage startups — Seed and Series A — aligned with Copel's Innovation Investment Thesis. This dual-purpose strategy seeks, on the one hand, strategic gains for the Company and, on the other, to foster the growth and scalability of the startups receiving investments. Investment success is measured both by the direct strategic benefits to Copel and by the development and expansion potential of the supported companies.

³ Seed refers to the early (startup) stage of a company, while Series A refers to the stage in which startups seek funding to launch new products.

In 2024, the first two disbursements by Copel Ventures I were directed to:

Move (BRL 3.5 million): a startup offering smart management solutions for electric vehicle charging systems through an integrated platform with the Eletroposto Fácil ("Easy Charging Station") app and service delivery, contributing significantly to the advancement of e-mobility in Brazil;

Nextron Energia (BRL 11 million): a solar energy marketplace connecting distributed generation with end consumers, promoting broader access to renewable energy.





Looking for more targeted solutions and strengthening the innovation ecosystem, Copel Volt has been evolving. As a result, Copel was recognized in the Conecta Startup Brasil 2024 program, in addition to strengthening its insertion in international collaboration networks.

Copel Volt Program

Copel Volt is Copel's main open innovation program. Launched in 2021, its objective is to accelerate new products and services in the power sector while strengthening the Company's presence in the innovation ecosystem. In 2024, its initiatives focused on multi-partner programs and Proofs of Concept (PoCs) for specific challenges.

It is worth noting that Copel has already conducted two editions of Copel Volt through public calls for proposals, yielding significant results for the Company. In 2024, the strategy evolved toward more targeted solutions and the strengthening of the innovation ecosystem.

In the same year, Copel Volt was carried out through partnerships with other institutions, which meant that the Company did not have to make direct investments; program execution was funded by the coordinating entities — Catapult Energy System and the Conecta Startup program. Under Conecta Startup, Copel carried out three PoCs with early-stage startups from different Brazilian regions, supporting economic development in the entrepreneurs' home regions. With

Catapult, however, no solutions were identified for the proposed challenges.

The Company was recognized as a standout company in the 2024 Conecta Startup Brasil innovation ecosystem, a program aimed at fostering innovation in startups through training, financial support, and connection with large companies. The results of the Conecta Startup program are reflected in the progress of selected startups' solutions, which underwent mentoring from Copel experts. The startup Siapesq, for example, developed PhytoBloom Vision, a monitoring and forecasting system for the proliferation of aquatic plant in reservoirs using satellite imagery and artificial intelligence. Startup Porang developed a telemetry solution that enables monitoring and alerting in remote communities with limited internet access and wider coverage. Startup Noleak, in turn, applied artificial intelligence to the analysis of security camera footage, a solution that enhances the safety of Copel's facilities and prevents accidents.

In 2024, Copel Volt also strengthened its presence in international collaboration

networks and was recognized for its strategic innovation role. Notably, Copel participated in the INES Program – Innovating to Net Zero in the Electricity Sector, a Brazil–UK partnership coordinated by the UK’s Energy Systems Catapult, an organization dedicated to decarbonizing the power sector. The initiative aimed to attract UK startups with solutions addressing the challenges of distributed generation and extreme weather events—topics aligned with Copel’s energy transition agenda and climate priorities.

In 2024, 10 innovation contracts were signed, including PoCs, rollout agreements stemming from open innovation programs/initiatives, and investment contracts made through Copel’s CVC fund.



E-mobility

Copel is renewing its light-vehicle fleet and testing e-mobility solutions, moving forward with the initiative started in 2018 with the launch of the country’s largest electric highway, which already features 12 charging stations along 730 km of the BR-277, connecting the easternmost and westernmost points of Paraná.

Copel is closely monitoring the growth of Brazil’s electric vehicle market and aims to strengthen its role in e-mobility through strategic partnerships, innovation, and investment in charging infrastructure. The goal is to promote sustainable and efficient electric mobility, aligned with ESG principles and the 2030 Agenda.

Copel plays a leading role in promoting e-mobility in Paraná. Its initiatives, such as Eletrovia (“Electric highway”) and Posto do Futuro (“The Station of the Future”), are pioneering in Brazil. The electric highway runs across the state from east to west with a network of rapid charging stations along the BR-277 highway, ensuring greater

autonomy and reliability for electric vehicle users. Posto do Futuro represents the next generation of charging stations, offering ultra-fast chargers of up to 150 kW, solar photovoltaic generation, and smart energy management.

A new initiative to develop equipment and processes for manufacturing EV chargers in Brazil, in partnership with the startup Move (see FIP Corporate Venture Capital, in page 132), for instance, aims to strengthen the domestic industry by enabling the production of lower-cost, high-quality chargers. This effort seeks to reduce dependence on imported technologies and contribute to the development of Brazil's electric vehicle supply chain.

Renewable hydrogen

The development of renewable hydrogen solutions (also known as low-carbon hydrogen) is one of Copel's main strategies for the production of new energy sources, under study since the project call launched in 2023. Three projects were selected, totaling BRL 7.6 million in investments over two years, focused on the use of biomass for electricity generation applied to hydrogen production.



The selected projects include the Federal University of Paraná (UFPR), which proposes the use of artificial intelligence to optimize the conversion of biogas into electricity via hydrogen; the National Industrial Learning Service of Pernambuco State (Senai-PE), which develops a traceability and certification system for low-carbon hydrogen using blockchain to verify energy origin and carbon emissions; and the Association of Researchers from the Northern Region of Brazil (Apreno-RO, all acronyms in Portuguese), which develops a scalable low-carbon hydrogen production system for ammonia manufacturing, fostering more sustainable agricultural fertilizers.

In addition to academic research, Copel has partnered with Companhia de Saneamento do Paraná (Sanepar) to launch the BioH2 – Renewable Hydrogen Project, a milestone in the Paraná State Government’s strategy to establish the region as a hub for low-carbon hydrogen production. The initiative includes the first pilot plant in Brazil dedicated to producing renewable hydrogen from biogas generated by domestic sewage treatment, with a focus on e-mobility. The pilot plant is scheduled for inauguration in the first half of 2026. The project will receive BRL 12.5 million investment, 50% funded by the Brazilian Funding Authority for Studies and Projects (Finep) and will include participation from the International Center for Renewable Energies (CIBiogás,

both acronyms in Portuguese) and UFPR as science and technology partners.

In 2024, Copel implemented a pilot plant at its headquarters to sustainably produce hydrogen using solar photovoltaic energy, in partnership with Colombian startup Solenium.

The initiative was one of the selected proposals under the Copel Volt Program and has

already begun producing its first hydrogen molecules in the testing phase. The technology used is electrolysis, a chemical process that uses electric current to separate hydrogen from the water molecule. The facility has a production capacity of 1 kg H2/day and uses systems developed by Solenium to monitor and optimize the energy efficiency of the process, both in energy generation and hydrogen production.

Copel took part in the launch of the BioH2 - Renewable Hydrogen project, which was a milestone in turning Paraná into a low-carbon hydrogen production hub.



Microgrids to reinforce the supply system

Sasb RR-ST-410a.1, RR-ST-410a.2

Microgrids are an innovative solution for the future of power distribution, allowing generating units to be automatically isolated and continue supplying electricity to the served area in the event of system failures. This technology increases grid reliability, improves energy efficiency, and contributes to the transition toward a more resilient and sustainable system.

In partnership with UFPR and the City of Curitiba, Copel implemented a microgrid at Barigui Park, consolidating an innovative model of distributed generation. The system is already operational and supplies part of a municipal administration building, ensuring greater energy security and efficiency in the use of renewable sources. To maximize the benefits of the installation, an electric vehicle charging station powered by solar energy is available on-site, promoting sustainable mobility. The project integrates different energy sources, such as a Micro Hydropower Plant (MCH) and photovoltaic generation, supported by a hybrid inverter and batteries,

allowing the system to operate independently from Copel's grid whenever necessary.

In addition to enhancing energy supply reliability, this initiative plays a key role in spreading knowledge about renewable energy and smart grids. The project has been used as a reference for academic research, technical visits, and educational activities, promoting public engagement and practically demonstrating the benefits of microgrids.

Another successful example in Paraná is the São Miguel do Iguaçu microgrid, operating since 2021, resulting from a partnership between Copel, Itaipu, and the local community. These projects reinforce the feasibility of the technology for a safer, more efficient, and innovation-driven electric system aligned with global sustainability trends.

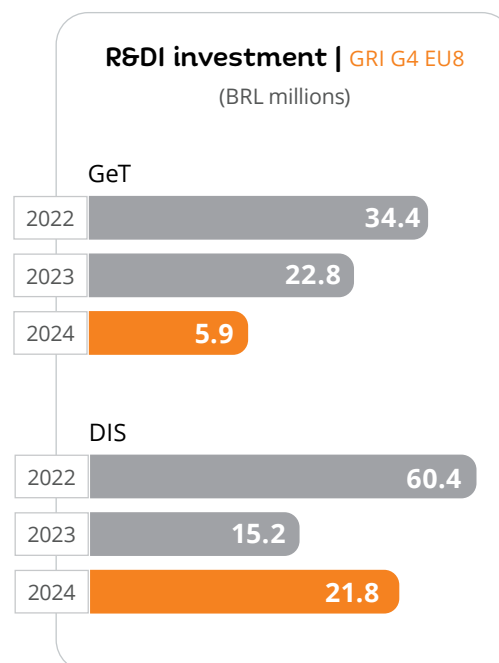


Aneel's Research, Development, and Innovation (R&DI) Program

Every power sector company is required to allocate 1% of its Net Operating Revenue (NOR) annually to Research, Development, and Innovation (R&DI) and energy efficiency initiatives, as established by Federal Law 9,991/2000. A portion of this amount is earmarked for R&DI, with a percentage invested directly by the company in self-managed projects. The remaining funds are allocated to the National Fund for Scientific and Technological Development (FNDCT), the Energy Research Company (EPE) under the Ministry of Mines and Energy (MME), and the Energy Development Account (CDE), with the aim of ensuring affordable tariffs. Aneel Normative Resolution 1,074/2023 governs the Procedures of the Research, Development, and Innovation Program (PROPGDI, all acronyms in Portuguese).

R&DI investments allow Copel to explore new technological opportunities, fostering strategic initiatives that drive

efficiency and modernization across the sector. In addition to meeting regulatory requirements, these projects strengthen Copel DIS and Copel GeT's positions as innovation agents, adding value for society and ensuring sustainable solutions.



Investment in research and development (R&DI) (by topic) | GRI G4 EU8

Topic	2023		2024	
	BRL	Percentage	BRL	Percentage
Energy efficiency	3,455,227.66	9.2%	1,239,431.16	4.5%
Alternative sources of electricity generation	12,740.12	0.0%	101,956.27	0.4%
Basin and reservoir management	-	0.0%	0.0	0.0%
Environment	2,932,283.44	7.8%	1,413,946.88	5.1%
Measurement, billing and combating commercial losses	586,125.20	1.6%	737,315.56	2.7%
Operation of electrical power systems	1,882,964.28	5.0%	2,715,426.57	9.8%
Planning of electrical power systems	4,128,767.66	11.0%	7,394,313.44	26.8%
Supervision, control and protection of electrical power systems	9,892,428.31	26.3%	-7,271.18	-0.03%
Security	1,907,385.92	5.1%	6,312,942.16	22.8%
Quality and reliability of electrical power systems	11,469,844.63	30.5%	2,651,615.77	9.6%
Energy storage	0.0	0.0%	0.0	0.0%
R&D&I Management	360,441.48	1.0%	1,317,526.84	4.8%
Others	943,789.78	2.5%	3,751,416.13	13.6%
Total	37,571,998.48	100.0%	27,628,619.60	100.0%

2024 Investments

In 2024, Copel GeT invested BRL 5,873,864.98 in the execution of nine R&DI projects, of which BRL 891,309.44 was allocated to managing its Aneel R&DI Program. Projects are carried out by at least two university centers, two research institutes, and three national technology companies, subject to approval by the Copel GeT's RDI Project Evaluation Committee (CJPDI, in Portuguese) and/or through calls for tender administered by Aneel.

During the year, the company registered new software derived from its R&DI projects and maintained 19 patents, nine industrial designs, 24 software registrations, and one trademark, consolidating its role in technological innovation in the power sector. For the next three years, the subsidiary plans to invest BRL 5 million.

Copel GeT also renewed the license for the manufacturing and commercialization of the Medcap device, developed to verify capacitor bank capacitance in the field, and began contracting two new projects to develop and commercialize new products.

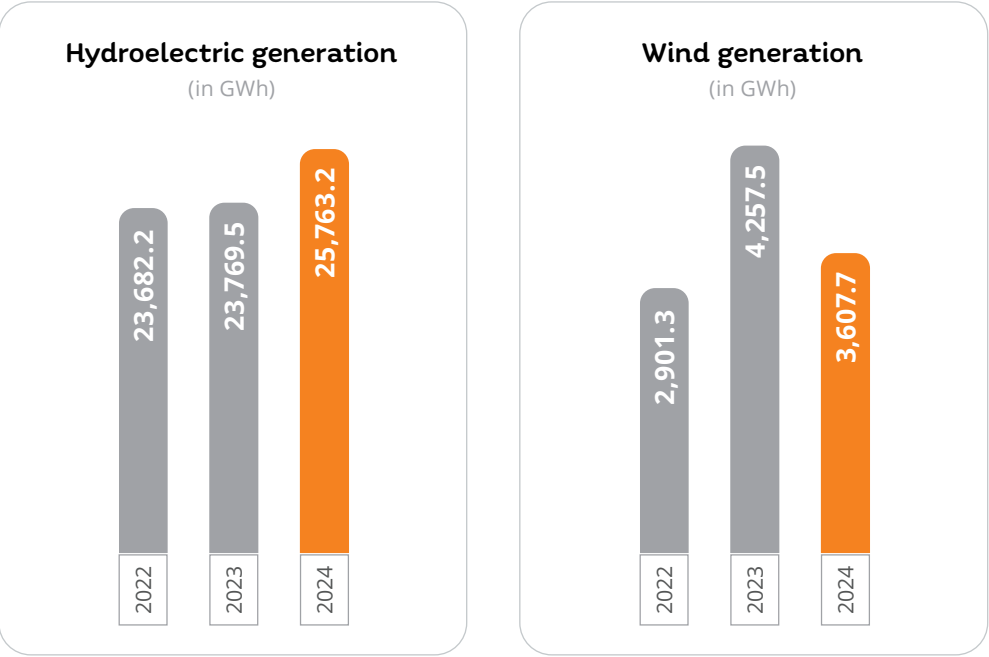
In 2024, Copel DIS invested BRL 21.8 million in R&DI, distributed across several categories, from service quality to environmental projects. Highlights include intelligent fault monitoring in equipment using thermography and unmanned aerial vehicles (UAVs); estimation and classification of outage risks in distribution networks using short-term weather forecasts and soft computing; and development of a methodology for automatic analysis of thermal images.



Operational efficiency — Generation

G4-EU02

Operational efficiency is one of Copel's main strategic goals. It is more than just a commitment; it is a continuous practice. The performance of generation and transmission assets is continuously monitored through specific indicators, in addition to certification processes. In 2024, Copel generated 29,373.3 GWh, considering hydro, wind and thermal sources, as detailed in the following chart:



Average availability factor of hydroelectric plants (%)¹ | GRI G4-EU30

2022	2023	2024
92.0	91.0	94.3

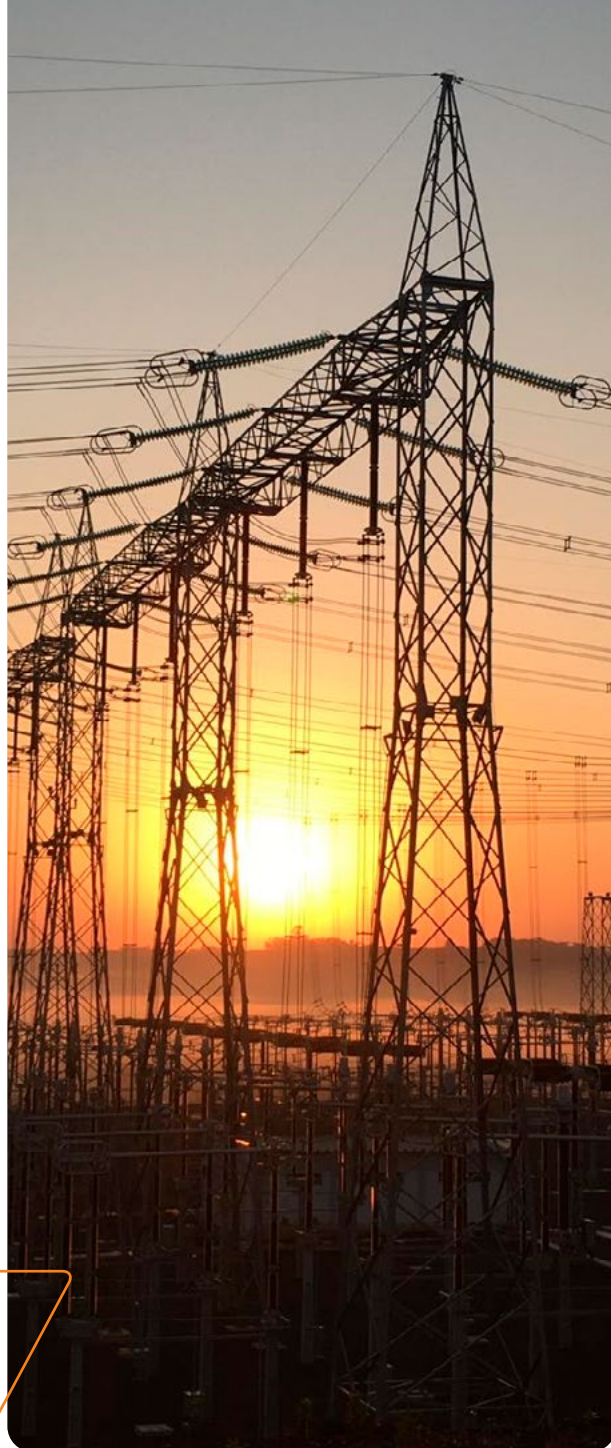
¹ Result considering the weighting by the power of each plant, as set out in ONS Network Procedure Submodule 9.2.

Thermal generation (in GWh)

2022	2023	2024 ¹
204.3	40.1	2.3

Copel's Jandaíra Wind Cluster (4 wind farms) started operating in 2022 and the Aventura (4 wind farms) and the Santa Rosa do Novo Mundo (5 wind farms) Wind Clusters in 2023.

¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.



To optimize performance and reduce failures, Copel GeT adopts the Reliability-Centered Operation and Maintenance (RCM) model, focused on ensuring the operational systems' maximum performance in terms of physical availability, operational reliability, safety, maximum useful life and optimum cost.

Operational performance is recognized by the National Electric System Operator's Annual Performance Report (RAD, in Portuguese) and assessed in certification processes. Currently, Copel holds an Integrated Management System with ISO 9001, 14001, and 45001 certifications for the operation and maintenance of power generation infrastructure, and ISO 9001 certification for the operation and maintenance of electricity transmission and distribution infrastructure. At the same time, the redeployment of teams from divested plants to larger projects ensured the retention of skilled human capital.

The relentless pursuit of efficiency is part of the goals of the open innovation program and of the research and development projects, which drive the modernization and improvement of operational processes.

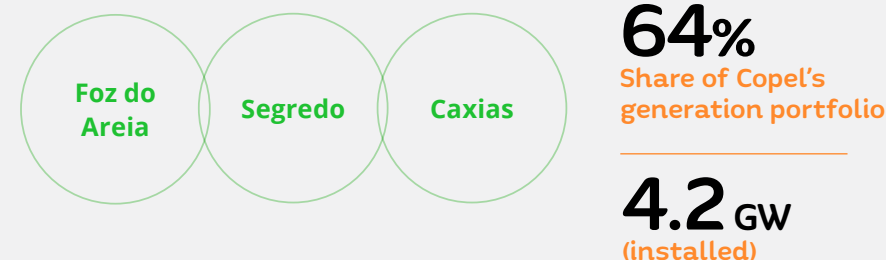
Copel's power generation is directly related to weather conditions and sector regulations, guaranteeing the delivery of established volumes ([read more on page 175 about the 1st Extreme Weather Events and Operational Safety Workshop](#)). For hydroelectric power plants with an installed capacity higher than 50 MW (considering nearly 5,075.2 MW of capacity proportional to the equity interest), generation volume is determined by the National Electric System Operator (ONS, in Portuguese), taking into account reservoir conditions and system demand. [Read more about net energy generation on page 30.](#)

HPPs expansion opportunities

Capacity Reserve Auction (LRCAP2025)

The continued presence of the most strategic hydroelectric power plants — Foz do Areia, Segredo, and Salto Caxias — in Copel's portfolio raises promising prospects for the expansion of the installed capacity of Copel GeT's HPPs. The planned expansion of these key assets is expected to be carried out in two stages, as described below, considering that Copel is awaiting the upcoming Capacity Reserve Auction to be held by the federal government, currently scheduled for 2025.

Status in 2024 of the three renewed HPP (premium assets)



Expansion Phase 1

+860 MW
at Foz do Areia, in Generating Units (GUs) 5 and 6

68%
Share of Copel's portfolio

5.1 GW
Potential capacity

13%
Operational efficiency gain



Expansion Phase 2

+1,266 MW
at Segredo, in GUs 5, 6, and 7

73%
Share of Copel's generation portfolio

6.3 GW
Potential capacity

33%
Operational efficiency gain

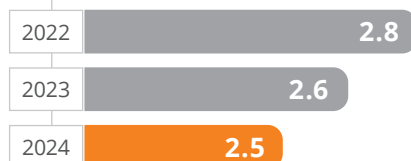


26 reinforcement
and improvement works
completed, in 2024

BRL 77.4 million
invested

67%
of the works were delivered
ahead of schedule

Losses in power
transmission
(%)



Operational efficiency — Transmission

GRI G4-EU6

Copel GeT plays a key part in electricity transportation and transformation relying on thousands of kilometers of transmission lines and over 20,900 MVA in transformation capacity. The Company constantly invests in expanding and modernizing the grid, operating at voltage levels of 138 kV, 230 kV and 500 kV. Over the past years, the transmission segment has grown significantly, driven by the segmentation of three existing lines and the addition of the new Blumenau–Curitiba East (BLU-CTL) line. With the completion of the asset swap process, scheduled for 2025, Copel GeT will fully own Contract No. 001/2014 – Mata de Santa Genebra Transmissão S.A., with 3,600 MVA of transformation capacity and 887 km of 500 kV transmission lines.

The operational efficiency is reflected in a low retention rate of the Permitted Annual Transmission Revenue (RAP, in Portuguese), which ranged between 0.7% and 0.8%, highlighting asset availability and a low penalty for unavailability. The RAP from concessions in operation ensures the company's financial sustainability and that it remains competitive in the industry.

In 2024, Copel GeT completed 26 reinforcement and improvement projects, 67% of which were delivered ahead of schedule, by 24% on average, more than in previous years. The investment was BRL 77.4 million, leading to an increase of BRL 11.8 million in the RAP. By 2027, BRL 350.4 million in new investments are planned, with a projected annual RAP increase of BRL 53.9 million.

Operational efficiency — Distribution

The Company continues to make progress in modernizing its electrical infrastructure by implementing an exclusive high-speed data transmission network. So far, 65% of the network has been installed, connecting power plants, substations and equipment to the company’s operation centers. The project, which includes the installation

of 260 stations by 2025, will receive an investment of BRL 45 million.

The new network, which is secure and independent of third parties, allows for efficient remote operations, guaranteeing more reliability and protection against cyberattacks, providing more quality and security in energy distribution.

The planning of distribution networks is analyzed through expansion studies, basically involving two sub-processes per voltage class: Medium-Voltage Distribution System, at voltages of 13.8 kV and 34.5 kV; and High-Voltage Distribution System, at voltages of 69 kV, 88 kV and 138 kV. For medium-voltage systems, planning considers customer consumption and demand data, as well as market growth and substation measurement data. For high-voltage systems, planning is based on customer consumption and demand data, market growth data, substation measurements and data provided by power sector agencies, the National Electric System Operator (ONS) and the Energy Research Company (EPE, both acronyms in Portuguese), which partner with Copel in several sector studies.

The networks are simulated taking into account the rate of natural increase in a given region, and systemic works are planned to meet consumer power demand. The





2,600

new automated reclosers
to be installed by 2025

A total investment of

BRL 2.5
billion

operation of distribution networks aims to guarantee the reliability and availability of electricity in the short term. Specialized computer systems are used to coordinate the restoration of power and the optimization of maintenance and service teams.

Copel already has 100% of its substations automated, operated remotely, and more than 9,000 pieces of automation equipment spread over 200,000 km of distribution networks. These devices reduce the response time to failures, allowing quick interventions or automatic restoration of the network, ensuring more stable and reliable energy for consumers.

Since 2021, Copel Distribuição has been implementing a project to replace conventional meters with smart meters, which provide real-time remote monitoring through the installation of a mesh communication network. As a result, more than one million consumer units are already directly connected to the operation centers, increasing the speed of commercial services and reducing downtime. In addition to the physical infrastructure, Copel invests

in advanced software and cybersecurity, ensuring total control over its assets.

Copel is also implementing automated network reconfiguration systems that reduce power restoration times in the event of accidental outages.

In 2025, 2,600 new automated reclosers will be installed as part of a BRL 2.5 billion investment in the enhancement and reinforcement of the distribution system. These systems work to isolate only the affected area, preventing outages from impacting a larger number of customers. Automation also enables many switching operations to be performed remotely in seconds, optimizing grid operations and reducing downtime.

The concession contract between Copel DIS and Aneel establishes strict standards to ensure operational efficiency, covering tariffs, regularity, continuity, safety, modernization and quality of services provided to consumers. The distribution company remains committed to serving the entire market, including low-income

populations and regions with low population density, as well as promoting initiatives to reduce energy waste and research in the power sector.

Copel is currently expanding the use of smart meters, which already connect one million properties directly to the operation center, allowing for fast and accurate diagnostics.

The adoption of technologies such as smart grids enhances operational efficiency and enables faster and more precise service, contributing to energy security and reducing response time in the event of power supply interruptions.

Grid market (Tariff for Use of the Distribution System - TUSD)

Category	Number of consumers				Electricity sold (GWh)			
	2022	2023	2024	Δ 2023/2024	2022	2023	2024	Δ 2023/2024
Captive market	5,011,557	5,098,006	5,184,322	1.7%	19,370	20,173	21,285	5.5%
Free market	2,629	3,071	4,902	59.6%	12,244	12,737	14,022	10.1%
Sales to concession operators	7	7	7	0.0%	925	940	1,002	6.6%
Grid market	5,014,193	5,101,084	5,189,231	1.7%	32,539	33,850	36,309	7.3%

Captive market (electricity sold) (GWh)

Category	2022	2023	2024	Δ 2023/2024
Residential	8,212	8,888	9,887	11.2%
Industrial	2,102	1,941	1,718	-11.5%
Commercial	4,294	4,520	4,782	5.8%
Rural	2,357	2,352	2,507	6.6%
Other	2,405	2,472	2,391	-3.3%
Total	19,370	20,173	21,285	5.5%

Initiatives in schools and hospitals

The company is promoting energy efficiency in the state of Paraná through investments exceeding BRL 75 million. The initiatives in its portfolio will directly benefit 200 public schools and 41 hospitals, promoting infrastructure modernization and electricity consumption reduction.

These actions are part of the Energy Efficiency Program ([read more on page 152](#)), regulated by Aneel, and have been designed to maximize positive impacts. The project includes the installation of solar power systems and the replacement of outdated electric equipment with modern, more efficient solutions. These improvements will benefit approximately 77,000 students, as well as teachers and staff, by reducing operational costs and reinforcing a culture of conscious and safe energy use.

In the healthcare sector, the Company will allocate nearly BRL 35 million to install solar panels and replace hospital, HVAC and lighting equipment in hospitals that hold the Certification of Charitable Social Assistance Entities (CEBAS, in Portuguese) in



With investments totalling more than BRL 75 million, Copel is seeking to boost energy efficiency with actions that will benefit schools and hospitals by installing solar panels and replacing obsolete electrical equipment.

the Education category, in Paraná. Over 80% of the works have already been completed, directly impacting institutions that provide essential services to the population. In Curitiba, Pequeno Cotoengo Hospital is already operating a solar power plant with 639 photovoltaic panels, resulting in a significant reduction in electricity costs.



Direct benefits for

200 public schools and 41 hospitals

Commitment to the customer

GRI 3-3 Material Topic: Customer satisfaction, G4-EU6, EU7, EU12, EU28, EU29, Sasb-IF-EU-550a.2

Copel invests in service digitalization and automation, reducing response time and ensuring greater access to information on customer rights and services. The enhancement of digital channels includes the provision of predictive options that direct consumers to available services according to their needs, as well as the implementation of self-service solutions for the swift resolution of requests. The Company has a working group to monitor the development of planned actions and review internal processes.

Greater operational efficiency reduces negative impacts. Therefore, Copel DIS monitors performance indicators — Equivalent Interruption Duration per Consumer Unit, Equivalent Interruption Frequency per Consumer Unit and Equivalent Substantiated Complaint Frequency (DEC, FEC and FER, in Portuguese, respectively) — and manages incidents and average response time through dashboards and key performance indicators (KPIs). Internal controls are used to reduce risks of fines and penalties, while system integration enables tracking customer interaction history.

Copel Comercialização also offers management services for customers with contracts in the Free Energy Market. Among the benefits of this service is the provision of a consumption monitoring system, enabled through the implementation of telemetry points on the meters. In general, companies use these data for demand and power factor management.

The optimization of electrical infrastructure and commercial processes reinforces the Company's good relationship with its customers. Investments are directed toward network modernization to prevent power outages and toward strengthening technical teams to ensure timely service delivery. Technologies such as smart grids are being implemented to enhance grid management and boost operational efficiency.



The measures for preventing and mitigating negative impacts related to customers are as follows:

- Internal and external audits to ensure regulatory compliance;
- ISO 9001 certification for commercial processes;
- Continuous employee training on rules and good practices;
- Monitoring of regulatory and customer satisfaction indicators;
- Monitoring of complaints and immediate corrective actions;
- Review and adaptation of processes to avoid regulatory non-compliance;
- Clear communication of rights and duties as well as on the responsible use of energy;
- Continuous monitoring of service execution and deadline delivery;
- Immediate recovery actions or activation of contingency plans;
- Digitalization and automation to improve customer service;
- Review and adjustment of internal processes to prevent non-compliances;
- Regular customer satisfaction surveys to support continuous improvement;
- Permanent working group to monitor the implementation and progress of actions;
- Enhancement and diversification of service channels to meet different customer needs;
- Testing of solutions before implementation in service channels;
- Infrastructure investments to prevent power outages;
- Real-time network monitoring for rapid fault detection;
- Use of technologies such as smart grids to increase operational efficiency; and
- Availability of technical teams to maintain quality standards.

Efficiency metrics

GRI G4-EU28, EU29, Sasb-IF-EU-550a.2

Copel DEC



Aneel DEC limit



Copel FEC



Aneel FEC limit



Loss rate (%)¹ | GRI G4-EU12

Category	2022	2023	2024
Backbone	1.4	1.2	1.1
Technical losses — Distribution	5.8	5.9	5.6
Non-technical losses – Distribution	1.8	1.9	2.3
Global losses — Distribution	9.0	9.0	9.0

¹ Losses are classified as technical losses in the Basic Grid and technical and non-technical losses in Distribution, both measured by the energy lost in relation to the energy injected into the distributor's system.

Frequency of power interruption in 2024:



27,502,449
Total number of interruptions



5,131,054
Total number of customers served



5.36
Interruption frequency per customer

Average duration of power interruption in 2024:



40,637,947
Total number of interruptions



5,131,054
Total number of customers served



7.92 hours
Equivalent interruption duration per customer



Energy Efficiency Program

GRI 203-1

Energy efficiency projects are selected by Copel DIS through annual public calls for proposals, in which consumers form the industrial, residential (condominiums), rural, commercial, services, government and public lighting segments present proposals to be funded with resources from the Energy Efficiency Program (PEE, in Portuguese).

Projects are conducted through the Energy Efficiency Program, regulated by Aneel, and address topics of interest and importance for society — in 2024, state and municipal schools in Paraná were visited to identify opportunities for equipment replacement and evaluate the feasibility of installing solar panels.

By providing access to more efficient technologies, thus allowing for energy savings and improvement to quality of life and contributing to reducing GHG emissions, the initiative is aligned with SDG 7 — Clean and affordable energy; SDG 9 — Industry, innovation and infrastructure; SDG 11 — Sustainable cities; and SDG 13 — Climate action. The initiatives’ effectiveness is revised every year, with adjustments made as lessons are learned.

In 2024, BRL 42.7 million was invested in 188 projects, 41 of which were considered priorities.

Energy Efficiency Program

Name	Target audience	Investment	Energy saved (MWh/year)	Peak shaving (kW)	Avoided emissions (tCO ₂ e) ¹
Commerce and services	Hospitals, charitable institutions, educational institutions and businesses in general	BRL 7,953,140.93	3,807.35	372.84	207.48
Street lighting	Municipalities	BRL 10,602,494.65	10,832.49	2,025.24	590.32
Industrial	Industrial segment	BRL 5,168,253.89	2,136.51	168.94	116.43
Government	Municipalities and public universities	BRL 5,416,501.86	1,779.57	51.25	96.98
Residential (common areas)	Residential condominiums	BRL 1,074,751.38	302.49	-	16.48
Total		BRL 30,215,142.71	18,858.41	2,618.27	1,027.70

¹To obtain the emissions avoided, the value obtained in energy saved is multiplied by the XXX tCO₂ conversion index for each MWh, as presented in the National Energy Balance (BEN), published in 2024.

Operational efficiency — Services

Copel Solar

Copel invests in generation and solutions to increase the share of solar power in the energy matrix, making it easier for consumers to access this renewable source. One of the highlights is the investment in Nextron Energia, a marketplace

connecting consumers to distributed solar power generation. The platform democratizes access to renewable energy, facilitating the adoption of the technology and encouraging the expansion of decentralized generation.

ECONOMIC AND FINANCIAL PERFORMANCE

GRI 3-3 Material topic: Economic and financial performance, G4-EU6



Financial discipline was an essential pillar for the Company's economic performance in 2024, a year in which it continued to improve transparency and efficiency in the allocation of funds, focused on creating value for its shareholders and other stakeholders.

Copel made strategic investments in smart grids, asset modernization and renewable energy expansion, ensuring greater operational efficiency and competitiveness in the sector. Even in the face of a challenging regulatory and economic environment, it maintained solid operating margins and strict financial management.

The Company has adopted policies focused on maintaining sustainability and economic and financial performance, prioritizing operational efficiency, cost control and innovation. To this end, it implements sustainable financial management practices and efficiently allocates capital, with continuous monitoring of key performance indicators (KPIs).

The monthly monitoring of KPIs includes a continuous analysis of key indicators such as EBITDA; Personnel, Materials, Outsourced Services and Other Expenses (PMSO); Provisions and Litigation; Financial Result; Profitability; and others that are essential to the Company's management. In addition, Copel publishes financial reports and documents, reinforcing its commitment to transparency and corporate governance.



To achieve greater operational efficiency, Copel has made strategic investments in intelligent electricity grids, modernization of assets and expansion of renewable energy.



The Zero-Based Budgeting (ZBB) was implemented across all subsidiaries, with the goal of reducing operational costs and improving profitability.

The effectiveness of adopted measures is assessed through accounting reports and detailed discussions on monitoring Zero-Based Budgeting (ZBB), which was implemented in 2025. With the aim of reducing operating costs and improving business profitability in 2025, the Company adopted the Zero-Based Budgeting (ZBB) in all its subsidiaries. In a landscape of economic crises that impact interest rates and inflation, these effects are mitigated through prudent capital allocation and strategic funding processes, always seeking the best conditions available on the market. In addition, the Company thoroughly monitors approved investments, by comparing budget to actual amounts, and continuously monitors projects through the

Corporate PMO portal, to ensure greater control and efficiency in resource management.

Copel has a tax strategy carried out in line with the Organization's business and sustainable development strategies. The Company fully complies with tax legislation in force through its Tax Compliance team. It is important to note that the Company has a good relationship with tax authorities and participates in sector organizations to discuss with lawmakers and tax authorities.

Tax policies and compliance are the responsibility of the Financial Vice Presidency, in accordance with the Bylaws, and compliance activities are carried out by an area reporting to the Legal and Compliance Vice Presidency.

The Financial Vice Presidency has a tax team that works to ensure compliance with tax obligations, which are validated and monitored through internal controls, such as the Sarbanes-Oxley Act (SOX) process. In addition, the Company has Whistleblowing Channels, which allow employees and third parties to report any complaints related to the Organization.

Stakeholder engagement and communication of results

The Company's transparency in communicating its strategy and results for 2024 was widely recognized by investors. Copel built a close relationship with the market, based on clear presentations and consistent data, which reinforced the transparency of its strong business model and its financial stability. It reaffirmed its commitment to sustainability, positioning itself as a reliable, long-term investment option.

Copel seeks to absorb feedback and adapt to the needs and

expectations of stakeholders through different means, including public consultations, environmental impact assessments and various communication strategies. Engagement strategies include conducting awareness campaigns, broadcasting radio spots, distributing informational materials, publishing press releases and organizing events. With regard to communicating results, the Integrated Report, news releases and the Sustainability Portal consolidate the transparency of the Company's actions.

Financial result

In 2024, financial result improved by BRL 48.0 million, mainly due to an increase in income from financial investments arising from the larger volume of amounts invested; an increase in late payment interest on electricity bills, and a reduction in expenses with monetary variation and debt charges, offset by an increase in monetary variation and adjustment to present value of accounts payable linked to concessions, which refers to balance from payment of HPP concession grants.

Net income

In 2024, Copel's consolidated net income was BRL 2,799.4 million, 20.3% more than the BRL 2,327.2 million recorded in the previous year. This increase is due to the change in Ebitda and financial result — already explained — coupled with gains from the sale of equity interest in Uega and Compagas, presented in the net income from discontinued operations line. These figures were offset by higher income and social contribution taxes, mainly due to higher earnings in the period.

BRL 2,799.4 million
 consolidated net profit in 2024.

20.3% 
 increase over the previous period.

Equity in earnings of subsidiaries

In 2024, equity in earnings of subsidiaries was BRL 281.2 million, down by 8.6% from the BRL 307.8 million recorded in 2023. This figure is mainly due to the equity of jointly-owned electricity transmission subsidiaries, taking into account the tariff review gains recorded in 2023 and non-recurring in 2024, among other factors.

Ebitda

Earnings before interest, taxes, depreciation and amortization (Ebitda) is a non-accounting measure prepared by the Company that should not be construed separately or as a replacement for net income or operating income; as an indicator of operating performance or cash flow or to measure liquidity or debt payment capacity.

Economic and financial indicators

(in BRL million)

Category	Consolidated	
	2024	2023
Net income for the period	2,799.4	2,327.2
Net income for the period — discontinued operations	(491.6)	(191.5)
Deferred income and social contribution taxes (IRPJ and CSLL)	421.4	(17.0)
Provision for income and social contribution taxes (IRPJ and CSLL)	178.0	371.1
Financial revenue (expenses), net	1,157.0	1,205.0
Ebit	4,064.2	3,694.8
Depreciation and amortization	1,465.5	1,382.0
Ebitda	5,529.7	5,076.8
Net Operating Revenue (NOR)	22,651.0	21,479.5
Ebitda margin % (Ebitda ÷ NOR)	24.4%	23.6%

Net operating revenue

In 2024, Copel's net operating revenue reached

BRL 22,651 million

Up by

5.5%



from the BRL 21,479.5 million recorded in 2023.

This increase in net operating revenue was mainly due to:

- Increase in revenue from electricity supply, mainly due to the periodic tariff adjustments (17.37% increase between June 24, 2023, and June 23, 2024 and 4.0% reduction as of June 24, 2024); the increase of 5.5% in captive market; and a higher number of consumers. On the other hand, revenue from supply to Copel Mercado Livre's free consumers was down to a reduction in spot prices and the Energy market.
- Change in revenue from electricity supply, especially due to the lower average price in the sale of energy in the Free Contracting Environment (ACL, in Portuguese); the termination of Copel GeT's contracts in the Regulated Contracting Environment (ACR, in Portuguese); and the higher provision for generation deviation in wind farms, in view of curtailment imposed by ONS and lower wind volumes.
- Increase in revenue from electricity grid availability mainly due to the periodic tariff adjustments (increase of 6.32% between June 24, 2023 and June 23, 2024 and of 2.69% as of June 2024), the 7.3% increase in Copel DIS's wire market, and the restatement of transmission contract balances, partially offset by impacts of tariff review of Copel GeT's transmission concession contracts;
- Increase in construction revenue, basically due to the increase in construction works related to the "Transformation Program", which encompasses investments in the improvement and modernization of distribution infrastructure and enhancement of its customer service; and
- Changes in sectoral financial assets and liabilities due to growth of the billed market and better adherence of the tariff coverage in relation to the realized costs of Component A (non-manageable costs).



Net Operating Revenue

(in BRL thousands)

Category	2024	2023	Change	
	BRL	BRL	BRL	%
Electricity supply	8,454,990	7,946,168	508,822	6.4
Electricity sales	3,120,628	3,602,788	(482,160)	(13.4)
Grid availability	7,048,036	6,002,192	1,045,844	17.4
Construction revenue	2,550,809	2,333,787	217,022	9.3
Fair value of indemnifiable concession assets	82,424	62,167	20,257	32.6
Sectoral financial assets and liabilities	838,280	971,203	(132,923)	(13.7)
Other operating revenue	555,869	561,163	(5,294)	(0.9)
Total	22,651,036	21,479,468	1,171,568	5.5

Operating costs and expenses

Copel's total operating costs and expenses reached

BRL 18,868 million

Moving up by

4.3%



from the BRL 18,092.6 million recorded in 2023

The main changes in operating costs and expenses were due to:

- Change in electricity purchased for resale, mainly stemming from the increase in mini and micro-generation; merger of New Energy Auctions, as of January 2024, impacting the Regulated-Environment Power Purchase Agreements (CCEAR, in Portuguese); and also the increase in spot market purchases, within the Chamber of Electric Energy Commercialization (CCEE, in Portuguese).
- Changes in estimated losses, provisions and reversals, due to the reversal of impairment recorded in 2023 (non-recurring in 2024) and the increase in provision for litigation, especially civil and labor actions.
- Change in personnel and management costs, mainly due to the compensation for the second additional third of vacation bonus to exclude this benefit from the Collective Bargaining Agreement, in the amount of BRL 138.0 million, and provision for the Voluntary Redundancy Program of BRL 610.0 million both in 2023, coupled with the Company's downsizing in 2024. These figures were offset by the increase in management fees in 2024; the 4.51% increase in employee salaries due to the collective bargaining agreement of October 2023 and the provision of BRL 15.6 million related to the impacts of the 2024 collective bargaining agreement ratified in 2025.
- Changes in outsourced services, especially due to the increase in maintenance costs of electric systems and facilities.
- Changes in other operating costs and expenses mainly due to the gain in the sale of properties unserviceable to Copel GeT's and FDA's concessions.
- Change in depreciation and amortization mainly due to the operational startup of new assets arising from the increase in investments at Copel DIS.
- Changes in construction costs, mainly related to investments in power distribution infrastructure.

Operating costs and expenses

(in BRL million)

Category	2024	2023	Change	
	BRL	BRL	BRL	%
Electricity purchased for resale	8,924,895	7,716,190	1,208,705	15.7
Power grid use charges	2,865,490	2,896,710	(31,220)	(1.1)
Raw materials and supplies for electricity production	936	17,654	(16,718)	(94.7)
Personnel and management costs	1,081,797	1,878,332	(796,535)	(42.4)
Private pension and healthcare plans	259,352	260,159	(807)	(0.3)
Material	86,882	102,667	(15,785)	(15.4)
Outsourced services	1,074,308	996,312	77,996	7.8
Credit losses, provisions and reversals	345,102	92,235	252,867	274.2
Other operating costs and expenses	240,842	430,544	(189,702)	(44.1)
Depreciation and amortization	1,465,478	1,382,040	83,438	6.0
Construction costs	2,522,908	2,319,720	203,188	8.8
Total	18,867,990	18,092,563	775,427	4.3



Investments

GRI 203-1



Copel invests significantly in infrastructure, including the construction of substations, distribution lines and networks, whose investment totaled BRL 2.5 billion in 2024.

Values of the investment program carried out, and those planned for 2025 approved by Copel's Board of Directors:

Investment Programme Values				(in BRL million)
Subsidiary	2024 (Realized)	2023 (Realized)	2025 (Expected)	Change % 2024-2023
Copel Geração e Transmissão	263.0	240.1	464.1	9.5
Copel Distribuição	2,196.9	1,966.5	2,501.9	11.7
Copel Comercialização	1.3	1.6	4.5	(18.8)
Copel Serviços and other equity interests	40.6	40.7	49.5	(0.2)
Copel Holding Company	2.0	3.2	9.1	(37.5)
Total	2,503.8	2,252.1	3,029.1	11.2

Share trading volume in 2024

Stock exchange	Category	ON (CPLE3)		PNB (CPLE6)	
		Total	Daily average	Total	Daily average
B3	Business	1,856,493	7,396	4,572,892	18,219
	Number	1,590,404,100	6,336,271	3,793,836,000	15,114,884
	Volume (BRL thousand)	13,954,469	55,595	37,147,785	147,999
	Presence in trading sessions	251	100%	251	100%
Nyse	Number	8,383,350	33,267	76,129,949	302,103
	Volume (UDS thousand)	57,770	229	565,653	2,245
	Presence in trading sessions	252	1	252	1
Latibex	Number	521	261	172,749	1,677
	Volume (EUR thousand)	-	-	-	-
	Presence in trading sessions	2	-	103	-

Added value

In 2024, Copel recorded BRL 16,623.6 million in added value, 7.6% more than in the previous year, amounting to BRL 15,447.1 million.

Distribution of Value Added (DVA, in Portuguese)

Category	2024	2023	%
Shareholders	10.5%	7.0%	50
Retained	3.3%	6.9%	(52.2)
Outsourced workers	13.7%	14.2%	(3.5)
Personnel	8.3%	13.9%	(40.3)
Discontinued operations ¹	4.9%	2.9%	69.0
Government	59.3%	55.1%	7.6
State and municipalities	35.6%	32.4%	9.9
Federal	64.4%	67.6%	(4.7)
Total	100.0%	100.0%	-

Direct economic value generated and distributed | GRI 201-1

Total added value to be distributed	Amount (BRL thousand)
Value added distributed (DVA)	16,623,558
Third parties	2,275,158
Personnel	1,372,812
Government	9,860,860
Shareholders	1,642,677
Retained	665,122
Discontinued operations ¹	806,929

¹ Resulting from the divestment process of UEG Araucária and Compagas.

Debt

The Company funds its liquidity and capital needs mainly with income from its operations and through financing, aimed at expanding and modernizing its power generation, transmission, trading and distribution business.

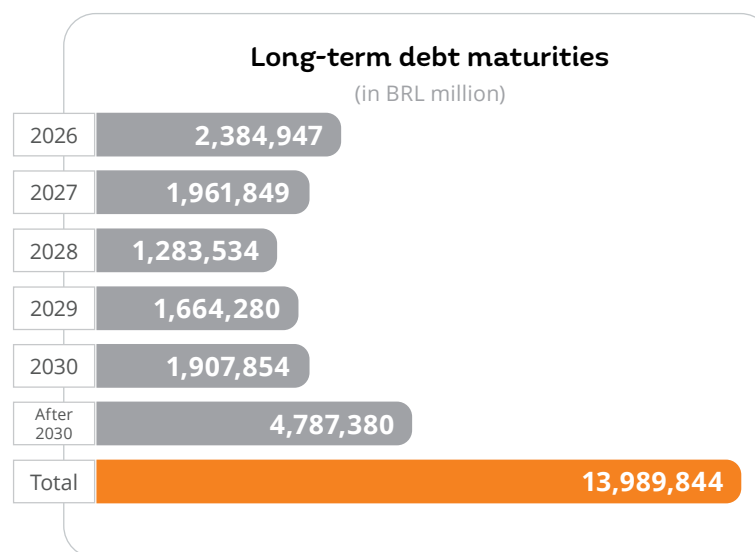
It is important to note that the Company seeks to invest in projects. In order to do this, it chooses among the financing lines available on the market the ones that are suitable to Copel's capital structure, in terms of financial leverage vis-à-vis returns.

Therefore, It should be noted that projected loan proceeds as well as cash available will be sufficient to cover the investment plan for the 2025 fiscal year. In 2024, funding was as shown in the following table:

Recursos obtidos em 2024

Income (in BRL million)	Company	Financing	Amount
BNDES UHE Colíder	Copel Geração e Transmissão	BNDES	1.8
Debentures - 9 th issue 1 st series	Copel Geração e Transmissão	Debenture	800
Debentures - 9 th issue 2 nd series	Copel Geração e Transmissão	Debenture	500
Debentures - 9 th issue 3 rd series	Copel Geração e Transmissão	Debenture	300
Debentures - 9 th issue 1 st series	Copel Distribuição	Debenture	750
Debentures - 9 th issue 2 nd series	Copel Distribuição	Debenture	1,500
Debentures - 1 st issue 1 st series	Copel Serviços	Debenture	70
BNDES Financing	Santa Maria	BNDES	0.8
BNB financing	Aventura II	Banco do Nordeste	0.5
BNB financing	Aventura III	Banco do Nordeste	0.5
BNB financing	Aventura IV	Banco do Nordeste	0.8
BNB financing	Aventura V	Banco do Nordeste	0.7
Total			3,925.10

Debt service payments made during the year, excluding discontinued operations, totaled BRL 2,902.0 million, of which BRL 1,341.7 million is related to principal and BRL 1,560.3 to charges. The maturity schedule for long-term debt, including loans, financing and debentures is as follows:



Customer delinquency

In December 2024, Copel Distribuição's consumer delinquency stood at BRL 247.2 million, which is equivalent to 1.05% of LTM revenue, compared to BRL 215.2 million in December 2023, which is equivalent to 1.01% of distribution revenue in the same period.

Customer delinquency

Indicator	2024	2023	Change %
Company's delinquency ¹	1.05%	1.01%	3.96%
Abradee delinquency ²	2.14%	2.32%	-7.76%

¹ Corporate Criteria Delinquency Rate: pending energy from 16 to 360 days and 12 month billing.

² Abradee Criteria Delinquency Rate: pending energy from 1 to 90 days and 12 month billing.

The Company implements collection tools such as default notices (text messages, email, bill protest, collection letter), and uses supply cuts as a last resort.



SOCIAL AND ENVIRONMENTAL

- Environmental commitment
- Social commitment



Interactive
summary

ENVIRONMENTAL COMMITMENT

GRI 3-3 Material Topic: Environmental commitment

6 7 12 13 14 15

In the current materiality matrix ([read more on page 08](#)), the topic “environmental commitment” encompasses biodiversity, eco-efficiency, water resource management,

climate change, and environmental responsibility. The guidelines related to these issues are established in Copel’s Sustainability Policy, with the main ones being:



Promote eco-efficiency by reducing consumption and ensuring the sustainable use of natural resources and ecosystem services;



Mitigate negative impacts and enhance positive ones, aligning operations and business practices with sustainability principles;



Minimize the effects of climate change on operations and expand the Company’s assets.

The guidelines of the Sustainability Policy are broken down into management strategies for each environmental topic and are analyzed and approved by a governance structure aligned with best environmental practices.



Environmental management governance

GRI 3-3 Material Topic: Environmental Commitment, SASB IF-EU-110a.3

Copel's environmental guidelines, including those related to climate change, biodiversity, and eco-efficiency, are aligned with the Strategic plan and the commitments approved by the Board of Directors (CAD).



Acting as Copel's highest governance body, the Board of Directors is responsible for guiding strategic decisions, including investment plans, overseeing the implementation of the strategic plan, and addressing matters related to environmental commitments. Its actions are aligned with the Corporate Risk Management guidelines, the Sustainability Policy, and other environmental topics that are relevant for the Company.

As interconnected topics, biodiversity, eco-efficiency, climate change, environmental responsibility, and water resource management share a common governance structure, especially with regard to the responsibilities of the Board of Directors and the Sustainable Development Committee (CDS, in Portuguese), whose duties are outlined [on pages 76 and 80](#).

The Investment and Innovation Committee (CII, in Portuguese) defines the criteria for selecting, evaluating, approving, and monitoring investments aligned with the Strategic plan, including the Company's decarbonization agenda.

All of this is part of a results-driven management model that links ESG targets to the variable compensation of executives ([read further details on page 88](#)). As metas possibilitam uma avaliação do progresso em relação aos temas ambientais da Companhia.

Copel also has a Legal and Compliance Department, responsible for establishing the Company's environmental guidelines, including those related to climate change, biodiversity, and eco-efficiency, in accordance with the strategic plan and the commitments approved by the Board of Directors.

Environmental stewardship

Environmental stewardship is essential for the Company, as its business activities have a direct impact on the environment and society — from changes in land use and biodiversity during the implementation of its projects to the use of materials and natural resources in its operations, as well as the generation of waste, emissions, effluents, and noise.

Aware of its environmental commitment, Copel prioritizes renewable sources in its electricity generation activities, with a generation matrix predominantly composed of hydroelectric power and wind energy.

The rational use of materials, energy, and other natural resources is reflected in the Company's administrative and operational eco-efficiency practices, as well as in water resource management. Its concern about the environmental impacts of operations is also demonstrated through environmental preservation and biodiversity protection.

Management of the environmental dimension at Copel is carried out based on the identification

of risks, impacts, and opportunities, the proposal of improvements, and the definition of targets that help contribute to indicators for integrated management, in line with the guidelines of the [Sustainability Policy – Environmental Chapter](#).

The Company's environmental plan encompasses short-, medium-, and long-term horizons, with actions continuously monitored to ensure the effectiveness of the measures implemented. The results of these initiatives are communicated to stakeholders through detailed reports and the Sustainability Portal, reinforcing transparency and alignment with national and international standards. Copel follows globally recognized guidelines, such as the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) – [refer to the page 335](#) – for the disclosure of climate-related information, and the Task Force on Nature-related Financial Disclosures (TNFD) for transparency regarding biodiversity, strengthening its commitment to sustainability and environmental governance

Climate Change

Copel's climate strategy is structured around two pillars: the Carbon Neutrality Plan and the Business Adaptation Plans. In parallel, the Company seeks to mitigate energy transition risks by expanding its renewable energy portfolio and offering more sustainable services, while aiming to improve infrastructure maintenance.



The Company's environmental strategy includes short-, medium-, and long-term planning, with actions constantly monitored to ensure the effectiveness of implemented measures.

GHG emissions management

Aligned with SDGs 7 and 13, Copel has established strategic targets that include the reduction of GHG emissions. These targets are part of the Carbon Neutrality Plan — developed in 2021 and approved by the Board of Directors, as part of the Strategic Plan: 2030 Vision — which aligns with the commitments of the Paris Agreement, aimed at preventing global temperatures from rising more than 1.5°C. The plan seeks to reduce greenhouse gas (GHG) emissions and offset residual Scope 1 emissions by 2030.

This commitment covers the Company's operationally controlled assets and reinforces its efforts to strengthen renewable energy sources and provide sustainable services. The [GHG emission reduction targets](#) are published on Copel's Sustainability Portal. Among

them, it is worth highlighting: Copel intends to reduce Scope 1 emissions by 50% by 2025 compared to the 2017 baseline, in addition to promoting light fleet electrification by replacing 15% of vehicles with electric models.

The company's Scope 2 target was to reach the minimum

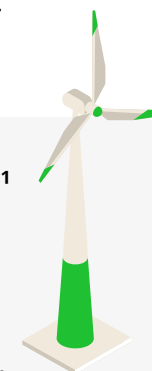
mark of neutralising 30% of its energy consumption from the grid by 2025, to which end Copel committed to using renewable energy certificates - I-REC. In 2024, this figure was surpassed, with 100% of the company's own consumption (excluding losses) neutralised with renewable energy certificates - I-REC.

Additionally, strategies have been defined, such as certifying 30% of administrative hubs with the WELL seal (which recognizes health and well-being initiatives in project implementation) and planning the construction of photovoltaic plants to supply internal consumption.



Copel – Fully renewable energy generation¹

In 2024, Copel met its decarbonization target for power generation ahead of schedule, shifting entirely to hydroelectric, and wind sources and fully eliminating reliance on fossil fuels. This milestone was driven by a series of strategic initiatives, including the divestment of thermal assets such as the Figueira and Araucária thermal power plants, as well as the continued expansion of installed capacity in clean energy sources ([read more on page 42](#)).



¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

Performance and metrics

Copel has been monitoring its carbon emissions through Greenhouse Gas (GHG) Inventories since 2009, following the methodology of the Brazilian GHG Protocol Program. The emissions calculation considers the following gases: CO₂, CH₄, N₂O, HCFC and SF₆, and is verified by an external auditor accredited by the National Institute of Metrology, Quality and Technology (Inmetro, in Portuguese), ensuring transparency and reliability in the Organization's environmental data. Biogenic emissions are also monitored and reported.

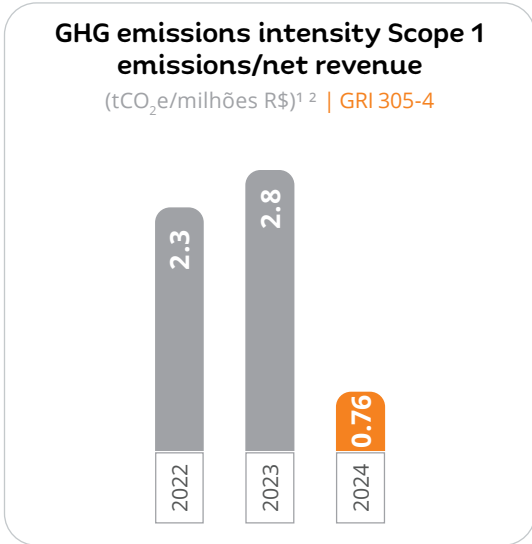
The Company monitors its direct (Scope 1) and indirect (Scope 2) emissions, comparing results to the 2017 baseline year. In 2024, aligned with the Carbon Neutrality Plan, Copel recorded a reduction of 64,372.3 tCO₂e in Scope 1 emissions compared to the previous year. This progress was driven mainly by reduced emissions from thermal power plants, the replacement of combustion-engine vehicles with electric models, and improved management of fugitive SF₆ emissions.

In 2024, Copel achieved full decarbonization of its power generation, meaning that all energy

generated is 100% renewable¹. Initially targeted for 2025, the goal was reached a year early, reflecting the Company's commitment to the energy transition and carbon emissions reduction.

64,372 tCO₂e 

of Scope 1 emission reductions



¹ In February 2024 the Figueira Thermoelectric Plant went into hibernation, making all the energy generated by Copel from March 2024 100% renewable.

Greenhouse gas emissions (tCO₂e) | GRI 305-1, 305-2, 305-3, SASB IF-EU-110a.2

Scope	2021	2022	2023	2024	2024/2023 ¹
Scope 1	15,377.7	50,834.4	81,690.3	17,317.97	-78.8%
Scope 2	451,356.9	163,700.8	148,798.7	229,169.37	54.0%
Scope 3	17,667.7	28,816.9	1,252,317.3	3,149,230.2	151.5%
Biogenic emissions — Scope 1	15,612.0	8,143.4	8,804.8	12,143.0	37.9%
Biogenic emissions — Scope 3	1,274.3	2,931.2	1,467.7	3,127.0	113.1%

¹ The reduction in Scope 1 emissions was due to the hibernation of the FRA TPP (66,926 tCO₂e reduction in stationary combustion) and the reduction in fossil fuels (1,490 tCO₂e). On the other hand, the increase in the emission factor of the national interconnected system, from 0.0385 to 0.0545 tCO₂e/MWh, due to the increased dispatch of thermal power plants in 2024, contributed to the increase in emissions from scopes 2 and 3. In Scope 2, the increase in electricity losses due to the greater volume of energy transported also contributed to the increase, while for Scope 3, Copel has been improving monitoring, including new sources, making the inventory more robust (e.g. customers and suppliers).

¹ Gases included in the calculation: CO₂, CH₄, N₂O, HFCs, NF₃.
² Since 2023, Copel has been reporting emissions intensity using the tCO₂/Net Revenue metric, making the information comparable to other companies. GRI 2-4

Indicators and targets

To enable the achievement of the commitment established in 2021 by the Carbon Neutrality Plan, the Board of Directors approved indicators and targets to be met by the Company by 2030. The targets were defined based on the Company's areas of operation

and their interconnection of processes, and are guided by the principles of the Science-Based Targets initiative (SBTi), which outlines practices to be adopted by companies committed to Net Zero goals.

Neutrality targets

Indicator (%)	2025	2027	2030
Renewable installed capacity	95	100	100
Scope reduction ¹	20	50	100
Electric fleet	15	30	50

¹ The reference year is 2017, when emissions amounted to 213,947 tCO₂e

Performance on Neutrality Indicators

Indicator (%)	2023	2024
Installed capacity from renewable sources	94.1	99.7 ¹
Scope reduction 1	61.8	91.9
Electric Fleet	17.0	18.8

¹ The 0.3% corresponds to the installed capacity of the Figueira Thermal Power Plant, which has been dormant since February 2024.

The indicators were set according to short-, medium-, and long-term targets and relate to:



Stationary combustion – divestment from thermal power plants;



Mobile combustion – gradual replacement of the fleet with electric light vehicles;



Fugitive emissions – study to improve equipment efficiency, which uses SF₆ gas;



Land use change – evaluation of the way in which vegetation is suppressed and study of compensation measures;



Electricity consumption – study and implementation of energy efficiency measures at facilities and the use of renewable energy certificates;



Analysis of compensation alternatives;



Suppliers – monitoring of emissions from critical suppliers and encouragement of GHG Inventory development and emissions reduction.

Climate scenarios and adaptation

As a development of Copel's Sustainability Policy, the Company is expanding its studies and modeling efforts to monetize risks and opportunities associated with climate change, enhancing the analysis of potential financial impacts and seeking greater resilience in the face of transformations in the power sector.

Copel GeT and Copel DIS have made progress in the assessment of climate risks and developed their Climate Change Adaptation Plans, aimed at guiding the Company's decisions by considering the specificities, risks, and opportunities of each business in light of climate change.

The Climate Change Adaptation Plans outline risks and vulnerabilities, as well as mitigation actions focused on future scenarios, designed based on trend monitoring and climate

studies. In addition, contingency plans are developed whenever necessary to ensure swift responses to severe weather events, securing the mobilization of teams and resources.

In the coming years, Copel intends to further develop studies to monetize climate-related risks and opportunities, refining the analysis of financial impacts associated with climate change. To support decision-making in this area, the Company uses climate scenarios — adopting RCP 8.5 for physical risks and IEA NZE 2050 for transition risks — which guide business management and expansion, steering decision-making and infrastructure adaptation in the face of climate challenges.

These studies enable the Company to invest in operational asset management improvements. In power generation, the impacts of climate

Copel is expanding studies to monetize risks and opportunities associated with climate change, aiming to enhance the analysis of financial impacts and the resilience of its operations.

change on the hydrological regime of river basins and wind pattern variations — both critical factors for renewable energy production — were evaluated. In power distribution, a study conducted by Sinapsis – Inovação em Energia and Climatempo (StormGeo Company), with support from Copel, analyzed the resilience of power grids in southern Brazil, considering climate projections through 2025. These assessments serve as input for generation and distribution planning.



In addition to implementing mitigation and adaptation measures to strengthen the resilience of its transmission networks, the Company invests in artificial intelligence and satellite imagery to identify risk areas and reinforces structures to withstand adverse conditions.

Transmission grid resilience

Copel adopts mitigation and adaptation measures to strengthen the resilience of its transmission grids in the face of extreme weather events. Real-time monitoring of air masses, wind gusts, and lightning strikes allows for early risk detection and the implementation of preventive actions. Assets undergo critical condition mapping and heatmapping to identify transmission lines that require structural reinforcement due to exposure to intense weather phenomena.

The Company invests in technological innovation to improve aerial preventive inspections of transmission lines, applying advanced tools that ensure greater system reliability. Copel also plans to implement a

system that combines satellite imagery and artificial intelligence to identify areas at risk of outages caused by vegetation contacting the power grid.

To prevent structural collapse caused by winds exceeding design thresholds, affected sections are redesigned with reinforced structures to withstand extreme conditions. Additionally, to expedite emergency response, Copel GeT is implementing a central warehouse for spare structures, ensuring quick access to critical components and reducing grid downtime. In new projects, designs are updated based on historical data and climate projections, using statistical calculations to balance safety and competitiveness in the transmission system.

Distribution grid resilience

The distribution segment is investing in infrastructure modernization to increase resilience to storms and strong winds, while an allocation of BRL 12.97 million strengthened the on-call availability of operational and maintenance teams, enabling faster emergency response. Paraná Trifásico (Rural Three-Phase Program), in turn, improves rural networks and reduces vulnerabilities

to adverse events, with an investment of BRL 703 million in 2024. Initiatives such as Smart Grid and Confiabilidade Total (“Total Reliability”) enable real-time monitoring and the installation of smart equipment, optimizing the response to grid failures. Micro- and Mini-Distributed Generation (MMGD) play an important role in making the power grid infrastructure more efficient.



R\$ 703 million
invested in the Paraná Trifásico project in 2024

Artificial intelligence on multiple fronts

The Company has intensified the study and application of artificial intelligence (AI) resources in its operations. In partnership with Simepar, an AI system has begun forecasting the impacts of severe weather on power supply, using data from weather stations, satellites, and radars. During the year,

a Proof of Concept (PoC) was also conducted to analyze, through climate scenarios, how distribution operations in the Maringá (PR) region could be affected by variables such as rainfall, wind, and extreme temperatures, supporting strategic development for the coming years.

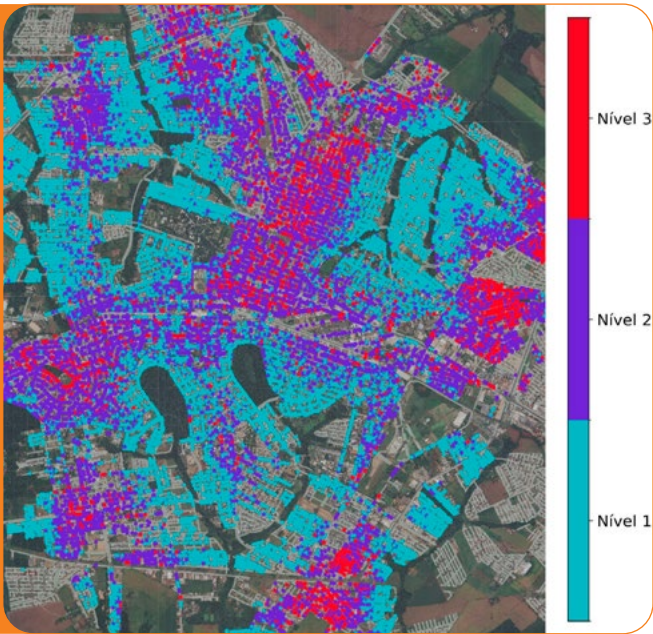


Image generated by MeteolA.



Extreme Weather Events and Operational Safety Workshop

Geared towards sharing knowledge and seeking solutions to strengthen the resilience of generation, transmission, and distribution operations, Copel held its 1st Extreme Weather Events and Operational Safety Workshop. The event took place in September 2024 and brought together around 100 participants, including executive officers, board members, technical teams, and experts from various areas, to discuss the impacts of climate change and operational challenges in the energy sector ([read more in the Climate scenarios section, on page 172](#)).

The program featured lectures by experts from the Climate Variability and Change Study Center at the Federal University of Paraná (UFPR), the Hydraulic Research Institute at UFRGS, Dona Francisca HPP, the National Electric System Operator (ONS, both acronyms in Portuguese), and Aneel.

The event highlighted the importance of the Company's preparedness in the face

of increasing climate unpredictability, emphasizing the need for risk mitigation to ensure service continuity under adverse conditions. One of the key moments was a case study on the historic flooding in Rio Grande do Sul, addressing the impacts on power plants and grid infrastructure, as well as the response of utilities and regulatory agencies, such as ONS and Aneel.

Copel and its subsidiaries presented their contingency plans for extreme weather events, such as storms and severe droughts, and demonstrated investments in innovative technologies, such as software for consolidating hydrological and meteorological data to forecast river flows.

During the workshop, the teams took part in activities to propose new solutions and improvements to the contingency plans, increase the operation's resilience to extreme events and improve the mapping of the Company's risks associated with climate change.

Recognitions

In 2024, Copel was once again recognized with the Clima Paraná Seal, in the 10th edition of the award organized by the State Department for Sustainable Development (Sedest, in Portuguese). The award honors organizations that adopt voluntary practices to reduce their carbon footprint and fight climate change. Copel, a participant since the first edition, received the seal in Category A — External Market, the highest score possible. As a result of this

ESG strategy focused on energy transition, the Company was once again recognized by being included in the B3 Efficient Carbon Index (ICO2) portfolio. This recognition reinforces the Company's position among the most efficient in managing Greenhouse Gas (GHG) emissions and strengthens its leadership in the Brazilian electric sector, consolidating its commitment to the transition toward a low-carbon economy.



In September 2024, for the fifth consecutive year, the Company received the GHG Protocol Gold Seal (referring to the 2023 Emissions Inventory), reinforcing its position among companies that measure and manage their emissions with excellence.



In 2024, in addition to receiving the GHG Protocol Gold Seal, Copel was awarded the Clima Paraná Seal, which recognizes organizations that adopt practices to reduce their carbon footprint and combat climate change.

Biodiversity

Taskforce on Nature-related Financial Disclosures (TNFD)

In 2023, Copel began adopting the recommendations of the TNFD in disclosing information about its biodiversity management. This initiative, similar to the Taskforce on Climate-related Financial Disclosures (TCFD) already applied by the Company for climate-related matters, strengthens transparency and environmental governance, enabling a more structured approach to assessing nature-related risks and opportunities.



Biodiversity strategy

GRI 3-3 Material Topic: Environmental commitment, 304-2

Biodiversity governance

As interconnected topics, biodiversity shares a common governance structure with eco-efficiency, climate change, environmental responsibility, and water resource management, especially with regard to the responsibilities of the Board of Directors and the Sustainable Development Committee (CDS, in Portuguese), whose duties are outlined on [pages 76 and 80](#). [For more information see the Environmental management governance section, on page 167](#)

Biodiversity management at Copel is aligned with its strategy and integrated with its climate agenda. The Company's Sustainability Policy establishes, in a dedicated chapter, the guidelines for biodiversity to be considered when

defining actions, based on national and international standards, such as the National Biodiversity Policy (Federal Decree 4,339/2002) and the UN Global Compact 2030 Agenda. In addition to setting guidelines for identifying, assessing, and mitigating the environmental impacts of the Company's activities, the Sustainability Policy, in its Biodiversity chapter, upholds the commitment to quantify and value environmental impacts, as well as to conduct integrated analyses of impacts, dependencies, risks, and opportunities related to biodiversity and ecosystem services for Copel's businesses, enabling strategic management.

At Copel, the assessment of related impacts takes place mainly within the scope of environmental licensing, which



applies to each of its projects and follows standardized methodologies validated by the scientific community and aligned with the requirements of different environmental agencies, based on Brazilian legislation. Regarding biodiversity, Copel adopts the assumption that any dependency of the Company on an ecosystem service implies a potential risk, whose materialization may directly affect the Company's business. Copel has conducted an internal materiality analysis across its different business segments to identify the most relevant ecosystem services and their respective business dependencies.

Continuous assessment and actions

Copel's wholly owned subsidiaries follow a continuous operational assessment model.



Sustainability Report
Explore the details of Copel's 2024 Socio-Environmental Report (GeT).

At Copel GeT, the Company periodically evaluates its operational areas with regard to biodiversity, using official databases from the Ministry of the Environment. In this sense, over 220,000 hectares have been assessed in terms of proximity to critical areas for conservation.

The subsidiary has developed a subprogram dedicated to wildlife management at its facilities, as well as specific conservation actions for endangered species.

In the development of new projects, the Company seeks to avoid impacting protected areas or areas with high biodiversity value. In cases where interference cannot be avoided, every effort is made to minimize negative impacts as much as possible, enhance positive impacts, and implement compensation programs. Among the positive impacts, the contribution to academic and scientific communities stands out, through the collection and sharing of data on species monitored

and recorded in the areas of influence of its projects. Other factors considered in the environmental impact studies include the extent of the affected areas, depending on the type and size of the project; the duration of the impacts; and whether the impacts are reversible or irreversible.

At Copel DIS, environmental impacts are primarily related to the construction of distribution networks and substations. During licensing, related studies are conducted to identify potential biodiversity impacts and define mitigation or compensation measures. Given the significant increase in extreme weather events, Copel DIS seeks alternatives for the shared use of urban vegetation and power distribution networks.

To this end, the Company invests in initiatives such as Florestas Urbanas (Urban Forests), which supports municipalities in managing

Copel's subsidiaries conduct continuous operational assessments to identify associated impacts, aiming to prevent or mitigate negative effects while enhancing positive ones.

urban tree cover and fostering coexistence with the power grid. Additionally, an R&D project is assessing the potential for integrated vegetation management in transmission line corridors, aiming to reduce the need for vegetation clearing.

The effectiveness of the biodiversity initiatives developed by Copel is reflected in the acquisition and maintenance of environmental licenses required for project implementation and operation, as well as in species-specific authorizations related to flora and fauna. The Company also participates in social and environmental questionnaires and platforms such as the Corporate Sustainability Index (ISE, in Portuguese), the Corporate Sustainability Assessment (CSA), and the Carbon Disclosure Project

(CDP), which assess its biodiversity initiatives and serve as benchmarks for continuous improvement in environmental management.

Copel has made progress in evaluating ecosystem services by conducting pilot studies to improve impact and dependency analyses, as well as to identify potential risks and opportunities. For example, within Copel's business operations, energy generation activities may be impacted by the unavailability of ecosystem services — such as water and wind for hydroelectric and wind power generation, respectively. Biodiversity conservation, whether through avoidance, reduction, or mitigation of impacts, helps to reduce the risk of scarcity or changes to resources on which the Company depends.

Copel invests in environmental conservation initiatives and has made significant progress in assessing ecosystem services, identifying its impacts, dependencies, risks, and opportunities related to natural resources.

Biodiversity risk and impact management

Copel owns assets across various Brazilian biomes, such as the Atlantic Forest, Cerrado, Amazon, and Caatinga, which requires a strategic approach to minimize the environmental impacts of its operations. The implementation and operation of energy generation, transmission, and distribution projects may affect local fauna and flora, alter the connectivity of remaining vegetation patches, and modify the composition of aquatic communities in hydroelectric facilities. Nevertheless, impacts on ecosystem services, such as water provision and climate regulation, can pose challenges to energy generation and transmission.

The Company prioritizes ecosystem protection in its projects, aiming to avoid interference in protected areas or those with high ecological value. Before implementing any project, a rigorous risk management process and detailed

To avoid interference with protected areas or zones of high ecological value, a rigorous risk management process and environmental studies are conducted prior to the implementation of new projects.

environmental studies are conducted to assess potential impacts on fauna and flora. In cases where project relocation is not feasible, measures are adopted to reduce, mitigate, or compensate for negative impacts and to enhance positive ones.

Copel conducts environmental studies during the environmental licensing process,

which help identify potential biodiversity impacts on its projects' areas of influence. In addition to contributing to environmental conservation, these studies provide valuable data to academic and scientific communities, aiding in the identification of new species and expanding knowledge about little-studied species and/or locations.

To mitigate these risks, Copel monitors changes in fauna and flora based on the conducted studies and seeks alternatives to avoid impacts in protected or high-biodiversity areas. When it is not possible to completely eliminate impacts, measures are implemented to reduce, mitigate, or compensate for them.



Currently, Copel implements several initiatives to protect and restore ecosystems, such as:



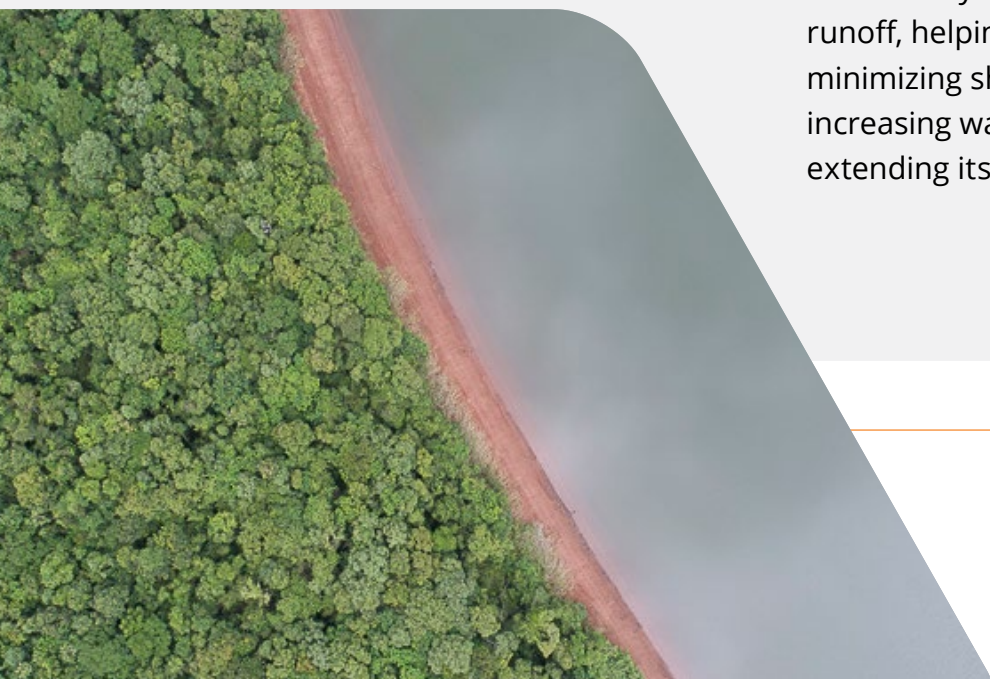
Forest compensation: This involves allocating and protecting already forested areas or restoring degraded land to compensate for vegetation clearance during the installation and operation of projects. These areas are important for maintaining ecosystem services and contribute to the gene flow of local fauna and flora, enhancing biodiversity.



Restoration of Permanent Preservation Areas (APPs, in Portuguese): During the implementation of hydroelectric power plants, previously disturbed lands and altered areas became degraded APPs, making it necessary to implement protection and ecological restoration actions. The recovery of APPs with native vegetation provides benefits such as enhancing connectivity between forest fragments and blocks by establishing biodiversity corridors, reducing sediment runoff, helping prevent siltation, and minimizing shoreline erosion, potentially increasing water flow to the reservoir and extending its useful life.



Protection of terrestrial fauna and ichthyofauna: During the implementation phase of energy projects, surveys are carried out to identify the species present in the region. Another step involves monitoring, which enables assessment of the project's impacts on terrestrial fauna and ichthyofauna by analyzing faunal characteristics before, during, and after the project's implementation. Activities such as dispersal, rescue, and relocation of terrestrial and aquatic fauna aim to prevent and mitigate potential direct impacts.



Vegetation Management Program: Considering the importance of vegetation in maintaining biodiversity, Copel develops vegetation management actions during the planning, construction, and operation of its projects. These actions aim to minimize native vegetation clearance, rescue and relocate native species, collect and donate seeds, monitor and manage official lists of rare and endangered species, and track preserved, restored, or regenerating areas.

- **Urban forests:** It provides municipalities with seedlings and guidance for proper urban tree planting, minimizing tree interference with power lines and preventing outages.
- **Integrated Vegetation Management (IVM):** A sustainable alternative to mowing that allows herbaceous-shrubby vegetation to be maintained beneath distribution lines, reducing interventions and offering environmental benefits such as soil protection and wildlife shelter.

- **Avian markers:** Installation of devices on high-voltage lines near wetlands and forested areas to increase cable visibility and reduce bird collisions.

The adoption of all applicable measures to prevent negative impacts on biodiversity aims primarily at minimizing interference with the ecosystems where the projects will be installed. Even so, in addition to avoiding or controlling these negative impacts, Copel develops specific programs focused on the conservation of rare or endangered species that may be found near its projects and ensures permanent protection

of certain natural areas, generating positive impacts.

Copel's role in biodiversity conservation reinforces its commitment to sustainability and the responsible management of natural resources. The actions undertaken aim not only at mitigating environmental impacts but also at promoting scientific research and preserving the ecosystems in which the Company operates.



Copel strives to minimize its impact on local ecosystems by integrating responsible natural resource management, promoting scientific research, and preserving the ecosystems in which it operates

Business commitment to biodiversity

GRI 3-3 Material Topic: Environmental commitment, G4-EU13

To reinforce its commitment to environmental conservation, Copel joined the Brazilian Business Commitment to Biodiversity, an initiative of the Brazilian Business Council for Sustainable Development (CEBDS, in Portuguese). This voluntary commitment encourages companies across the country to recognize the importance of biodiversity and to adopt concrete targets for the preservation and sustainable use of natural resources.

The targets adopted by Copel are aligned with its Sustainability Policy, strengthening the integration of environmental conservation into the Company's business strategy. Of the nine targets proposed by the movement, Copel adopted the four that align with its operations and management on the topic and that can contribute to identifying biodiversity conservation opportunities.



SUSTAINABILITY POLICY

The actions to meet these commitments are reported in this publication and detailed on the **Sustainability Portal**. They will also be monitored by **CEBDS**.



Target 1

integrate the topic of biodiversity into the Company's business strategy.

Target 2

apply the mitigation hierarchy: prevent, mitigate, recover, and compensate for impacts on biodiversity throughout the life cycle of the projects.

Target 4

develop and encourage studies, research projects, technology, and innovation that contribute to the conservation of biodiversity and ecosystem services.

Target 5

know the biological diversity of the Company's areas of operation and, if possible, monitor and measure impacts and dependencies.

Copel's commitment involves specific initiatives to avoid and minimize environmental impacts, with the implementation of programs focused on protecting ecosystems in its areas of operation.

Biodiversity performance

GRI 304-1, SASB-RR-ST-160a.1

Copel maintains a strong commitment to environmental conservation, protecting over 24,000 hectares of native vegetation across different biomes, which serve as refuges for regional flora and fauna. Of this total, around 10,400 hectares are located in the Serra do Mar region of Paraná, one of the most biodiverse ecosystems on the planet, designated almost exclusively for the preservation of the Atlantic Forest.

To minimize environmental and social impacts during the project phase, the Company conducts detailed route studies to divert power lines and reduce interference with traditional communities located in protected areas. As for energy supply to such communities, Copel adopts alternative sources of electricity, prioritizing the installation of photovoltaic panels.

The Company manages its Permanent Preservation Areas (APPs) and has established as an environmental performance indicator the percentage of restorable areas that have native vegetation cover. This assessment is conducted periodically using imagery and inspections, enabling the adoption of the best forest restoration strategies aligned with the Sustainable Development Goals (SDGs ,  e ).

In total, Copel maintains over 9.7 thousand hectares of APPs, with an initial goal of reaching 84% native vegetation cover by 2025 in areas surrounding the reservoirs of its generation operations. This goal was fully achieved in 2024, and the next target is to reach 87% by 2030.

Copel's actions align with environmental legislation and are discussed with the relevant environmental agencies. Communication occurs through reports, technical opinions, and letters throughout the environmental licensing process, with responses from the agencies regarding requested additions or clarifications. In specific situations, meetings are held with environmental agencies to discuss questions and guidance on licensing procedures or the execution of conditions.

To ensure compliance and monitoring of these requirements, all licenses, authorizations, and environmental conditions are registered and tracked regarding implementation and deadlines in the internal Environmental Licensing Management system (GLA, in Portuguese).

Target Achieved in 2024:
Maintaining

84%

Native Vegetation
Coverage

Copel Preserves over

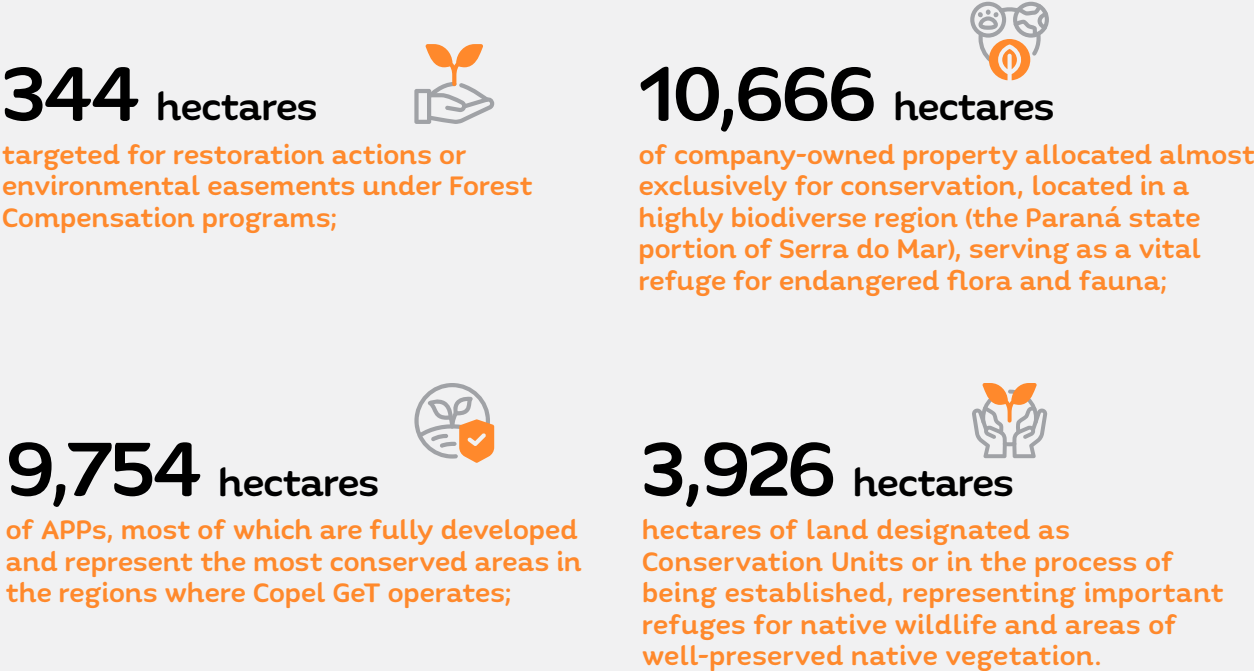
9.7 thousand Hectares
of APPs



In the case of Copel GeT, most of the restored or recovering sites previously featured land uses such as pastures, crops, or commercial reforestation, and were partially or completely altered before restoration

activities began. These restoration efforts employ various techniques, including planting native tree species, green fertilization, nucleation, among others, to reestablish biodiversity in degraded areas.

Currently, the subsidiary maintains the following protected or restored areas (GRI 304-3):



Support for species conservation

Copel develops specific biodiversity conservation programs aimed at protecting rare or threatened species found near its power generation, transmission, and distribution facilities. These initiatives help minimize environmental impacts and contribute to the preservation of natural ecosystems. Below are some examples of these initiatives:

Generation and transmission

Protection of ichthyofauna

Since 1993, Copel has maintained an ichthyofauna monitoring program in its reservoirs to reduce the potential impacts of hydroelectric projects. During maintenance activities at hydroelectric plants, fish are rescued from the turbines during machine shutdowns, with a survival rate of 99% achieved in 2024.

The Company invests in research, breeding, and release of fish, contributing to the documentation of

the biology and ecology of Brazilian ichthyofauna, with special attention to threatened species. At the Colíder HPP, located in the Amazon Basin, electric barriers were installed to repel fish and prevent their entry into the plant structures, in addition to the implementation of a fish passage system that allows the migration of different species. Since the plant began operations, more than 80 fish species have been recorded using the fish passage system at the Colíder HPP.



Serra do Mar Large Mammals Program

Copel GeT plays a key role in biodiversity conservation by preserving important areas of the Serra do Mar in the state of Paraná. Reinforcing its commitment to biodiversity, in 2021 the company partnered with the Serra do Mar Large Mammals Program (PGMSM, in Portuguese), coordinated by the Manacá Institute and IPeC, to monitor wildlife in these areas.

Since then, 24 mammal species have been identified through camera traps, some of which are listed as threatened, including the tapir, white-lipped peccary, red brocket deer, puma, and other wild felines. Records of females with offspring and young individuals suggest that these areas serve as breeding refuges, helping to sustain these populations.

The subsidiary preserves over 10 thousand hectares of Atlantic Forest across the municipalities of São José dos Pinhais, Guaratuba, Piraquara, and Morretes. These areas are part of the largest conserved remnant of this biome, underscoring their importance for wildlife protection. In addition to monitoring, the PGMSM provides essential data for conservation strategies, environmental restoration, and decision-making, enhancing the protection of ecosystems.



Distribution

Urban Forests Program

Copel works to conserve vegetation through its Urban Forests Program, which has supported municipalities in tree planting for 15 years, promoting harmonious coexistence between urban greenery and the power grid. Since the program's inception, 90 thousand tree seedlings have been planted in over 100 municipalities, with 7,600 seedlings in 17 cities in 2024 alone.

Integrated vegetation management in power systems

The Company conducts research to improve vegetation management along power line corridors, assessing its impact on vegetation recovery and maintenance costs. Tests have shown that the selective application of herbicides achieved 85% to 100% control of unwanted plants, ensuring environmental safety and benefits for biodiversity.



90 thousand
tree seedlings planted since the start of the program



+100 municipalities
since the start of the program

Water

GRI 303-1, 303-2, 303-3, 303-4, SASB IF-EU-140a.1, IF-EU-140a.3

Copel's power generation represents the company's most water-intensive activity, although it does not involve water consumption, as the resource is returned to water bodies with the same quality and quantity, in accordance with environmental regulations. The use of this natural resource occurs mainly in the 26 hydroelectric power plants located across the Iguaçu, Tibagi, Alto Ribeira, Atlântico Sudeste, and Teles Pires river basins, where water is used for energy generation and then released back into the environment.

The construction of dams for reservoir formation alters aquatic environments, temporarily affecting water transparency and sedimentation. To mitigate these impacts, Copel conducts hydrological studies and environmental monitoring, taking into account the multiple uses of water within the river basins.

One major water-related risk is scarcity, especially under changing hydrological regimes, which could impact electricity generation and dam management. Copel has real-time monitoring systems in place for water levels and rainfall, emergency action plans with preventive and corrective measures, and community alert strategy and channels to support local populations surrounding its projects, among other management measures.

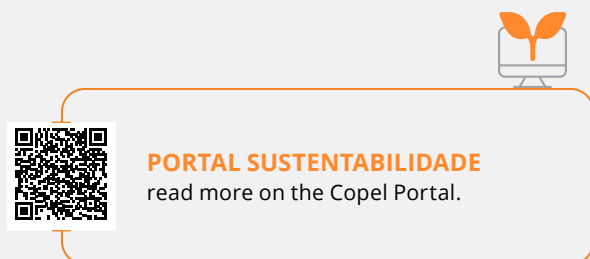
The Company is recognized for its transparent water resource management, publishing real-time operational and monitoring data, and participating in water basin committees and resource councils. Copel also collaborates with local communities and civil defense agencies, contributing to the River Basin Plan and aligning its goals with public policy and local needs. Hydroelectric inventory studies and assessments of alternative sustainable water uses support the development of environmental targets and water efficiency goals. According to assessments based on the Water Risk Atlas and Brazilian public datasets, Copel's hydroelectric power projects are not located in areas of water stress, reinforcing water security in its operations.

Copel prioritizes transparency in water resource management by publishing real-time data and participating in specialized forums and councils. It also contributes to the Watershed Basin Plan, aligning its objectives with public policies.



Effluent management

Copel's effluent management follows strict environmental standards to minimize environmental impact, in compliance with Conama Resolution 430/11. Although the operation of substations, transmission lines, and distribution networks does not produce effluents on a regular basis, routine inspections are conducted to monitor for potential oil leaks from equipment. Sanitary effluents are discharged into the public sewage system, when available, or treated using septic tanks and anaerobic filters in areas lacking public infrastructure. Construction site effluents are managed by contractors, who employ chemical toilets or dry pits, in accordance with NR 31.



PORTAL SUSTENTABILIDADE
read more on the Copel Portal.

In administrative operations, water is sourced from public utilities and artesian wells. Consumption is monitored monthly through the Eco-efficiency Program, which promotes actions for reduction and conscious water use. In 2024, Copel achieved a 11% reduction in water consumption from the local public utility (third party), consistent with the 5% reduction target set for 2025, based on Ecoefficiency program actions, awareness and optimization of building installations.

Operational water consumption mainly takes place through the hydraulic potential harnessed in the power plants maintained

and operated by Copel, and is preceded by a Grant for the Right to Use Water Resources, an instrument of the Brazilian Water Resources Policy (Federal Law 9,433/1997), which aims to ensure both quantitative and qualitative control of water use and the effective exercise of the right to access water.

The table below presents the amounts of administrative water consumption and the water used for hydroelectric power generation — which is non-consumptive, as it merely flows through the turbines. In 2024, a significant increase was observed.

Water consumption (ML)^{1 2} | GRI 303-5, SASB-IF-EU-140a.1

Indicador	2022	2023 ³	2024
Indicator	94,929.8	102,791.0	121,874.3
Total water withdrawal	94,904.9	102,731.0	121,852.2
Total water consumption	24.9	60.0	22.1

¹ Copel does not use water from water-stressed areas and does not store water. Information based on the WRI Aqueduct identification tool.

² The Company's use of surface water is non-consumptive, i.e., water is used in operations, passing through the turbines, and then returned to its original body of water without altering its properties. In order to analyze administrative consumption, it is assumed that 80% of the total water collected from third parties is disposed of as sanitary sewage, implying that actual consumption corresponds to only 20% of water withdrawn..

³ It was identified that there was a need to adjust the information on water abstracted in 2023, from 85,564.4 ML to 102,791.0 ML, and water discharged, from 85,504.1 ML to 102,731.0 ML, due to an adjustment in the measurement methodology for the operational consumption of the GBM Plant and the erroneous recording of groundwater at the Holding, with the result that water consumption went from 60.3 ML to 60.0 ML (GRI 2-4).

Energy

GRI 302-2, 302-3, 302-4

Copel monitors and manages its energy consumption through the Eco-efficiency Program as part of its strategic actions to reduce energy use. In 2024, the total energy consumption within the Organization was 251,149.8 GJ, a significant decrease compared to previous years, when consumption was 741,335.7 GJ in 2022 and 719,496.8 GJ in 2023. This reduction is mainly due to the hibernation

of the Figueira Thermal Power Plant in February 2024, which was the Company's largest source of energy consumption.

In the same year, Copel achieved a 18.8% reduction in diesel consumption and a 13.9% reduction in gasoline use. The Company has set a target to reduce electricity consumption and fuel consumption by 5%.

Plans are in place to build solar plants to supply 100% of the Company's internal energy demand by 2030. In 2024, solar collectors were installed, and air conditioning units were replaced with more efficient models, aiming to reduce electricity consumption.



Energy intensity ratio | GRI 302-3

Indicator	2022	2023	2024 ³
Total energy consumption within the Company (GJ) ¹	741,335.7	719,496.8	251,149.8
Energy Intensity (GJ/BRL million) ²	24.4	24.3	11.1

¹ Total energy consumption within the Company refers to the amount of electricity and fuel (renewable and non-renewable) in GJ.
² Energy intensity was calculated based on total energy consumption within the Company/Company's total net revenue in thousands of Reais, available in the Management Report.
³ There was a significant reduction in the 2024 figures due to the reduction in coal consumption at Copel GeT.

Waste Management

GRI 306-1, 306-2

The waste generated by the Company's operations is segregated by source and type, following procedures for monitoring, proper disposal, and recovery of recyclable materials whenever possible, in compliance with applicable legislation and to mitigate environmental impacts.

Waste originated from Copel's administrative activities is managed in accordance with the Corporate Waste Management Standard and aligned with the guidelines of the Sustainability Policy.

Key initiatives include:



Recycling
Recyclable materials such as paper and plastic are preferably sent to local recycling cooperatives.



Construction waste
Construction contractors prepare the Solid Waste Management Plan (PGRS, in Portuguese), defining proper disposal methods.



Organic waste
Copel has a service agreement in place to ensure appropriate disposal of this waste category.



Paper reduction
Copel prioritizes digital communication to reduce paper usage, and reusable containers are encouraged.

Administrative waste management is carried out in partnership with licensed collection agencies. During collection, the waste is weighed and documented in reports to ensure traceability and control.

On the other hand, waste generated from Copel's operational activities is managed in accordance with current environmental regulations, ensuring correct storage, transport, and disposal. Different strategies are adopted for each waste category:

- Industrial and hazardous waste (Classe I):**
Primarily directed to co-processing in the cement industry, reducing reliance on fossil fuels. When no feasible alternative is available, it is directed to industrial landfills or incineration.
- Recyclable waste:** Preferably donated to cooperatives or reused internally to promote circular economy.
- Organic waste:** In 2024, 20.7 tons were collected properly disposed of by a contracted company.

Hazardous waste transport complies with strict safety protocols, including the mandatory submission of Emergency Response Plans (PAEs, in Portuguese) by carriers. Waste management is supported using environmental data collection systems, which allow real-time tracking of waste generation, transport, and final destination.

Copel Holding is responsible for defining corporate guidelines and standards for waste

management, ensuring integrated, consistent practices across subsidiaries. In operation and maintenance, waste is managed under the Waste Management Program, which outlines procedures for storage, treatment, and disposal according to the PGRS, updated regularly with reduction targets and continuous improvement actions.

The waste generated in the construction and maintenance of power lines and substations

is managed in accordance with the Construction Waste Management Plan (PGRCC). Suppliers receive a dedicated manual and undergo regular training to ensure compliance with environmental standards. Compliance with standards is verified through environmental inspections and contractual requirements that oblige waste management companies to provide proof of environmental licensing.

Eco-Efficiency

Through the Eco-efficiency Program, the Company systematizes initiatives to reduce wasting resources such as energy, water, fuels, and paper, in addition to minimizing waste generation. Corporate guidelines are disseminated across all areas of Copel and its wholly-owned subsidiaries, with targets adapted to the specificities of each business.

The Eco-efficiency Program also includes actions such as fleet upgrades, the incorporation of electric vehicles, the use of ethanol in flex-fuel vehicles, and the optimization of operational routes. Internal campaigns reduce the consumption of energy and water, the use of other natural resources and printers, in addition to implementing energy management modules for IT equipment and

replacing conventional light bulbs with LED lamps.

The Company also invests in the installation of cisterns for rainwater harvesting and timed faucets.

SOCIAL COMMITMENT

GRI 3-3 Material Topic: Social commitment, 203-1, 203-2



At Copel, social commitment is built on four pillars: Social Responsibility, Human Rights, Community Relations, and Stakeholder Engagement.

Accordingly, the Company aims to generate positive impact through social, cultural, educational, and health-related programs, always aligned with the Sustainable Development Goals (SDGs). Across all its operations, Copel has adopted practices that promote quality of life, energy security, and job creation in the communities where it operates.

In addition to creating jobs and generating income through the construction of new projects, Copel's presence contributes to increased municipal revenue and improvements in the electrical infrastructure, strengthening

the National Interconnected System (SIN, in Portuguese). However, the expansion of its projects can also present challenges, such as the strain on local public services resulting from population growth in impacted cities. To mitigate these effects, the Company conducts continuous impact monitoring and implements technical support measures for municipalities, ensuring a sustainable adaptation to new demands.

Copel also strengthens local economy by prioritizing the hiring of regional suppliers for its projects and operations, promoting the development of small businesses. In doing so, the Company boosts the social and economic development of the communities where it operates, balancing infrastructure advancement with population well-being.



The Company promotes public consultations and hearings to understand the expectations and needs of its diverse stakeholders, thereby strengthening ongoing dialogue with communities, municipal authorities, consumer councils, and civil society organizations.

Environmental communication and education

Through its annual communication plan, Copel conducts institutional campaigns to inform customers and the community about the safe and efficient use of electricity, providing content that promotes civic responsibility and environmental care.

To foster ongoing dialogue with communities, local authorities, consumer committees, and civil society organizations, the Company holds public consultations and hearings to understand the expectations and needs of its many stakeholders. Copel also promotes organizational learning through post-implementation reviews, analyzing results and incorporating suggestions for improvement into policies and operational practices. The Company adjusts or sets new goals as needed to ensure the continuous improvement of its processes.

Copel carries out environmental education initiatives for construction workers, neighboring communities, and suppliers. All supplier-related activities are preceded by strict documentation checks and a safety orientation conducted by a professional from the Specialized Safety Engineering and Occupational Medicine Service (SESMT, in Portuguese), which addresses topics such as Copel's Code of Conduct, human rights in the workplace, reporting channels, safety regulations, and environmental risks in the workplace.

To ensure transparency and assess the effectiveness of these initiatives, the Company maintains open communication with stakeholders through service and ombudsman channels, allowing for the continuous improvement of its strategies.

Copel's social programs

Driven by its commitment to sustainability, Copel carries out initiatives that reflect its socially responsible conduct. Its social focus and strategies are designed to generate positive impacts across multiple areas, including education, social inclusion, health, income generation, reduction of inequalities, and the conscious use of natural resources.

In addition to EletriCidadania, the following programs designed by Copel stand out:

Aluno Energia – Copel DIS program aligned with SDG 4, aimed at ensuring inclusive, equitable, and quality education, offering participants scholarship opportunities and professional mentoring. [Read more on page 198.](#)

Boa Vizinhança – Initiative to foster engagement with communities surrounding Copel DIS's facilities. [Read more on page 199.](#)

Third-Party Collection (CVT, in Portuguese) – Service that facilitates donations to organizations that provide services to communities via the electricity bill. [Read more on page 199.](#)

Coleta Seletiva Solidária – Initiative focused on the proper disposal of administrative recyclable waste. [Read more on page 200.](#)



The **EletriCidadania** corporate volunteering program encourages employees to dedicate part of their professional working time to social actions in local communities. To find out more about the program [go to page 203.](#)

Diversity Committee – Permanent group that promotes equity and inclusion within Copel, addressing topics such as gender, race, disability, and sexual orientation. [Read more on page 258.](#)

Cultivar Energia – Corporate program that supports the creation of community gardens in underutilized urban areas beneath Copel's power lines, in partnership with municipal governments. The program focuses on property preservation and revitalization, food security, and income generation. [Read more on page 200.](#)

Human Rights – Copel initiative aligned with the UN Global Compact, focusing on the identification of risks, prevention, mitigation, and remediation of fundamental human rights violations. [Read more on page 202.](#)

EducaODS – Program aimed at consolidating efforts to fulfill the 2030 Agenda and Copel's Voluntary Commitments, by disseminating information to stakeholders on the Company's alignment with the SDGs. [Read more on page 57.](#)

Espaço Energia – Museum offering an interactive experience on the world of energy and its responsible use, featuring both permanent and temporary exhibitions.

Iluminando Gerações – Educational program that teaches children and young people about the safe and efficient use of electricity, through interactive activities and educational materials. [Read more on page 206.](#)

Mais que Energia – Project aimed at expanding the impact of Copel's private social investments, with initiatives focused on accessibility and the inclusion of vulnerable groups.

Migração e Refúgio – Project designed to support the local integration of migrants and refugees, facilitating access to information on Copel services, public policies, and social programs.





Aluno Energia (Student Energy)

GRI 302-4

Aluno Energia is a program by Copel DIS focused on supporting the education of electrical engineering students by offering scholarships, mentorship, and internship opportunities. Launched in 2023, the program selects first-year university students admitted through affirmative action policies who attended public schools, providing financial assistance and

specialized guidance to reduce dropout rates and strengthen the link between academic training and the job market.

In 2024, Copel expanded its partnership with universities in Paraná, signing cooperation agreements to reinforce the program and support students' retention in electrical engineering courses. This initiative highlights

the Company's commitment to education, social inclusion, and professional development, aligning with SDG 4 (Quality Education).

Selected students receive scholarships for a period of three years, along with continuous guidance from Copel engineers who bring extensive experience in the field and provide academic and professional advice throughout the program. In the final two years of their degree, students have the opportunity to intern at Copel, gaining hands-on experience and improving their chances of entering the power sector.

Currently, 30 students benefit from this program, which

not only fosters technical and professional development but also promotes equity in access to higher education, preparing new talent to meet the demands of the power sector.

The program has the potential to be expanded to other Copel business units, as well as to include additional fields of academic training. The *Aluno Energia* program was presented as a case study in the UN Global Compact's SDG Ambition Program, an initiative aimed at accelerating the integration of the SDGs into corporate strategies.

Boa Vizinhança (Good Neighborhood)

This community engagement program assesses the needs and strengthens relationships with residents near Copel DIS administrative buildings. It was created to address the need for direct dialogue with stakeholders, promoting social well-being and shaping initiatives aligned with both legal requirements and the company's strategic guidelines. The program's target audience includes public institutions that provide educational and/or social services to such communities.

The program aligns with the SDG **11** (Sustainable Cities and Communities) targets and prioritizes investments in initiatives that bring benefits to the communities where Copel operates. In 2024, about 15 initiatives were carried out under the *Boa Vizinhança* Program across all regions of Paraná, specifically targeting communities near Copel facilities, and engaged 101 volunteers and directly or indirectly benefited 3,163 individuals.



Third-Party Collection (CVT, in Portuguese)

Copel is a pioneer in the Brazilian power sector in facilitating donations to community service organizations through its electricity bill. The first beneficiary organization was *Pastoral da Criança*, in 1998.

The program supports 92 organizations and receives an average of 240 thousand monthly donations, resulting in an annual contribution of about BRL 49 million.

To apply for the CVT service, entities must be registered with relevant councils that recognize them as philanthropic organizations.



PORTAL SUSTENTABILIDADE

Details on how to participate are available on Copel's Sustainability Portal.



Coleta Seletiva Solidária (Solidarity Selective Collection)

Copel implements selective waste collection and prioritizes the forwarding of administrative waste to cooperatives of recyclable material collectors who generate income through recycling. Partnerships with waste collection companies and cooperatives are governed by contracts that require the issuance of official documentation, such as Transportation Manifests and Movement Declarations (MTR and DMR, in Portuguese, respectively). Best practices adopted by Copel include the reuse of materials by employees, recycling, the fulfillment of socio-environmental responsibility clauses in service agreements, and the proper treatment of construction waste, underscoring its commitment to responsible waste management.

Cultivar Energia (Community Gardens)

The *Cultivar Energia* program was launched in 2013 as a pilot project and became a corporate program in 2016, with the dissemination of internal regulations. It involves the creation of community gardens in areas beneath Copel's power lines, in partnership with local governments, with the goal of benefiting local communities. The program supports public policies on urban agriculture while preventing unauthorized occupation on Copel-owned lands and reducing the risk of electrical accidents, as participants receive safety guidance.

In 2024, eight new community gardens were created across five municipalities, encouraging food security, income generation, and sustainability. The new units are located in Curitiba (Dembinski II), Siqueira Campos (Novo Horizonte I and II), Almirante Tamandaré (Jardim Roma), Londrina (Mundo Ideal and Parigot de Souza III), and Foz do Iguaçu (Vale do Sol). The *Horta Semear* garden in Curitiba has also begun operations and is awaiting its formal inauguration.



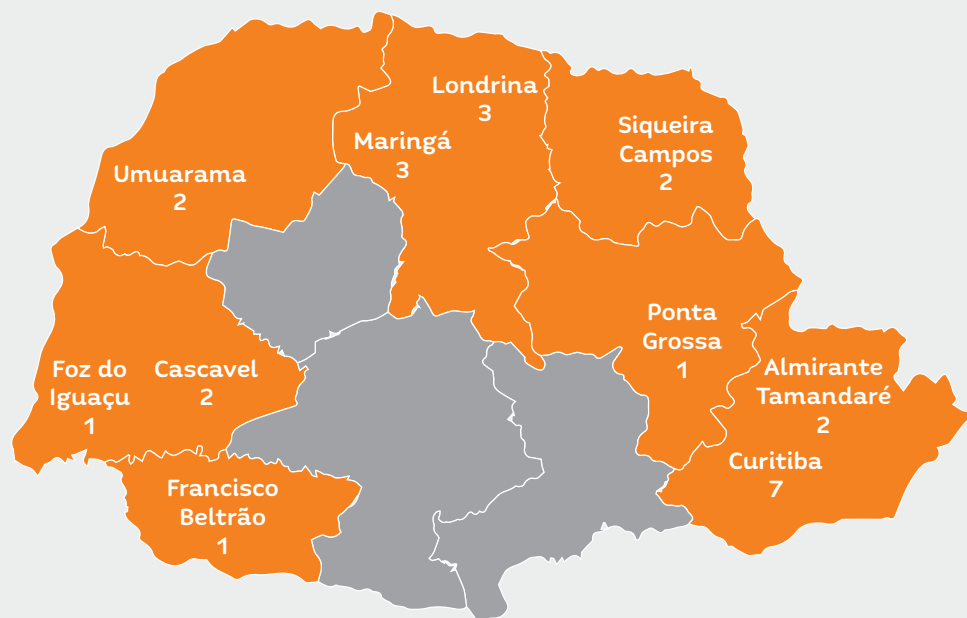
The number of families benefiting from the program has grown to

657

an increase of
122
families compared to the previous year.

Currently, Cultivar Energia maintains 24 productive gardens in ten municipalities across Paraná: Maringá, Curitiba, Ponta Grossa, Cascavel, Francisco Beltrão, Londrina, Umuarama, Foz do Iguaçu, Almirante Tamandaré and Siqueira Campos.

Number of community gardens
(per municipality)



Copel employees play a key role in the program's success by purchasing produce through weekly organized purchasing groups. This initiative, known as *Compra Solidária* ("Solidarity Purchase"), not only supports local small-scale producers but also strengthens the connection between the Company and the community, fostering a sustainable cycle of production and consumption.

Human Rights

GRI 3-3 Social commitment, 2-23

Human rights protection is a part of Copel's Sustainability Policy, which includes an entire chapter dedicated to the subject. The Company sets clear guidelines for respecting and promoting human rights within its sphere of influence, encompassing its operations, supply chain, and affected communities. As part of this commitment, Copel actively participates in the Human Rights Working Group of the UN's Global Compact Network Brazil, which enables the sharing of experiences and continuous updates on best corporate practices.

To further strengthen this commitment, the Company established the internal [Human Rights – Protection and Due Diligence](#), standard, which complements the Sustainability Policy, and outlines a due diligence process designed to identify, mitigate, and address adverse impacts or potential risks associated with human rights. This tool helps ensure the protection of workers' rights while supporting the sustainability of the Company's processes and services.

As of December 2024, there were 1,113 enrollments in the new human resources course, with 949 completions.

Copel has developed a series of materials to enhance its practices: the Human Rights Risk Identification and Prioritization Manual — applicable to both its own operations and those of its contractors — along with a guidebook and an educational video focused on human rights aimed at helping contractors recognize slave-like situations. These materials are publicly available on [Copel's Sustainability Portal](#).

Copel's commitments in this area are aligned with international frameworks such as the International Bill of Human Rights, the UN Guiding Principles on Business and Human Rights, the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact. These guidelines are extended to all of Copel's stakeholders, ensuring that its efforts are conducted

ethically, transparently, and with social responsibility throughout its entire sphere of influence — both direct and indirect.

In 2024, as part of its ongoing efforts to strengthen the topic within the Company, Copel offered a new training course on human rights developed by a specialized consulting firm. The course provides a conceptual overview of human rights, covering their origins and significance while addressing current issues that affect businesses, organizations, and society.

EletriCidadania – 20 years of volunteering

SASB IF-EU-240a.4

Copel’s corporate volunteering program, *EletriCidadania*, celebrated its 20th anniversary in 2024 honoring the dedication of its volunteers and the program’s achievements, including the VOL Award for Best Corporate Volunteering Management Practices.



Saiba mais
The celebration also featured the release of an episode from the Energia da Sustentabilidade podcast, which can be accessed [here](#)



In 2024, the program reached a historic high of 6% of employee participation, totaling 296 individuals and 2,063 hours. Key initiatives included a donation campaign for the state of Rio Grande do Sul, affected by severe flooding, and the Migration and Refuge project, which provided training for migrant and refugee women. The program also featured joint efforts organized by Amigos do HC, Salas do Desapego at Copel facilities to promote circular economy practices, and initiatives led by Copel DIS’s Internal Social and Environmental Committees (CISAs, in Portuguese), which collected recyclable materials and supported social campaigns.



In 20 years, the EletriCidadania program has mobilized:



more than 3,8 thousand volunteers,
amounting to more than 32 thousand hours of activities and benefiting more than 235 thousand people

The program allows employees to dedicate up to 8 work hours every two months to participate in social and environmental initiatives, in coordination with their managers.

As part of its corporate volunteering activities in 2024, social initiatives held during the Integrated Innovation Week collected nearly two metric tons of food, along with donations of pet food, hygiene and cleaning products, blood, and funds for the Pequeno Príncipe Hospital ([read more on page 129](#)).

Solidarity with Rio Grande do Sul

In response to the most severe climate disaster in the history of Rio Grande do Sul, which occurred between April and June 2024, Copel demonstrated its solidarity and capacity for mobilization by organizing a broad humanitarian aid campaign. The Company coordinated donation drives across all its sites and managed the logistics for transporting the items using its own vehicles and those of partner organizations.

Among the items collected and delivered to affected communities were: 131,800 hygiene and cleaning products, 2.4 metric tons of food, 3,300 liters of mineral water, 4,400 pieces of clothing, 1,264 mattresses, 360 kg of pet food, 70 pallets, and 3 pallet cages containing wood materials from Copel's warehouses.

Copel also engaged its employees in a large-scale volunteer effort, organizing 10 joint task forces in partnership with Paraná's Civil Defense department. In total, 149 volunteers contributed 644 hours to the sorting and dispatch of donations, reinforcing the Company's commitment to social responsibility and community support during critical times.



Mais que Energia (More than Energy)

The program was created with the goal of implementing, expanding, and consolidating social investment projects designed to support the community. In 2024, Copel held the second edition of the program, focused on fostering the social and economic development of women in vulnerable situations throughout the State of Paraná. A total of 199 women over the age of 18 were trained through professional development courses consistent with the current job market needs. The benefiting institutions were selected through a Public Call, made available on Copel’s website. Institutions selected in 2024 included: Cáritas Curitiba, Cáritas Ponta Grossa, Comunidade Terapêutica Rosa Mística – Ponta Grossa, and Clube das Mães Unidas – Londrina. Each institution was free to choose the courses most suitable for its audience, following the criteria set out in the public call.

Migração e Refúgio (Migration and Refuge)

GRI G4-EU24, SASB-IF-EU-240a.4

Since 2020, Copel has been developing initiatives to facilitate migrants' and refugees' access to energy services and social benefits. Therefore, the Company made informational booklets available in six languages and, starting in 2022, expanded its efforts with training, volunteer initiatives, and strategic partnerships, including collaborations with the UN High Commissioner for Refugees (UNHCR) and Cáritas Brasileira Regional Paraná. As a result, Copel participated in two editions of the UN’s Empowering Refugee Women project, establishing itself as an active agent in social and economic inclusion for such group.

Paraná is one of the states that receives the highest number of migrants in Brazil, which is why Copel strengthened its commitment to the training and integration of these individuals through the Migration and Refuge Project. In November 2024, volunteers from the EletriCidadania program participated in an initiative that supported 13 migrant women in Curitiba, in partnership with Cáritas Brasileira Regional Paraná and the IBGPEX Institute. The event covered labor rights,



In 2024, the Migration and Refuge Project involved



60 volunteers

and a total of 198 hours of volunteer work.

resume building, and access to essential services, as well as topics such as the Maria da Penha Law and gender-based violence prevention. As part of its support for financial autonomy and employability, participants had the opportunity to interview with three companies, improving their chances of entering the job market.

Iluminando Gerações (Lighting up Generations)

Launched in the 1970s, Iluminando Gerações has been a key tool for providing communities in municipalities within Copel's concession area with informative and preventive guidance on sustainability, energy efficiency, and the conscious and safe use of electricity.

Recognized as a highly relevant initiative for its contribution to raising public awareness, the program educates elementary school students (grades 4 and 5) on the rational use of natural resources and proper waste disposal. In this initiative, Iluminando Gerações benefits from the voluntary participation of Copel employees.

In 2024, the initiative reached around 87 thousand children using interactive methods such as lectures, theater plays, educational videos, and digital games.

Among the key resources offered are lectures and recreational activities held in schools, institutions, and community events. The Program also features two educational games designed for children aged 7 to 10: Se Liga and Click Esperto. These games are available for free on Google Play and can be accessed with no need for internet connection, broadening their reach and allowing students to engage with the content in an affordable way.

In 2024, the program hosted a drawing contest for children aged 5 to 10 from public schools across Paraná. With free registration on Copel's website and guidance from teachers, the contest focused on the efficient and safe use of electricity. The top winners were awarded a tablet and a computer for their schools, while other winners received painting kits.



Learn more
In addition to the in-person activities, Iluminando Gerações offers **educational materials and videos** available on Copel's website, and the playlist can be accessed on **Copel's official YouTube channel**.



Espaço Energia (Energy Space)

Copel values the preservation of its own history and that of the power sector, ensuring the safeguarding of both tangible and intangible heritage built over decades. To that end, the Company is committed to documenting and preserving its legacy, passing it on to future generations while raising awareness about the importance of energy in society.

To preserve this heritage, Copel maintains a specialized work group dedicated to digitally cataloging and conserving a vast collection that includes documents, publications, audiovisual materials, artworks, ethnographic and archaeological artifacts,

as well as historical buildings, equipment, and furniture. The collection features personal belongings of notable individuals, items related to energy technologies, and other scientific materials that tell the story of the Company and its areas of operation.

By preserving its historical heritage, Copel contributes to education, raises public awareness about the essential role of energy in daily life, promotes its efficient and safe use, and highlights sector innovations — all in alignment with the Sustainable Development Goals.

In this context, Copel maintains *Espaço Energia*, a prominent cultural space located

in Curitiba, housed in a 19th-century house, restored in 2018. Espaço Energia offers an interactive experience focused on the world of energy and its responsible use, featuring both permanent and temporary exhibitions.

The facility includes *Sala Antiga* (the “Old Room”), featuring historical curiosities about electricity; *Sala Moderna* (the “Modern Room”), which showcases innovative technologies in the sector and a scale model illustrating the path of energy; *Sala Multiuso* (the “Multipurpose Room”), dedicated to educational video displays; *Corredor da Sustentabilidade* (the “Sustainability Hall”), highlighting the SDGs through interactive games; and *Pátio das Energias* (the “Energy Courtyard”), which displays historical equipment and physical experiments for visitors. In 2024, the space welcomed 116 school groups, totaling 2,809 students.



Learn more

All visits are guided by educators at scheduled times. Admission is free and requires prior booking. **Click here** to learn more.

Management of social and environmental impacts

GRI 203-1, 203-2, 413-1, 413-2, 3-3 Material topic: Social commitment

Copel's operations inherently generate both positive and negative impacts. To enhance the positive impacts and prevent or mitigate negative ones, Copel has established governance, management, and monitoring processes for social and environmental aspects,

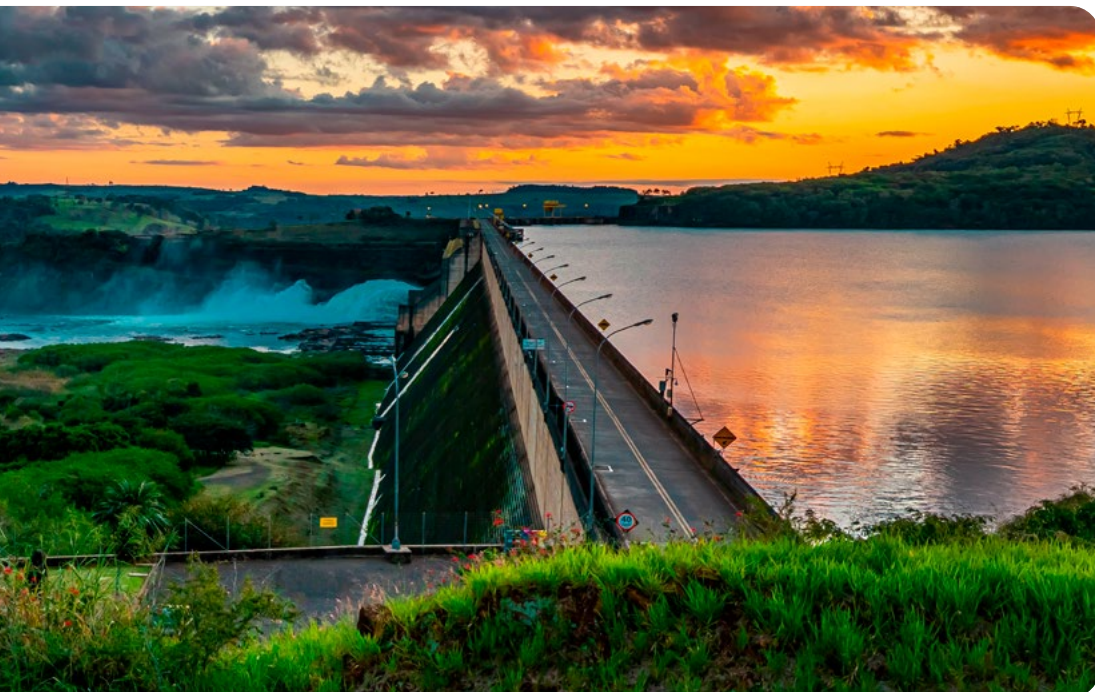
and employs highly qualified professionals to execute these activities. Regarding the management of negative impacts, the Company implements compliance programs, audits, regular training, and continuous monitoring of legal, social and environmental requirements.

Among Copel's various initiatives, it is important to highlight the Communication, Community Relations, Environmental Awareness, and Environmental Education Programs, which are crucial for ensuring transparency and social and environmental responsibility, as well as mitigating adverse effects and maximizing benefits. Additionally, the Company maintains direct communication channels with its stakeholders, including local communities ([read more on page 65](#)).

The main negative social and economic impacts may include strain on urban infrastructure and public services due to population and urban growth during the construction of new projects; interference with

economic activities involving the use of natural resources and land affected by the projects; forced displacement of communities and changes to their ways of life, including shifts in production methods, local ties, and social structures; risks of economic decline and depopulation following project completion; and disturbances to the communities near the facilities, such as increased movement of people and vehicles, risks of epidemics or infectious diseases transmission among residents and workers, and operational noise emissions.

Copel's Whistleblowing Channel, managed by an independent external company, is available to the communities with which Copel engages and to the general public whenever necessary.



The main positive impacts include income generation and job creation in the communities and municipalities where Copel operates, which strengthens the economy, increases available services, and contributes to regional development. Through its commitments and requirements, Copel strengthens the supply chain and reinforces the need for dignified working conditions. Support for social and environmental projects and private social investment benefits vulnerable populations and helps reduce social inequalities. Expanding access

to electricity improves the quality of life in communities, especially when combined with energy education and awareness, through social programs focused on energy efficiency and responsible use.

In addition to the positive impacts already mentioned, it is also worth noting the increase in tax revenue in municipalities hosting the projects, the stimulation of greater dynamism in local economies, the creation of direct and indirect jobs, and the development of the tourism and leisure sectors.

The Company has processes in place to track the effectiveness of these measures, including ongoing analysis of indicators and the identification of improvement opportunities, which are communicated across various Copel departments. Improvements are implemented in processes, policies, and regulations, and are supported by a specific training system and communicated through the Sustainability Portal and publicly available annual sustainability reports, which detail progress toward goals and results for stakeholders.

The Company establishes criteria to determine the causes and responsibilities for damages to third parties, aiming for compensation and reimbursement. Compensation requests are reviewed and granted when it is proven that they were caused by disruptions in the electrical system or failures in the services. Regarding displacement and interference in communities, Copel has preventive solutions in place to ensure compliance with strict environmental regulations.

Copel's business operations follow the guidelines of its Sustainability Policy. The Copel Occupational Safety and Health Safety Policy also applies to all operations and includes guidelines that extend to suppliers and the community, such as:



- Requiring suppliers to comply with applicable laws as well as internal occupational safety and health instructions that ensure the physical and mental well-being of the workforce, thereby promoting the protection of human rights.



- Educating and guiding consumers and the community about the risks and necessary precautions for the safe use of electricity.

Through its subsidiaries—Copel DIS and Copel GeT—, the Company adopts a strategic approach to managing social and environmental impacts, investing in environmental compensation, community

engagement, regulatory compliance and reducing operational impacts, thus establishing itself as a responsible agent committed to sustainable development.

Percentage of operations with implemented local community engagement, impact assessments and/or development programs | GRI 413-1

Type of assessment and plans for local community development	GeT % operations	DIS % operations
Social impact assessments, including gender impact assessment, based on participatory processes	0	13,0
Environmental impact assessments and ongoing monitoring	100	100
Public disclosure of results of environmental and social impact assessments	100	100
Local community development programs based on local communities' needs	6.2	5.3
Stakeholder engagement plans based on stakeholder mapping	6.2	13.0
Broad based local community consultation committees and processes that include vulnerable groups	0	100
Works councils, occupational health and safety committees and other worker representation bodies to deal with impacts	0	0
Formal local community grievance processes	100	100

Copel DIS

Copel DIS ensures social and environmental compliance and implements mitigation measures to minimize the impacts of its operations. During the implementation of new projects, the impacts are identified through environmental studies, such as Simplified Environmental Reports (RAS), Environmental Control Plans (PCA/PCAS), and Detailed Environmental Program Reports (RDPA; all acronyms in Portuguese). Specific programs are applied, including Boa Vizinhança, Construction Environmental Management, Construction Waste Management, Forest Compensation, and Preventive Archeology.



The installation of 69 kV and 138 kV power lines can impact land use due to safety buffer zones, and compensatory measures are applied, such as compensation to affected landowners. Over the past four years, more than BRL 35.7 million have been allocated for compensations. For low-voltage grids (13.8 kV and 34.5 kV), the main impacts involve risk of accidents and interference with urban greenery. To mitigate these, the company invests in compact insulated and underground lines, and the Urban Forest Program, which promotes the planned planting of trees on public roads.

Copel DIS also participates in inter-institutional committees, such as the Working Committee for Analysis of Municipal Urban Forestry Plans in Paraná, ensuring integrated social and environmental management. The Company's presence in large administrative hubs such as Curitiba, Ponta Grossa, Londrina, Maringá, and Cascavel requires ongoing planning to reduce impacts and adopt sustainable practices in its operations.

Copel GeT

The implementation of Copel GeT projects involves social and environmental challenges and opportunities, which are detailed in the Impact Study, under the topics Environmental and Social Commitment, [on page 11](#).

To minimize negative impacts, Copel GeT maintains active dialogue with communities and adopts compensatory measures, as well as initiatives to support families resettled due to compulsory displacement resulting from some projects. The company invests in local workforce training and the social and economic strengthening of communities, creating employment and increasing tax revenue.

The Social and Environmental Management Plan covers activities such as managing environmental licensing, conducting social and environmental studies, and implementing programs and actions aimed at sustainable development. The effectiveness of these initiatives is assessed through regular meetings and performance reports, ensuring compliance with environmental legislation and the mitigation of negative impacts.

The company implements programs focused on environmental education, community communication,

and technical support to communities. Compliance with environmental, labor, and safety regulations is ensured through audits, training, and continuous monitoring of regulatory requirements.

To ensure alignment with local needs, Copel GeT provides fair compensation to landowners, tenants, and caretakers affected by the projects, ensuring that the operation of projects only commences after the completion of land negotiations. The company also invests in initiatives such as the Social Communication and Community Relations Subprogram, which disseminates safety measures about energy installations, project information, and environmental programs, helping reduce social conflicts and strengthen community relations.

Another highlight is the *Boa Vizinhança* Program, which creates informative and promotional materials regarding the safe and proper coexistence with energy generation and transmission facilities, as well as broadcasts educational content on local radios to strengthen relationships with communities near Copel GeT's sites. In 2024, the company continued its communication efforts with educational campaigns and the distribution of information.

Displacement management

GRI G4-EU20, EU22

Copel is committed to ensuring that its operations respect the communities involved and uphold principles of human dignity. When relocation is needed, the Company offers full support, following technical and social criteria to minimize impacts.

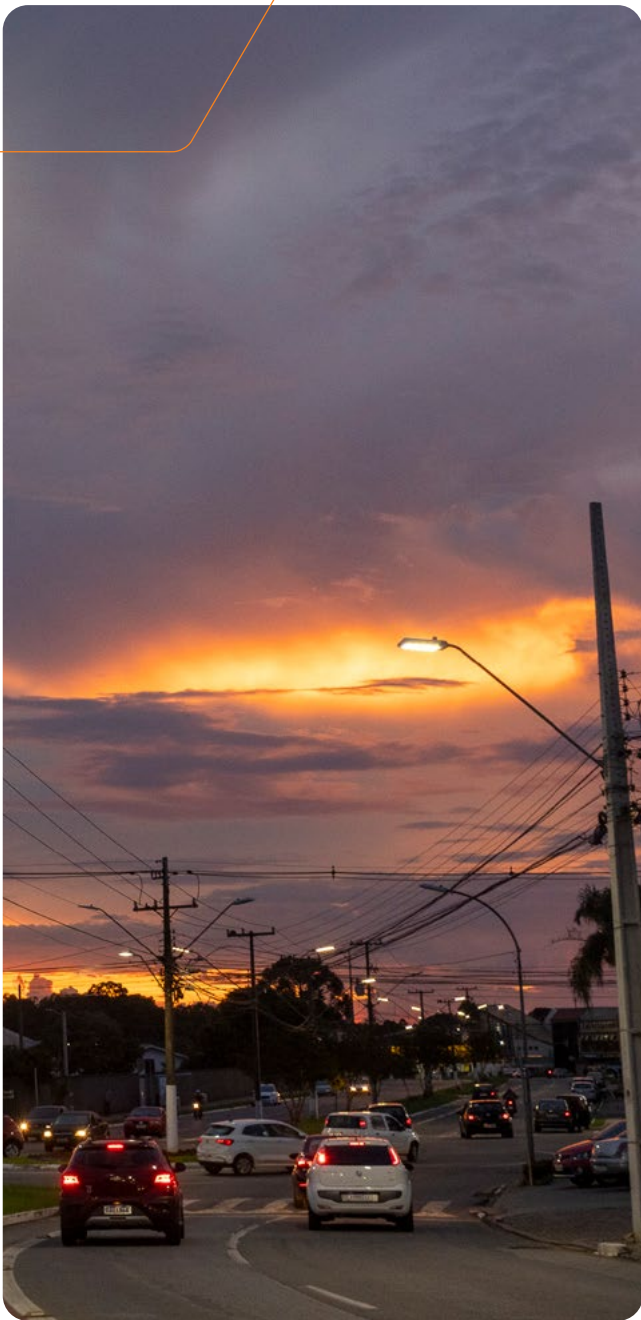
In recent years, Copel's new projects have not required the relocation of any families. The planning of Copel's power lines, whenever possible, prioritizes routes and solutions that avoid interference with inhabited areas and reduce impacts on vegetation, using advanced technologies such as compact grids and smart systems, tower height adjustments, and drone-assisted cable installation.

Copel adheres to environmental legislation and conducts social and economic surveys to map the affected communities. In the planning stage, communication channels are opened to address concerns and seek amicable solutions, including fair compensation payments or social support for families in vulnerable situations.

In the context of dam risk management, particularly in the face of extreme weather events, Copel may carry out emergency evacuations, always aiming at ensuring community safety and mitigating potential environmental and social impacts ([read more on Community safety on page 231](#)).

Number of people displaced and compensation, broken down by type of project | GRI G4 EU22

Indicator	2024
Plant expansion	0
New plants	1
New transmission lines	235
Total number of displaced people	236
Total number of people compensated	236





Relationship with the Communities

GRI 203-1

Copel plays a key role in serving over 5 million customers, promoting social and environmental initiatives aligned with international best practices and the commitments of the UN's 2030 Agenda.

In addition to the mandatory social programs outlined in the Basic Environmental Plans (PBA, in Portuguese) and environmental studies, Copel invests in voluntary initiatives, awareness campaigns on sustainability, safe energy use, and the fight against gender-based violence. Private Social Investment reinforces the commitment to the SDGs and supports social, cultural, sports, and healthcare projects.

One of the initiatives for dialogue with local communities carried out by both

subsidiaries is the relationship programmes called Community Information and Relationship Programme (Copel GET) and Community Relationship Programme (DIS), whose goal is to establish an effective communication channel between Copel and its consumers, ensuring that they are informed about the energy projects to be developed by the Company, the scope of their impacts, as well as the benefits promoted by their implementation.

Copel DIS in particular actively engages with communities directly or indirectly impacted by its construction projects through its Community Relations Program. The program provides guidance on public safety and environmental preservation, serving as a

Copel GeT and Copel DIS have dedicated organizational structures for community engagement, operating in alignment with their specific business characteristics and the territories where they operate.

key communication channel. The Program fosters engagement between Copel DIS and landowners affected by project installation, supporting negotiations and minimizing conflicts from misinformation. It also aims to promote understanding of the potential impacts, safety risks, and benefits of its implementation, while maintaining open dialogue and transparency with local communities.

The company invests in social and educational initiatives aimed at developing the communities it serves. Among the main initiatives are expanding access to energy for low-income families by expanding networks and applying social tariffs, as well as supporting projects that encourage energy efficiency, environmental education and professional training. In regions where the installation of conventional networks is not

feasible due to technical and environmental restrictions, Copel DIS develops solutions to bring energy to traditional peoples and communities, such as the installation of modern photovoltaic systems adapted to local needs.

Present in different regions of Brazil, Copel GeT operates in line with local realities, integrating socio-economic and cultural aspects into the management of its projects. As a complement to the legal requirements linked to environmental licensing, it develops voluntary actions aimed at mitigating impacts and increasing the positive effects of its activities. These include private social investments made through sponsorship and social credits, which help to strengthen the communities around the projects, promoting more sustainable and balanced relations with the territories where it operates.



Relationship with Indigenous peoples

GRI 411-1, GRI G4-EU24, SASB-IF-EU-240a.4

Copel engages with Indigenous peoples through the operations of its subsidiaries. Copel GeT maintains a relationship based on respect, cultural appreciation, and the promotion of social and economic sustainability with the Indigenous communities located around its facilities. Currently, two Kaingang communities are

directly involved: the Apucarana Indigenous Land, in Tamarana, where the 10 MW Apucarantina Small Hydroelectric Power Plant (SHPP) is located, the Barão de Antonina Indigenous Land, intersected by the 230 kV Figueira–Londrina Transmission Line, in São Jerônimo da Serra, both in Paraná.

Copel promoted the production of a booklet on dam safety in Portuguese and Kaingang, with the aim of reinforcing its commitment to the education and safety of the population.

The efforts were formalized through Conduct Adjustment Agreements (TACs) signed by the company, the relevant Indigenous communities, the Brazilian National Foundation for Indigenous Peoples (Funai), and the Public Prosecutor's Office (MPF; all acronyms in Portuguese). Initiatives within these communities are made possible through specific funds, managed in a hybrid format by joint management committees, comprising representatives from Copel and the Indigenous communities, under the supervision of Funai and the MPF. Resource allocation is determined

through dialogue with the communities, always respecting their traditions and priorities.

As part of its community engagement activities, Copel supported the development of a bilingual booklet in Portuguese and Kaingang on dam safety, created by a collective of Kaingang teachers and cultural leaders from the Apucarana Indigenous Land. The publication uses a didactic approach adapted to the Indigenous culture, reinforcing the Company's commitment to the education and safety of these communities.



Social Electricity Tariff Program

1,588

Indigenous families benefited



673

quilombola families benefited

Copel DIS, in turn, works to improve access to electricity in areas occupied by Indigenous peoples and traditional communities. Preliminary studies for selecting service alternatives for Indigenous people, quilombolas, caiçaras, artisan fishermen, and other traditional communities are conducted in accordance with the principles of Prior, Free, and Informed Consultation, as outlined in International Labor Organization (ILO) Convention 169. In 2024, three solar power systems were installed in the Ilha da Cotinga Indigenous Land, located in the municipality of Paranaguá (PR), to serve the residences of Indigenous families and community equipment within the Indigenous Land.

Throughout the year, studies on Archaeological Heritage Impact Assessment and Environmental Control were also conducted in the Cerco Grande Indigenous Land, in the municipality of Guaraqueçaba (PR), to support the future implementation

of an electricity distribution network for the Indigenous Land. The purpose of the project is to improve the quality and reliability of electric power supply for the Cerco Grande Indigenous Land, which is currently served by isolated solar power systems.

Copel DIS also registers families from Indigenous and traditional communities in the Social Electricity Tariff Program, ensuring more affordable energy consumption. In 2024, an average of 1,588 Indigenous families and 673 quilombola families benefited from the program. During this period, no human rights violations were reported regarding Indigenous peoples in Copel's operations.

Copel participates in meetings of the State Council for Traditional Peoples and Communities of Paraná, aiming at providing special attention to the needs of these communities and offering clarifications to all those attending.

Private social investment at Copel

Copel has a chapter in its Sustainability Policy dedicated to Private Social Investment, which sets out guidelines for the allocation of its own resources and tax incentives, through voluntary or mandatory contributions. This policy strengthens the connection between the Company’s social investments and the Priority SDGs, as well as best practices in sustainability and social responsibility.

Copel’s subsidiaries are responsible for reporting all donations and contributions—both voluntary and mandatory—to Copel Holding Company’s Governance, Risk, and Compliance Department. This department, in turn, communicates periodically with the Sustainable Development Committee, ensuring transparency and monitoring of the invested amounts.



Private Social Investment

Voluntary contributions		2024
Tax incentives		BRL 33,844,640.42
Community investments		BRL 1,640,178.11
Cost of volunteering during working hours		BRL 236,224.95
Donations		BRL 937,765.50
Involuntary contributions		2024
Community investments		BRL 898,775.12
Total		BRL 37,557,584.10

Contribution to public policies

GRI 203-2, 415-1, G4-EU23, SASB-IF-EU-240a.4

Copel acts as an executor of both federal and state government programs, contributing to public policies that generate significant economic and social impacts. These programs aim to improve the quality of life for vulnerable communities, driving local development through social inclusion, efficient energy use, and the promotion of sustainability. These are: Social Electricity Tariff (TSEE), *Energia Solidária* ("Solidarity Energy"), *Casa Fácil Paraná*, Night-time Irrigation and Aquaculture Tariff (TIN/TAN; all acronyms in Portuguese).

Key programs implemented by Copel include:

Tarifa Social (Social Energy Tariff) Program - TSEE

A benefit established by the Federal Government (Law 12,212/2010), TSEE offers discounts on electricity bills for low-income families across Brazil registered in the Unified Registry for Social Programs (CadÚnico, in Portuguese), up to a consumption limit of 220 kWh, provided the criteria established in Aneel Resolution 1,000/2021 are met. In 2024, around 620,000 families benefited from a total subsidy of BRL 190 million funded by the Energy Development Account (CDE, in Portuguese). The discounts granted are reimbursed to distribution companies by Aneel, using resources from the CDE.

Energia Solidária (Solidarity Energy) Program

In 2024, the program provided monthly electricity bill exemptions for about 330,000 families in Paraná. Operated by Copel and funded by the state government, this initiative supports low-income families with consumption of up to 150 kWh per month, offering financial relief and improving their quality of life.

Since its expansion in 2021, the program has become one of the state's key social policies, with an investment of BRL 130 million in 2024, benefiting nearly 1 million people in Paraná. The bill is delivered to beneficiaries with no



Copel implements government programs that positively impact the economy and society by promoting social inclusion for vulnerable communities.

charges, containing only information on consumption.

Eligibility for the program requires registration in CadÚnico and extends to elderly individuals and people with disabilities who receive the Continuous Cash Benefit (BPC, in Portuguese), as well as families with patients who rely on electric-powered medical equipment for survival — in such cases, the subsidy for consumption is increased to up to 400 kWh per month.



Casa Fácil Paraná Program:
In 2024, 2,259 housing units were served, with an investment of R\$5.8 million.

Nighttime Irrigation/ Aquaculture Tariff (TIN/TAN): In 2024, 1,630 consumer units benefited, totaling R\$25 million in subsidies.

Casa Fácil Paraná (Easy Home Paraná)

The *Casa Fácil Paraná* State Housing Program aims at making housing more accessible for families earning up to six minimum wages. This program counts on investments from Copel in electrical grid work and the installation of Service Connections (ES, in Portuguese). The program focuses on the revitalization, expansion, or renovation of urban and rural properties, as well as land regularization and urbanization in residential areas of social interest. Copel's costs are reimbursed by the State of Paraná each fiscal year, using budgetary funds from Paraná's Housing Department (agreement ended on December 31, 2024).

Night-time Irrigation and Aquaculture Tariff (TIN/TAN)

Copel facilitates the federal program, in accordance with the criteria set out in Aneel Resolution 1,000/2021, which offers discounts of 60% to 70% on electricity rates for irrigation and aquaculture activities during the reserved time period from 9:30 PM to 6:00 AM.

Communication initiatives

GRI 3-3 Material Topic: Community safety

Copel conducts communication initiatives focused on raising public awareness, promoting the safe and efficient use of electricity and addressing topics such as consumer rights, access to services, citizenship, and sustainability.

The main communication channels include agreements with more than 300 radio stations, a press office service, participation in community events, and digital content available through the institutional website, the Sustainability Portal, apps, YouTube and Vimeo video platforms, and the social network LinkedIn. Internally, communication is primarily facilitated through Microsoft

tools, with a structured intranet and the corporate social network Engage. Copel promotes initiatives focused on the SDGs, human rights, diversity, the environment, health and safety, and awareness campaigns against child labor, targeting both internal (employees, leadership, and contractors) and external stakeholders (suppliers, communities, and social institutions).

The Company also produces content aimed at innovation and sustainability, such as GDCast, focused on distributed generation, and *Energia da Sustentabilidade*, which explores SDG-

related topics in an accessible way. The monthly *Minuto da Sustentabilidade* ("Sustainability Minute") videos cover topics related to the environment, social responsibility, and governance. All materials are available on Copel's website and the Sustainability Portal.

Institutional partnerships are another important way to build communication networks with different stakeholders. Examples include partnerships with universities and social and educational institutions to promote workshops, training, and assistance programs.



Copel produces content on innovation and sustainability while strengthening institutional partnerships with universities, social organizations, and educational institutions.

Service information

When initiating energy supply with Copel Distribuição, the consumer receives the Subscription Contract, which outlines the service conditions, as well as the rights and responsibilities of the parties involved. One of the primary means of communication with consumers is the electricity bill, which details the amount and nature of the energy supplied on a monthly basis, in compliance with Aneel Normative Resolution 1,000/2021.

Copel provides detailed billing information on its website and offers a wide range of services and information through customer service channels, enabling consumers to track their consumption, understand their rights, and access products and solutions with transparency and ease.

Customer satisfaction

GRI 3-3 Material Topic: Customer satisfaction , SASB IF-EU-000.A

With over 820 thousand smart meters installed across Paraná, Copel is transforming consumer experience.

Customer satisfaction is one of Copel's strategic pillars and is continuously monitored and enhanced through policies, structured processes, and technological innovation. From planning to operation, the Company identifies risks and impacts related to customer service and experience, leading to the implementation of preventive and corrective actions to minimize failures and maximize benefits.

The guidelines for managing customer satisfaction align with corporate policies, such as the Sustainability Policy and Corporate Governance Policy, which set standards for subsidiaries, suppliers, and service providers. Compliance with these guidelines is ensured through contractual clauses, the Code of Conduct, and the Supplier Manual.



Copel systematically monitors performance and sustainability indicators, in addition to conducting environmental and social audits to ensure transparency and the continuous improvement of customer service initiatives.

The Company has set specific goals to enhance customer experience, such as scoring 80 points in Abradee's Customer Satisfaction Index (ISQP, in Portuguese) by 2025 and 85 points by 2030. In 2024, Copel scored 79.1 points. Furthermore, the Company regularly conducts surveys with consumers, especially those who have submitted complaints, to identify improvement opportunities and reduce recurring dissatisfaction.

To ensure excellence in service and regulatory compliance, Copel performs internal and external audits and maintains ISO 9001 certification for its commercial processes. Continuous training for employees includes courses on standards and best practices in

customer service, aiming to improve service quality and reduce failures. At the same time, the digitalization and automation of processes allow for quicker and more efficient responses, ensuring faster service for consumers.

Customer satisfaction is continuously measured through surveys like Net Promoter Score (NPS), Customer Satisfaction Score (CSAT), and Abradee's ISQP, which help map perceptions and needs. In 2024, the Company was a finalist in the Reclame Aqui Award, receiving a rating of 8.2 (great).

Copel also adopts a set of operational indicators to monitor service efficiency, such as Average Response Time (TE30), Billing Quality Index (IQF), and First Contact Resolution Rate (FCR; all acronyms in Portuguese). Improving customer experience involves developing digital solutions, strategic partnerships, and innovation, enhancing service efficiency and improving customer journey.

Distribution customer profile | GRI G4-EU3, SASB-IF-EU-000.A

Consumer units	2022	2023	2024
Residential	4,131,039	4,212,397	4,300,335
Industrial	69,811	69,134	68,970
Institutional (government and public services)	45,978	54,701	56,290
Commercial	431,818	440,749	448,388
Other classes (rural, own consumption, etc.)	341,882	324,103	315,248
Total	5,020,528	5,101,084	5,189,231

Customer Profile for Energy Trading | GRI G4-EU3, SASB-IF-EU-000.A

Consumer units	2022	2023	2024
Residential	0	0	0
Industrial	1,093	1,206	1,261
Institutional (government and public services)	0	0	0
Commercial	397	418	445
Other classes (rural, own consumption, etc.)	0	123	179
Subtotal	1,490	1,747	1,885

Assessment of consumer perception 2024

79.1%

Abradee Satisfaction Survey
— Residential Customers

77.6%

Abradee Satisfaction Survey —
Group A Customers

3rd place

Cier Customer Satisfaction
Survey

8.2 (Great)

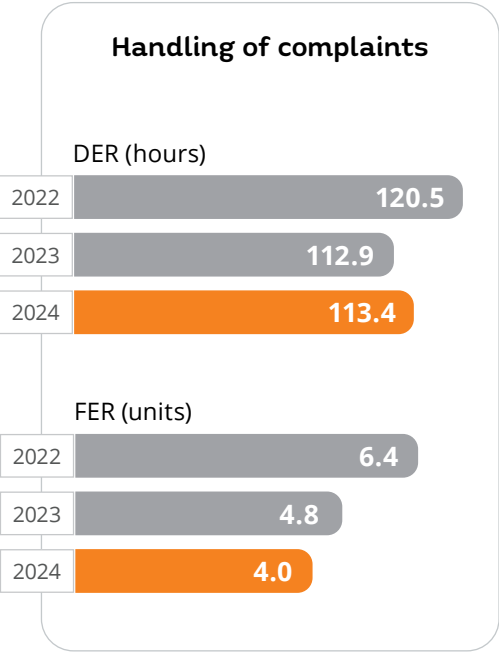
Score Achieved on Reclame Aqui

Transparency and engagement with stakeholders are fundamental to this strategy, and the Company uses satisfaction surveys, ombudsman channels, and complaint analysis to improve its services. Internal workshops, training on compliance and service quality, and alignment with technology suppliers also contribute to optimizing customer relations.

The effectiveness of these initiatives is assessed through periodic performance reports, covering indicators such as energy supply, billing, and service quality. Continuous customer feedback is gathered through informative campaigns and monitoring interactions on customer service channels. Additionally, Copel performs benchmarking with other distribution companies, adopting the best practices in the industry and ensuring compliance with Aneel regulations, minimizing regulatory risks.

Number of received complaints

Body/institution	2022	2023	2024
Copel (forthcoming)	31,875	24,538	20,714
Aneel	1,614	2,851	2,816
Department for Consumer Protection and Defense (Procon)	2,298	1,008	1,032
TJPR	7,399	8,319	11,125



20,714
complaints

resolved out of valid
complaints received

Number of complaints resolved¹

Category	2022	2023	2024
Received	91,145	95,105	99,702
Substantiated	31,875	24,538	20,714
Complaints solved in relation to the number of substantiated complaints	31,875	24,538	20,714

¹ All complaints are resolved within 30 days.

Smart grids

In 2024, Copel made significant progress in one of Brazil's largest electrical grid digitization programs, with over 820,000 smart meters already installed in 94 municipalities across Paraná, transforming consumer experience. The goal is to reach 1 million installations by early 2025. As part of the Smart Grid Program, this initiative modernizes the electrical infrastructure, enabling automatic readings, real-time monitoring, and improved energy consumption efficiency.

The smart meters, installed at no cost to customers, offer benefits such as automatic fault detection, a reduction in the need for technical visits, and promoting the use of digital billing, contributing to sustainability. In municipalities like Ipiranga, where the project started, 95% of consumers

have already switched to digital bills. It is worth noting that the new meters are compatible with solar power generation, allowing consumers to track both their consumption and any excess energy generated. The technology also prepares the system for future variable tariff models.

The program has already prevented the emission of 305 metric tons of CO₂ by reducing the need for maintenance vehicle trips, highlighting its positive impact on sustainability. Copel remains at the forefront of innovation, aligning with successful models already implemented in the European Union and the United States, promoting a more efficient and modern energy management system with sustainable investment.

The company is actively reducing complaints and enhancing customer satisfaction, ensuring increasingly closer and more efficient engagement with society

Accessibility

GRI 3-3 Customer satisfaction – Affordable electric power, G4-EU24, SASB-IF-EU-240a.4

Copel offers a variety of service channels to facilitate contact with consumers and the general public, including its website, the 0800 51 00 116 hotline, the Ombudsman’s Office, and in-person assistance at both company-owned and outsourced service points (Copel com Você) across all municipalities in its service area. To ensure accessibility, the Company offers braille electricity bills for blind consumers and website adaptations to assist people with visual and hearing impairments. In its branches, accessibility features such as tactile flooring are also available.

To help migrants and refugees access information about energy services and social programs, Copel provides a booklet in six languages aimed at this audience (🔗 [read more in Migration and Refugee Project on page 205](#)). The Iluminando Gerações (“Lighting up Generations”) Program shares content on the safe use of energy and energy efficiency with children and adolescents (🔗 [read more in Iluminando Gerações on page 206](#)).

Copel actively participates in joint initiatives with the state and local governments, such as the *Mutirões da Cidadania* and *Paraná Cidadão* programs, offering guidance on sustainability and efficient energy use, as well as in-person support to address inquiries and increase access to services.

For Indigenous communities located in environmental preservation areas or other regions where it is not possible to install the power distribution network, Copel develops projects that include new energy connections, the installation of solar power panels, guidance on efficient electricity use, and enrollment in the Social Electricity Tariff (TSEE, in Portuguese).

Copel GeT has been collaborating with various institutions to expand the reach of the TSEE and the Energia Solidária Program among Indigenous communities where the company has generation and transmission assets.

Copel provides guidance on sustainability and the efficient use of energy, acting in integrated actions with public bodies, in which it offers face-to-face assistance to clarify the population’s doubts.

Simultaneously, it has been forging partnerships to design and develop an educational program on the safe and efficient use of electricity for these communities. As a result of this partnership, a contract was signed in 2024 for a Participatory Energy Assessment, aiming at creating joint actions and solutions with the community (🔗 [read more in Relationship with Indigenous peoples on page 216](#)).

Regarding the material topic Affordable electricity, Copel DIS adheres to the Electric Power Distribution Procedures (Prodist, in Portuguese) within the Brazilian National Electric System, Module 8 – Quality of electric power distribution. To monitor power quality, Aneel sets targets and standards for the Equivalent Interruption Duration per Consumer Unit and the Equivalent Interruption Frequency per Consumer Unit indicators (DEC and FEC, in Portuguese, respectively). Copel, in turn, ensures the integrity of such process through internal and external audits, including ISO 9001 certification.

The Company also continuously monitors the performance of its distribution system, carrying out inspections and regular maintenance, as well as making investments aimed at improving service quality. It is worth noting that with the installation of new meters under the Smart Grid Project, the subsidiary brings direct benefits to consumers, such as reduced power supply interruptions and faster detection and resolution of failures by the distributing company, thus improving the quality of electric power supply.

Regarding the tariff process, it is important to note that the tariff setting aims to ensure the economic-financial balance of the concession contract and a fair rate for consumers. Moreover, the correct application of the tariff rules established by Aneel is monitored by the regulatory agency, which applies the methodology outlined in the Tariff Regulation Procedures (Proret, in Portuguese) and control mechanisms to track and validate the involved amounts.

Copel is always attentive to the evolving discussions promoted by Aneel with the public, through public consultations and input gathering. Learning is

continuous, and the Company regularly participates in discussions to ensure that any approved changes or improvements to the methodology are incorporated into its tariff projection and monitoring processes.

Furthermore, although tariff setting is the responsibility of the regulator, Copel has expressed support — through public consultations and relevant forums — for reducing subsidies related to mini- and micro-distributed generation, aiming to lessen the impact on other consumers.

The engagement of these stakeholders is crucial for building a more equitable relationship. Copel DIS has an active electricity consumer committee, which provides feedback to Copel regarding stakeholder perceptions of the tariff value, Aneel, and investors. The submission of calculation memories related to tariff processes to the committee is required by Aneel under Proret. Copel Distribuição establishes a regular agenda to discuss these matters with committee members — tariff adjustments or reviews are included in the agenda in detail, to clarify the main impacts of the measure on consumers.

Enhanced customer service

Copel Distribuição has been investing in the modernization of customer service, expanding access to its services through digital platforms. In 2024, the Copel website became the most used channel by consumers, recording over 36 million interactions, which accounted for 52% of customer interactions. The mobile app was the second most popular channel, representing 32% of interactions.

To further enhance customer service, Copel is implementing a new management system, with an estimated investment of BRL 205 million and an implementation timeline of 30 months. This modernization will streamline customer service processes, integrate various channels, and expand the range of digital services, improving customer experience.

The new system will be omnichannel, allowing customers to start a request for service on one channel and continue it on another without losing any information, ensuring greater efficiency and convenience. This initiative is part of Copel’s digital transformation, which aims to provide faster, higher-quality, and more innovative customer service.

Pix payment option

Copel has been adopting measures to facilitate payment processes. In addition to the QR Code already present on electricity bills and the option to pay by credit card, including the ability to pay in installments, the Company now also offers payment via Pix, both in

printed and digital formats. This new payment method has gained popularity, becoming the primary payment option for electricity bills in Paraná. As of January 2023, only 7% of customers used Pix. The percentage increased to 27% in 2024.



Residential disconnections

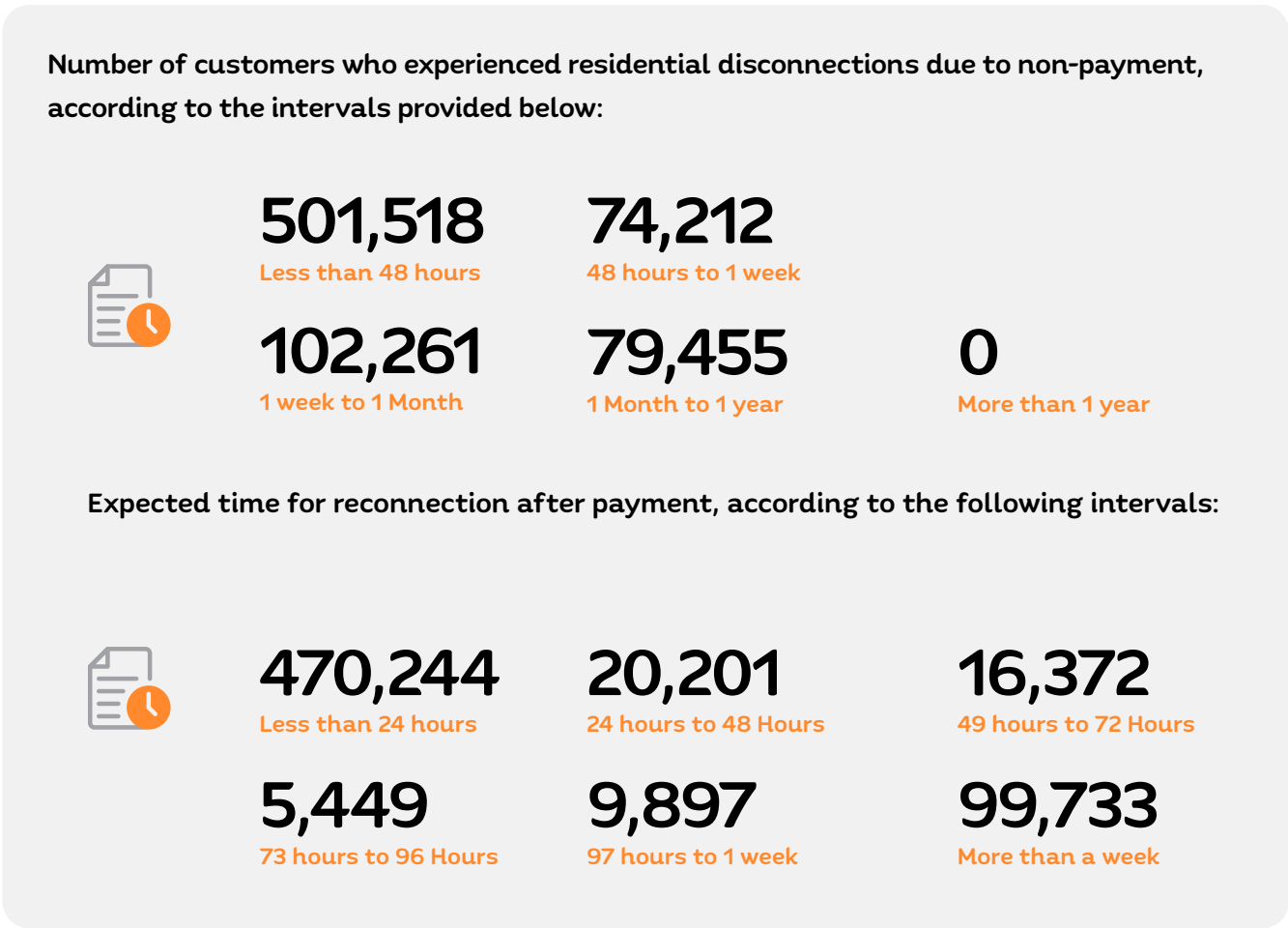
GRI G4-EU27, SASB IF-EU-240a.3

Disconnections due to non-payment at Copel Distribuição are carried out after the bill's due date, with a regulatory period of 15 days for payment before service suspension. If payment is made and no other issues are present, the reconnection order is automatically generated and executed as a priority. In 2024, 75.6% of reconnections were completed within 48 hours, ensuring greater speed in restoring service.

To minimize the impact on consumers, Copel is testing a new tool in partnership with a startup that allows customers to make payments via Pix during the electrician's visit, using a secure and fast chatbot via WhatsApp, preventing service suspension. The Company also employs preventive measures before suspending service, including billing reminders, email notifications, and installment options.

Following the pandemic, an increase in disconnections due to non-payment was observed, highlighting the importance of

initiatives that make debt settlement easier and offer alternatives to customers.



Community safety

GRI 3-3 Material Topic: Community safety, 416-1, GRI G4 EU21

The topic of Community safety is linked to the security of dams and reservoirs, as well as the prevention and monitoring of accidents involving the public and electric power. Identified as one of the most significant issues in Copel's double materiality assessment, this topic has been classified as a high priority for both the Company and its stakeholders. This classification results from the severity of the direct impacts on business, especially on the operations of subsidiaries, with an emphasis on the risks associated with dams and the electricity grid.

As part of its commitment to safety and public awareness, Copel actively participates in regional fairs in the communities where it operates, promoting educational actions aimed at sustainability, energy efficiency, safety, and the conscious use of energy and natural resources. During these events, the Company distributes informational materials and offers specialized guidance, reinforcing its role in disseminating best practices and preventing accidents.

Accidents involving the community represent negative impacts resulting from business activities or relationships. Given the risks associated with its operations, Copel adopts Occupational Safety and Health as a fundamental principle, with structured policies and standards in place to ensure the well-being of its employees and the community.

These guidelines include the Occupational Safety and Health Policy, which sets the primary directives for occupational safety and health, and the Sustainability Policy, which guides

the respect for Human Rights across Copel's sphere of influence, including its operations, supply chain, and affected communities.

Safety initiatives follow the guidelines of the Internal Accident and Harassment Prevention Committee (CIPA, in Portuguese) and are managed by the *Segurança com a Comunidade* Working Group. This group is responsible for coordinating community events, establishing partnerships with businesses, trade unions, and cooperatives, and promoting actions through sectoral safety committees.



Promotion of safety in power generation and transmission

GRI 3-3 Material Topic: Community safety, 416-1, G4 EU21

Dams are critical structures for the generation of electric power, following established construction standards in the power sector. Their condition is monitored throughout all phases of their lifecycle, from design to operation.

In addition to the Dam Safety Plan and the Emergency Action Plan (PSB and PAE, in Portuguese, respectively), the dams managed by Copel GeT comply with legal requirements. Dam safety management is carried out through these devices, along with continuous monitoring of structures, including periodic inspections, analysis of civil auscultation instrumentation, and preventive and corrective maintenance.

The PAE outlines emergency actions in the event of incidents, ensuring a coordinated and swift response; and as part of its implementation, external drills were

conducted with the population in areas potentially impacted by a dam failure. A Communication Plan, validated by the department responsible for disaster response (*Defesa Civil* in Portuguese), is developed to enhance transparency and ensure a structured and efficient communication. These drills provide vital information to downstream communities, providing them with comfort and safety.

In 2024, Copel achieved the goal of implementing the PAEs at 100% of the plants covered by dam safety legislation. Drills were held at 50 PAE meeting points with the community, involving the coordinators of disaster response teams, for 12 plants, with flood maps covering an area of influence across 28 municipalities, considering the Self-Evacuation Zones (ZAS, in Portuguese).

Promotion of safety in power distribution

GRI 3-3 Material Topic: Community safety, 416-1, G4 EU25

The primary risks associated with Copel DIS's operations involve electric shocks and other grid-related accidents. To mitigate such impacts, the company continuously invests in technology, educational campaigns, and preventive initiatives.

One of its community-focused actions is participation in Paraná Cidadão, a government program in which Copel provides guidance on sustainability, energy efficiency, and electrical safety. These events feature interactive tools, such as educational games, making learning accessible for all age groups.

The *Iluminando Gerações* Program complements these efforts by delivering information on the safe use of electricity to elementary school students and their communities in municipalities served by Copel. The initiative reinforces early awareness by promoting best practices and reducing risk (🔗 [see more on page 206](#)).

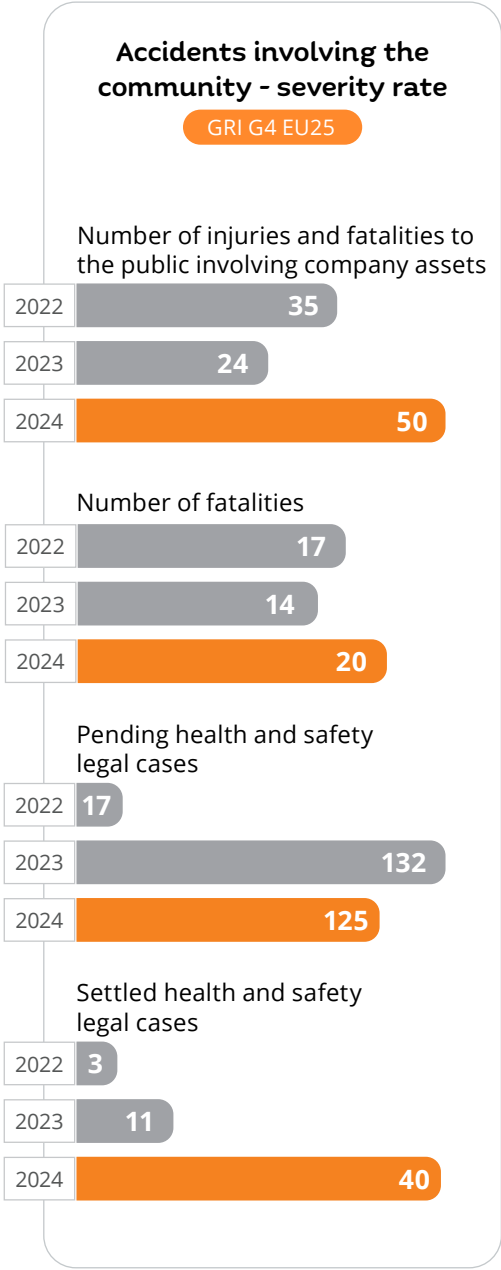
Risks can be reported and followed up through the Health and Safety Portal, where employees report critical events and propose corrective actions.

Internally, the company maintains a structured system for accident analysis and prevention, led by the Occupational Safety Department. Internal Accident and Harassment Prevention Committees (CIPAs) review incidents involving the workforce, with findings communicated through Critical Analysis Meetings (RACs; both acronyms in Portuguese) and CIPAs meetings, where implemented actions, indicator progress, and safety and quality-of-life improvements are discussed.

Copel DIS also adopts safety indicators and sets specific goals to reduce the number of accidents. In 2024, the number of accidents reported was higher than in 2023: 50 accidents in 2024 compared to 24 in 2023. The company continues to emphasize the need to intensify educational campaigns and improve safety processes, aiming at mitigating incidents.

Community safety is also reinforced through information campaigns on radio, TV, social networks and printed materials distributed at commercial establishments and events. Booklets and leaflets are available on Copel's website and at its service branches, covering topics such as energy efficiency, safety and environmental preservation.

To raise awareness, Copel organises events such as National Energy Safety Week, Community Safety Month and the Safe Energy Campaign. Specific educational actions are aimed at high-risk sectors, such as agriculture and construction, through partnerships with co-operatives and trade unions.



Energia Segura (Safe Energy)

One of the key ongoing initiatives led by the Occupational Safety team for the general public is the Safe Energy Campaign, which encompasses a variety of initiatives such as lectures for public school students, guidance for construction workers, distribution of materials through agricultural supply stores, flyer distribution in public areas, and promotion through various media channels. This initiative is part of a broader set of large-scale events, including the National Electrical Safety Week and the Community Safety Month.

Sustainable sourcing

GRI 3-3 Material Topic: Sustainable sourcing, 204-1

Copel recognizes the importance of transmitting its values to suppliers, as this fosters stronger relationships that support the sustainable development of its business.

To guide its suppliers and partners, the Company provides the Supplier Manual and the Code of Conduct, both specifically tailored to this audience. The Manual is accompanied by a statement of acknowledgment to be signed by the supplier, while the Code of Conduct is included as an annex to contracts and on the Sustainability Portal.

In 2024, Copel enhanced its supplier management processes by strengthening integrity due diligence procedures and modernizing procurement practices. The Company has two internal policies — “Rules for Procurement and Contractual Processes and Amendments” and the “Contracting Regulations.” As part of this process, the

Company enhanced Background Checking for suppliers, following established criteria. This analysis aims to understand, assess, and mitigate integrity risks in business relationships with third parties (including suppliers, service providers, consultants, partners, intermediaries, and associates), sponsorship recipients, and strategic partners (in cases of merger, acquisition, and restructuring procedures).

The Background Check focuses on verifying corporate integrity aspects through public databases — such as federal certificates, outstanding debts with the Brazilian Institute of Environment and Renewable Natural Resources (Ibama), consultation with the Ministry of Work and Employment (MTE; all acronyms in Portuguese) regarding contemporary slave labor — and Copel’s internal databases.

Another measure to promote environmental and social responsibility among suppliers is the contractual requirement that they establish and/or widely publicize accessible reporting channels, including Copel's whistleblowing channel. This practice helps identify social, environmental and labor-related irregularities during contract execution. Contracts also include explicit clauses prohibiting child labor and sexual exploitation.

Copel has also begun implementing the Coupa system, a procurement platform aimed at automating and modernizing supply and contracting processes. This tool enhances efficiency, competitiveness, and governance in procurement, aligning with global best practices. The system is being rolled out gradually to ensure a structured and efficient transition to a more dynamic and strategic procurement model.

Supplier contracting is governed by Copel's Contracting Regulations, which set forth the conditions, rules, and procedures applicable to service provision, procurement and leasing of goods, asset disposal, sponsorships, and execution of works.



Supply chain

Copel's supply chain is diversified to meet the needs of electricity generation, transmission, trading, and distribution operations, including a wide range of suppliers, such as manufacturers of materials, heavy machinery providers, and contractors, among others. At Copel Holding Company, the main supplier categories include service providers and administrative support services, such as cleaning and maintenance, security, property leasing, facility repairs and renovations, consulting firms, and travel agencies.

Copel manages its supply chain based on technical and operational criteria. The process begins with the identification of procurement

needs by the business units, followed by supplier screening and negotiations conducted by the procurement department. Before contracts are formalized, suppliers are assessed and, in specific cases, prior approval of the materials being purchased is required, which may involve a technical inspection to ensure compliance with required standards. The level of requirement varies according to the criticality of the service provided and the involved value, with more stringent requirements applied to strategic suppliers.

In 2024, the Company recorded the following data for signed contracts and active suppliers:

Contracts with suppliers¹

Indicator	2021	2022	2023	2024
Number of contracts signed ^{1 2}	2,025	1,591	1,575	1,458
Number of contracts signed with locally-based suppliers ^{1 3}	1,254	1,090	1,023	931
Number of suppliers with contracts in force ⁴	3,116	3,117	3,053	2,805

¹ There are cases of suppliers who do not require a contract to be drawn up. Smaller purchases, for example. Considering all of them, regardless of whether they require a contract, Copel had 7,373 suppliers in 2024.

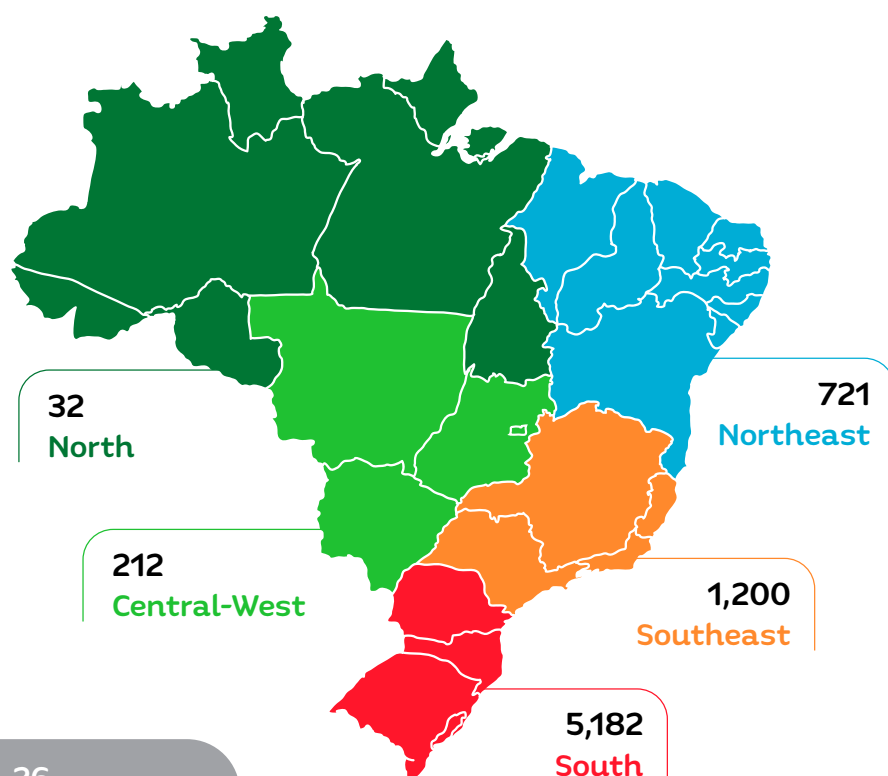
² Total terms of type 0 (creation of a new supply contract) with a signature date in the reference year.

³ Considered as local suppliers: for Holding, DIS, COM, SER and Telecom (until 2021), suppliers with CNPJs in PR; and for GeT and SPEs, suppliers with CNPJs in MT, PR, RN, SC and SP.

⁴ Contracts for material and/or service supply that were in force for at least part of the reporting year.

Most of Copel's suppliers are located in Southern Brazil, where the company's headquarters is based. The Company has suppliers in all Brazilian regions and abroad, as shown in the chart:

Total number of unique suppliers by region¹



¹ The total number of suppliers in this infographic takes into account all of Copel's suppliers, regardless of the need for a contract, which is dispensable in the case of small purchases, for example.

FLAWAL SERVIÇOS ELÉTRICOS



In 2024, contracts were signed with 931 local suppliers, representing 63.85% of the total of contracts with Copel's suppliers. Local suppliers include: suppliers incorporated in the state of Paraná (PR) for Copel Holding, DIS, COM, and SER, and suppliers incorporated in

the states of Mato Grosso (MT), Paraná (PR), Rio Grande do Norte (RN), Santa Catarina (SC), and São Paulo (SP) for Copel GeT. The total value of contracts signed with local suppliers in 2024 increased by about 93% compared to the previous year.

The table below shows total contract values (in BRL) and specific values of contracts with local suppliers over the past four years.

Value of contracts with suppliers (BRL)				
Category	2021	2022	2023	2024
Total value of contracts signed ¹	3,683,835,787.31	2,318,254,866.60	2,646,691,424.51	4,618,296,388.42
Total value of contracts signed with locally-based suppliers ^{1 2}	2,354,535,399.42	1,285,804,502.06	1,433,202,292.50	2,761,669,302.55

¹ Header value of contracts with signature date of amendment type '0' in the reference year.
² Local suppliers include: for Copel Holding, DIS, COM, SER and Telecom (until 2021), considers suppliers incorporated in the state of Paraná (PR); for GeT and SPEs, suppliers incorporated in the states of Mato Grosso (MT), Paraná (PR), Rio Grande do Norte (RN), Santa Catarina (SC), and São Paulo (SP).

Percentage of spending on locally-based suppliers | [GRI 204-1](#)

Category	2022	2023	2024
Copel Holding Company	34.6%	35.7%	43.2%
Copel Distribuição	18.6%	22.6%	19.5%
Copel Geração e Transmissão	71.3%	57.4%	53.7%



Supplier performance

To ensure the quality and compliance of the services and materials provided to Copel, suppliers are constantly monitored. Responsibility for this oversight lies with the contract’s technical management area, the contract manager, contract inspectors, and operational inspectors, supported by the Supplier Management department. In cases of non-compliance with legal or contractual requirements, the management area assesses the situation and, when applicable, imposes the penalties determined in the contract. Depending on the severity of the event, the contract may be terminated.

The Supplier Performance Index (IDF, in Portuguese) is the device Copel uses to measure specific criteria related to contract execution, covering both service and material suppliers from Copel GeT, as well as strategic suppliers from Copel DIS. The IDF takes into account key aspects that ensure the efficiency and quality of services delivered, while also strengthening the relationship between the Company and its supply chain. Such continuous monitoring allows for the identification of improvement opportunities, mitigates operational risks, and improves the reliability of business partners, aligning them with the Company’s technical, regulatory, and governance standards.

IDF Breakdown – Criteria:



Copel GeT’s Materials and Services

- Social and environmental
- Health and safety
- Competence and commitment
- Compliance with requirements



Copel DIS’s Materials

- Quality
- Timeliness
- Supplier Records



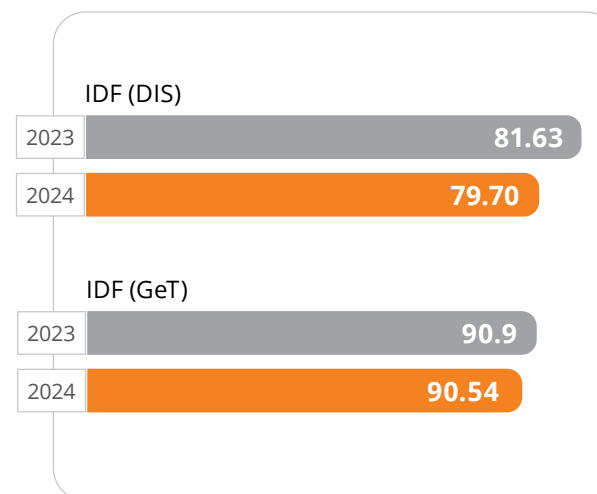
Copel DIS’s Services

- Occupational Safety
- Service Unit Production
- Sustainable Management
- Contractual Compliance
- Timely Delivery of Services

The IDF helps Copel in monitoring and understanding the status of its suppliers, serving as a key input for providing feedback, conducting meetings, and identifying necessary actions in collaboration with them. As an incentive, suppliers of strategic categories who achieve the highest IDF scores are recognized at Copel DIS’s annual Copel Supplier Awards and through the “Supplier Certification” event conducted by Copel GeT.



Below are the IDF results for suppliers:



The supplier performance is assessed based on the Lost-Time Injury Frequency Rate (LTIFR), which is specific for contractors, as shown in the table below:

Lost-Time Injury Frequency Rate (LTIFR) — Contractors

Categoria	2022	2023	2024
COM	0	0	0
DIS	5.87	5.57	4.39
GeT	12.51	6.77	4.55
Holding	0	0	0.4

Recognition – Copel Supplier Awards (Copel DIS) and Supplier Certification (Copel GeT)

To foster ESG initiatives, Copel DIS has two notable categories: Management & Sustainability and Occupational Safety. Copel GeT, in turn, incorporates sustainability-related items into its IDF evaluation criteria.

Supplier development

To promote best practices across its supply chain, Copel offers training sessions, manuals, lectures, seminars, and meetings focused on key ESG topics, such as the Human Rights guide and an event on Anti-Corruption, for supplier development.

Suppliers can access training programs made available by Copel on the [Supplier Training](#) website, among which the following stand out:

- Supplier compliance;
- Anti-Corruption: a joint effort;
- Leadership Development;
- LGPD and impact on contracts and suppliers;
- Information security in daily operations;
- **INOVAR!** A look into the future of your business;
- Innovating and creating value together;
- A conversation on sustainability (Human Rights and Climate Change);
- ESG, SDGs, and Sustainability;
- ESG Practices;
- Climate change;
- Mitigating impacts on natural habitats;
- Biodiversity;
- Human rights and diversity;
- Violence against women;
- Occupational Safety; and
- Web series: The energy of sustainability.

To improve supplier training, in 2024, Copel launched the Safety Onboarding e-learning program. This training, which complements the in-person onboarding sessions conducted by safety technicians, aims to ensure that new workers understand and apply the Company's safety standards in their work environments.

In 2024, a total of **3,988**  contractors completed the Safety Onboarding e-learning course.

Environmental and social impacts on the supply chain

GRI 3-3 Material Topic: Sustainable sourcing

The Company is attentive to the environmental and social impacts of its supply chain and adopts a preventive approach to eliminate or mitigate situations that could result in harm to its brand, image, and reputation, loss of market share and competitiveness, or legal action involving joint civil and/or criminal liability. Accordingly, regarding the supplier contracting phase, requirements are more stringent if the object of the provision involves a higher value, or when the contracting falls under an exceptional category.

Within the scope of each contract, Copel implements measures aimed at preventing or mitigating potential negative impacts.

Mechanisms that can support learning include supplier satisfaction assessments and the conduct of audits. The measures outlined in the Company's policies are grounded in applicable legislation, related regulations and evaluating supplier satisfaction, with the aim of achieving the best market practices.

Protective instruments

Throughout the supply chain management process, protective instruments are adopted with the purpose of mitigating exposure to these risks:

- In the supplier qualification assessment phase, Copel verifies whether the company meets the requirements established for the process in question and whether it has a compromised reputation, through background checks.
- When registering or participating in a contracting process, Copel's suppliers must acknowledge a statement of social responsibility, affirming that:

a) for the purposes of Article 7,

Item XXXIII of the Brazilian Federal Constitution, they do not employ individuals under eighteen years of age in night shifts, hazardous, or unhealthy conditions, and do not employ individuals under sixteen years of age for any work, except as apprentices from fourteen years of age;

b) they do not adopt labor relations

that constitute forced or slave labor, as provided for in Law 9,777 of December 30, 1998, Law 10,803 of December 11, 2003, and Federal Complementary Law 75 of May 20, 1993;

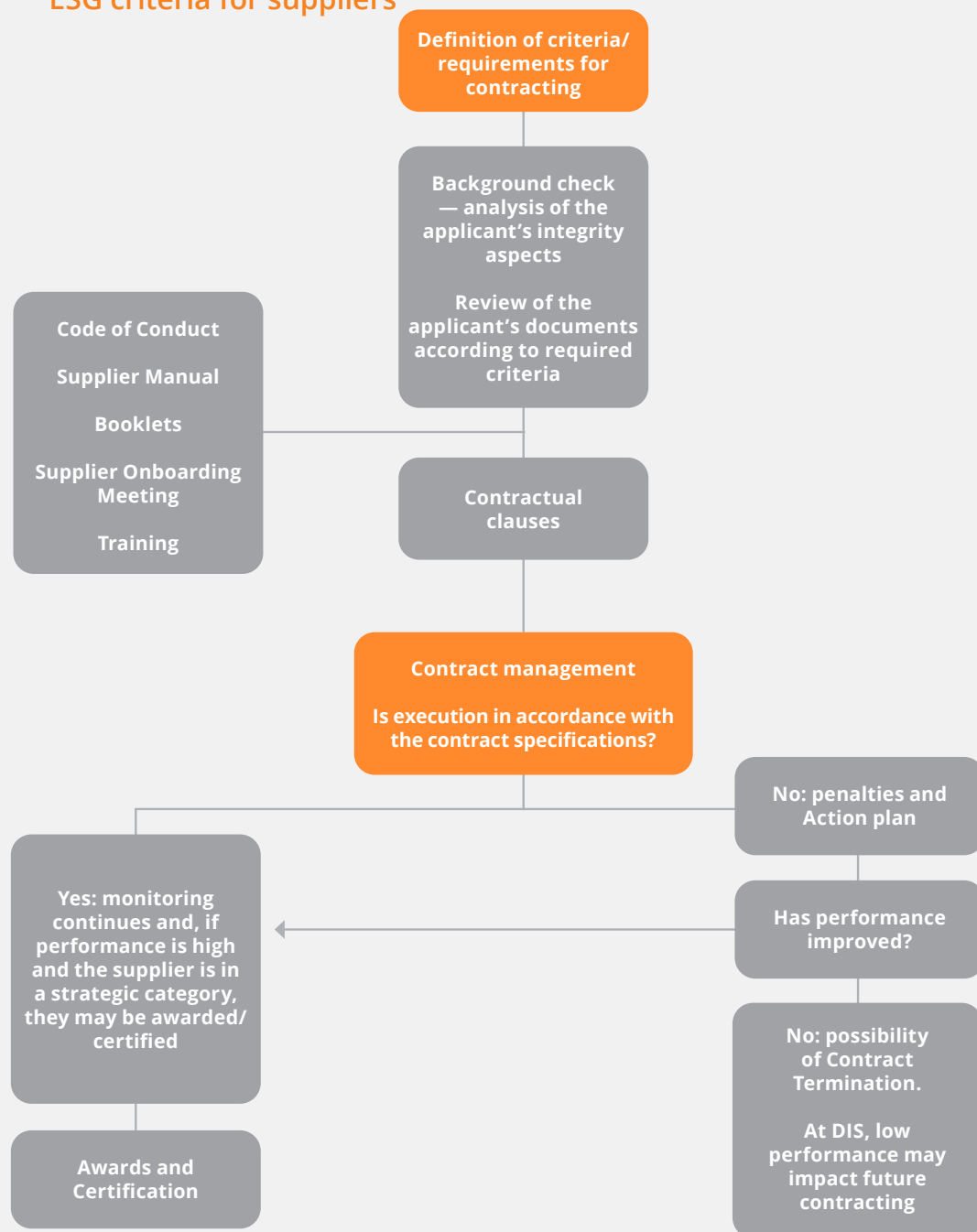
c) they respect human rights and do not tolerate any form of discrimination, complying with labor obligations and ensuring decent working conditions for employees;

d) they do not adopt environmentally

harmful practices, conducting their activities in accordance with environmental legal, regulatory, and administrative acts issued by federal, state, and local authorities, including but not limited to compliance with Law 6,938/81 (Brazilian National Environmental Policy) and Law 12,305/10 (Brazilian National Solid Waste Policy).

- **Contractual requirements are established covering** labor obligations, occupational safety and health, applicable environmental provisions, prohibition of slave labor, waste management (when applicable), and other provisions related to social and environmental responsibility. After the contract is signed, Copel's contract manager becomes responsible for monitoring and inspecting compliance with the Company's requirements with the support of inspectors. In the event of non-compliance, penalties may be applied, including contract termination, depending on the severity, impacts, and consequences of the contractual violation.

ESG criteria for suppliers



Identification, monitoring, and mitigation of human rights risks in the supply chain

GRI 408-1, 409-1, 410-1

Copel has procedures in place for classifying and assessing its activities and those of its suppliers regarding risks of human rights violation. To guide the human rights risk classification, the Company provides the [Corporate Manual for Identification and Prioritization of Human Rights Risks](#), featuring an internally developed methodology that allows for the identification of critical activities and suppliers in terms of human rights, that is, those that represent higher risk of violation based on the characteristics and nature of their operations.

Copel's assessment and Due Diligence rules are outlined in the Human Rights – Protection and Diligence internal policy. The document mandates periodic inspections within the supply chain to ensure working conditions meet Human Rights preservation standards, including a supplier inspection questionnaire. In addition to the provided for inspections, Copel monitors compliance with labor laws through periodic document inspections, ensuring that its suppliers fully meet legal requirements during the execution of contracts.

If issues related to human rights are identified, Copel's internal policy sets forth that the responsible department — whether the contracting party or the supplying company — must prepare and execute a remediation plan with measures to halt such situation and address the affected parties, promptly limiting the extent of damages to minimize losses to the community or other stakeholders as much as possible. Depending on the severity of the violation, the supplier's contract may be terminated, and the relevant legal authorities are notified.

The Company acknowledges that it may be exposed to labor and occupational safety risks and, therefore, has a series of guidelines, standards, procedures, and measures in place to prevent and mitigate them.

The Company's suppliers are required to adhere to Copel's Code of Conduct and undergo evaluation for their criticality in terms of human rights. Based on Copel's Manual, bush-cleaning and construction contracts are found to be critical in terms of human rights among the Company's direct suppliers. In such cases, safety inspections were carried out more frequently, and included specific human rights criteria in the evaluations.

Contracts executed by the Company include the requirement to comply with current labor legislation, as well as the requirement for contracted companies to be familiar with and adhere to Copel's Sustainability Policy. Contractual guidelines include the prohibition of employing individuals under the age of 18 in night shifts, hazardous,

or unhealthy activities, and of employing individuals under 16 for any work, except as apprentices starting at the age of 14.

For service suppliers with contractors, Copel holds an Onboarding Meeting. During such meeting, contractors receive guidance on safety and health, the Code of Conduct, and other important information necessary for the proper performance of the contract.

In operations that require temporary accommodation for workers, especially in rural areas for project development, the Company adopts measures to ensure dignified working conditions. Acknowledging the inherent risks of these activities, Copel seeks to prevent any situation that could be categorized as forced or slave labor.

To prevent and mitigate risks across its supply chain, Copel has established guidelines, standards, and procedures - including the adoption of its Corporate Manual for Human Rights Risk Identification and Prioritization. This framework enables the identification of critical activities and high-risk suppliers

Highlights and progress in Supplier Management in 2024

- Implementation of the new Procurement Portal, providing an integrated, user-friendly system for suppliers, facilitating the contracting process;
- Increased use by suppliers of the procedure to submit invoices directly via the PFN (portal used by the supplier, which includes the status of their registration, contract information and negotiations), simplifying and improving the relationship with partners;
- Simplification of the registration process, including data required for micro-enterprises (MEI, in Portuguese);
- Optimization of the tax review process for invoices, improving efficiency and enhancing supplier relationships.

Labor aspects and supplier evaluations

Copel ensures compliance with labor legislation and the safety of workers involved in its operations. Service suppliers with contractors attend onboarding meetings and are required to provide comprehensive documentation, such as employee list, occupational health certificates, registration forms, and other documentation mandated by the Regional Labor Office. The Company's contracts include clauses ensuring compliance with labor laws and respect for the freedom of association.

In 2024, no confirmed reports of violations related to these aspects were recorded.

Within Copel Distribuição, about 29,000 inspections were conducted on its suppliers, identifying 3,864 cases of potential negative social impacts, primarily related to occupational safety risks. All these occupational safety-related deviations were duly corrected.

People management

GRI 3-3 Material Topic: People management

People Management is a material topic for Copel, monitored, measured, and managed through the Strategic Management System (SGE, in Portuguese), under the framework of the People Management Policy and the Sustainability Policy. The topic encompasses labor practices, corporate education for all hierarchical levels, employee engagement, relations with trade unions, and, in the current context, processes related to Copel's transition to a corporation.

The Company's guidelines on the topic are outlined in the People Management Policy and further detailed in internal regulations. To assist the Board of Directors in this area, there is the People Committee (CDG, in Portuguese) ([read more on page 80](#)). In 2024, the CDG played an important

role in strategic decision-making and in addressing the challenges of Copel's cultural transformation with great efficiency.

As an initial part of such transformation, the Company has invested in leadership development through training and mentoring, with the purpose of ensuring proper succession and strong leadership in key positions. The positive impacts of the current context include faster hiring processes and Copel's benefits package.

On the other hand, the Company identified negative impacts such as the loss of knowledge and experience due to terminations under the Voluntary Redundancy Program, as well as challenges related to employee engagement.

Current workforce

GRI 2-30, 402-1



Specialized technical staff
16 years of average in-house time
44 years old on average
Strong knowledge of the business and the Company
70% hold a university degree or postgraduate qualifications (including master's and doctoral degrees)

Copel is undergoing a cultural transformation driven by its recent transition from a state-owned company to a corporation. This process, called **Novo Jeito de Ser Copel** ("New Way of Being Copel") ([read more on page 256](#)), is not merely an organizational change, but a long-term journey involving restructuring.

The cultural transformation is based on three fundamental pillars: focus on results; ownership mindset; and a more meritocratic model. The intention is to promote an organizational culture that values employee performance and commitment to strategic

goals. The new organizational structure, currently under development, seeks to reduce hierarchies and increase employee access to leadership, allowing for a more agile, collaborative, and transparent environment, as well as allowing teams greater autonomy and active participation in strategic decisions.

This transition has required greater investment in internal communication, making it faster and more effective, with the objective of engaging employees and reducing potential resistance. The Company acknowledges that this is an ongoing journey and that adapting to this new

management model requires time, effort, and engagement from those involved.

It is worth highlighting the transparent and structured communication with employees and trade union representatives.

The Company develops a change management plan for significant changes in the organizational structure, which includes prior communication to those impacted. An example of this commitment is the clause in the Collective Bargaining Agreement regarding the maintenance of sponsorship for Copel Foundation, in which Copel commits to informing the interested parties at least three years in advance in the event of any changes related to the theme.



Employees by gender and region^{1 2 3} | GRI 2-7

Gender	2022			2023			2024		
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time
Women	1,267	1	1,268	1,255	2	1,257	961	0	961
Men	4,605	2	4,607	4,544	3	4,547	3,426	2	3,428
Total	5,872	3	5,875	5,799	5	5,804	4,387	2	4,389

¹ Copel does not employ temporary workers or staff without guaranteed working hours.

² Full-time was considered a working schedule of 6 or 8 hours a day (over 30 hours a week), and part-time was considered 4 hours a day (fewer than 30 hours a week).

³ Employees include both general employees and managers.

The data refer to December 31, 2024.

Employees by working hours, employment contract and region^{1 2} | GRI 2-7

Region	2022			2023			2024		
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time
Northeast	14	0	14	7	0	7	23	0	23
Midwest	37	0	37	7	0	7	26	0	26
Southeast	18	0	18	12	0	12	15	0	15
South	5,803	3	5,806	5,773	5	5,778	4,323	2	4,325
Total	5,872	3	5,875	5,799	5	5,804	4,387	2	4,389

¹ Copel does not employ temporary workers or staff without guaranteed working hours.

² Full-time was considered a working schedule of 6 or 8 hours a day (over 30 hours a week) and part-time was considered 4 hours a day (fewer than 30 hours a week).

For the analysis of working hours, Copel classified as part-time those employees with a working schedule shorter than 30 hours a week; all others were classified as full-time. The calculation includes both employees and managers, grouped under the category “employees.”

The figures presented reflect the Company’s workforce structure as of December 31, 2024, covering the total number of permanent employees, regardless of work schedule (part-time or full-time). All employees are covered by collective bargaining agreements.

Most of the terminations under the Voluntary Redundancy Program (PDV, in Portuguese) took place in August 2024, affecting the composition of the workforce.

Below are the data on contractors:

Number of contractors by region^{1 2} | GRI 2-8

Region	2024
South	11,336
Southeast	47
Midwest	13
Northeast	322
North	0
Total	11,718

Number of contractors by employee category (Copel standard)¹ | GRI 2-8

Gender	Secondary-level technical workers	Secondary-level workers	University-level workers	Total
Women	14	1,586	40	1,640
Men	136	9,616	321	10,073
Other genders	1	4	0	5
Total	151	11,206	361	11,718

¹ Outsourced workers allocated to Copel Holding and its wholly-owned subsidiaries were taken into account.

¹ There was an increase of about 3,010 contractors between 2023 and 2024.

² Outsourced workers allocated to Copel Holding and its wholly-owned subsidiaries were taken into account.



Career plan

When discussing the career plan, the Company proposes a model that is less linear and more competency-based, emphasizing the importance of continuous learning. In this model, the responsibility for professional development is shared between the employee and the organization. Employees are encouraged to define their career aspirations and seek the qualifications needed to achieve their goals,

while the Company fosters open career-related dialogue and communicates opportunities broadly and transparently.

One of the ways to encourage employee ownership of their career development is through the mobility program, which aims to offer internal opportunities before posting vacancies to external candidates.



The career plan is competency-based, encouraging employees to pursue the necessary qualifications to achieve their professional goals.



Benefits

The  **benefits package** offered by Copel, a key element in its talent attraction and retention strategy, remains a differentiating factor following its transition to a corporation. It is worth noting that its design followed best practices and market benchmarks, while aligning with the specific characteristics of the business. Moreover, the compensation and benefits package reinforces the Company’s meritocracy and employee recognition strategy.

The remuneration and benefits package is structured to meet the needs of own employees:

Benefits | GRI 401-2, 403-6

Type	Name of benefit	Description
Healthcare	Healthcare Plan	Through Copel Foundation, Copel offers all employees the option to enroll in the Healthcare Plan. A distinguishing feature of the plan is its broad coverage. The Company covers part of the monthly premium, in accordance with the policy in effect on the employee’s date of hire. The plan includes medical, hospital, and dental care, as well as urgent and emergency services available in different states through reciprocal agreements.
	Medical leave support	Copel employees are entitled to 12 hours per year for accompanying family members to medical appointments. Additionally, they may use up to 40 hours annually to accompany registered first-degree relatives during hospitalization, surgery, or home recovery, with no need for time compensation.
	Breastfeeding rooms	Copel maintains breastfeeding support rooms at seven facilities, providing employees with a comfortable, private, and secure space to store breast milk. This initiative is part of the Bem Gestar Program and the Working Mothers Who Breastfeed strategy, and is certified by the Ministry of Health. These rooms encourage continued breastfeeding after employees return to work, aligning with the Sustainable Development Goals (SDGs), particularly in the areas of gender equality and child health.
	PlenaMente	Copel promotes mental health initiatives for employees through workshops and learning tracks that address emotional balance and well-being. The Company also provides an emergency support channel and specialized counseling in legal, financial, nutritional, and social matters for employees and their registered dependents.
	Primary Health Care	Primary health care units are available in key locations and serve as the place where employees can undergo primary and periodic health exams focused on prevention, as well as receive preventive dental care. This benefit extends to family members and does not charge co-payments.

Benefits | GRI 401-2, 403-6

Type	Name of benefit	Description
Financial	Profit Sharing Program (PLR, in Portuguese)	The practice of distributing a percentage of profits to employees on an annual basis, based on a specific agreement between Copel and Labor Unions.
	Copel Performance Bonus (PPD, in Portuguese) (variable compensation)	An annual variable compensation program designed to reinforce and recognize outstanding results at different organizational levels of the Company (Executive Board, superintendencies, departments, and divisions). The bonus is contingent upon the achievement of goals established for the cycle.
	13 th salary advance payment	In January, employees receive in advance the first installment of the 13th salary, corresponding to 50% of their compensation. Beginning in 2026, in line with market practices, this first installment will be paid either at the time of vacation or in November.
	Vacation advance	When scheduling vacation, employees may choose to receive a vacation advance. This benefit corresponds to one month's compensation, and the repayment of this amount will be deducted from the payroll in up to 10 monthly pays.
	Minimum vacation pay	One-third of the employee's compensation, granted as the constitutional vacation bonus, has a fixed minimum amount established in the Collective Bargaining Agreement (ACT, in Portuguese).
Food	Meal and food vouchers	Employees receive a monthly meal/food allowance, with the flexibility to allocate the amount between food and/or meal categories. The amount is negotiated through a collective bargaining agreement.
	Snack voucher	Employees receive a monthly snack voucher, which can be divided between food and meal cards, according to their preference. For employees who work a daily shift of 4 hours, the amount remains the same.
Private pension	Supplementary private pension plan	Through the Copel Foundation, the Company offers a supplementary private pension plan, allowing employees to build a financial reserve throughout their careers. Copel contributes in the same proportion as the employee's contribution, up to a limit of 4% of the salary. Additional contributions can be made without a contribution from the Company, and upon retirement, the accumulated reserve is converted into a lifetime monthly benefit, calculated based on the accumulated amount. On the Copel Foundation's website, employees can simulate their future benefit based on their current contribution.
	Pension education	The <i>Redefinindo Valores</i> Program provides guidance on financial planning and the transition to retirement, while the Retirement Preparation Program (PPA, in Portuguese), active since 1979, offers lectures on pension education, financial management, entrepreneurship, and quality of life.
Disability and invalidity assistance	Program for people with disabilities	Copel has a professional rehabilitation program that adapts the tasks of employees with limitations or a permanent reduction in their work capacity and provides assistance for people with disabilities, reimbursing 50% of the cost incurred in acquiring orthotics and prosthetics for employees. For dependents, a monthly amount is deducted from the employee's payroll.

Benefits | GRI 401-2, 403-6

Type	Name of benefit	Description
Parental leave	Parental leave	Copel grants an extension of maternity leave for 60 days, in addition to the 120 days determined by law, and allows for a reduction in working hours to 6 hours a day for additional 60 days, without salary impact, to encourage breastfeeding. Paternity leave may be extended from 5 to 20 consecutive days, offering greater support to the family during the post-birth period.
Education	Education assistance	A program that promotes personal and professional development, reimbursing up to 70% of the tuition fees for post-secondary, undergraduate, or graduate courses.
Sports	Atuba Run	An annual event offered to all employees to promote health, well-being, and sportsmanship. In its 21st edition, held in December 2024, the event brought together over 400 participants, including runners and walkers.
Other	Social name	At Copel, transgender individuals may request the use of their social name on badges, emails, and internal documents, with the goal of creating a more inclusive and respectful work environment. This initiative is part of the corporate diversity program, promoting cultural progress and aligning with the Sustainable Development Goals (SDGs), particularly in gender equality and emotional well-being.
	Daycare allowance	Copel offers daycare allowance to employees who have custody of children between the ages of 7 and 72 months. The amounts are negotiated and established in the collective bargaining agreement, and reimbursement is made monthly through payroll.
	Flexible working hours benefits	Copel offers benefits that allow for flexible working hours, promoting a balance between professional and personal life. These practices include a reduced work week of 40 hours, flexible hours, a time bank, and the possibility of adjusting the work schedule for employees who are students or teachers, ensuring greater autonomy and well-being.
	Part-time work option (reduced hours)	The standard 8-hour workday may be reduced to 6 hours upon employee request, subject to justification and approval by the Executive Board. This benefit entails a proportional reduction in salary.
	Remote work	Copel's Remote Work Program promotes employee well-being and work-life balance by offering two options: hybrid home office with up to four in-office days and one remote day per week, and occasional remote work, for specific situations agreed upon with management. Participation is voluntary and adapted to the needs of each department and activity. Currently, 75% of roles are eligible for the program.



Regarding the supplementary private pension plan, Copel has a structured system in place designed to encourage employees' long-term financial security. employees, whose contribution percentage is limited to 10 Pension Units (UP, in Portuguese), with deductions ranging from 2% to 4% (a 12% deduction applies to any amounts exceeding the first tier of the Actual Salary Base). Participation in the pension plans is high, with a 99.16% participation rate, reflecting Copel's commitment to providing benefits that ensure the long-term financial stability of its employees. [GRI 201-3](#)



In 2024, the employee return rate after parental leave at Copel was 100% in both cases.

Parental leave | [GRI 401-3](#)

Category	2022		2023		2024	
	Men	Women	Men	Women	Men	Women
Employees entitled to parental leave	4,607	1,268	4,547	1,257	3,428	961
Employees that took parental leave	163	55	124	40	102	39
Employees that returned to work in the reporting period after parental leave ended	163	55	121	31	102	39
Employees that returned to work after parental leave ended that were still employed 12 months after their return to work	157	50	121	31	100	39
Return to work rate	100%	100%	97.6%	77.5%	100%	100%
Retention rate	96.3%	90.9%	100%	100%	98.0%	100%

New Way of Being Copel

The New Way of Being Copel reflects the Company's cultural transformation — an ongoing, long-term journey in response to its transition to a corporation. This process aims to promote organizational change, focusing on integrating departments, reducing segmentation, and consolidating a unified company vision.

As part of the ongoing organizational redesign, the Company is reviewing all structures to achieve greater fluidity, synergy, and intelligence in its processes. In 2025, new organizational structures will be implemented, including more modern career formats such as specialized career paths, and a less hierarchical structure that allows

for closer interaction between teams and senior leadership.

Copel is redefining its employee value proposition, shifting from a traditional focus on job stability to new financial and non-financial incentives and recognition opportunities, aligned with the Organization's new reality.

New career perspectives



~1,000
job transitions over the last months



143,000+
hours of training by Unicopec

New organizational structure with a revised career design



Less hierarchical structure



Revised job titles



New career formats

Performance review model that recognizes distinct performances

Leaders who inspire the "new way of being Copel"

Voluntary Redundancy Program

1,438
beneficiary employees

56 years
average age

26 anos
average in-house time

1/3
retired or to retire within 5 years

The Voluntary Dismissal Program (PDV) was one of the main initiatives Copel in the period, covering 1,438 employees, or 25% of the total workforce.

The Voluntary Redundancy Program (PDV, in Portuguese) was one of Copel's key initiatives during the period, involving 1,438 employees, or 25% of the total workforce. The program — formally established through a Collective Bargaining Agreement with labor unions — involved selection criteria and a preparation plan that included succession planning, knowledge transfer, and process review. Implementation was carried out in phases, with most terminations taking place in August 2024. Exceptionally, some departures were scheduled through 2025 in the case of critical positions that required additional planning. One-third of PDV participants were either retirees or individuals approaching retirement.

To ensure a safe transition, a systematic knowledge transfer plan was developed for all PDV participants. This process, jointly conducted by managers and employees, used a platform to formalize and track the development of successors.

Critical and leadership positions received special attention, with oversight and monitoring by the Statutory Audit Committee.

One of the main strategies adopted was outsourcing in operational areas, combined with valuing the internal workforce. An example is the outsourcing of electrician positions, allowing these professionals to take on technical roles, replacing employees who left through the PDV. As a result, more than 500 positions were opened for internal transition in 2024, promoting opportunities for development and reassignment, which brought new prospects for many employees.

The PDV process presented challenges, such as knowledge management and the difficulty of quickly filling critical positions. As established in the Collective Bargaining Agreement, Copel plans new editions of the PDV until 2027, aligning the interests of employees and the Company.



Diversity and inclusion

Copel is committed to promoting diversity and inclusion, with clear equity guidelines in its people management policy. Copel also upholds public commitments that reinforce its actions on this front, including the UN Global Compact, the Federal Government's Gender and Race Pro-Equity Program, and the UN's Women's Empowerment Principles (WEPs). Copel is part of initiatives such as the Inclusion Pact for Black Workers in the Labor Market promoted by the Labor Prosecution Office of Paraná (MPT/PR, in Portuguese), and the Sustainable Development Goals (SDGs) Brazil – *Nós Podemos Paraná*.

In 2024, the Company intensified its efforts to increase representation in leadership roles and ensure the inclusion of underrepresented groups, advancing its commitment to increase female representation in senior management positions by 40%¹.

This progress was driven by Company policies aimed at raising the level of discussion around people and diversity. To strengthen this agenda, the topic is addressed in different forums, each with specific responsibilities:

¹ The 40% increase refers to the number of women in senior management in the year the target was set.

People Committee, a strategic body composed of board members, responsible for advising the Board of Directors; Diversity Committee, made up of heads from different business areas, focused on guiding diversity-related events and programs; People Management Department, directly involved in formulating and executing strategies and processes related to the topic. This structure reinforces Copel's commitment to inclusion and the appreciation of diversity at all organizational levels.

The inclusion of women, People with Disabilities, Black individuals, LGBTQIA+ individuals, and people from different cultural backgrounds is a priority for the Company.

Copel already implements several inclusion practices for People with Disabilities, ensuring that its physical, digital, and regulatory structures are accessible and inclusive. However, as a state-owned company, Copel faced for many years the limitation of expanding the number of People with Disabilities in the workforce due to the requirement for entry exclusively through civil service exams.

With its transition to a corporation, this restriction was lifted, allowing for diversified entry processes. A recruitment and selection process is currently being developed to include criteria aimed at increasing the hiring of people with disabilities, along with a plan to accelerate their integration into the workforce. While legal requirements reinforce this planning, what is most relevant is that Copel already has directives committed to inclusion. This not only facilitates the expansion of such practices but also supports the structural changes required within the private market context.

To promote a safe and healthy environment for all, 2024 saw mandatory trainings on psychological harassment (moral), sexual harassment, and workplace respect for full-time employees and interns, achieving 98% participation across this group.



As part of the Company's Diversity Program, which includes both direct employees and contractors, structured actions are promoted to increase equity and ensure a safe, healthy, and respectful corporate environment. Resources for these initiatives are allocated annually by Copel Holding Company and its subsidiaries and are reviewed and improved with each cycle.

Copel believes that all diversity and inclusion fronts represent opportunities and it is

committed to implementing structural and cultural changes to increase representation and create a more inclusive environment. Among preventive measures against discrimination, such as educational actions on equity in workplace relations, the Company has open channels for reporting acts that are inconsistent with the conduct expected from its employees and leadership. These efforts are further supported by meetings of the Diversity Committee, structured personnel admission processes, and ongoing training.

In terms of diversity, there is one woman on the Board of Directors, one self-declared LGBTQIA+ member and two self-declared black members. The average age was 56.

Percentage of members of governance bodies¹ | GRI 405-1

2022								
Gender	Executive Board		Board of Directors		Fiscal Council		Statutory committees ²	
	Total	%	Total	%	Total	%	Total	%
Men	6	86.0%	8	88.9%	5	83.3%	16	94.1%
Women	1	14.0%	1	11.1%	1	16.7%	1	5.9%
Age group	Executive Board		Board of Directors		Fiscal Council		Statutory committees ²	
	Total	%	Total	%	Total	%	Total	%
Under 30 years old	0	0.0%	0	0.0%	0	0.0%	0	0.0%
30 - 50 years old	5	71.0%	4	44.0%	1	20.0%	6	35.3%
Over 50 years old	2	29.0%	5	56.0%	4	80.0%	11	64.7%
Per vulnerable group	Executive Board		Board of Directors		Fiscal Council		Statutory committees ²	
	Total	%	Total	%	Total	%	Total	%
Black	0	0.0%	1	11.0%	0	0.0%	1	7.0%
People with disabilities	0	0.0%	0	0.0%	0	0.0%	0	0.0%
LGBTQIA+	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Indigenous people	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Percentage of members of governance bodies¹ | GRI 405-1

2023								
Gender	Executive Board		Board of Directors		Fiscal Council		Statutory committees ²	
	Total	%	Total	%	Total	%	Total	%
Men	6	86.0%	8	88.9%	4	80.0%	9	81.8%
Women	1	14.0%	1	11.1%	1	20.0%	2	18.2%
Age group	Executive Board		Board of Directors		Fiscal Council		Statutory committees ²	
	Total	%	Total	%	Total	%	Total	%
Under 30 years old	0	0.0%	0	0.0%	0	0.0%	0	0.0%
30 - 50 years old	5	71.0%	1	11.0%	1	20.0%	2	18.2%
Over 50 years old	2	29.0%	8	89.0%	4	80.0%	9	81.8%
Per vulnerable group	Executive Board		Board of Directors		Fiscal Council		Statutory committees ²	
	Total	%	Total	%	Total	%	Total	%
Black	1	7.0%	3	19.0%	0	0.0%	1	10.0%
People with disabilities	0	0.0%	0	0.0%	0	0.0%	0	0.0%
LGBTQIA+	0	0.0%	0	11.1%	0	0.0%	0	0.0%
Indigenous people	0	0.0%	0	0.0%	0	0.0%	0	0.0%

¹ The data on race, gender and sexual orientation was taken from the D&O Questionnaire on Form 20F. The reference date for the information is December 31st, 2024.

² The Statutory committees category covers the following committees: Statutory Audit Committee, Investment and Innovation Committee, Sustainable Development Committee and People Committee.

Percentage of members of governance bodies¹ | GRI 405-1

Executive Board			Board of Directors		Fiscal Council		Statutory committees ²	
2024								
Gender	Total	%	Total	%	Total	%	Total	%
Men	8	88.9%	8	88.9%	5	83.3%	10	83.3%
Women	1	11.1%	1	11.1%	1	16.7%	2	16.7%
Age group	Total	%	Total	%	Total	%	Total	%
Under 30 years old	0	0.0%	0	0.0%	0	0.0%	0	0.0%
30 - 50 years old	6	66.7%	3	33.3%	1	16.7%	6	50.0%
Over 50 years old	3	33.3%	6	66.7%	5	83.3%	6	50.0%
Per vulnerable group	Total	%	Total	%	Total	%	Total	%
Black	0	0.0%	2	22.2%	0	0.0%	1	8.3%
People with disabilities	0	0.0%	0	0.0%	0	0.0%	0	0.0%
LGBTQIA+	0	0.0%	1	11.1%	0	0.0%	0	0.0%
Indigenous people	0	0.0%	0	0.0%	0	0.0%	0	0.0%

¹ The data on race, gender and sexual orientation was taken from the D&O Questionnaire on Form 20F. The reference date for the information is December 31st, 2024.

² The Statutory committees category covers the following committees: Statutory Audit Committee, Investment and Innovation Committee, Sustainable Development Committee and People Committee.

Percentage of employees by employee category and gender¹ | GRI 405-1

Employee category	Gender	2022	2023	2024
Secondary-level technical employees	Men	93.0%	93.0%	93.3%
	Women	7.0%	7.0%	6.7%
Secondary-level employees	Men	73.5%	74.2%	73.4%
	Women	26.5%	25.8%	26.6%
University-level employees	Men	73.6%	72.2%	70.5%
	Women	26.4%	27.8%	29.5%
Operational staff	Men	100%	100%	-
	Women	0.0%	0.0%	-
Total	Men	78.4%	78.3%	78.1%
	Women	21.6%	21.7%	21.9%

¹ The operational career has no more occupants. Copel's transformation into a corporation has enabled these employees to migrate to other careers within the Company.

Percentage of employees by employee category, color and/or race^{1 2} | GRI 405-1

Employee category	Color or race	2022	2023	2024
Secondary-level technical employees	Black	14.8%	14.6%	3.7%
	Brown	-	-	12.7%
	White	-	-	81.8%
	Indigenous people	-	-	0.1%
	Yellow	-	-	1.7%
	Not informed	-	-	0.0%
	Total	14.8%	14.6%	100%
Secondary-level employees	Black	14.2%	14.1%	3.7%
	Brown	-	-	10.9%
	White	-	-	81.6%
	Indigenous people	-	-	0.1%
	Yellow	-	-	3.7%
	Not informed	-	-	0.0%
	Total	14.2%	14.1%	100%
University-level employees	Black	8.1%	8.6%	2.0%
	Brown	-	-	7.2%
	White	-	-	85.3%
	Indigenous people	-	-	0.1%
	Yellow	-	-	5.3%
	Not informed	-	-	0.0%
	Total	8.1%	8.6%	100%
Operational staff	Black	11.1%	11.8%	-
	Brown	-	-	-
	White	-	-	-
	Indigenous people	-	-	-
	Yellow	-	-	-
	Not informed	-	-	-
	Total	11%	11.8%	-
Total	Black	13.1%	13.0%	3.2%
	Brown	-	-	10.4%
	White	-	-	82.3%
	Indigenous people	-	-	0.1%
	Yellow	-	-	3.6%
	Not informed	-	-	0.0%
	Overall total	100%	100%	100%

¹ In 2022 and 2023, only the percentages for Blacks were reported. To maintain the historical series, consider the Black line as Black in these years, with Black being the sum of Blacks and Brown.

² The operational career has no more occupants. Copel's transformation into a corporation has enabled these employees to migrate to other careers within the Company.

People development

GRI 404-2, G4-EU14

In 2024, Copel reinforced its commitment to the continuous development of its employees through three strategic initiatives aimed at enhancing competencies and cultivating leadership: the Leadership Development Program (PDL, in Portuguese), the Women’s Leadership Program, as well as learning platforms. These initiatives are part of an effort to align employees’ professional growth with the Company’s organizational strategies.

The 2024 edition of the Leadership Development Program focused on improving the performance of the Company’s leaders, ensuring they not only manage their teams effectively but also add value to both individuals and the organization. The initiative, which engaged approximately 800 participants in its first edition (2023), recorded 344 participations in 2024, maintaining its strategic premise of aligning leadership development with corporate goals and Copel’s transformation into a modern, competitive corporation. To ensure

talent retention and recognize professional development, the Company enhanced its meritocracy practices, including a review of its Career and Compensation Structure, aiming for a balance between capacity-building and rewards for employees.

The Women’s Leadership Program made progress in offering mentorship training to 20 employees, providing opportunities for women in strategic leadership roles to connect with other leaders. The goal is to share knowledge, inspire one another, and strengthen a mutual support network, thereby amplifying the impact of female leadership within the Company. In addition to contributing to increasing the presence of women in strategic positions, the initiative supports Copel’s commitment to gender equity, as established in its people management and sustainability policies.

Copel has consolidated the Degreed learning platform as an interactive



Three strategic initiatives were implemented in 2024: the Leadership Development Program, the Women’s Leadership Program and the learning platforms

educational hub. This AI-based tool recommends personalized content and encourages employees’ self-development by allowing them to select topics aligned with their interests and corporate strategy. The platform offers courses on communication, soft skills, relationship-building, and digital transformation, as well as other content such as articles, books, and podcasts, fostering a culture of self-directed knowledge management.

Another key focus of Copel’s corporate education is health and safety. Investments



in occupational safety training reinforce the Company's culture of prevention, reduce operational risks, and promote a safer environment for all employees ([read more about health and safety on page 269](#)).

Copel implemented the Retirement Preparation and Post-Employment Program (Pape, in Portuguese), designed to support employees in career transitions ([read more on page 282](#)).

People management and workforce development actions are included in Company's main corporate risks portfolio and are periodically monitored in meetings of the Vice Presidencies, the Statutory Audit Committee, and the Board of Directors. Key performance indicators are recorded in the Strategic Management System (SGE, in Portuguese), including the Annual Training Budget – Corporate, and the Successor Development

Plan for leadership and critical roles. Copel's main initiatives for workforce development include qualification training for role-specific skill building; mandatory training for specific activities; professional enhancement training; events such as seminars, lectures, workshops, and conferences; research and development projects; and development programs with specific themes and audiences.

Additionally, Copel invested in development initiatives addressing strategic themes for the Company, such as the 1st Extreme Weather Events and Operational Safety Workshop, dedicated to discussing the impacts of climate change and the operational challenges facing the power sector under extreme weather scenarios ([read more on page 175](#)).

ESG is a key component of Copel's Corporate Education program. In addition to periodic communications, the ESG Integrated Week, held in November 2024, offered an immersive experience in the environmental, social, and governance dimensions ([read more on page 58](#)). Together with lectures and

employee engagement activities, two e-learning courses were launched: the Copel Sustainability Course – 2024 Edition, [on page 57](#); and the Human Rights Course – 2024 Edition, designed to deepen understanding of respect, inclusion, and social responsibility ([read more on page 202](#)).

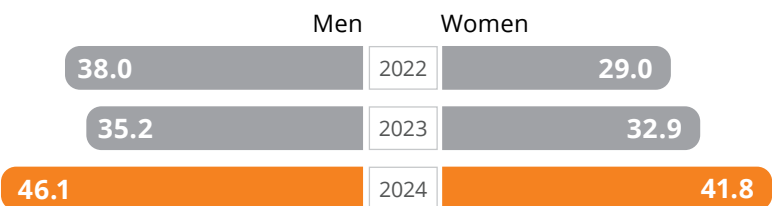
Average training hours per year, per employee¹ | GRI 404-1

Employee category	2022	2023	2024
Operational staff	24.7	27.4	-
Secondary-level technical employees	53.5	42.0	55.5
Secondary-level employees	26.8	25.2	31.2
University-level employees	40.0	46.1	53.5
Total	36.0	33.9	43.5

¹The operational career has no more occupants. Copel's transformation into a corporation has enabled these employees to migrate to other careers within the Company.

Average training hours per year, per employee¹ | GRI 404-1

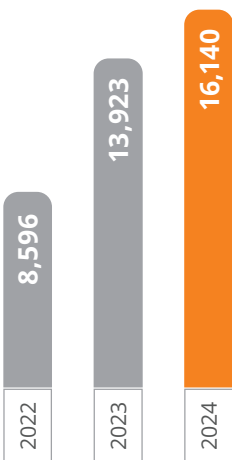
(Gender)



¹ The operational career has no more occupants. Copel's transformation into a corporation has enabled these employees to migrate to other careers within the Company.

Investment in training and development¹

(BRL million)



33% of the Company's safety professionals received formal training on human rights-specific policies and procedures. These trainings are conducted with in-house employees, who will be responsible for disseminating the information to contracted companies. (GRI 410-1)

¹ This figure takes into account general training costs, such as spending on materials, tuition fees, registration fees, hiring instructors and freight.

Performance review

Copel’s Performance Review takes place annually, recognizing the individual efforts of its employees. The initiative seeks to strengthen the organizational culture, align employee performance with the Company’s strategic goals, and reward expected behaviors and achieved targets.

Senior management’s performance is assessed by a specialized consulting firm, ensuring isonomy, transparency, and credibility of the results. In line with best

market practices, the performance of executives is reviewed using technical criteria, encouraging continuous improvement.

Employees are assessed through the *Nossa Energia* Program, which is well-established within the Company and structured to enhance professional development. The program promotes transparency and dialogue between managers and employees and supports decisions on career, compensation, and development.

At the senior management level, the performance review of the statutory bodies of Copel Holding Company and its wholly-owned subsidiaries takes place annually, as set forth in the Bylaws and the Annual Performance Review Policy for Statutory Bodies. This process complies with current legislation and follows best practices in corporate governance. It is overseen by the Board of Directors with methodological support from the Nomination and Assessment Committee (CII).

Percentage of employees receiving regular performance and career development reviews^{1 2} | GRI 404-3

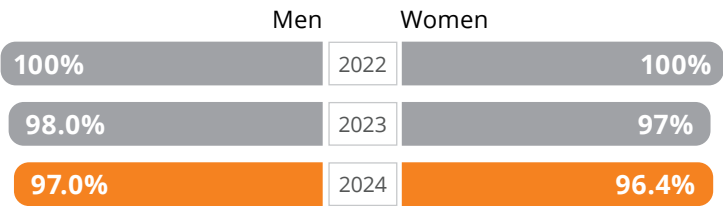
Employee category	2022	2023	2024
Operational staff	100%	100%	-
Secondary-level technical employees	100%	99.0%	98.8%
Secondary-level employees	100%	97.0%	96.4%
University-level employees	100%	98.0%	95.9%
Total	100%	98.0%	96.9%

¹ The performance review program applies to all employees, excluding those on leave, newly hired, reinstated, or absent for more than 180 days during the annual evaluation cycle. Therefore, excluding exemptions, 100% of eligible employees were evaluated. In addition, 50 employees were dismissed during the evaluation cycle as part of the Surplus Personnel Framework (QEP, in Portuguese).

²The operational career has no more occupants. Copel’s transformation into a corporation has enabled these employees to migrate to other careers within the Company.

Percentage of employees receiving regular performance and career development reviews^{1 2} | GRI 404-3

(Por gênero)



Compensation

Copel's compensation structure is designed to ensure a balance between recognition and incentive, based on two main pillars: competitiveness and financial sustainability, combining fixed and variable pay, benefits negotiated under the Collective Bargaining Agreement (ACT, in Portuguese) with labor unions, and performance-based incentive programs. This model aims to align the recognition of employees with organizational performance, fostering a culture of meritocracy and excellence.

Fixed compensation is defined by the Career and Compensation Structure (ECR, in Portuguese), which establishes salary criteria based on market practices, job position, function, and level of education. The ECR is managed by the People Management department, which defines job roles, functions, complexity levels, and rules for career and salary progression, while also offering opportunities for professional growth within the Company. The compensation model is reviewed periodically to ensure strategic adjustments that maintain the Company's competitiveness in the power sector. Benefits are established through the Collective Bargaining Agreement.

In addition, variable compensation encourages high performance through goal-oriented management, involving all employees in the achievement of challenging goals. This includes up to three main mechanisms: Profit Sharing Program (PLR); Copel Performance

Bonus (PPD); and Long-Term Incentive (ILP; all acronyms in Portuguese). These programs promote the pursuit of exceptional results, rewarding employees based on their contributions and supporting an organizational culture focused on performance and sustainable growth.

Copel promotes compensation practices aligned with its ESG commitments, reinforcing employee appreciation and its attractiveness as an employer.

Copel is currently reassessing the compensation structure across all its functional levels. The goal is to achieve economic and financial balance in the compensation and benefits offered to employees, focused on attracting and retaining talent. Regarding superintendents, the compensation structure is in its final stage and is expected to be fully

implemented by 2025. The review includes an analysis of the job structure and benchmarking against market practices, ensuring competitiveness without compromising the Company's financial sustainability.

These guidelines are tied to the People Management Policy, which outlines the commitment to balance internal and external compensation aspects.

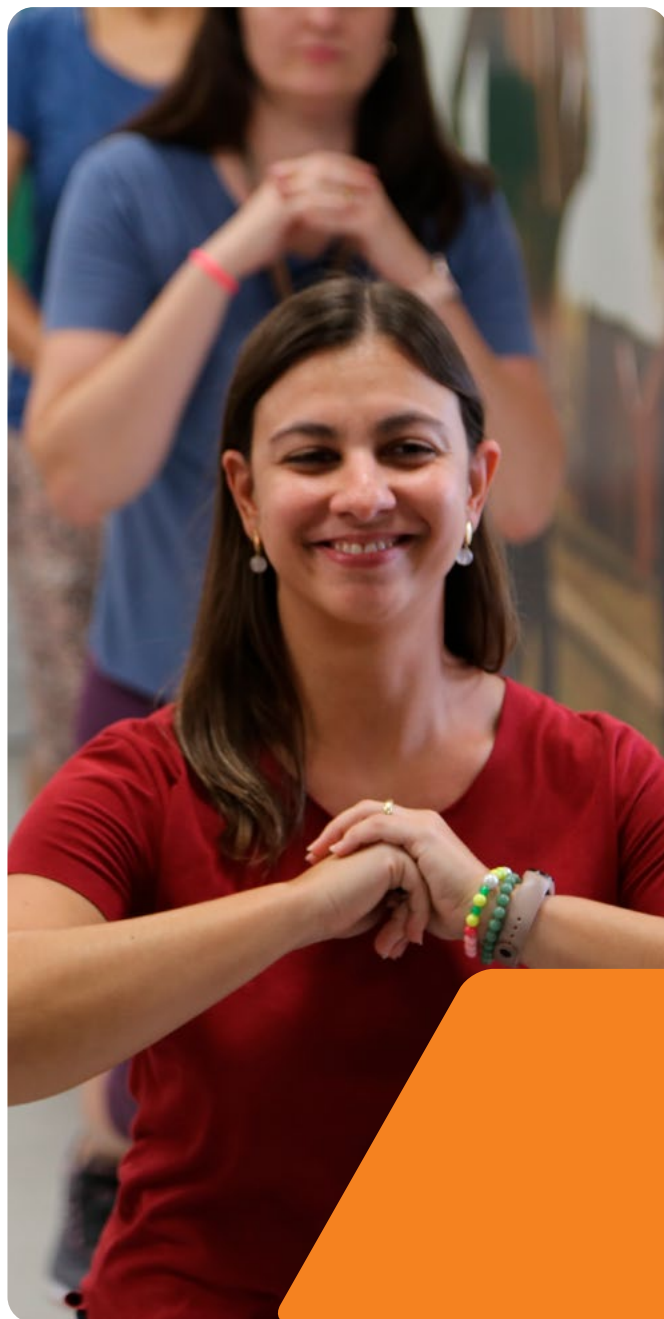
Another relevant element in Copel's Compensation Policy is the Profit-Sharing Program. For the year 2024, the proposal was submitted for a vote and approved at a meeting held by the labor unions.

In 2024, the total annual compensation of the highest-paid individual (excluding the CEO) was 31.48 times greater than the average annual compensation of the other Copel employees. For further information on leadership compensation, ([refer to page 86](#)).

Employees can share their views on compensation through the annual Great Place to Work (GPTW) climate surveys, in addition to regular meetings held between Copel and labor unions. These interactions allow employee expectations and demands to be considered in the drafting of compensation policies.

With regard to contractors, the Company has mechanisms in place to ensure they are not paid less than the current minimum wage. Therefore, Copel includes in its contracts the requirement for submission of pay slips and proof of wage payments for employees of outsourced companies. These documents are reviewed by a team of contract document auditors, supported by the SG3 tool and forensic audit services. The minimum wage used as a reference in the Company's operational units is BRL 1,412.00. [GRI 202-1](#)





Well-being, health and safety

One of Copel's strategic goals is to create a wholesome work environment in which employees and managers collaborate in a continuous improvement process to protect and promote the safety, health, and well-being of all. Therefore, Copel has specific rules and procedures in place.

The Occupational Safety and Health Policy applies to all operations and includes both direct employees and contractors. Aligned with regulatory standards, the policy ensures worker consultation and participation, guaranteeing a safe and healthy work environment. Notwithstanding, it grants

all workers—whether direct employees or contractors—the right and duty to interrupt any activity if safety measures are not fully met, thereby protecting the physical integrity of the workforce. The policy guidelines are detailed in a series of internal standards, manuals, and instructions.

The Company is committed to the continuous improvement of its Occupational Safety and Health (OSH) system, to reducing and monitoring accidents, and to promoting the safety, health, and well-being of both direct employees and contractors. Accordingly, Copel sets quantitative targets and adopts preventive and corrective measures, subject to approval by the Board of Directors.

Safety and health practices are managed by a multidisciplinary team, ensuring a cohesive approach. Systematically integrated, Copel's safety and health programs take into account regulatory, environmental, and activity-specific aspects to identify hazards, assess risks, and establish appropriate control measures, focusing on the prevention

of accidents and harm to employee health. Management includes, among other efforts, absenteeism monitoring, preventive and periodic health exams, and the tracking of accident frequency and severity rates involving both direct employees and contractors. In this sense, 100% of direct employees and contractors are covered by an occupational safety management system.

Additionally, the Internal Committee for Accident and Harassment Prevention supports risk identification and the implementation of preventive measures. Holding monthly meetings, its members are backed by Regulatory Standard NR-5, which guarantees their

autonomy to implement necessary actions. To promote a culture of care and safety, since 2022, Copel has held the Internal Occupational Accident Prevention Week (Sipat, in Portuguese) in a format that includes all Copel locations simultaneously, with hybrid lectures and in-person activities at each site.

In the event of safety violations or incidents affecting physical or mental health, employees may report them anonymously through the Whistleblowing Channel, which is operated by an external, independent company and is available 24/7 ([access the Whistleblowing Channel here](#)).

Safety at Copel Distribuição

At Copel DIS, in 2024, the annual target for the accident severity rate involving the general public was 6,000; however, the recorded figure reached 11,493, indicating the need for reinforcing mitigation strategies. The ongoing analysis of results guides the revision of preventive measures and adjustments to policies and operational procedures, ensuring that lessons learned are systematically incorporated. Strategic plan follows the BSC methodology, and management commitments are formalized through internal agreements, which unfold into specific actions led by Superintendencies and Departments, reinforcing Copel's commitment to safety and the quality of life of the communities.

Safety at Copel Geração e Transmissão

The safety of Copel GeT's dams is a topic of high relevance and impact for the company, as indicated in the update of the materiality matrix carried out in 2023. Essential for electricity generation, dams have consolidated construction standards, with conditions monitored at all stages of their life cycle, from design to operation. The legislation established criteria for classifying and formulating the Dam Safety Plan (PSB), including the Emergency Action Plan (PAE) and the Periodic Safety Review (RPS; all acronyms in Portuguese). [read more on page 232.](#)



Employees' safety and health risk management

GRI 3-3 Material topic: Well-being, health, and safety for the workforce 403-1, 403-2, 403-4, 403-7, 403-8, 403-10

DJSI/CSA

Copel adopts an occupational safety and health management system based on Regulatory Standard 1 (NR-1) of the Ministry of Labor. The Risk Management Program (PGR, in Portuguese) covers all workers, activities, and locations, identifying and mitigating physical, chemical, biological, ergonomic, and accident-related risks. It is important to note that the process includes a Risk Inventory, an Action Plan, and internal audits to ensure the effectiveness of actions. Risk assessments are carried out by Occupational Safety and Health professionals within the Specialized Safety Engineering and Occupational Medicine Service (SESMT), in collaboration with employees and the Internal Accident and Harassment Prevention Committee (CIPA; both acronyms in Portuguese).

Workplace safety is monitored through the Workforce Severity Rate (TGFT, in Portuguese), in accordance with NBR 14280. This indicator impacts the Copel Performance Bonus for executives, with financial penalties for unmet targets,

reinforcing the Company's commitment to reducing accidents.

In the event of accidents and injuries, the Occupational Safety team conducts detailed investigations using methodologies such as 5 Why's, the Ishikawa Diagram, and Root Cause Analysis. Following the analysis, specific actions are assigned to those responsible, according to their competence, to implement preventive measures such as the revision of procedures, elimination of risk sources, adoption of engineering controls, and improvements to Collective and Personal Protective Equipment.

Copel DIS, which accounts for the largest number of contractors, strengthened its safety controls in 2024. Before beginning any activities, all contractors undergo a comprehensive document audit. This process has identified irregularities such as invalid work papers and inadequate training, ensuring that only qualified professionals operate within the company.



Safety inspections are conducted regularly at Copel. Although safety teams are directly allocated within the subsidiaries, Copel is enhancing its governance and integration between People and Management and Safety. As a result, 100% of employees and workers are covered by the occupational safety and health management system. The goal is to make safety and health management more efficient, structured, and aligned with the Company's digitalization efforts, ensuring safer and more controlled work environments.

Additionally, the "Golden Rules" proficiency test was introduced, assessing reading, writing, and the ability to follow essential commands. In 2024, about 200 individuals did not pass the test, highlighting the need for rigorous screening to ensure operational safety.

Copel GeT implements a structured set of measures that includes regular inspections, safety audits, and continuous training. Furthermore, the company strengthens its governance in supplier management, ensuring that partners meet safety

requirements and follow appropriate practices for worker and environmental protection. Engagement with neighboring communities is also part of this approach, aiming at minimizing negative impacts through dialogue and social responsibility programs. At Copel DIS, in addition to face-to-face checks, there is camera monitoring and a pilot project is being implemented for an automation system with artificial intelligence, which will identify deviations in real time and send alerts to the security team for immediate action.

Work-related injuries | GRI 403-9, SASB-IF-EU-320a.1

Categoria	2022		2023		2024	
	Direct employees	Contractors ³	Direct employees	Contractors	Direct employees	Contractors
Fatalities from work-related injuries^{1 2}						
Number	0	3	1	4	0	1
Rate	0	0.18	0.15	0.27	0	0.05
High-consequence work-related injuries (except for fatalities)						
Number	0	3	0	2	6	20
Rate	0	0.18	0	1.9	0.65	1.01
Recordable work-related injuries						
Number	20	112	21	107	18	79
Rate	1.8	6.6	6.0	15.6	1.95	4.01
Number of hours worked	9,526,981	17,024,632	9,152,248	17,018,519	9,219,059	19,704,904

¹ The indicators were calculated per 1,000,000 hours worked, and no employee or worker was excluded from the calculation.

² The main types of work-related accidents involve impacts from falling objects, traffic incidents, same-level falls, and injuries from improper movements, which may result in leave of fewer than 15 days or no leave at all.

³ Workers who are not employees, but whose work and/or workplace is controlled by the Organization.

Safety training

GRI 3-3 Material topic: Well-being, health, and safety for the workforce, 403-5, G4-EU16, EU18

Copel ensures that all direct employees and contractors receive the necessary training in occupational safety and health, as outlined in its Occupational Safety and Health Policy. Training is tailored to the risks associated with the work environment and the activities performed and serves as a measure to prevent or mitigate negative health and safety impacts.

The SG3 system is responsible for the control and auditing of documentation for contractors, ensuring compliance with safety and health training requirements. Contractors participate in an onboarding training, and to perform high-risk activities, they must hold valid certificates for mandatory training courses and a valid

Occupational Health Certificate (ASO, in Portuguese).

Both direct employees and contractors participate in the Internal Occupational Accident Prevention Week (Sipat, in Portuguese), which includes lectures and educational activities focused on safety. During the event, Copel's direct employees receive internal and external training, while contractors undergo external training, except for the Safety Onboarding meeting, which is conducted directly by the Company. Furthermore, Copel promotes lectures, short courses, and other events throughout the year, reinforcing awareness of occupational safety and health in the workplace.



Training, capacity-building, and corporate education programs are focused on the qualification, improvement, and development of direct employees, addressing both technical and behavioral aspects based on current roles and future needs. Capacity building is provided at no cost,

conducted during working hours, and complies with the requirements of national regulations and ILO conventions ratified by Brazil. Training effectiveness is verified through reaction assessment.

For contractors, training is conducted in accordance with contractual requirements and based on the Hazard and Risk Assessment for the specific activity to be performed. Additionally, all contractors undergo the Occupational Safety Onboarding training, which addresses specific safety topics related to the risks of their functions.

In 2024, all workers exposed to occupational risks received the required training. A total of 804 maintenance workers (100%) participated in the relevant safety and health training sessions.



Health and quality of life

GRI 3-3 Material topic: Well-being, health, and safety for the workforce, 403-6

Copel's Health and Quality of Life Program is structured around four pillars—physical health, psychological and emotional health, social well-being, and financial well-being—aligned with the guidelines of the World Health Organization (WHO). Focused on promoting a healthy and safe work environment, the initiative takes an integrative approach, addressing the various factors that impact the health and well-being of employees and their families.

The program is directly aligned with the UN's Sustainable Development Goals, with an

emphasis on SDG 3 (Good health and well-being) and SDG 8 (Decent work and economic growth), particularly target 3.4, which focuses on promoting mental health and well-being, and target 8.8, which aims to ensure safe and healthy working environments.

Health initiatives are continuously coordinated together with occupational safety engineering professionals. Based on the analysis of identified and recorded environmental hazards and risks within the electronic management system, the Program establish the

Copel has a Health and Quality of Life Program structured around four essential pillars: physical health, psycho-emotional health, social well-being, and financial well-being.

requirements and frequency of medical evaluations, the types and intervals of complementary examinations, and the corresponding medical-administrative protocols to prevent, monitor, and diagnose early changes in employees' health status—particularly those arising from the nature of their work—as well as to determine each individual's physical and mental fitness to safely perform their duties, that not only for themselves but also regarding their colleagues, third parties, and the community, while also addressing conditions that may impact their future work capacity and quality of life.

The health and quality-of-life management strategy involves the integration of health and wellness data, including employees' epidemiological profiles, associated risks, health complaints, illness profile, absenteeism monitoring, medical leave, and certificates with critical diagnoses that may impact occupational safety. The use of dashboard systems facilitates data cross-referencing and information analysis, enabling greater accuracy in designing health and quality-of-life initiatives and practices, aligned with the program's core pillars.



Promotion of physical health

Copel promotes the health and well-being of its employees through an integrated approach that combines preventive , assistance, and professional rehabilitation actions. These initiatives aim to anticipate illness risks, monitor employees' health, and provide ongoing support for quality of life in the workplace.

In the preventive front, Copel conducts periodic occupational health exams to monitor employees' health and detect potential work-related impacts. As a complementary measure, it offers second-stage preventive exams, which include screenings for heart disease, gynecological, prostate, colorectal, and eye conditions, at no additional cost to employees.

The Health Management Dashboard enables the monitoring of absenteeism and identification of critical illnesses, allowing for early and targeted interventions. Special medical exams are conducted when there is a suspected illness that could impact safety or work activities, ensuring that employees with restrictions receive appropriate support.

The Company also invests in health promotion and disease prevention by offering a healthcare plan to employees and their dependents, with comprehensive coverage of medical, dental, and pharmaceutical services. Annual influenza vaccination is promoted with widespread coverage and decentralized administration, resulting in 60% participation in 2024. Furthermore, the Primary Health Care Unit (APS, in Portuguese)—with offices in Curitiba, Maringá, and Londrina, and digital units in Irati, Foz do Iguaçu, Francisco Beltrão, and Pato Branco—focuses on continuous care and the prevention of chronic illnesses, addressing topics such as mental health, diabetes, hypertension, and smoking.





In 2024, engagement in physical health initiatives rose to 78.9%, surpassing the 77.4% recorded in 2023, demonstrating increased participation in health promotion practices.



Encouragement of physical activity and healthy habits is part of Copel's commitment to quality of life. The Company organizes events such as the Atuba Rustic Run, offers partnership with gyms and restaurants, and maintains a Fitness Room at its headquarters, where Pilates, functional training, muscle strengthening, and jujitsu classes are offered. In 2024, two gamified health challenges were held, engaging 28% of employees and encouraging healthier habits through the initiatives Desafio Volta ao Mundo ("Around the World Challenge") and Energia que Contagia ("Energy That Spreads").

In addition to preventive actions, Copel maintains intervention and treatment programs, such as the Occupational

Restriction and Rehabilitation Program, which supports the reintegration of employees with physical or mental limitations into new roles compatible with their capabilities. The Hearing Conservation Program protects workers exposed to high noise levels, while the Weight Control initiative monitors employees with obesity through the Slim Pass, a multidisciplinary program involving endocrinologists, nutritionists, and psychologists.

The Management of Medical Leaves is overseen by a multidisciplinary committee that monitors employees on medical leave, providing support and ensuring that processes are carried out in a standardized and efficient manner.

Promotion of mental health

Another strategic pillar at Copel is the care for the mental health of its employees, promoting initiatives that strengthen emotional well-being and quality of life in the workplace. Since 2021, the Company has maintained the *PlenaMente* Program, structured around three main axes: psycho-education, specialized support, and psychological and emotional health management. With actions aimed at prevention, strengthening, and preserving mental and emotional health, the program is available to all employees, consolidating

the organizational culture of balance and well-being.

In the psycho-education axis, Copel encourages self-awareness, personal and professional development, as well as the adoption of a healthy lifestyle. The initiatives include workshops, lectures, educational content, and learning tracks that contribute to raising awareness of the importance of balancing personal and professional life.

To expand support for employees, in 2024, a 24/7 psychological emergency hotline was implemented, operated by professionals specialized in urgent and emergency mental health situations. The service, available at no cost to employees and dependents, guarantees confidentiality and security in the assistance provided.

The Company also offers another relevant program focused on mental



PlenaMente

gestão
de gente
Qualidade de Vida

health, the Substance Abuse Treatment and Prevention Program, which promotes the prevention and treatment of psychoactive substance and alcohol use, assisting employees who require specialized follow-up. The initiative offers medical and psychological treatment, with full coverage provided by the Company, including psychiatric hospitalization when necessary. Furthermore, Copel's healthcare plan offers free virtual psychotherapy and a network of accredited professionals specializing in psychology and psychiatry, ensuring continuous support for employees and dependents.

In terms of psychological and emotional health management, the Company monitors organizational factors that may impact the mental health of its employees. The monitoring includes analyses of absenteeism due to psychological issues, tracking of critical diagnoses in periodic exams, and participation in support programs.



As a result of the progress made in initiatives related to psycho-emotional health, in 2024, engagement in these actions reached 41.5% of employees.

Support for social and financial well-being

Copel promotes the balance between personal and professional life for its employees through initiatives focused on social well-being and financial education. In 2024, the Company's efforts resulted in 23.6% employee participation in social well-being initiatives and 28.3% in financial well-being programs, reflecting the engagement and relevance of these practices for employees.

In the social well-being axis, Copel held the 10th edition of Family Day, with virtual events on mental health, technology addiction, and conscious parenting, in addition to in-person meetings at 26 Company locations, expanding employee and family member participation.

The *Bem Gestar Program* advanced in promoting the reconciliation of motherhood and career, providing support for pregnancy, active fatherhood, and breastfeeding. With the inauguration of two new breastfeeding support rooms, the Company now has seven well-equipped spaces to ensure adequate infrastructure for working mothers.

Redefinindo Valores Program

Copel has integrated social initiatives into its Strategic plan by promoting inclusion, community training, and educational support. An example is the *Redefinindo Valores* ("Redefining Values") program, which in 2024 expanded its activities, including a lecture on personal Strategic plan, the publication of quick tips on the internal +Saúde platform, and the delivery of pension education activities in partnership with Copel Foundation. It also began offering individual mentoring sessions with specialists on investment and financial balance, providing more personalized support to employees.

Launched in 2023 as part of the Quality-of-Life Program, its goal is to promote employees' financial well-being and economic sustainability. Since its inception, the program has offered targeted learning tracks, informational content, and tools focused on financial education, encouraging planning and conscious management of resources for personal and family financial independence.



Copel reinforces its commitment to inclusion by providing support to employees or their dependents with special needs through the Disability Assistance Benefit.

The commitment to inclusion is also reflected in the support provided to employees with disabilities or those with dependents with special needs. Copel offers the Disability Assistance program, which subsidizes orthotics, prosthetics, therapies, and materials not covered by the health plan, ensuring a better quality of life for beneficiaries. A parents support group named Grupo de Apoio de Pais Copelianos was also created, providing a space for support and sharing experiences for families with children diagnosed with Autism Spectrum Disorder (ASD), promoting knowledge and the exchange of information about treatments and coexistence practices.

To prepare its employees for career transitions, Copel maintains the Retirement Preparation and Post-Employment Program (Pape, in Portuguese), which encourages personal and professional planning for employees leaving the company. In 2024, the program's initiatives were directed at employees who joined the Voluntary Redundancy Program, including four hybrid events covering topics such as holistic health, longevity, personal and professional strategic development. To recognize the trajectory of employees who have contributed to the Company's history, the digital book "Eu fiz parte dessa história" ("I was part of this history") was created, gathering stories and experiences of professionals who have been part of Copel.

In the field of financial education, the Company launched the Redefinindo Valores Program, focused on economic sustainability and financial independence planning for employees and their families. In 2024, lectures on personal Strategic plan and pension education events were held in partnership with the Copel Foundation. One of the program's highlights was the offer of individual mentoring with investment and financial balance experts, providing personalized support and strategic guidance for employees.

Relationship with labor unions

GRI 2-30

Copel DIS fosters a balanced and constructive relationship with the 18 labor unions that represent its workforce, ensuring its employees' right to freedom of association. These principles have guided the Company's actions, especially during the process of transformation into a corporation.

The Collective Bargaining Agreement (ACT, in Portuguese), which covers 100% of workers and has October as base date, defines aspects such as salary adjustments, benefits, working hours, overtime, vacation, Copel

Foundation, and the Voluntary Redundancy Program. The latest ACT was negotiated over five months and approved in January 2025, ensuring that all changes were widely discussed and agreed upon.

Among the notable commitments made during Copel's transformation into a corporation is the maintenance of at least 95% of the workforce in the second year and at least 90% of employees each year until the fifth year.



APPENDICES

- Supplementary disclosures
- GRI and SASB content index
- Performance regarding the SDGs
- TCFD - Task Force on Climate-related Financial Disclosures
- Limited Assurance Report
- Corporate information
- Credits



Interactive
summary

SUPPLEMENTARY DISCLOSURES

Environmental commitment

Materials used by weight or volume¹ | GRI 301-1

Copel Distribuição (DIS)	2022	2023	2024
Aluminum conductors	8,556.9	9,406.7	8,216.0
Coper conductors	282.0	192.9	102.0
Concrete crossarms	4,851.9	4,818.2	4,867.0
Polymer crossarms	95.2	84.2	95.0
Operation equipment	691.7	390.6	576.0
Iron	1,581.8	1,489.7	2,078.0
Insulators	1,936.8	1,906.0	1,836.0
Energy meters	580.7	383.4	260.0
Concrete poles	170,549.2	173,231.8	167,944.0
Fiber poles	635.6	571.0	412.0
Current transformer	166.0	166.8	229.0
Network transformer	4,715.3	4,769.0	5,948.0
Total	194,643.2	197,410.2	192,563.0

Copel Geração e Transmissão (GeT)	2022	2023	2024
Aluminum	884.0	476.9	472.4
Copper	3,233.8	4,467.7	6,389.0
Electronic components	2,869.0	2,682.5	2,528.7
Contaminated materials	17,710.5	2,092.2	7,143.5
Miscellaneous operation equipment	520.0	33.2	1,144.2
Iron and steel	3,372.6	5,745.3	5,332.4
Lighting	886.2	687.9	484.2
Insulators	410.1	509.29	929.2
Wood	25.0	0.0	78.0
Insulating oil	840.0	5,640.0	10,060.0
Lube oil	5,961.3	5,592.3	150.5
Paper	146.1	81.4	58.6
Transformers	-	200.0	0.0
Polymers	4,139.3	5,058.8	3,104.6
Glass and porcelain	26.6	225.3	1.1
Total	41,024.6	33,492.7	37,876.4

¹ Only wood and paper are renewable. All materials are acquired from external suppliers.

Energy consumption within the Organization (GJ) | GRI 302-1

Category	2022	2023	2024	Δ 2023/2024
Non-renewable fuels	517,132.9	546,641.9	124,649.7	-77.2%
Gasoline	2,452.6	2,810.6	2,401.9	-14.5%
Diesel	103,204.6	102,851.9	83,286.2	-19.0%
LPG	0	1,208.0	1,188.8	-1.6%
Coal	-	-	37,772.8	-
Renewable sources	36,886.1	37,751.9	32,212.1	-76.2%
Biodiesel (B100)	12,085.2	12,491.9	12,296.1	-1.6%
Ethanol	24,173.8	25,260.0	19,299.8	-23.6%
Anhydrous ethanol	627.1	0	616.1	100.0%
Electricity consumption	187,316.7	135,102.8	94.338,0	-30.2%
Electricity sold	70,487,895.3	71,393,076.0	76,626,000.0	7.3%
Total energy consumption	-69,746,559.6	-70,673,579.2	-76.531.662,0	8.3%

Water withdrawal by source | GRI 303-3, Sasb-IF-EU-140a.1

Water withdrawal (ML) ^{1 2 3 4}	2022	2023 ⁵	2024
Surface water	94,805.3	102,491.2	121,763.7
Groundwater	39.9	185.1	25.8
Third-party water	84.7	114.8	84.9
Total water withdrawal	94,929.8	102,791.0	121,874.3

¹ No water is withdrawn from water-stressed areas.

² Withdrawal of groundwater and third-party water is measured by water meters.

³ The water withdrawal data consist solely of fresh water (total dissolved solids ≤1,000 mg/L).

⁴ The Company does not withdraw seawater nor produce its own water.

⁵ An adjustment was made to the information on surface water abstracted in 2023, from 85,264.5 ML to 102,491.2 ML, due to an adjustment in the measurement methodology for the operational consumption of the GBM Plant (GRI 2-4).

Water discharge by source | GRI 303-4, Sasb-IF-EU-140a.1

Water discharge (ML) ^{1 2 3}	2022	2023 ⁴	2024
Surface water	94,805.3	102,491.2	121,763.0
Groundwater	31.9	148.0	20.6
Third-party water	67.7	91.8	67.9
Total water discharge	94,904.9	102,731.0	121,852.2

¹ No water is discharged in water-stressed areas.

² Water disposal data consist solely of fresh water (total dissolved solids $\leq 1,000$ mg/L). Moreover, the Company does not discharge seawater or internally produced water, as there is no water withdrawal or production in these categories.

³ The Company's use of surface water is non-consumptive, i.e. water is used in operations, passing through the turbines, and then returned to its original body of water without altering its properties. Consequently, no treatment is required for discharging this water, justifying the indication of the same volume for untreated discharge. Untreated discharge complies with Conama Resolution 430/2011.

⁴ An adjustment was made to the surface water discharge information for 2023, from 85,264.5 ML to 102,491.2 ML, due to an adjustment in the measurement methodology for the GBM plant's operational consumption (GRI 2-4).

NO_x, SO_x, and other significant air emissions (t)^{1 2 3 4} | GRI 305-7

Category	2023	2024	2024/2023	Meta 2027 ⁵
NO _x	5.0	9.5	90.8%	0
SO _x	0.3	0.5	71.6%	0
Volatile organic compounds (VOC)	1.4	1.3	- 4.7%	ND
Hazardous air pollutants (HAP)	0.0	0.01	-	0
Particulate Matter (PM)	0.3	0.2	-20.0%	0
Other standard categories of air emissions identified in relevant laws and regulations	0.0	3.2	-	ND

¹ Data refer to fleet emissions.

² In 2022, NO_x and SO_x emissions were not measured as the Figueira Thermal Power Plant operated only in testing phase.

³ With the hibernation of the Figueira TPP and considering the Carbon Neutrality Plan by 2030, Copel's target is to reduce its own GHG emissions, and zero industrial emissions of NO_x, SO₂, and particulates.

⁴ There are no emissions of persistent organic pollutants (POP).

⁵ The target set by Copel is to zero atmospheric emissions of NO_x, SO_x and PM and hazardous air pollutants (Hg, Cd, Pb, BTX,) from power generation operational activities by 2027.

Operational sites owned, leased or managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas

GRI 304-1

Hover over the icons



Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area): Terrestrial ecosystem

Covering parts of the environmental protection area	Biodiversity value	Size of operational site in ha	
		Full protection conservation units	1.05
	Includes parks (national, state and municipal), wildlife refuge, RPPN, ecological station and ecological reserve	Full protection conservation units	3.43
		Buffer zones of integral protection conservation units	6.59
	It includes state and national parks, wildlife refuges and ecological stations.	Buffer zones of integral protection conservation units	20.02
		APCBs - Priority Areas for the Conservation of Atlantic Forest Biodiversity	198.55
	APCB Atlantic Forest	APCBs - Priority Areas for the Conservation of Atlantic Forest Biodiversity	29.14
		APCBs - Priority Areas for the Conservation of Cerrado Biodiversity	5.6
	Cerrado APCB	APCBs - Priority Areas for the Conservation of Cerrado Biodiversity	1.01
		Sítio RAMSAR – ESEC Guaraqueçaba	0.01
Within the boundaries of the protected area		RAMSAR site - ESEC Guaraqueçaba	0.17
	Guaratuba State APA	RAMSAR site - ESEC Guaraqueçaba	0.46
		APCBs - Priority Areas for the Conservation of Atlantic Forest Biodiversity	0.67
	APCB Atlantic Forest		

Geographic location: State of Paraná and São Paulo



Biodiversity value (Attribute of the protected area): Full protection conservation units

Adjacencies to the environmental protection area	Biodiversity value	Size of operational site in ha	
		Assis Ecological Station	37478.98
	Inserted in the SNUC	São Carlos Ecological Station	
		Mata do Jacaré Ecological	
		Vila Velha State Park	
		Guartelá State Park	
		Pau Oco State Park	
		Penhasco Verde State Park	
		Rio Guarani State Park	
		Pico Paraná State Park	
		Vale do Codó State Park	
		Augusto Ruschi Municipal Park	
		Ilha Grande National Park	
		Saint Hilaire Lange National Park	
		Iguaçu National Park	
		Campos Gerais National Park	
		Guaricana National Park	
		Apiáí Biological Reserve	
		Rio Tibagi Wildlife Refuge	
		Mono Castro Wildlife Refuge	

Label



Acquired/leased



Areas managed by the organization



Owned areas



Hydroelectric plants (HPPs and SHPs)



Transmission Lines



Wind farms



Manufacturing/production

Geographic location: State of Paraná, Santa Catarina and São Paulo



Biodiversity value (Attribute of the protected area): Full protection conservation units

Adjacencies to the environmental protection area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Rio Verde Environmental Protection Area (APA) Devonian Escarpment State Environmental Protection Area (APA Estadual da Escarpa Devoniana) Guaratuba State Environmental Protection Area Piraquara State EPA Guaraqueçaba State EPA Ilhas e Várzeas do Rio Paraná EPA Jundiáí EPA Alto Rio Turvo Municipal EPA Rio Vermelho Humbolt Municipal EPA Pedregulho EPA Piracicaba Juqueri Mirim Area I EPA Piracicaba Juqueri Mirim Area II EPA Serra Dona Francisca EPA Cantareira System EPA Matão de Cosmópolis (ARIE) Assis State Forest Navarro de Andrade State Forest Metropolitan State Forest Assungui National Forest Ipanema National Forest Jatobá Estate PNHR Fazenda do Tigre PNHR – Part I Fazenda do Tigre PNHR – Part II Fazenda Horii PNHR Fazenda Itapuá PNHR Fazenda Monte Alegre PNHR Fazenda Nova Esperança PNHR Granja Perobal PNHR Invernada do Cerradinho PNHR Mata do Barão PNHR Morro da Mina PNHR Narciso Luiz Vanini I PNHR Perna do Pirata PNHR Rio Cachoeira Nature Reserve PNHR Sítio do Bananal PNHR Vô Borges PNHR

500295.29

Geographic location: state of Rio Grande do Norte



Biodiversity value (Attribute of the protected area): Full protection conservation units

Adjacencies to the environmental protection area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Fazenda Santa Helena Private Natural Heritage Reserve (RPPN) 751.73

Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area): Full protection conservation units

Adjacencies to the environmental protection area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Rio dos Touros Ecological Station Graciosa State Park Pico Marumbi State Park Rio Guarani State Park Pico Paraná State Park Serra da Baitaca State Park Guaricana National Park Campos Gerais National Park Wildlife Reserve (RVS)

29,116.6

Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area): Full protection conservation units

Adjacencies to the environmental protection area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Iraí Environmental Protection Area (APA) Devonian Escarpment State EPA Serra da Esperança State EPA Guaratuba State EPA Piraquara State EPA Guaraqueçaba State EPA Helmuth Krause PNHR(RPPN) Rio Cachoeira Nature Reserve PNHR Sítio Cagnini Private Natural Heritage Reserve 59595.89

Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area): Full protection conservation units

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Pau Oco State Park Rio Guarani State Park Vale do Codó State Park Iguaçu National Park Mono Castro Wildlife Refuge 57.9

Geographic location: State of Paraná and São Paulo



Biodiversity value (Attribute of the protected area): Area of Very High Biological Importance and High Priority for Conservation Action

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Paraíba do Sul River Basin EPA Cabreúva EPA Corumbataí, Botucatu and Tejuapá EPA – Corumbataí perimeter Campinas EPA Iguaçu EPA Iraí EPA Passaúna EPA Pequeno EPA Rio Verde EPA Devonian Escarpment State EPA Piraquara State EPA Guaraqueçaba State EPA Jundiaí EPA Alto Rio Turvo Municipal EPA Rio Vermelho Humbolt Municipal EPA Piracicaba Juqueri Mirim Area I EPA Piracicaba Juqueri Mirim Area II EPA Cantareira System EPA Morro da Mina PNHR Perna do Pirata PNHR 3894.09

Geographic location: State of Paraná and São Paulo



Biodiversity value (Attribute of the protected area):
Area of Very High Biological Importance and High Priority for Conservation Action

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 APCB Atlantic Forest  Cerrado APCB	144513 (Cerrado-Pantanal s/cod) MA067 MA107 MA114 423.81

Geographic location: State of Mato Grosso



Biodiversity value (Attribute of the protected area):
Area of Very High Biological Importance and High Priority for Conservation Action

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 APCB Amazon	AMZ-529 (UHE Colíder) 320.0

Geographic location: State of Paraná and São Paulo



Biodiversity value (Attribute of the protected area):
Area of high biological importance and priority for conservation action High and
Area of extremely high biological importance and priority for conservation action
Very high

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 APCB Atlantic Forest  APCB Cerrado-Pantanal	302363 (Cerrado-Pantanal s/cod) MA072 MA090 MA092 MA099 MA118 MA089 MA079 MA063 MA076 5761.73

Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area): Full protection
conservation units

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Devonian Escarpment State Environmental Protection Area (APA) Serra da Esperança State Environmental Protection Area (APA) Guaratuba State Environmental Protection Area (APA) Guaraqueçaba Environmental Protection Area (APA) 5686.1

Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area):
Full protection conservation units

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 Inserted in the SNUC	Rio dos Touros Ecological Station Pico Marumbi State Park Rio Guarani State Park Pico Paraná State Park Serra da Baitaca State Park Campos Gerais National Park Guaricana National Park 3407.54

Geographic location: State of Paraná, Santa Catarina, São Paulo, Rio Grande do Norte and Mato Grosso



Biodiversity value (Attribute of the protected area):
Area of Extremely High Biological Importance and Extremely High Priority for Conservation Action

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 APCB Atlantic Forest  APCB Caatinga  APCB Amazon	MA051 MA062 MA065 MA068 CA047 CA055 AMZ-816 15193.28

Geographic location: State of Paraná and Santa Catarina



Biodiversity value (Attribute of the protected area):
Area of Extremely High Biological Importance and Extremely High Priority for Conservation Action

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 APCB Atlantic Forest  APCB Cerrado-Pantanal	144513 (Cerrado-Pantanal s/cod) MA053 MA058 MA064 MA106 15823.83

Geographic location: State of Paraná



Biodiversity value (Attribute of the protected area): Terrestrial ecosystem

Within the boundaries of the protected area	Biodiversity value	Size of operational site in ha
	 It includes state and national parks, wildlife refuges and ecological stations.	Buffer zones of integral protection conservation units 0.01

Sulfur hexafluoride (SF₆) emissions in metric tons

Scope 1 ¹	2022	2023	2024
Total	0.126	0.119	0.125

¹ Verified by another external auditor.

Protected or restored habitats^{1 2} | GRI 304-3

Area designation	Size of habitat areas (hectares)	Location of all protected or restored habitat areas	Status of each area based on its condition at the end of the reporting period
Forest compensation projects	344.1	Several Brazilian states	Total area refers to several areas in different stages of the compensation process.
Permanent Protection Areas (APPs, in Portuguese) in Paraná	4,265.4	Several	Protected and monitored
APPs in Mato Grosso	5,488.4	Several	Protected and monitored
Serra do Mar areas - Parna de Guaricana	6,003.8	Guaratuba (PR)	Protected and monitored
Serra do Mar areas - Chaminé SHPP	3,779.6	Tijucas do Sul (PR)	Protected and monitored
Serra do Mar areas - Guaricana SHPP	812.0	Several	Protected and monitored
Serra do Mar areas - Several	70.0	São José dos Pinhais (PR)	Protected and monitored
Tia Chica Ecological Station	460.2	Pinhão (PR)	In process of formalization of transfer to the environmental agency.
Guarani State Park	2,235.0	Três Barras do Paraná (PR)	Conservation Unit
Rio dos Touros Ecological Station	1,231.1	Reserva do Iguaçu (PR)	Conservation Unit
Total protected or restored habitats	24,689.6		

¹ The effectiveness of ecological restoration initiatives is measured based on ecological indicators defined by state legislation, such as those in São Paulo and Paraná. These actions follow methodologies supported by both legislation and the Society for Ecological Restoration (SER), with the aim of fostering biodiversity, increasing climate resilience, and strengthening the connection between society and the natural world.

² Data are based on the environmental licensing process, with annual updates to the corresponding management plans.

IUCN red list species and national conservation list species with habitats in areas affected by the Organization's operations | GRI 304-4

Number of species according to the level of extinction risk ^{1 2 3}	2022	2023	2024
Critically endangered	14	14	9
Endangered	63	65	55
Vulnerable	115	120	91
Near threatened	82	90	66
Least concern	901	1,119	1,988
Total	1,175	1,408	2,209

¹ The IUCN Red List 2022 and the Ministry of the Environment's 2022 and state lists were considered, broken down by level of extinction risk.

² Data come from several environmental studies and forest inventories, which involve fieldwork for monitoring fauna and flora.

³ It is important to note that the same species can appear in more than one threat category, depending on the threat list consulted.

Waste generated ³ | GRI 306-3

Composition of the waste ¹	Description of the waste	2022	2023 ²	2024	Δ 2023/2024 (%)
Hazardous waste (Class I)	Batteries, lead-acid batteries, portable batteries, treated wooden crossarms, unserviceable equipment containing insulating mineral oil, lamps, alkaline batteries, poles, oils, solvents and paint	1,194.5	4,820.9	4,768.0	-1.1%
Non-hazardous waste (Class II)	Paper, cardboard, food waste, pruning waste, sanitary waste, glass, metals, plastics and residual fiber optic scrap from telecom operations	56,970.7	79,929.9	70,570.9	-11.7%
Total waste		58,165.3	84,750.8	75,338.9	-11.1%

¹ Copel has a system for the collection and proper disposal of waste, issuing Waste Transportation Manifests (MTR, in Portuguese) for all subsidiaries through SINIR.

² In 2022, the reported values did not account for the disposal of poles removed from the grid (Class II), generated by Copel Distribuição, totaling 40,043.9 metric tons, and pruning waste totaling 9,799.6 metric tons, which are restated in this report. The 37.40% increase is not only due to Figueira's waste but also to poles removed from the grid and pruning waste generated.

³ There was also an increase in waste registration due to the integration of units that previously did not belong to Copel, including the Aventura, Santa Rosa, Mundo Novo, Vilas, and Jandaira Wind Clusters.

Waste diverted from final disposal¹ | GRI 306-4

Category	2022			2023			2024		
	On-site	Off-site	Total	On-site	Off-site	Total	On-site	Off-site	Total
Hazardous									
Preparation for reuse	-	1,031.5	1,031.5	-	963.7	963.7	-	388.4	388.4
Recycling	-	2,708.5	2,708.5	-	3,092.8	3,092.8	-	3,151.6	3,151.6
Other recovery options	-	176.3	176.3	-	151.8	151.8	-	198.9	198.9
Total hazardous waste directed to disposal	-	3,916.4	3,916.4	-	4,208.2	4,208.2	-	3,738.9	3,738.9
Non-hazardous									
Preparation for reuse	-	35,601.1	35,601.1	-	30,482.8	30,482.8	-	54,843.3	54,843.3
Recycling	-	11,971.9	11,971.9	-	4,037.1	4,037.1	-	4,587.7	4,587.7
Other recovery options	7.6	0.0	7.6	6.5	9,074.9	9,081.4	8.3	10,255.4	10,263.7
Total non-hazardous waste directed to disposal	7.6	47,573.0	47,580.6	6.5	43,594.9	43,601.4	8.3	60,694.7	69,694.7
Total waste directed to disposal	7.6	51,489.4	51,497.0	6.5	47,803.1	47,809.6	8.3	73,454.3	73,433.6

¹There are no record of waste diverted from disposal onsite.

Waste directed to final disposal | GRI 306-5

Category	2022			2023			2024		
	On-site	Off-site	Total	On-site	Off-site	Total	On-site	Off-site	Total
Hazardous									
Incineration without energy recovery	-	29.0	29.0	-	6.3	6.3	-	8.0	8.0
Incineration with energy recovery	-	-	-	-	3.0	3.0	-	1.3	1.3
Landfill	-	363.3	363.3	-	28.9	28.9	-	11.0	11.0
Total hazardous waste directed to disposal	-	392.4	392.4	-	38.2	38.2	-	20.3	20.3
Non-hazardous									
Incineration without energy recovery	-	-	-	-	1.4	1.4	-	-	-
Incineration with energy recovery	-	-	-	-	-	-	-	6.5	6.5
Landfill	-	3,936.0	3,936.0	-	15,095.0	15,095.0	-	4,935.8	4,935.8
Total non-hazardous waste directed to disposal	-	3,936.0	3,936.0	-	15,096.4	15,096.4	-	4,942.3	4,942.3
Total waste directed to disposal	-	4,328.3	4,328.3	-	15,134.5	15,134.5	-	4,962.6	4,962.6

Social commitment

17

Membership of associations | GRI 2-28

Institution	Company participation in the institution	Annual fee
Brazilian Association of Electric Energy Distribution Companies (Abradee)	Copel serves in the Board of Directors, appointing professionals to represent the company and participate in working groups and other activities developed by the association.	3,345,815.5
Brazilian Association of Electricity Generation Companies (Abrage)	Copel is part of the General Meeting, appointing professionals to represent the company and participate in working groups of the association, including as coordinators.	641,579.1
Brazilian Association of Electricity Transmission Companies (Abrate)	Copel is part of the General Meeting and serves in the Board of Directors, appointing professionals to represent the company and participate in the association's active committees, including as coordinators.	289,481.0
Brazilian Association of Independent Power Producers (Apine)	Copel serves on the Board of Directors and appoints professionals to represent the company and take part in the association's Working Groups.	241,179.8
Brazilian Association of Wind Energy (Abeeólica)	Copel appoints professionals to represent the company and take part in the association's Working Groups.	134,771.6
Brazilian Association of Electric Energy Companies (ABCE)	Copel serves on the Board of Directors and appoints professionals to represent the company and take part in the association's committees.	106,730.0
Brazilian Association of Clean Energy Generation (Abragel)	Copel serves on the Board of Directors and appoints professionals to represent the company and take part in the activities developed by the association.	121,700.0
Brazilian Photovoltaic Energy Association (Absolar)	Copel appoints professionals to represent the company and take part in the association's Working Groups.	57,730.0
Brazilian Power Traders Association (Abraceel)	Copel appoints professionals to represent the company and take part in the association's Working Groups.	88,452.0
Brazilian Association for Sustainable Carbon (ABCS)	Copel appoints professionals to represent the company and take part in the activities developed by the association.	48,860.0
Brazilian Association for Maintenance and Asset Management (Abraman)	Copel elects representatives for the Southern region (PR, SC and RS) in the activities developed by the association.	67,954.0
Total		5,144,253.0

People management

8 10

On the following pages, Copel presents information on people management, including the ratio between the lowest salary and the minimum wage, turnover rate, parental leave, among others:

Ratio of the lowest salary and the minimum wage¹ | GRI 202-1

Category	2022			2023			2024					
	Men	Women	Ratio women and men	Men	Women	Ratio women and men	Direct employees			Contractors		
							Men	Women	Ratio women and men	Men	Women	Ratio women and men
Lowest salary paid by the Organization	2,173.4	2,088.5	1.0	2,434.7	2,636.3	0.9	2,434.7	2,636.3	1.1	1,412.0	1,412.0	1.0
Minimum wage determined by law or labor union	1,212.0	1,212.0	1.0	1,320.0	1,320.0	1.0	1,412.0	1,412.0	1.0	1,412.0	1,412.0	1.0
Ratio (%)	1.8	1.7	1.0	1.8	2.0	0.9	1.7	1.9	1.1	1.0	1.0	1.0

¹ Data comprise of the staff report provided by the CSC/DFRH/VSRH and extracted from the Success Factor system's reporting center and the personnel budget report extracted from SAP via transaction ZHR024.



New employee hires and employee turnover^{1 2 3} | GRI 401-1

Category	2022				2023				2024			
	New hires	Rate of new hires (%)	Terminations	Turnover rate (%)	New hires	Rate of new hires (%)	Terminations	Turnover rate (%)	New hires	Rate of new hires (%)	Terminations	Turnover rate (%)
By gender												
Men	3	100	362	3.7	0	0	60	0.7	8	66.7	1,129	12.5
Women	0	0	149	5.3	1	100	12	0.5	4	33.3	300	12.1
Total	3	100	511	4.0	1	100	72	0.6	12	100	1,429	12.4
By age group												
Up to 30 years old	0	0	3	1.4	0	0	0	0	3	23.0	0	300
30 - 50 years old	1	33.33	150	1.6	0	0	56	0.6	9	75.0	276	3.7
Over 50 years old	2	66.67	358	10.9	1	100	16	0.6	0	0	1,153	12.4
Total	3	100	511	4.0	1	100	72	0.6	12	100	1,429	12.4
By region												
South	3	100	509	4.1	1	100	71	0.6	6	50	1,416	12.4
Midwest	0	0	0	0	0	0	0	0	0	0	7	10.3
Northeast	0	0	2	6.7	0	0	1	3.6	6	50	3	25.0
Southeast	0	0	0	0	0	0	0	0	0	0	3	8.3
Total	3	100	511	4.0	1	100	72	0.6	12	100	1,429	12.4

¹ For the calculation of number of new hires, the rate of new employees and employee turnover considered as hired, the hired and reinstated employees.

² The employee turnover rate is calculated using the formula (new hires + terminations/2)/ the total number of employees in disclosure GRI 2-7 (by category).

³ Since August 2023, Copel has evolved from a state-owned company to a corporation. With this transition, Copel is no longer required to hold civil service exams to hire new employees. New guidelines are being drafted for future hiring processes.

Turnover rate of direct employees | GRI 401-1

Rate	2022	2023	2024
Total employee turnover rate	4.0%	0.6%	12.4%
Voluntary employee turnover rate	3.9%	0.4%	1.3%

Workforce diversity by employee category and vulnerable social group^{1 2} | GRI 405-1

Functional category	2022				2023				2024			
	Black	People with disabilities ³	LGBTQIA+	Indigenous people	Black	People with disabilities ³	LGBTQIA+	Indigenous people	Black	People with disabilities ³	LGBTQIA+	Indigenous people
Operational staff	11.1%	0.0%	0.0%	0.0%	12.0%	0.0%	0.0%	0.0%	-	-	-	-
Secondary-level technical employees	14.8%	0.4%	0.0%	0.1%	15.0%	1.0%	0.0%	0.0%	14.8%	2.3%	0.0%	0.3%
Secondary-level employees	14.2%	3.2%	0.1%	0.2%	14.0%	3.0%	0.0%	0.0%	7.3%	8.0%	0.0%	0.2%
University-level employees	8.1%	1.1%	0.0%	0.1%	8.0%	1.0%	0.0%	0.0%	4.3%	1.7%	0.0%	0.2%
Total	13.1%	2.1%	0.1%	0.1%	13.0%	2.0%	0.0%	0.0%	7.7%	5.4%	0.0%	0.2%

¹ Currently, Copel considers the number of people who use their social name when calculating LGBTQIA+ employees.

² The operational career has no more occupants. Copel's transformation into a corporation has enabled these employees to migrate to other careers within the Company.

³ Pessoas com deficiência

Ratio of basic salary and compensation received by women and men^{1 2} | GRI 405-2

Employee category	2022		2023		2024	
	Ratio of basic salary	Ratio of compensation	Ratio of basic salary	Ratio of compensation	Ratio of basic salary	Ratio of compensation
Secondary-level technical employees	0.97	0.96	0.99	0.93	1.00	0.94
Secondary-level employees	1.04	0.96	1.06	0.92	1.04	0.91
University-level employees	0.85	0.90	0.84	0.89	0.83	0.81

¹ The Organization considers all units of Companhia Paranaense de Energia as important operating units.

² Employees working fewer than 8 hours a day were excluded from the calculation of average basic salary and compensation. Total compensation was calculated by adding up basic salary, bonuses, Profit Sharing, Performance Bonus and the bonus provided for in the Collective Bargaining Agreement.

Permanent own employees by type of work and region (% of employees, by employee category and region, that may retire in the next 5 or 10 years) | GRI G4 EU15

South	Line and connection workers	2.4
	Power plant operators	1,9
	Engineers	0.3
	Maintenance mechanics	0.8
	Other	0.5

Infrastructure

GRI G4-EU4

Transmission and distribution lines | GRI G4-EU4

Length of transmission and distribution lines by voltage category^{1 2}

	2023	2024
500/525 kV	1,031.0	1,031.0
230 kV	2,667.0	2,667.0
138 kV	6,775.2	7,098.4
69 kV	779.0	775.7
Less than 69 kV	203,767.1	206,563.9
Total	215,019.4	218,136.0

Length of transmission and distribution lines by line location (kV)^{1 2}

	2023	2024
Above ground	214,673.4	217,780.8
Underground	346.0	354.9
Total	215,019.4	218,135.7

¹ Copel DIS's distribution lines cover up to 138 kV, including systems from 13.8 kV to 34.5 kV and high-voltage distribution lines (LDATs) of 69 kV and 138 kV. The transmission lines managed by Copel GeT operate above 138 kV.

³ In 2022, there were 9,685 km of transmission lines, with the transformation capacity of their substations at approximately 20,462 MVA (megavolt-amperes).

26 

hydroelectric power plants

47

wind clusters

9.684 km

km of transmission lines

20.962 MVA

of Substations with transformation capacity

Days worked by contractor and subcontractor employees | GRI G4-EU17

Outsourced labor (days) ¹	2023	2024
Construction activities	551,760	604.111
Operation activities	461,241	588.499
Maintenance activities	461,241	588.499
Total time (days) worked by contractor employees	1,474,242	1.781.109

¹ Activities are grouped into five categories: Engineering Works, Technical/Operational Services, Commercial/Support Services, Facility Maintenance/Security, and Administrative Services. A 360-day calendar was used to calculate the number of days, considering the allocation of workers to contracts, although Copel does not control the actual days worked by each individual.



GRI AND SASB CONTENT INDEX

Declaração de uso A Companhia Paranaense de Energia – Copel reported in accordance with the GRI Standards for the period from January 1, 2024, to December 31, 2024

GRI 1 usada GRI 1: Fundamentos 2021

For the Content Index – Essentials Service, GRIServices reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders. The service was performed on the Portuguese version of the report.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
General Disclosures						
The organization and its reporting practices						
GRI 2: Conteúdos gerais 2021	2-1	Organizational details	6, 24. b) Holding company, legal personality under private law.	N/A	N/A	N/A
	2-2	Entities included in the organization's sustainability reporting ¹	6	N/A	N/A	N/A
	2-3	Reporting period, frequency and contact point	6	N/A	N/A	N/A
	2-4	Restatements of information ¹	170, 190, 286, 287	N/A	N/A	N/A
	2-5	External assurance ¹	6, 354	N/A	N/A	N/A
Activities and workers						
GRI 2: General Disclosures 2021	2-6	Activities, value chain and other business relationships	24, 29, 31, 32	N/A	N/A	N/A
	2-7	Employees	249	N/A	N/A	N/A
	2-8	Workers who are not employees	250	N/A	N/A	N/A
Governance						
GRI 2: General Disclosures 2021	2-9	Governance structure and composition	75. 79. 82	N/A	N/A	N/A

Note: GRI G4 was used as the sector standard.

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Governance						
GRI 2: General Disclosures 2021	2-10	Nomination and selection of the highest governance body	75, 82	N/A	N/A	N/A
	2-11	Chair of the highest governance body	75	N/A	N/A	N/A
	2-12	Role of the highest governance body in overseeing the management of impacts	75	N/A	N/A	N/A
	2-13	Delegation of responsibility for managing impacts	75	N/A	N/A	N/A
	2-14	Role of the highest governance body in sustainability reporting	6	N/A	N/A	N/A
	2-15	Conflicts of interest ¹	93	N/A	N/A	N/A
	2-16	Communication of critical concerns ¹	97	N/A	N/A	N/A
	2-17	Collective knowledge of the highest governance body	84	N/A	N/A	N/A
	2-18	Evaluation of the performance of the highest governance body	85	N/A	N/A	N/A
	2-19	Remuneration policies	86	N/A	N/A	N/A
	2-20	Process to determine remuneration	86	N/A	N/A	N/A
	2-21	Annual total compensation ratio	86	N/A	N/A	N/A
Strategy, policies and practices						
GRI 2: General Disclosures 2021	2-22	Statement on sustainable development strategy	3	N/A	N/A	N/A
	2-23	Policy commitments	89, 202	N/A	N/A	N/A
	2-24	Embedding policy commitments	89	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Strategy, policies and practices						
GRI 2: General Disclosures 2021	2-25	Processes to remediate negative impacts ¹	97	N/A	N/A	N/A
	2-26	Mechanisms for seeking advice and raising concerns ¹	97	N/A	N/A	N/A
	2-27	Compliance with laws and regulations ¹	89	N/A	N/A	N/A
	2-28	Membership associations	297	N/A	N/A	N/A
Stakeholder engagement						
GRI 2: General Disclosures 2021	2-29	Approach to stakeholder engagement ¹	59, 63	N/A	N/A	N/A
	2-30	Collective bargaining agreements	248, 283	N/A	N/A	N/A
Material Topics						
GRI 3: Material Topics 2021	3-1	Process to determine material topics ¹	8	N/A	N/A	N/A
	3-2	List of material topics ¹	8, 10	N/A	N/A	N/A
Economic and financial performance						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 154	N/A	N/A	N/A
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed ¹	163	N/A	N/A	N/A
	201-2	Financial implications and other risksand opportunities due to climate change	114	N/A	N/A	N/A
	201-3	Defined benefit plan obligations and other retirement plans	255 a, b, c) There is no liability, as the pension plans (retirement) are in surplus and do not present a deficit. Furthermore, since the funds showed excess coverage as of December 31, 2024, no measures are being taken regarding the possibility of insufficiency.	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Economic and financial performance						
GRI 201: Economic performance 2016	201-4	Approach to tax¹	a, b, c) The organization's total monetary value of benefits and tax credits from governments amounts to R\$ 33,604,046.5. There are no other types of financial support. Currently, the State of Paraná holds 27.6% of the common shares (ONs) and 15.9% of Copel's total shares, while BNDESPAR holds 10.1% of the common shares (ONs) and 22% of the total capital. However, in accordance with Article 6 of the Bylaws, voting rights are limited to 10% of the total number of shares comprising Copel's voting capital, regardless of the shareholder's stake in the Company's total capital.	N/A	N/A	N/A
Social commitment						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 59, 194, 202, 208	N/A	N/A	N/A
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	268, 298	N/A	N/A	N/A
	202-2	Proportion of senior management hired from the local community	a) 100% of senior executives were hired from the local community. b) The Board of Directors is the executive body responsible for management and representation, tasked with ensuring the Company's regular operations in accordance with the general guidelines established by the Board of Trustees (or Administrative Council, depending on context). c, d) For this data, the Brazilian territory is considered, where the key operational unit is Companhia Paranaense de Energia (Copel).	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Social commitment						
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	152, 162, 194, 208, 214	N/A	N/A	N/A
	203-2	Significant indirect economic impacts	194, 208, 219	N/A	N/A	N/A
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples ¹	216	N/A	N/A	N/A
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	208, 210	N/A	N/A	N/A
	413-2	Operações com impactos negativos significativos reais ou potenciais nas comunidades locais ¹	208	N/A	N/A	N/A
GRI G4: Electric Utilities Sector Disclosures	EU19	Stakeholder participation in decision making processes related to energy planning and infrastructure development	59	N/A	N/A	N/A
	EU20	Approach to managing the impacts of displacement	213 Copel is committed to providing full support to the relocated population	N/A	N/A	N/A
	EU22	Number of people physically or economically displaced and compensation, broken down by type of project	213	N/A	N/A	N/A
Sustainable sourcing						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 234, 242	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Sustainable sourcing						
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	234, 238 b, c) The key operational units considered are Copel Holding, Comercialização (Trading), and Serviços (Services). Local suppliers are defined as those whose company headquarters are located in the State of Paraná (the same state as the key operational units).	N/A	N/A	N/A
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria¹	-	a.	Information unavailable	Copel does not manage the percentage of new suppliers selected on the basis of environmental criteria. However, it does consider adherence to labour, human rights, tax and environmental legislation in its evaluation processes. The indicator is being developed and monitored for future publication.

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Sustainable sourcing						
GRI 308: Supplier Environmental Assessment 2016	308-2	Negative environmental impacts in the supply chain and actions taken ¹	-	a, b, c, d, e.	Information unavailable	Negative environmental impacts associated with the supply chain are not controlled by Copel. The environmental impact assessments are controlled individually and only form part of the documentation for the respective contracting/ qualification/ management processes. The indicator is being developed and monitored for future publication.
GRI 408: Child Labor 2016	408-1	Operations and suppliers with significant risk of child labor cases ¹	244	N/A	N/A	N/A
GRI 409: Forced or compulsory labor 2016	409-1	Operations and suppliers with significant risk of cases of forced or compulsory labor ¹	244	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Sustainable sourcing						
GRI 414: Social assessment of suppliers 2016	414-1	New suppliers that were screened using social criteria	-	a.	Information unavailable	Copel does not manage the percentage of new suppliers selected on the basis of social criteria. However, it does consider adherence to labour, human rights, tax and environmental legislation in its evaluation processes. The indicator is being developed and monitored for future publication.
	414-2	Negative social impacts in the supply chain and actions taken	-	a, b, c, d, e.	Information unavailable	Negative social impacts in the supply chain are evaluated by Copel. Copel does not manage the percentage of suppliers identified with negative social impacts, with whom improvements have been agreed or with whom it has terminated business relations. The indicator is being developed and monitored for future disclosure.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Corporate governance						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 50, 68, 70, 72, 75, 89, 101	N/A	N/A	N/A
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption ¹	93, 101	N/A	N/A	N/A
	205-2	Communication and training about anti-corruption policies and procedures ¹	95, 96	N/A	N/A	N/A
	205-3	Confirmed incidents of corruption and actions taken ¹	97	N/A	N/A	N/A
GRI 206:Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices ¹	a, b) There were no legal actions regarding unfair competition, trust practices or monopoly.	N/A	N/A	N/A
GRI 415: Public Policy 2016	415-1	Political contributions	219 a, b) There are no financial or other political contributions made directly or indirectly by Copel.	N/A	N/A	N/A
Environmental commitment						
GRI 3: Temas Materiais 2021	3-3	Raw materials or recycled materials used	11, 166, 167, 177, 183	N/A	N/A	N/A
GRI 301: Materials 2016	301-1	Interactions with water as a shared resource	285	N/A	N/A	N/A
	301-2	Management of impacts related to water discharge	a) There are no raw materials or recycled materials used in the manufacture of its main products and services.	N/A	N/A	N/A
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	189	b, d.	Not applicable	No target has been set for reducing consumption, but there is consistency in the activities aimed at ensuring that consumption is conscious.

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Environmental commitment						
GRI 304: Biodiversity 2016	303-2	Management of impacts related to water discharge	189	N/A	N/A	N/A
	303-3	Water withdrawal ¹	189, 286	N/A	N/A	N/A
	303-4	Water discharge ¹	189, 287	N/A	N/A	N/A
	303-5	Water consumption ¹	190	N/A	N/A	N/A
	304-1	Operational units owned, leased or managed within or adjacent to environmental protection areas and areas of high biodiversity value located outside of environmental protection areas	184, 288	N/A	N/A	N/A
	304-2	Significant impacts of activities, products, and services on biodiversity	177	N/A	N/A	N/A
	304-3	Protected or restored habitats	185, 293	N/A	N/A	N/A
	304-4	Species included in the IUCN Red List and in national conservation lists with habitats in areas affected by the organization's operations	294	N/A	N/A	N/A
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions ¹	170	N/A	N/A	N/A
	305-2	Energy indirect (Scope 2) GHG emissions ¹	170	N/A	N/A	N/A
	305-3	Other indirect (Scope 3) GHG emissions	170	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Environmental commitment						
GRI 305: Emissions 2016	305-4	GHG emissions intensity	170	N/A	N/A	N/A
	305-5	Reduction of GHG emissions	a) In 2024, there was a reduction of 66,926.0 tCO ₂ e in stationary emissions and 1,490.0 tCO ₂ e in mobile emissions.b) The gases CO ₂ , CH ₄ , and N ₂ O were included.c) The base year used for the 2017 target was 2024.d) Both reductions occurred in Scope 1 emissions.e) The methodology adopted was the one provided by the calculation tool of the Brazilian GHG Protocol program.	N/A	N/A	N/A
	305-6	Emissions of ozone-depleting substances (ODS)	-	a, b, c, d	Not applicable.	Copel does not produce, import or export ozone-depleting substances.
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	287	N/A	N/A	N/A
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	192	N/A	N/A	N/A
	306-2	Management of significant waste-related impacts	192	N/A	N/A	N/A
	306-3	Waste generated	294	N/A	N/A	N/A
	306-4	Waste not destined for final disposal	295	N/A	N/A	N/A
	306-5	Waste destined for final disposal	296	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Environmental commitment						
GRI G4: Electric Utilities Sector Disclosures	EU5	Allocation of CO ₂ e emissions allowances or equivalent, broken down by carbon trading framework ¹	-	All of them.	Not applicable	Copel is not currently subject to carbon offsetting or reduction obligations, as Brazil's carbon market bill was only approved in 2024. Furthermore, the law does not take automatic effect, requiring approval of implementation mechanisms by other governing bodies. Therefore, in 2024, this requirement was not yet applicable to Copel. It should be noted that Copel monitored this development through meeting and the unfolding of the project until it was enacted as Law 15.042/2024.

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Environmental commitment						
GRI G4: Electric Utilities Sector Disclosures	EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	183	N/A	N/A	N/A
Greenhouse Gas Emissions & Energy Resource Planning	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries ¹	170	N/A	N/A	N/A
	F-EU-110a.3	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	167	N/A	N/A	N/A
Water Management	IF-EU-140a.1	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress ¹	189, 190, 286, 287	N/A	N/A	N/A
	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	189	N/A	N/A	N/A
Ecological Impacts of Project Development	RR-ST-160a.1	(1) Number and (2) duration of project delays related to ecological impacts	184	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Environmental commitment						
Ecological Impacts of Project Development	RR-ST-160a.2	Description of efforts in solar energy system project development to address community and ecological impacts	345	N/A	N/A	N/A
Energy sector transformation						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 123 Electrification and New Business Opportunities c) Copel is committed to sustainable mobility, integrating practices that prioritize energy efficiency and environmental impact reduction. di) Use of PoCs (Proofs of Concept) and strategic partnerships to ensure charging station projects are efficient and sustainable, with a focus on renewable energy sources. dii) Investments in renewable energy technologies to power charging stations, thereby reducing associated emissions. Sustainability audits and reports are used to adjust strategies as needed. diii) Copel is expanding its electric charging infrastructure and collaborating with research centers and startups to develop innovative solutions that promote sustainable electric mobility.	N/A	N/A	N/A

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Energy sector transformation						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 123 ei) Regular impact assessments and audits are conducted to ensure sustainable electrification goals are being met. Additionally, through a dashboard powered by movE – a Copel-invested startup responsible for operating and maintaining chargers and the recharge management system – Copel monitors data such as: Number of charging sessions Energy consumption Average charging duration Revenue and costs User vehicle profiles eii) 2030 Target: Establish an electrical infrastructure capable of supporting 100% sustainable electrification in priority areas. Key Metrics: Operational charging stations CO ₂ emission reductions Total kWh consumed Costs and revenue Growth in electric vehicle adoption eiii) Annual reports highlight progress toward sustainable electrification, emphasizing infrastructure expansion, emission reductions, and energy efficiency improvements. eiv) Lessons learned are incorporated into operational policies, ensuring Copel continues to lead the energy sector’s transformation.	N/A	N/A	N/A
GRI 302: Energy 2016	302-1	Energy consumption within the organization ¹	286	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Energy sector transformation						
GRI 302: Energy 2016	302-2	Energy consumption outside of the organization	191 a, b, c) There was no energy consumption outside the organization.	N/A	N/A	N/A
	302-3	Energy intensity ¹	191	N/A	N/A	N/A
	302-4	Reduction of energy consumption	191, 198	N/A	N/A	N/A
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	a, b, c) There have been no proven complaints regarding breaches of privacy and loss of customer data.	N/A	N/A	N/A
GRI G4: Electric Utilities Sector Disclosures	EU1	Installed Capacity, Broken Down By Primary Energy Source And By Regulatory Regime	29, 30	N/A	N/A	N/A
	EU2	Net energy output broken down by primary energy source and by regulatory regime	29, 30	N/A	N/A	N/A
	EU4	Length of above and underground transmission and distribution lines by regulatory regime	302	N/A	N/A	N/A
	EU6	Management approach to ensure short and long-term electricity availability and reliability	144, 149, 154	N/A	N/A	N/A
	EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	124, 149	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Energy sector transformation						
GRI G4: Electric Utilities Sector Disclosures	EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	126, 130, 138, 139	N/A	N/A	N/A
	EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	29	N/A	N/A	N/A
	EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	The average annual generation efficiency of the group of plants by regulatory regime and net efficiency was 23.6% only at UTE Figueira	N/A	N/A	N/A
	EU12	Transmission and distribution losses as a percentage of total energy ¹	149, 151	N/A	N/A	N/A
	EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/ restoration plans	231, 232	N/A	N/A	N/A
	EU28	Power outage frequency	149, 151	N/A	N/A	N/A
	EU29	Average power outage duration	149, 151	N/A	N/A	N/A
	EU30	Average plant availability factor by energy source and by regulatory regime	141	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PWC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Energy sector transformation						
Management of Energy Infrastructure Integration & Related Regulations	RR-ST-410a.1	Description of risks associated with integration of solar energy into existing energy infrastructure and discussion of efforts to manage those risks	137	N/A	N/A	N/A
	RR-ST-410a.2	Description of risks and opportunities associated with energy policy and its effect on the integration of solar energy into existing energy infrastructure	137	N/A	N/A	N/A
Activity Metrics	RR-ST-000.B	Total capacity of completed solar energy systems ¹	Copel currently has solar energy systems only for its own supply, no longer to generate energy for sale.	N/A	N/A	N/A
Grid Resiliency	IF-EU-550a.1	Number of incidents of non-compliance with physical or cybersecurity standards or regulations	There have been no proven complaints regarding breaches of privacy and loss of customer data.	N/A	N/A	N/A
	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	149, 151	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
People management						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 247	N/A	N/A	N/A
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	299, 300	N/A	N/A	N/A
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	252, 253, 254 a vi) We have no share acquisition plan.	N/A	N/A	N/A
	401-3	Parental leave	255	N/A	N/A	N/A
GRI 402: Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	248	N/A	N/A	N/A
GRI 404: Training and education 2016	404-1	Average hours of training per yearper employee	265	N/A	N/A	N/A
	404-2	Programs for the development of employees' skills and assistance for career transition	263	N/A	N/A	N/A
	404-3	Percentage of employees receiving regular performance and career development assessments	266	N/A	N/A	N/A
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	260, 261, 262, 300	N/A	N/A	N/A
	405-2	Ratio of basic salary and remuneration of women to men	301	N/A	N/A	N/A

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
People management						
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	97	N/A	N/A	N/A
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	a, b) The operations that risk violating freedom of association are janitorial work and mowing, only in Brazil. Copel has no direct action on suppliers and employee relations in terms of freedom of association and collective bargaining.	N/A	N/A	N/A
GRI G4: Electric Utilities Sector Disclosures	EU14	Programs and processes to ensure the availability of a skilled workforce	263	N/A	N/A	N/A
	EU15	Percentage Of Employees Eligible To Retire In The Next 5 And 10 Years Broken Down By Job Category And By Region	301	N/A	N/A	N/A
	EU17	Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	303	N/A	N/A	N/A
Well-being, health and safety for the workforce						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 271, 274, 275 e iii. Continuous analysis of occupational health and safety indicators, with annual results demonstrating progress toward established targets. e iv. The company drives continuous improvement by incorporating employee feedback, expanding training programs, and adjusting awareness campaigns as needed.	N/A	N/A	N/A

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Well-being, health and safety for the workforce						
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	271	N/A	N/A	N/A
	403-2	Hazard identification, risk assessment, and incident investigation	271 b. The Occupational Health and Safety Policy and the organization’s Code of Conduct guarantee that all employees can speak out about hazards and risks to their safety at work, which can be reported through the Whistleblowing Channel, with total confidentiality and protection for the whistleblower.	N/A	N/A	N/A
	403-3	Occupational health services	The company’s Occupational Health and Quality of Life area is structured in a division linked to People Management in the People and Management Vice-presidency; it is made up of its own qualified multi-professional team made up of 3 occupational doctors, 2 occupational nurses, 1 occupational nursing technician and 3 social workers, distributed in Curitiba, Londrina, Cascavel and Guarapuava, in Paraná.	N/A	N/A	N/A
	403-4	Worker participation, consultation, and communication on occupational health and safety	271	N/A	N/A	N/A
	403-5	Training of workers in occupational health and safety	274	N/A	N/A	N/A
	403-6	Worker Health Promotion	252, 253, 254, 275	N/A	N/A	N/A

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Well-being, health and safety for the workforce						
GRI 403: Occupational Health and Safety 2018	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	271	N/A	N/A	N/A
	403-8	Workers covered by an occupational health and safety management system	271	N/A	N/A	N/A
	403-9	Occupational Accidents ¹	273	N/A	N/A	N/A
	403-10	Work-related ill health	271 a, b) There were no cases work-related ill health. e) In cases of suspected illness caused by the conditions or manner in which the work is carried out, the employee is referred by the manager for an initial medical examination and definition of the diagnosis and limitations. This suspicion will be identified by an assessment by the employee’s treating doctor (identification of the diagnosis and institution and management of the specific treatment) and recorded in a specialized report.	N/A	N/A	N/A
GRI 410: Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	244, 265	N/A	N/A	N/A
GRI G4: Electric Utilities Sector Disclosure	EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	274	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Well-being, health and safety for the workforce						
GRI G4: Electric Utilities Sector Disclosure	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	274	N/A	N/A	N/A
Workforce Health & Safety	IF-EU-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees ¹	273	N/A	N/A	N/A
Community safety						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 221	N/A	N/A	N/A
GRI 416: Customer Health and Safety 2016	416-1	Assessment of health and safety impacts caused by categories of products and services ¹	232, 233 a) 100% of significant categories of products and services are assessed for health and safety impacts in search of improvements.	N/A	N/A	N/A
	416-2	Operations with significant actual and potential negative impacts on local communities ¹	a, b) There are no lawsuits identified involving the respective issues.	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure	Location/Answer	Omission			
			Requirement(s) omitted	Reason	Explanation	
Segurança da População						
GRI 417:Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	a, b) 100% of significant categories of products or services are covered by the organization's procedures and assessed for compliance with these procedures.	a (i, ii, iii, iv, v), b.	Not applicable.	As Copel GeT has no direct relationship with the consumer, information related to the product is provided by the other companies in the group that have this relationship, such as Copel Distribuição and Copel comercialização.
	417-2	Incidents of non-compliance concerning product and service information and labeling	a, b) We have not identified any cases of non-compliance with laws and/or voluntary codes in relation to product and service information and labeling for 2024.	N/A	N/A	N/A
	417-3	Incidents of non-complianceconcerning marketing communications	a, b) There have been no cases of non-compliance with laws, voluntary codes or other situations that have resulted in penalties for the company.	N/A	N/A	N/A
GRI G4: Electric Utilities Sector Disclosures	EU25	Number of injuries and fatalities to the public involving company assets including legal judgments, settlements and pending legal cases of diseases¹	232, 233	N/A	N/A	N/A

¹ Indicators guaranteed in a limited manner by PwC.

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Customer satisfaction						
GRI 3: Material Topics 2021	3-3	Management of material topics	11, 149, 222, 227, 231, 232	N/A	N/A	N/A
GRI G4: Electric Utilities Sector Disclosure	EU3	Number of residential, industrial, institutional and commercial customer accounts	224	N/A	N/A	N/A
	EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	219	N/A	N/A	N/A
	EU24	Practices to address language, cultural, low literacy and disability related barriers to access and safely use electricity and customer support services	205, 216, 227	N/A	N/A	N/A
	GRI G4: Electric Utilities Sector Disclosure	EU26	Percentage of population unserved in licensed distribution or service areas	According to Aneel Order 2344 and Annex I of 17/07/2012, Copel concluded the Universalization Plan in the urban area in 2006 and in the rural area in 2010.	N/A	N/A
EU27		Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	230	N/A	N/A	N/A

GRI Standard	Disclosure		Location/Answer	Omission		
				Requirement(s) omitted	Reason	Explanation
Customer satisfaction						
Energy Affordability	IF-EU-240a.3	(1) Number of residential customer electric disconnections for non-payment, (2) percentage reconnected within 30 days	230	N/A	N/A	N/A
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	203, 207, 216, 219, 227	N/A	N/A	N/A
Activity Metrics	IF-EU-000.A	Number of: (1) residential, (2) commercial, and (3) industrial customers served	222, 224	N/A	N/A	N/A

PERFORMANCE REGARDING THE SDGS

Area	SDG	Targets	2024 Performance
Education		■ Target 4.3: by 2030, ensure equal access and retention in quality vocational and higher education, free of charge or at an affordable cost, irrespective of gender, race, income, location, and other factors.	The “Aluno Energia” Program benefited an additional 30 students. Award at “Computer on the Beach”, a technical-scientific computing event that recognizes innovative solutions. A student from the first “Aluno Energia” class, together with her Copel mentor, developed a musical keyboard for people with hearing impairments. The knowledge shared between the Copel mentor and the “Aluno Energia” student also resulted in a prototype of a robot with motion controlled by an infrared sensor.

Area	SDG	Targets	2024 Performance
Affordable and clean energy	7 AFFORDABLE AND CLEAN ENERGY 	■ target 7.1: by 2030, ensure universal access to affordable, reliable and modern energy services.	Copel already meets all criteria for universal access to electricity established by the Brazilian Electricity Regulatory Agency (Aneel) and is implementing improvements to distribution assets in remote or hard-to-reach locations. Additionally, Copel aims to strengthen infrastructure and improve supply quality through an investment of BRL 3.1 billion in 25,000 km of three-phase power lines by 2025. In 2024, 20,000 km of three-phase lines were completed
		■ Sector target: enable access to electricity to 100% of the Brazilian population by 2030 through the use of new technologies, at affordable prices and with quality.	
		■ Target 7.2: by 2030, increase substantially the share of renewable energy in the national energy mix.	The goal of sourcing 100% of energy from renewable sources was achieved in 2024, following the decommissioning of the Figueira thermal power plant.
		■ Target 7.3: by 2030, increase the rate of improvement in energy efficiency of the Brazilian economy. ■ Sector target: Strive to reach a 5% gain in electrical efficiency (GWh or equivalent) by 2030.	The availability of the power plants was 94.33%. In 2024, the power generation park produced 29,373.3 GWh, approximately 4.65% more than in 2023. Copel makes a series of investments to ensure the operational efficiency of its power plants and continues to expand the share of wind power in its generation portfolio.

Area	SDG	Targets	2024 Performance
Decent work and economic growth		■ Target 8.3: promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services ■ Sector target: Foster strategies/initiatives to hire micro-, small-, and medium-sized companies in order to increase their share in the value chain (implementation goal/target). ■ Sector target: Ensure no fatalities involving direct employees and outsourced workers while on the job in the electricity sector.	Copel adopts differentiated and favorable treatment practices for micro and small enterprises, as established by Federal Law No. 147/2014, enabling the participation of these suppliers in the contracting processes Commitment to the health and safety of employees and service providers is a non-negotiable value for Copel. This topic is linked to the Company's variable remuneration program as a way to reinforce everyone's commitment to the matter.
Industry, innovation and infrastructure		■ Target 9.1: develop quality, reliable, sustainable and robust infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all. ■ Sector target: reach at least 80,000 public electric charging stations installed in the country by 2030. ■ Target 9.4: by 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities. ■ Sector target: by 2030, to increase the number of patents and licenses requested for every million Reais invested in R&D projects.	Electric vehicle charging: 6,493 registered users 31 stations GHG emissions avoided: 423 tons of CO₂ 247 trees planted Innovation: Copel GET implemented a new satellite-based vegetation risk monitoring tool for transmission lines, reducing the number of field visits required for this monitoring.

Area	SDG	Targets	2024 Performance
Sustainable cities and communities		■ Target 11.1: by 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums. ■ Sector target: reach less than 13% in real non-technical losses by 2030.	Non-technical losses are assessed on the low-voltage distribution market: the realized value in 2024 was 2.3%. Copel is within the sector target (below 13%).
		■ Sector target: step up initiatives linked to smart cities by 2030.	1 million smart meters installed, benefiting approximately 20% of customers (residential, commercial, industrial, and rural properties).
		■ Target 11.4: step up efforts to protect and safeguard the world's cultural and natural heritage ■ Sector target: conduct socio-economic analytics in traditional communities impacted by the operations of the electricity sector until 2025 to subsidize the implementation of voluntary projects ■ Sector target: support the maintenance of projects aimed at preserving tangible and intangible historical heritage until 2030 to ensure the efficient use of funds and the effectiveness of the initiatives.	Natural Heritage: Copel GeT manages 24,689 hectares of protected or restored habitats. It invests in mitigation and conservation initiatives, such as establishing permanent preservation areas (APPs) around reservoirs, contributing to the recovery of native vegetation and increased biodiversity over time. The annual goal is to maintain 100% of the original coverage in these environmental easement areas. It promotes ecological restoration in degraded areas and develops forest compensation programs, using techniques like planting native species to restore biodiversity. Cultural Heritage: Copel develops programs focused on specific socio-cultural components aimed at mitigating impacts on safeguarded cultural assets.

Area	SDG	Targets	2024 Performance
Climate action	13 CLIMATE ACTION 	■ Target 13.2: Integrate climate change measures into national policies, strategies and planning. ■ Sector target: 15 power sector companies (generation, transmission, and distribution) with science-based targets approved by 2023.	Copel has established decarbonization indicators and targets through 2030 in a plan approved by the Board of Directors, based on SBTi principles. In 2024/2025, Copel became a 100% renewable¹ company by removing thermal plants from its portfolio. The drone project for cable installation on transmission lines was a finalist for the 2024 Sesi SDG Award in the Environmental category, as it preserves local ecosystems by avoiding clearing openings, contributing to SDG 13 and SDG 15.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel 100% renewable from that date on.

TCFD - TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

TCFD

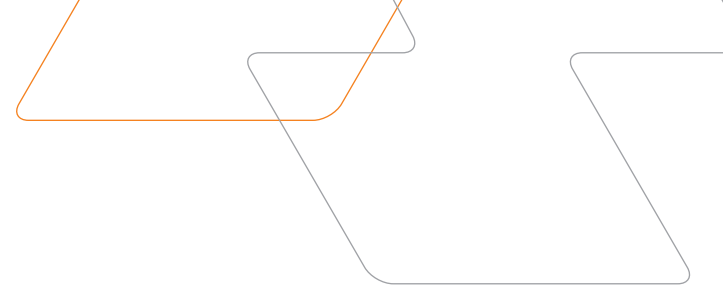
The Financial Stability Board's Task Force on Climate-Related Financial Disclosures (Task Force or TCFD) released its recommendations in 2017, which provide a framework for companies and other organizations to prepare more effective climate-related financial disclosures through their existing reporting processes.

The recommendations are structured around four thematic areas, which represent core elements of how organizations operate: governance; strategy; risk management; and metrics and targets.

Governance	Strategy	Risk management	Metrics and targets
Disclose the company's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the company's business, strategy and financial planning, where this information is relevant.	Disclose the process used by the company to identify, assess and manage climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, where this information is relevant.

The commitment to the environment is essential for Copel and is reflected in the materiality assessment prepared in 2023, and reaffirmed in 2024. Based on this process, the priority environmental topics — including climate change — were grouped under Environmental Commitment. To report on climate-related matters, Copel follows the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

In recent years, Copel has concentrated its investments in technological advancements, promoting innovation and expanding clean energy generation projects, such as wind farms, solar farms and hydroelectric power plants. There is a clear growing demand for renewable energy among customers.



Governance

Governance bodies and organizational structure

Copel has a Board of Directors (CAD, in Portuguese), which is the highest governance body responsible for making strategic decisions and approving and monitoring policies related to sustainability, climate change, people management, and occupational health and safety, among other ESG topics, such as private social investment, eco-efficiency and human rights. The Board of Directors is responsible for approving the review of the Company's strategic plan, which is coordinated by the President.

The Board of Directors is advised by the Sustainable Development Committee (CDS, in Portuguese), an independent and permanent advisory body. According to the Company's Bylaws, the CDS is responsible for monitoring sustainability trends — including climate change —, supporting the integration of the ESG Agenda into the Company's strategic plan. It has three members, including one independent and one external member. Every month, the CDS coordinator reports to the Board of Directors on climate change, biodiversity and other ESG-related matters.

Selection for governance positions at Copel is grounded on the Appointment Policy, which requires that candidates have proven experience and a profile compatible with the responsibilities of the position. Evaluated criteria include academic background and relevant industry experience. The Appointment Policy and the Bylaws also outline the need for diversity of gender, religion, age and race.

Copel also has the Governance, Risk and Compliance Department, responsible for establishing the Company's environmental guidelines, including those related to climate change, biodiversity, and eco-efficiency, in accordance with the strategic plan and the commitments approved by the Board of Directors.

Responsibility for climate-related matters is shared between the Executive Director of Risk and Compliance, who is responsible for the Company's sustainability matters, the President and the Board of Directors members.

Responsibility for ESG-related issues lies with the Company's President and the Executive Director of Risk and Compliance, who reports to the Board of Directors. Their responsibilities include:

- Assessing and planning according to environmental trends, in terms of impacts, dependencies, risks and opportunities;
- Managing participation in environmental public policies;
- Defining corporate policies and monitoring their compliance;

- Setting corporate targets and monitoring their progress, including those related to preparing and implementing a climate transition plan, as was the case when the Neutrality Plan was approved;
- Conducting environmental scenario analysis;
- Managing environmental reporting and verification processes;
- Analyzing investments for acquisitions, mergers and disposals of facilities that address environmental issues, and defining strategies to mitigate them or use them in the best possible way. They are also responsible for approving incentives to improve the Company's environmental performance.

Topics resolved by the governance bodies

The Board of Directors, supported by its advisory committees, is responsible for resolving on the various ESG-related matters, especially climate change and biodiversity. It is also responsible for:

- Guiding the evaluation of dependencies, impacts risks and opportunities;
- Approving incentives for employees, corporate policies and commitments;
- Monitoring the implementation of business strategies, the compliance with corporate policies and commitments and the progress of corporate targets;
- Overseeing the processes of reporting, verification, auditing, development of business strategies, large capital expenditures, scenario analysis, acquisitions, mergers, divestitures and engagement with public policies.

In 2024, the Board of Directors held 12 ordinary meetings. At all of them, the Sustainable Development Committee reported on the matters discussed at its meetings, which were debated and recorded in CAD minutes. The minutes of the Board of Directors' meetings are available at the [page Board Meetings](#). One example is the development of the Carbon Neutrality Plan. On November 25, 2024, the minutes of the CAD meeting state that the Vice President of Strategy, New Business and Digital Transformation presented information on the signing of a divestment agreement for some of Copel assets, including the Figueira Thermal Power Plant.

In addition, periodically during the year, matters are submitted for Board of Directors' deliberation concerning or related to climate change, biodiversity and water resources.

Here are some examples of resolutions made by the Board of Directors and subsequently implemented by the Risk and Compliance Department or other teams:

- Neutrality Plan: approval of the plan and monitoring and implementation of targets set out in the plan, such as divestment of thermal power plants;
- Indicators and targets: approval and monitoring of indicators and targets related to climate change, biodiversity, and occupational health and safety, among others;
- Sustainability Policy.

Guidelines - Sustainability Policy

Copel integrates the guidelines set out by the Board of Directors into its Sustainability Policy, which addresses the following topics in specific chapters: Environmental, Biodiversity, Human Rights, Stakeholder Engagement, Private Social Investment and Climate Change, ensuring an integrated ESG approach. The guidelines govern the Company's structure and apply not only to its operations, but also to suppliers and customers.

The policy covers topics such as commitments to reduce emissions, engagement in biodiversity practices, compliance with regulatory standards, sustainable investment, respect for social practices and good practices with customers and suppliers.

As a signatory to the Global Compact, Copel's Sustainability Policy covers the commitments it has made, such as the Net Zero Ambition, the Paris Agreement and targets for achieving the SDGs. Its guidelines adhere to the Global Compact principles.

ESG indicators for variable compensation

Established in 2021, ESG metrics are part of the variable compensation criteria at all Company levels. In 2024, up to 30% of the Variable Compensation Program was linked to overall sustainability performance, occupational health and safety and internal control effectiveness. The ESG metrics linked to the Compensation Program are as follows:

- **10% related to Corporate Sustainability Assessment (CSA)** and the implementation of the Neutrality Plan (incentive linked to the topic of climate change);
- **10% related to** internal controls indicator;
- **10% related to the occupational health and safety indicator** — zero fatalities among own employees and outsourced workers.

As part of the incentives linked to the development of the Neutrality Plan, there is a direct correlation with the implementation of climate commitments and the Company's

climate transition plan. This was the basis for the Executive Board, the subordinate Department and all the employees to make efforts to leverage emission reduction.

The incentive is awarded in the short term (annually) and the compensation is awarded to the corporate executive team, managers and employees of the Company, who receive the amount in the form of a bonus (a percentage of their salary).

Indicators are implemented and monitored in order to make Copel achieve net zero direct carbon emissions. Therefore, the Company has implemented practices to reduce GHG emissions. These trends are linked to compliance with the Organization's targets and performance in terms of environmental sustainability indicators that assess the Company's practices in reducing emissions.

The Executive Director of Risk and Compliance supports the development of climate change-related indicators and targets, which are then approved by the Board of Directors, which monitors the performance of indicators, including those related to climate change.

Strategy and Planning

Climate risk management and adaptation at Copel

Mindful of the impacts of climate change on its operations, Copel adopts a strategic approach to assessing how new weather conditions might affect its business. Every three years, the Company carries out a detailed analysis of these scenarios, enabling continuous investment in the modernization and safety of its activities.

The most recent assessment considered the RCP 8.5 and RCP 4.5 scenarios, as well as the SSP1, SSP2 and SSP5 scenarios, which are regarded as the most probable pathways for future climate conditions. Although a significant reduction in global emissions is not expected in the near term, in the Brazilian context, sustainable technologies are expected to develop and become more accessible over the next decade.

Due to Copel's growing exposure to climate effects, the assessment was conducted based on conservative scenarios, as the number of extreme weather events has been increasing

each year. In response to that, the Company's strategic planning seeks to mitigate the impacts of such events, prioritizing actions that guarantee service continuity and infrastructure resilience.

Impacts of climate scenarios and mitigation measures

In its analysis of physical risk scenarios, both chronic and acute, Copel assessed qualitative and quantitative impacts. With a projected global temperature rise of 4°C by 2050, the Company's service quality may be affected by extreme weather events, which could compromise assets and lead to a greater demand for emergency response services.

The main risks identified include stronger winds and rising temperatures, especially for energy distribution. As a mitigation measure, Copel has continuously invested in system modernization, including the implementation of smart grids to increase infrastructure resilience and minimize the impacts of weather events.

Climate analysis as the basis for strategic planning

These scenarios have helped to refine the analysis of risks and opportunities at Copel, guiding the development of a more robust and resilient plan in the face of climate transition.

A key example of this process is the study prepared in Brazil's Southern region, which assessed the effects of wind and rainfall until 2049. The results indicated a trend towards increased extreme wind events during the summer, and more intense rainfall in the winter and spring. These phenomena may directly impact the quality of the energy supplied, with implications for service frequency and continuity. Based on these data, Copel began developing new projects taking these criteria into account and implementing programs aimed at modernizing the power grid, such as expanding smart grid infrastructure.

Another important project was the construction of climate scenarios for Paraná's Northern region, focusing on events such as heavy rainfall, heatwaves and winds. Using artificial intelligence tools, the project

identified that wind intensity is one of the most critical factors for operations in the region. Based on this, the Company has been stepping up actions to mitigate these impacts and adapt its infrastructure.

These studies have informed important strategic decisions. The Company's planning prioritized two main actions:

Implementation of the Carbon Neutrality Plan

Aimed at making Copel's generating units — owned and shared — fully renewable, the Company has divested of high-carbon assets, such as the Araucária Gas-fired Power Plant (Uega) and the Figueira Thermal Power Plant, which runs on coal. The sale of Companhia Paranaense de Gás (Compagás) was also completed, reinforcing Copel's focus on renewable sources.

Structuring the Climate Adaptation Plan

The plan presents specific strategies for the energy generation and distribution segments, based on projected climate scenarios. These guidelines aim to prepare the Company for the challenges arising from climate change in the coming years.

The full content of the Climate Adaptation Plan, with the climate scenarios used and the planned actions, is available on [Copel's Management of Climate Change Impacts – Copel Sustainability](#) portal.



Transition risks and strategic adaptation

Copel also carried out an in-depth analysis of transition risks, considering market and policy impacts on its business. This analysis was based on the International Energy Agency's Net Zero Emissions (NZE) scenario, which projects a path to achieving net zero emissions by 2050. This scenario reinforces the need for companies to actively position themselves to reduce their emissions, which is in line with Copel's initiatives — the Company has set the target of decarbonizing its generation matrix by 2030.

Studies by the Ministry of Mines and Energy, based on the International Renewable Energy Agency (Irena) model, indicate the need to adopt practices that drive the energy transition in Brazil. . In response, the Federal Government, which is responsible for offering new assets to the power sector, has been promoting auctions for renewable projects, as well as implementing energy efficiency measures.

In line with its Sustainability Policy, Investment Policy and commitments to minimizing emissions, Copel has determined that its investments should consider ESG (environmental, social and governance) criteria. In this context, the climate change topic must be incorporated into both the financial assessment and the identification of strategic opportunities. The Company prioritizes initiatives that expand its low-emission asset portfolio, focused on expanding and operating sustainable projects.

Strategy and financial planning

Strategy

As a result of the Company's strategic plan; Sustainability Policy, which addresses Climate Change in one of its chapters; and Neutrality Plan; and in line with its Investment Policy, whose guidelines establish climate change as one of the aspects to be considered in the analysis of every investment opportunity, the development of the following projects — divided into four fronts — has been mapped out as a strategy for opportunities and addressing risks:

a. Products and Services

Considering the 2030 Vision and the climate transition, the opportunities were assessed in the short, medium and long term and are divided into: development of new wind farms, through greenfield/ brownfield projects (short term); operation of solar power and distributed generation projects and expansion of services offered focused on energy efficiency (medium term); and offering of services for electric vehicles and energy storage, as well as entering the green hydrogen market (long term).

b. Engagement

Copel has strengthened its efforts to increase customer engagement on climate issues. On this front, the Company incentivizes Free Market customers to purchase renewable energy and renewable energy certificates, as well as fosters energy use optimization through the Energy Efficiency Program (PEE, in Portuguese). In 2024, the program invested BRL 42.7 million in projects that encourage the sustainable use of energy. Among the PEE's initiatives, the energy modernization of 200 public schools in Paraná must be emphasized. The project benefited approximately 77,000 students, teachers, and staff. The investment — over BRL 40 million — significantly improves energy efficiency in these educational institutions. All these practices are encouraged through training, the dissemination of communication materials and customer support.

c. R&D Investments

Considering the energy transition and the need to adapt to a new market, the Company invested BRL 27.7 million in R&D projects in 2024, with emphasis on projects in the following areas:

- **Power generation:** research on weather forecast; forecasting accumulated precipitation levels and average temperature, considering long-term climate change scenarios; and the application of techniques in the treatment of hydrology and historical wind series, aimed at helping to minimize the use of thermal power.

- **Distribution:** research was carried out to estimate and classify the risk of interruptions in distribution networks in the short term, using weather forecast.

In addition, within innovation, Copel invested in green hydrogen such as the projects: “renewable hydrogen, from the dry reforming of biogas from domestic sewage treatment, as energy for electromobility”; “green hydrogen and energy storage”; “electromobility and smart cities”; “customer relationship and service solutions”; “asset and facilities management”; and “digitalization and improvement in management and processes”.

a. Operation

Considering the Neutrality Plan and the 2030 Vision, Copel is committed to being a fully renewable energy generation company¹. Moreover, it has been heavily investing in the Smart Grid, having already installed approximately 1 million smart meters. In 2024 alone, BRL 290 million was invested in 50 municipalities, and an investment of BRL 58 million is planned for 2025. This technology makes it possible to restore the energy supply as quickly as possible. It also allows for a reduction in service times for routine services and real-time control via the Copel app.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel 100% renewable from that date on.

Financial planning

As regards financial planning, Copel has identified that the benefits from divesting thermal generation assets were not limited to the assets' sale value as they also enable the achievement of a strategic goal: achieving 100% renewable generation at Copel¹. This move was essential to align the Company with its sustainability targets while at the same time contributing positively to its financial health.

In addition, the budget forecast for the technological development and construction of new sustainable projects, including wind and solar power, was taken into account. Copel also projected investments in modernizing and reinforcing infrastructure, taking into account climate scenarios that indicate increased challenges in the near future. Other key investments include ensuring the availability of emergency response teams and strengthening monitoring mechanisms, focused on the continuity and security of energy supply.

Investments in infrastructure and weather monitoring

To improve transmission and distribution lines, Copel DIS invested in several programs such as Paraná Trifásico (BRL 703 million) and Smart Grids (BRL 290 million). In the Transmission segment (Copel GeT), BRL 77.4 million was invested in 2024, in addition to other investments in technologies that ensure efficient operation and fewer power outages. These investments are essential not only for daily operations but also for mitigating the risks of extreme weather events.

Still within this perspective, Copel invested BRL 10.5 million in weather monitoring and in reinforcing transmission and distribution lines. Although these investments entail initial costs, they are seen as a long-term strategy to minimize potential revenue losses and ensure the Company's resilience in the face of climate challenges.

Integration of carbon pricing and analysis of new projects

When designing new projects, Copel has adopted shadow carbon pricing as a strategic tool for carrying out cost-benefit analysis of new ventures. This instrument helps to prioritize sustainable projects and to stress test investments, considering possible adverse scenarios. Although the power sector in Brazil does not yet have specific regulations on penalties for carbon emissions, the price of USD 5.00/tCO₂e is currently being used, based on comparisons with international carbon markets.

With the recent approval of the Brazilian Carbon Market Law (Law 15,042/2024), the carbon price is expected to rise in the coming years. Moreover, depending on the duration of the projects, it will be necessary to incorporate additional costs to mitigate the associated emissions.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel 100% renewable from that date on.

Accounting Adequacy and Financial Reporting

Copel is currently adapting to include climate change directly in its financial accounting, in line with the premises of IFRS 1 and IFRS 2. Transparency as regards these data is a priority, as the climate context can have both positive and negative impacts on the Company's financial performance and risks.

Investments in low-carbon Research and Development (R&D)

In terms of investments in low-carbon R&D, Copel has devoted its efforts to two main programs:

- 1. Copel Ventures I:** A corporate venture capital fund focused on seeking investment opportunities in innovation in the electricity sector.
- 2. Regulatory research projects:** The Company has also been investing in research projects linked to the power sector, focused on reducing emissions and advancing sustainable technologies.

The Key investments in innovation include:

- **Move (BRL 3.5 million):** A startup offering smart management solutions for electric vehicle charging systems through an integrated platform with the Eletroposto Fácil ("Easy Charging Station") app, contributing to the advancement of e-mobility in Brazil.
- **Nextron Energia (BRL 11 million):** A solar energy marketplace connecting distributed generation with end consumers, promoting broader access to renewable energy.

Risk and opportunity management

Corporate risk management is an integral part of the Company's strategy and is essential for sustainable growth, profitability and the creation of value for shareholders. Constantly monitored by senior management to identify threats and opportunities, this practice supports decision-making and maximizes results. [To learn more about Copel's Risk Management, go to page 107.](#)

In its analysis of risks and opportunities, Copel adopts the definition of three horizons as the basis for strategic and financial planning.

- **Short term:** up to 3 years;
- **Medium term:** from 4 to 9 years; and
- **Long term:** over 10 years.

Copel adopts a structured approach to risk and opportunity identification, analyzing a set of internal and external events that could impact its strategic goals.

The Board of Directors oversees the main risks so that they can be mitigated. The SAP-GRC system is used to document processes and risks, improving management efficiency. Severity is assessed based on financial, operational, social and environmental and image impact, so that incidents are recorded and followed up for analysis and decision. Responses to risks range from accepting, avoiding, mitigating to sharing, and are reviewed on a quarterly basis (review cycles).

Environmental risks and opportunities

Considering the multidisciplinary nature of environmental matters, the Company has a process for identifying, assessing and managing environmental dependencies, impacts, risks and opportunities. Key stakeholders considered in the analysis of environmental risks and opportunities are suppliers, customers, employees, regulators and investors. Specifically with regard to suppliers, a 1st tier analysis is carried out more than once a year in qualitative and quantitative terms, in accordance with the time horizons defined by the Company. Because the Company operates in different Brazilian regions, the process is applied in various locations and at a national level.

There are several work fronts. One of them is the licensing process, in which dependencies, impacts, risks and opportunities are assessed. In terms of scope, the entire direct operation is considered in the analysis, while the external portion (upstream and downstream) is partially assessed, focused only the portions with the greatest financial, operational and image impacts.

The tools used include environmental impact assessment; IPCC climate change projections; ISO 140001 standards; double materiality assessment; TNFD and TCFD. For risk analysis, the Company uses COSO; corporate risk management; stress testing, and contracted scenarios, as well as having the support of external consultants.

At Copel, the environmental impacts (positive and negative) of each project is assessed based on standardized methodologies, validated by the scientific community and aligned with the requirements of different environmental agencies, based on the Brazilian legislation. Copel seeks to mitigate negative environmental impacts and maximize positive ones through the use of technology and by prospecting opportunities in the areas of biodiversity, reduction of GHG emissions and eco-efficiency. With regard to dependence on the environment, Copel uses the typology proposed by The Economics of Ecosystems and Biodiversity (TEEB), i.e., any dependence of the Company on an ecosystem service implies a potential risk and could impact its business.

To minimize this, environmental studies are carried out to help reduce impacts, such as defining new transmission line routes or using drones to minimize vegetation clearing.

Analysis of business risks and opportunities

SASB RR-ST-160a.2

Risk and opportunity analysis and management are intrinsically part of the Company's decision-making process. A concrete example is the influence of the hydrological regime on power production and the prices at which it is traded. To this end, Copel analyzes water availability scenarios based on historical variations and using future projections, making it possible to define strategic planning, revenue estimates and the associated risks.

Risks related to current and future environmental issues affecting the Company's operations, especially climate change, hydrology and biodiversity, are divided into the following parameters:

i) **Physical climate risks** — The possibility of losses caused by events associated with frequent and severe weather events (acute) or long-term environmental changes (chronic), which may be related to changes in climate patterns;

- **Acute physical risks:** drought or heavy rainfall caused by changes in rainfall volumes, heatwaves, cyclones and hurricanes;
- **Chronic physical risks:** ecosystem vulnerability and soil erosion, poor water quality, increase in hydrological vulnerability, rainfall and temperature patterns, more severe extreme weather events;

ii) **Transition climate risks** — The possibility of losses caused by events associated with the transition to a low-carbon economy, in which greenhouse gas emissions are reduced or offset and the natural mechanisms for capturing these gases are preserved. In addition, it should consider risks related to carbon pricing, changes in legislation, limitation to the use of resources and pollutant emissions;

iii) **Regulatory risk** — It encompasses the possibility of adverse impacts arising from the introduction of new regulations or stricter existing standards and inspection criteria applicable to the power sector.

The analysis of risks and opportunities takes into account qualitative and quantitative aspects, the frequency with which the effect occurs, the time horizon and the likelihood of the event occurring.

With regard to gains and opportunities, the scale defined in the Company's risk management methodology is used to assess the benefit, considering gains in productivity and revenue. When designing new projects, the Company's opportunity management refers them to the risk management department for analysis.

Physical risks

The risks identified in the operation can be divided into short-, medium- and long-term risks.

a. Short-term

Transmission:

Direct operation is subject to phenomena such as cyclones, hurricanes and typhoons, related to strong winds, which can impact the physical structures of transmission lines located in Southern Brazil. History shows that events of great magnitude have been capable of damaging up to four structures on a given transmission line, preventing the 230 kV Transmission Line circuit from being reconnected. This type of action has financial consequences with higher direct costs (restoring the system), as well as indirect costs (fines from the regulator, lawsuits arising from supply unavailability). The same historical data show that events like this do not exceed 1% of transmission Opex.

Analyzing the historical data and considering the climate scenarios (RCP 4.5) with projections for 2040, there is a medium-high likelihood of an extreme event occurring every two years, which could result in the unavailability of structures, the need to obtain resources to rebuild the structure and a discount on the variable portion of the tariff.

To respond to this risk, the Company has invested in infrastructure enhancement, as well as in labor, materials and monitoring.

Risk mitigation: The strategy to minimize the impact takes into account real-time monitoring of atmospheric conditions and identification of transmission lines that need improvement (robustness of the structure to endure intense and frequent weather phenomena). This is coupled with investments in technological innovation to inspect lines and anticipate possible problems, guaranteeing the reliability of transmission networks. There are situations in which it is necessary to redesign structures so that they become more reinforced and robust to withstand the most extreme events. As for new projects, historical cases

and future climate scenarios are taken into account and statistical calculations are carried out to ensure that power transmission is affected as little as possible.

Generation — hydroelectric power plants:

The direct operation of hydroelectric power plants can be subject to impacts from heavy rainfall, i.e., the hydrological regime can be affected by climate change, triggering risks to the Company's operations and facilities, which can have a financial impact on operating and maintenance costs. Historical data show that costs vary depending on the size of the project and the criticality of the event.

■ **Risk mitigation:** In order to minimize risk, the Company takes action to improve the monitoring of direct operations and guarantee the safety of people around the reservoirs. These measures include Dam Safety Plans, Emergency Action Plans for the dams, installation of flood protection systems at three hydroelectric power stations, maintenance of standby teams, hydrological and weather monitoring service and 24/7 weather forecasting.

Distribution:

Cyclones, hurricanes and typhoons can compromise the value chain, especially customers, since heavy rainfall over a short period of time, accompanied by windstorms and lightning strikes can cause physical damage to the facilities that transport and distribute energy, interrupting power supply to consumers and leading to the payment of compensation to customers for power outages. Studies show that extreme weather events can worsen indicators that measure energy supply quality and, in extreme cases, can threaten the Company's concession.

To mitigate this risk, the Company is stepping up investments in the monitoring of direct operations, aiming to expand a robust and secure network equipped with technologies that minimize the impact, frequency and duration of service interruptions, allowing for a quicker restoration of energy supply.

b. Medium-term

In the medium term, the chronic physical risk may arise from changes in hydrology, since the volume of rainfall in the river basins in which the Company has hydroelectric power plants may decrease and reduce the volume of water stored in the reservoirs. In financial terms, this risk is reduced since the Company participates in the Energy Allocation Mechanism, which aims to share hydrological risks. In addition, the Company invests in hydrological and weather monitoring to provide reliable data in its area of operation, in order to gather as much information as possible to support project reviews and interventions that may be necessary. The risk of such a phenomenon occurring is considered probable, but the reduction in revenue is low.

c. Long-term

In the long term, acute physical risk has been identified as possible in relation to flooding, which could impact some of the Company's assets. In 2014, Copel was impacted by heavy rainfall in the Iguaçu River basin, requiring additional costs for the recovery of the small hydroelectric plant on the Cavernoso River and, in 2016, the small hydroelectric power plant located on the Apucarantina River recorded a BRL 2 million impact due to damage to its facilities. In order to mitigate this risk, Copel maintains a hydrological and weather monitoring network, with an uninterrupted weather forecasting service for the regions where it has hydroelectric power generation projects, which helps to anticipate the actions and have a team ready to maintain the safety of the operation. The investment in monitoring is around BRL 6.5 million/year. A reduction in asset value as a result of flooding is seen as very unlikely, but if it does happen, it is of medium-high magnitude.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel 100% renewable from that date on.

Transition risks

Carbon regulation

In 2024, Brazil passed Federal Law 15,042, which regulates carbon credit trading. The power sector is heavily regulated by a national agency (Aneel) and it is not yet clear how the law will unfold. However, Copel has already been structuring itself to adapt to this new market, including by preparing its greenhouse gas inventory verified by a third party; developing strategies, such as the Neutrality Plan aimed at reducing its own emissions; and investing in expanding its fully renewable power generation matrix¹. Based on information from the GHG inventories and what is being designed by the Law, Copel considers that it should not be significantly affected.

Financial vulnerability due to significant environmental effects:

From the point of view of transition risks, the assets related to the divestment in Compagas, with an equity value of BRL 906.0 million, and Uega, of BRL 290.7 million, must be considered.

As for financial and image risks, the Company is subject to legal and administrative proceedings, including those related to consumers. Therefore, the Company records a provision for legal proceedings related to damage to equipment and machinery and power outages.

Opportunities

a. Short-term

Renewable energy:

Renewable energy is expected to replace fossil fuels in the coming years, which could lead to an increase in revenue through access to new markets, according to the 2022 report by the International Renewable Energy Agency (Irena). Green hydrogen is expected to be one of the driving forces behind this transition. Copel is participating in the Renewable Hydrogen Project, which aims to produce fuel for electromobility through the dry reforming of biogas (derived from domestic sewage treatment). This program is being implemented in Paraná, through the construction of Brazil’s first pilot plant for producing renewable hydrogen from biogas, which will receive an investment of BRL12.5 million.

b. Medium-term

In the medium term, there are opportunities in two fronts. One is to develop climate adaptation solutions, such as the Paraná Trifásico program, which will provide greater energy efficiency for customers and reduce energy losses during distribution by building 25,000 km of lines by 2025. Also in terms of improving energy distribution efficiency, smart meters are expected to be implemented to serve up to 30% of the Company’s 5 million customers by 2024, enabling them to better manage their consumption. In addition, automation reduces the need for field trips to identify faults during outages, making it possible to reduce GHG emissions and indirect operating costs, due to system modernization

c. Financial opportunity due to significant environmental effects

To fully decarbonize its energy matrix, the Company must focus its investments in 100% renewable sources, such as wind and solar power, as well as green hydrogen produced from biomass. In addition, it is essential to expand distributed generation and encourage the development and adoption of these sustainable technologies.

In compliance with the guidelines of Copel's Corporate Strategic Plan — 2030 Vision regarding the decarbonization of its asset portfolio, the Company evaluated divestments and recycling of assets and equity stakes, as follows:

UEG Araucária S.A. (UEGA) — On December 14, 2023, Copel and Copel GeT signed a Share Purchase and Sale Agreement (SPSA) for the sale of their equity stake in UEGA to Âmbor Energia S.A. On the reference date of September 30, 2023, the transaction value, equivalent to the equity value of Copel's 81.2% stake in the investment, was BRL 290,662,000.00.

Companhia Paranaense de Gás (Compagas) — On July 10, 2024, Copel signed the Control Block Purchase and Sale Agreement (CCVBC, in Portuguese) with Compass Dois Ltda., a subsidiary of Compass Gás e Energia S.A., for the sale of its stake, representing 51% of Compagas' capital stock. On September 16, 2024, the Company received 40% of the equity value of BRL 906,000,000.00.

Small-scale Generation Assets — On May 8, 2024, the Board of Directors approved the start of the non-binding proposal stage for the divestment of 13 small-scale generation assets, including the Figueira TTP, owned by its wholly-owned subsidiary Copel GeT, totaling 118.7 MW of installed capacity. On November 25, 2024, a Share Purchase and Sale Agreement and Other Covenants (SPSA) was signed with Electra Hydra/Intrepid for the total amount of BRL 450,492,000.00, corresponding to the equity value of the 13 assets.

Metrics and targets

Greenhouse Gas Inventory

Since 2009, Copel has been monitoring its greenhouse gas emissions and submitting its GHG inventory to a third-party verification, with publication on the main public registers. The inventory is reported by operational control and considers Copel Geração e Transmissão, Copel Distribuição and Copel Holding Company.

Scope 1 emissions consider emissions from stationary combustion and mobile combustion, as well as fugitive emissions and change in land use.

Scope 2 comprises emissions from energy consumption and electrical losses in transmission and distribution, considering both the location approach and the purchasing choice.

Scope 3 includes emissions from goods and services purchased, capital goods, transportation and distribution (upstream), waste generated in the operation, business travel, commuting and the use of goods and services sold.

Unit — tCO ₂ e	2022	2023	2024
Scope 1	50,834.44	81,690.26	17,317.97
Scope 2 (location)	163,700.83	148,798.66	229,169.37
Scope 2 (market)	162,594.895	147,848.524	223,406.49
Scope 3	28,816.86	1,252,317.29	3,149,230.23

Scope 1

Scope 1 emissions reflect the actions adopted by Copel. In 2024, these emissions sharply decreased due to the end of operations at the Figueira Thermal Power Plant, which used to run on coal. In 2024, emissions were broken down as follows:

Unit — tCO ₂ e	GeT	DIS	Total
Stationary combustion	3,652.96	2.29	3,671
Mobile combustion	974	5,325	6,381
Fugitive emissions	2,312	141	3,453
Changes in land use	0	3,811	3,811

Currently, the main emission sources are the Company's fleet — especially the use of diesel in the heavy-duty fleet — , residual coal combustion, fugitive SF6 emissions from electrical insulation equipment and the construction of new assets.

Scope 2

In Scope 2, the largest emissions are related to transmission and distribution losses. Copel seeks to minimize these losses by pursuing a high level of efficiency. However, part of these losses result from the interconnected system and, as such, there are no effective direct actions that can influence these outcomes.

In 2024, GHG emissions from electricity consumption totaled 1,398 tCO₂e, while losses in transmission and backbone grid amounted to 227,770 tCO₂e. Copel DIS accounted for 89% of emissions from electricity consumption and Copel GeT for 10%. In terms of transmission and backbone grid losses, Copel DIS accounted for 87% and Copel GeT for 13% of total emissions. Through I-REC certificates, the Company offset all emissions from electricity consumption and part of transmission and backbone grid losses.

Scope 3

The largest emission in this scope comes from goods and services sold, totaling 3,100,056 tCO₂e, followed by waste generated in operations, totalling 28,905 tCO₂e and upstream transportation and distribution, accounting 16,539 tCO₂e. Other emissions are significantly smaller by comparison: purchased goods and services — 1,676 tCO₂e; capital goods — 1,402 tCO₂e; business travel — 519 tCO₂e; and employee commuting — 130 tCO₂e.

"Goods and services sold" refers to the use of electricity sold to both captive and free market customers. In the Waste category, the largest share refers to tree pruning generated in the operation and upstream transportation, which corresponds to the transportation of goods by suppliers to Copel. It is worth mentioning that, in 2024,

Copel carried out an initiative with suppliers to encourage them to prepare their GHG inventories and began publishing their emissions, especially those related to the services and goods provided to Copel. It should be noted that these emissions were calculated using primary data, not estimates.

Indicators and targets

Indicators

Copel's greenhouse gas emissions indicator is Scope 1 emissions per operating revenue. In 2023, it came to 2.75 tCO₂e/R\$ million, and, in 2024, the figure was 0.72 tCO₂e/R\$ million. This difference reflects Copel's decarbonization efforts, with the disposal of assets with high emission levels.

¹ In February 2024 the Figueira Thermal Power Plant went into hibernation, making all the energy generated by Copel 100% renewable from that date on.

Targets

The targets related to climate change approved by Copel are linked to the following criteria for the coming years:

- **Stationary combustion:** Be 100% renewable by 2030. By the end of 2024, this target had already been achieved.¹
- **Mobile combustion:** Study underway to replace the old fleet. By 2030, the goal is to have 50% of the light vehicle fleet composed of electric or hybrid vehicles, and 100% running on ethanol. By the end of 2024, 18.8% of the light fleet consisted of electric vehicles.
- **Fugitive emissions:** Setting targets and study to reduce SF6 consumption. By the end of 2024, a 5% reduction target had already been established, along with actions to improve leak measurement.
- **Change in land use:** Review of project design methodology and acquisition of carbon credits for offsetting by 2030. By the end of 2024, the implementation of these actions was still under evaluation
- **Electricity consumption:** Ensure that all electricity consumption come from renewable sources by 2030. By the end of 2024, Copel had achieved this target.
- **Electricity losses:** By 2030, study improvements in loss management and analyze the purchase of I-REC. By the end of 2024, Copel was studying these strategies.
- **Offsetting:** By 2030, offset all residual emissions. By the end of 2024, Copel was conducting initiatives to reduce its emissions, and has been analyzing projects that could help offset these emissions.
- **Suppliers:** carry out actions to improve supplier engagement and encourage suppliers to submit their emissions, especially critical ones. By the end of 2024, Copel had developed incentive practices, and the capital goods category was included in the inventory.

Taxonomy

Brazil is developing its own green taxonomy system, but until it is approved, the European model is used as a reference. This model includes electricity generation from renewable sources (wind and solar power), electricity transmission and distribution and energy storage.

In 2024, Copel recorded net revenue of BRL 22,651 million. In terms of Opex and Capex, the total figures were BRL 18,868 million and BRL 2,504 million.



LIMITED ASSURANCE REPORT

GRI 2-5



Independent auditor's limited assurance report on the non-financial information included in the 2024 Integrated Report

To the Board of Directors and Stockholders
Companhia Paranaense de Energia - COPEL
Curitiba - PR

Introduction

We have been engaged by Companhia Paranaense de Energia ("Company" or "COPEL") to present our limited assurance report on the non-financial information included in the 2024 Integrated Report, in the GRI Content Index, for the year ended December 31, 2024.

Our limited assurance does not cover prior-period information, or any other information disclosed together with the 2024 Integrated Report, including any images, audio files or videos.

Responsibilities of COPEL's management

The management of COPEL is responsible for:

- (a) selecting or establishing adequate criteria for the preparation and presentation of the information included in the 2024 Integrated Report;

- (b) preparing the information in accordance with the GRI Standards, the Sustainability Accounting Standards Board (SASB), with the basis of preparation developed by the Company, and with Guidance CPC 09 - Integrated Reporting, issued by the Federal Accounting Council (CFC), equivalent to the Basic Conceptual Framework for Integrated Reporting, prepared by the International Integrated Reporting Council (IIRC);

- (c) designing, implementing and maintaining internal controls over the significant information used in the preparation of the 2024 Integrated Report, free from material misstatement, whether due to fraud or error.

Limitations in the preparation and presentation of non-financial information and indicators

In the preparation and presentation of non-financial information and indicators Management followed the definitions of the Preparation Base developed by the Company, the Sustainability Accounting Standards Board and the GRI Standards and, therefore, the information included in the 2024 Integrated Report does not aim to provide assurance with regard to the compliance with social, economic, environmental or engineering laws and regulations. However, the aforementioned standards establish the presentation and disclosure of possible cases of non-compliance with such regulations when sanctions or significant fines are applied.

The absence of a significant set of established practices on which to base the evaluation and measurement of non-financial information allows for different but acceptable evaluation and measurement techniques, which can affect comparability between entities and over time.

Our independence and quality control

We comply with the independence and other ethical requirements of the Federal Accounting Council (CFC), which are based on the principles of integrity, objectivity and professional competence, and which also consider the confidentiality and behavior of professionals.

We apply the Brazilian and international quality control standards established in NBC PA 01, issued by the CFC, and thus maintain an appropriate quality control system that includes policies and procedures related to compliance with ethical requirements, professional standards, legal requirements and regulatory requirements.

Independent auditor's responsibility

Our responsibility is to express a conclusion on the non-financial information included in the 2024 Integrated Report, based on our limited assurance engagement carried out in accordance with the Technical Communication CTO 01/12, "Issuance of an Assurance Report related to Sustainability and Social Responsibility", issued by the Federal Accounting Council (CFC), based on the Brazilian standard NBC TO 3000 - "Assurance Engagements Other than Audit and Review", also issued by the CFC, which is equivalent to the international standard ISAE 3000, "Assurance engagements other than audits or reviews of historical financial information", issued by the International Auditing and Assurance Standards Board (IAASB), applicable to non-financial information.

The aforementioned standards require that the work be planned and performed to obtain limited assurance that the non-financial information included in the 2024 Integrated Report, taken as a whole, is free from material misstatement, whether due to fraud or error, and to issue a limited assurance report that includes our conclusion.

A limited assurance engagement conducted in accordance with the Brazilian standard NBC TO 3000 and ISAE 3000 mainly consists of making inquiries of management and other professionals of COPEL involved in the preparation of the information, as well as applying analytical procedures to obtain evidence that allows us to issue a limited assurance conclusion on the information, taken as a whole. A limited assurance engagement also requires the performance of additional procedures when the independent auditor becomes aware of matters that lead him to believe that the information disclosed in the 2024 Integrated Report taken as a whole might present material misstatements.

As part of a limited assurance engagement in accordance with NBC TO 3000 (ISAE 3000), we exercise professional judgment and maintain professional skepticism throughout the engagement. We also:

- (a) Determine the suitability in the circumstances of the Company's use of the GRI Standards and SASB as basis of preparation of the non-financial information and indicators.
- (b) Perform risk assessment procedures, including obtaining an understanding of internal controls relevant to the engagement, to identify where material misstatements are likely to arise, whether due to fraud or error, but not for the purpose of providing a conclusion on the effectiveness of the Company's internal controls.
- (c) Design and perform procedures responsive to where material misstatements are likely to arise in the non-financial information and indicators. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

Summary of the procedures performed

The procedures selected are based on our understanding of the aspects related to the compilation, materiality, and presentation of the information included in the 2024 Integrated Report, other circumstances of the engagement and our analysis of the activities and processes associated with the material information disclosed in the 2024 Integrated Report in which significant misstatements might exist. The procedures comprised:

- (a) planning the work, taking into consideration the materiality and the volume of quantitative and qualitative information and the operating and internal control systems that were used to prepare the information included in the 2024 Integrated Report;
- (b) understanding the calculation methodology and the procedures adopted for the compilation of indicators through inquiries of the managers responsible for the preparation of the information;
- (c) applying analytical procedures to quantitative information and making inquiries regarding the qualitative information and its correlation with the indicators disclosed in the 2024 Integrated Report;
- (d) applying substantive tests to certain non-financial information and indicators; and
- (e) when non-financial data relate to financial indicators, comparing these indicators with the financial statements and/or accounting records.

The limited assurance engagement also included the analysis of the compliance with the GRI Standards, the Sustainability Accounting Standards Board, the principles for the Integrated Reporting, pursuant to Guidance CPC 09 - "Integrated Reporting", and the criteria established in the Premises Base developed by the Company.

Our procedures did not include assessing the adequacy of the design or operating effectiveness of the controls, testing the data on which the estimates are based or separately developing our own estimate to compare with COPEL's estimate.

Basis for conclusion

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Scope and limitations

The procedures applied in a limited assurance engagement are substantially less detailed than those applied in a reasonable assurance engagement, the objective of which is the issuance of an opinion on the information included in the 2024 Integrated Report. Consequently, we were unable to obtain reasonable assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement, the objective of which is the issuance of an opinion. Had we performed an engagement with the objective of issuing an opinion, we might have identified other matters and possible misstatements in the information included in the 2024 Integrated Report. Therefore, we do not express an opinion on this information.

Non-financial data are subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate and estimate these data. Qualitative interpretations of the relevance, materiality, and accuracy of the data are subject to individual assumptions and judgments. Furthermore, we did not consider in our engagement the data reported for prior periods, nor future projections and goals. Our assurance report must be read and understood in the context of the limitations inherent in the process of the preparation of non-financial information and indicators used by management, including the fact this information is not intended to provide assurance with regard to the compliance with social, economic, environmental or engineering laws and regulations.

The contents included in the scope of this assurance engagement are presented in the GRI Content Index of the 2024 Integrated Report.

Conclusion

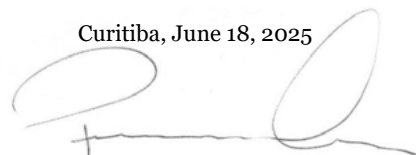
Based on the procedures performed, described herein, and on the evidence obtained, no matter has come to our attention that causes us to believe that the non-financial information included in the 2024 Integrated Report of COPEL has not been prepared, in all material respects, in accordance with the criteria established in the Preparation Base, with the Sustainability Accounting Standards Board (SASB), with the GRI Standards, and with the Guidance CPC 09 - "Integrated Reporting".

Other matters - restriction on use and distribution

This report was prepared for the use of COPEL and may be presented or distributed to third parties, as long as they are familiar with the object and criteria applicable to this assurance engagement, considering its specific purpose described in the first paragraph of this report.

Any parties other than COPEL that obtain access to this report, or a copy thereof, and rely on the information contained therein does so at their own risk. We do not accept or assume any responsibility and deny any liability to any party other than COPEL for our engagement, the assurance report or our conclusions.

Curitiba, June 18, 2025



PricewaterhouseCoopers
Auditores Independentes Ltda.
CRC 2SP000160/F-6

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Assinado por: Raurício Colombari (CPF: 015.124.020-1)
Data: 18/06/2025
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