



**Report on the Materiality
Process of Companhia
Paranaense de Energia - COPEL
2023 –2025**

Preparation:

Governance and Sustainability Superintendence

Governance, Risk, and Compliance Executive Board

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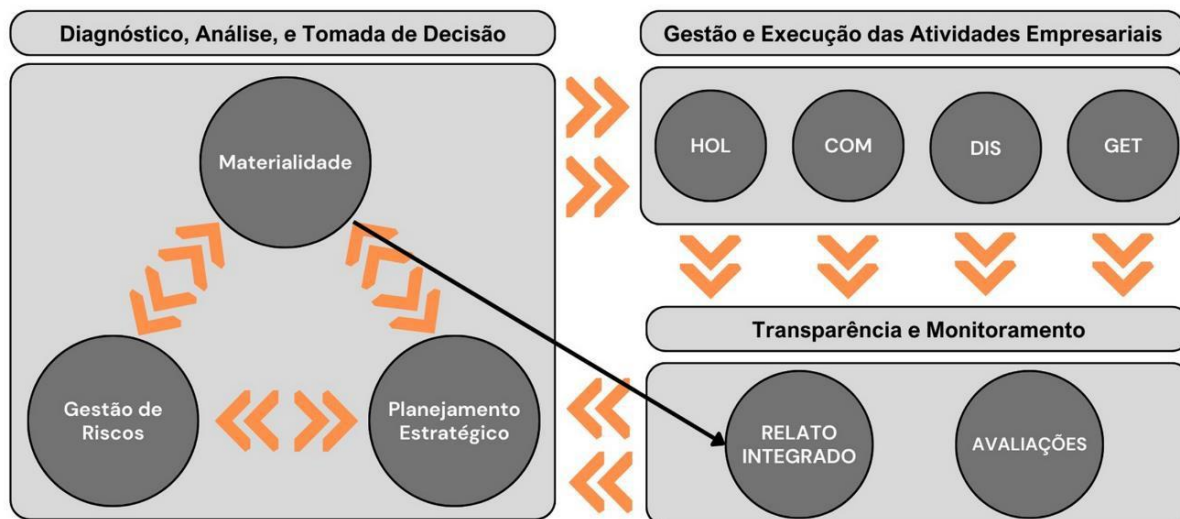
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1. Introduction

The material topics represent the most significant impacts of a company in the economic, environmental and social spheres. In order to reach its material topics, the Company periodically carries out the **Materiality Process**.

Copel completed its most recent materiality process in 2023 with the support of several areas and the participation of all businesses. To do so, it was based on the recommendations of the international GRI Standards (GRI3: Material Topics 2021). Ultimately, the Board of Directors approved Copel's material topics, the Company's highest level of Governance. **The complete process is valid for 2023 –2025, with annual reviews.** In 2024, the materiality process was submitted for review by the Sustainable Development Committee and the Board of Directors, which approved the maintenance of the existing material topics for another year.

The material topics are a fundamental subsidy for the Company's strategic planning, indicating the action priorities to be disseminated across all Copel areas and operations. They serve as an important guide for the company and directly contribute to Copel's risk management. They also guide the Integrated Report and the Socio-Environmental Reports, as the content and organization of the documents reflect the material topics.



Key:

Diagnóstico, Análise, e Tomada de Decisão	-	Diagnosis, Analysis, and Decision Making
Materialidade	-	Materiality
Gestão de Riscos	-	Risk management
Planejamento Estratégico	-	Strategic Planning
Gestão e Execução das Atividades Empresariais	-	Management and Execution of Business Activities
HOL	-	HOL
COM	-	COM
DIS	-	DIS
GET	-	GET
Transparência e Monitoramento	-	Transparency and Monitoring
RELATO INTEGRADO	-	INTEGRATED REPORT
AVALIAÇÕES	-	ASSESSMENTS

Main advances

The 2023-2025 materiality process represents a leap in quality for Copel. Firstly, it was one of the largest consultations with stakeholders (groups that impact or are impacted by Copel, such as customers, employees, suppliers, investors, among others) ever carried out by the Company. There were 6,905 participants from different segments, emphasizing Copel Distribuição customers: 3,595 respondents from 276 municipalities in Paraná.

Furthermore, Copel carried out double materiality for the first time, which was in line with best market practices. The double materiality consists of the joint analysis of ESG aspects with the Company's financial aspects. In the case of Copel, the risk portfolio was used as a basis for mapping financial impacts.

This materiality cycle was conducted 100% by Copel specialists.

2. Materiality process methodology

The materiality process consisted of seven stages, namely:

- stakeholder review;
- selection of relevant topics for consultation with the stakeholders;
- consultation with the stakeholders;
- analysis of collected data;
- cross-reference with topics financial impacts;
- preparation of materiality matrices;
- analysis and approval by the Executive Board.

2.1 Stakeholder Review

The corporate mapping of stakeholders in force at the Company, based on the AA1000 methodology, was revised at the beginning of 2023 to equalize terms and understandings.

Based on current terminologies and the terminology used in strategic planning (as explained in the 2022 Integrated Report), the current approach of corporate stakeholders to materiality is as follows:

- **Shareholders and Investors:** the stakeholders responsible for providing Copel with part of its financial resources, from which the Company can carry out its activities with excellence and stability and demand efforts from the Company to generate value and financial returns.
- **Customers:** the stakeholders directly impacted by the services provided by the Company.
- **Society and communities:** It comprises the entire society directly or indirectly affected by the Company's operations, emphasizing the Communities that are directly affected. The Environment was considered in this stakeholder, represented in the consultations.
- **Regulatory Bodies and Sector Entities:** the stakeholders that impact the Company's operations through regulations, sectoral decisions, etc.
- **Employees:** the stakeholders who directly impact and are impacted by the Company's operations. Both owned and outsourced employees are considered.
- **Partners and Suppliers:** the stakeholders who directly impact and are impacted by the Company's operations.

3. Selection of relevant topics for consultation

The first step in a good materiality process is the appropriate selection of relevant topics to be submitted for consultation with the company's stakeholders. At Copel, this selection was carried out by internal experts based on:

- **Studies** on real and potential impacts, positive and negative, and of greater and lesser severity relating to the Company's activities and business;
- **International rules and standards.** Main sources: Communication on Progress (CoP) of the United Nations (UN) Global Compact; GRI Standards and G4 Standard – Electric Utilities GRI; SASB Methodology - Renewable Energy in Electric Utilities & Power Generators Industry; Measuring Stakeholder Capitalism Methodology: towards Common Metrics and Consistent Reporting of Sustainable Value Creation – World Economic Forum (WEF).



- **National and international sustainability assessments.** Main sources: Corporate Sustainability Assessment (CSA/ DJSI); Corporate Sustainability Index (ISE B3); FTSE4Good Index – ESG; MSCI ESG; Sustainalytics; ISS.



- **Sectoral research (electric utilities)** in the national and international market. Main sources: 21 national market companies with the best performance in the CSA; 9 national companies with the best performance in ISE B3.

After analyzing this survey, the 34 most recurring topics that were consistent with Copel's context were selected.

4. Consultation with the stakeholders

Once the topics for consultation were defined, Copel's stakeholders responded to a questionnaire prepared by the sustainability team, which indicated which topics they believed the Company should prioritize in its activities.

The responses were collected between 08/23/2023 and 09/20/2023, with 34 topics distributed among 41 questions corresponding to the Environmental, Social, and Governance spheres. The research was applied in online and in-person formats and disseminated in different ways so that all groups could participate in the best way.

As a result, 6,905 people participated in the survey. Representatives from all the groups were mentioned, and the samples collected were satisfactory for all segments. The following table shows the number of responses by groups:

Group	Answers
Clients	3595
Communities*	25
Board of Directors, Executive Board, and Presidency	18
Owned employees	1755
Outsourced Employees	459
Sector Entities	6
Interns	133
Suppliers	314
Investors	552

Regulatory Bodies**	3
Equity Interests***	10
Society****	35
Total	6905

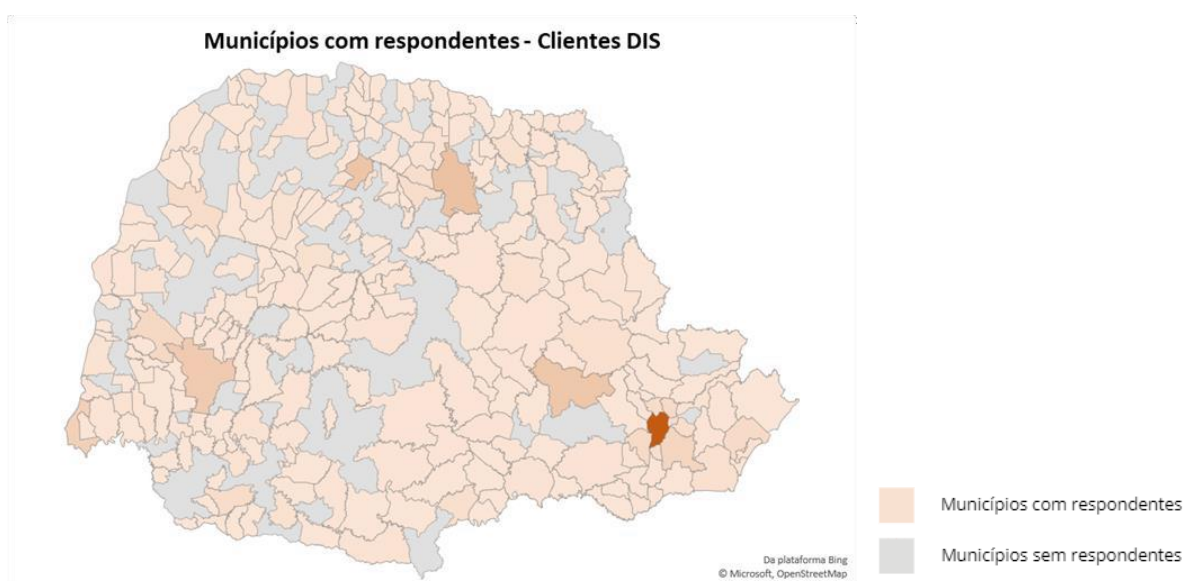
* Communities: leaders of the communities with which Copel interacts were consulted;

** Regulatory Bodies: three responses were received from representatives of the National Electric Energy Agency - ANEEL;

*** Equity Interests: In 2023, Copel had 26 equity interests, represented by 12 managers. Of these, 10 participated in the consultation.

**** Society: members of institutions representing society, such as universities, schools, and NGOs, among others.

In this universe, the broad participation of Copel DIS customers stands out: There were responses from customers in 276 municipalities in Paraná, the state in which Distribution operates, which became one of the largest queries ever carried out by the Company:



Key:

Municípios com respondentes – Clientes DIS	-	Municipalities with respondents – DIS Customers
Da plataforma Bing	-	From the Bing platform
Municípios com respondentes	-	Municipalities with respondents
Municípios sem respondentes	-	Municipalities without respondents

On the map, the darker the shade of orange, the greater the number of respondents.

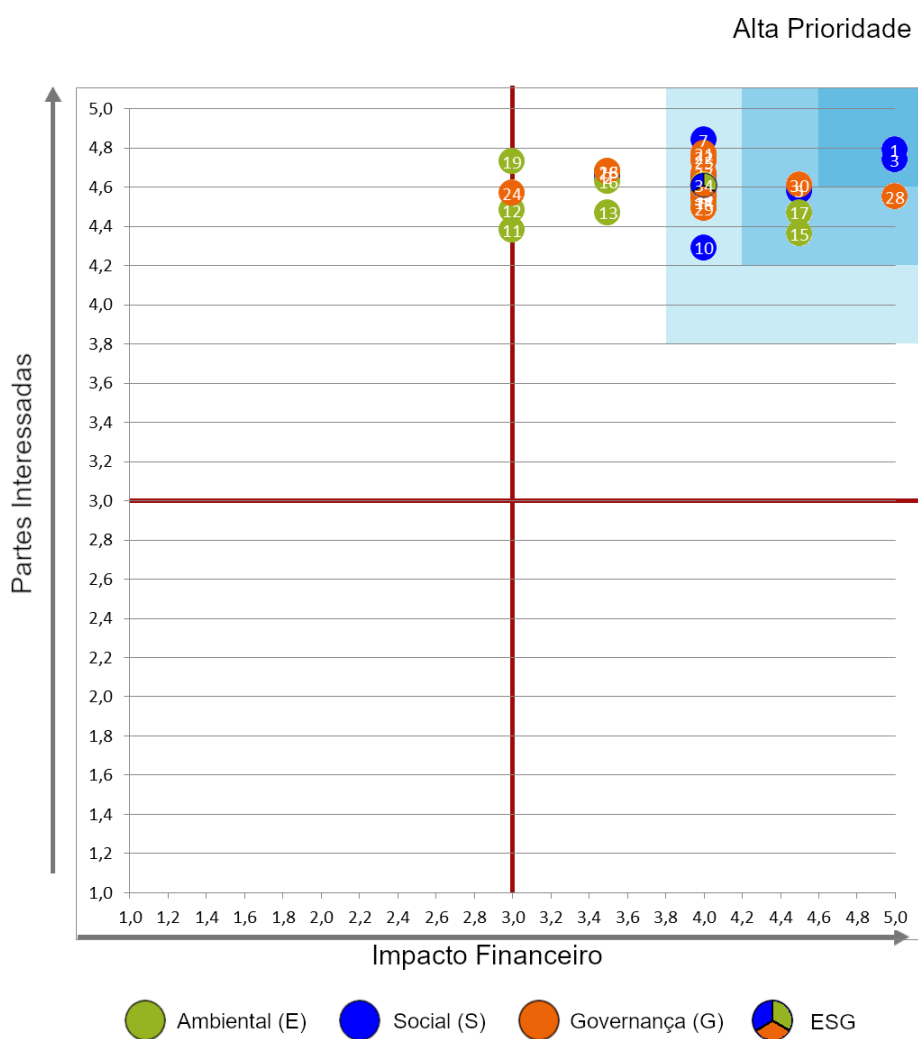
5. Materiality Matrices

Based on the results of the consultations, three materiality matrices were created:

- Stakeholder perception vs. company perception
- Perception of internal stakeholders vs. external stakeholders
- Double materiality:** perception of all stakeholders vs. topics financial impacts

Double materiality is an advance that allows a joint reading of ESG issues and their financial impacts, strengthening corporate strategy and risk management. From there, prioritizing certain topics, such as population safety, was emphasized.

Matrix: Double Materiality



Key:

Alta prioridade	- High priority
Partes Interessadas	- Stakeholders
Impacto Financeiro	- Financial impact
Ambiental	- Environmental
Social	- Social
Governança	- Governance

S	SOCIAL	1	Satisfação do Cliente
		2	Energia elétrica acessível
		3	Segurança da população
		4	Compromisso com os direitos humanos
		5	Compromisso com as comunidades
		6	Responsabilidade social
		7	Bem estar, saúde e segurança para a força de trabalho
		8	Desenvolvimento da força de trabalho
		9	Gestão de pessoas
		10	Diversidade, igualdade e inclusão
A	AMBIENTAL	11	Mudanças do Clima
		12	Gestão de recursos hídricos
		13	Ecoeficiência
		14	Compromisso com a biodiversidade
		15	Responsabilidade ambiental
		16	Geração de energia elétrica limpa
		17	Eletrificação
		18	Eficiência Energética
		19	Eficiência Operacional
G	GOVERNANÇA	20	Desempenho econômico e financeiro
		21	Integridade
		22	Transparência
		23	Governança Corporativa
		24	Ambiente regulatório
		25	Estratégia Corporativa
		26	Gestão de riscos e oportunidades
		27	Segurança Cibernética e da informação
		28	Inovação
		29	Oportunidade de novos negócios
		30	Investimentos em Infraestrutura de Distribuição e Transmissão de Energia Elétrica
		31	Gestão sustentável de fornecedores
		32	Engajamento com partes interessadas
		33	Investimento sustentável
ESG	34	Desenvolvimento Sustentável (ESG)	

Key:

SOCIAL

Satisfação do Cliente
Energia elétrica acessível
Segurança da população
Compromisso com os direitos humanos
Compromisso com as comunidades
Responsabilidade social
Bem estar, saúde e segurança para a
força de trabalho
Desenvolvimento da força de trabalho
Gestão de pessoas
Diversidade, igualdade e inclusão

AMBIENTAL

Mudanças do Clima
Gestão de recursos hídricos
Ecoeficiência
Compromisso com a biodiversidade
Responsabilidade ambiental
Geração de energia elétrica limpa
Eletrificação
Eficiência Energética
Eficiência Operacional

GOVERNANÇA

Desempenho econômico e financeiro
Integridade
Transparência
Governança Corporativa
Ambient regulatório
Estratégia Corporativa
Gestão de riscos e oportunidades
Segurança Cibernética e da informação
Inovação
Oportunidades de novos negócios
Investimentos em Infraestrutura de
Distribuição e Transmissão de Energia
Elétrica
Gestão sustentável de fornecedores
Engajamento com partes interessadas
Investimento sustentável
Desenvolvimento Sustentável

- SOCIAL

- Customer Satisfaction
- Affordable electrical energy
- Population Safety
- Commitment to human rights
- Commitment to the communities
- Social responsibility
- Well-being, health and safety for the
workforce
- Workforce development
- People Management
- Diversity, equality and inclusion
- ENVIRONMENTAL
- Climate Changes
- Water resources management
- Eco-efficiency
- Commitment to biodiversity
- Environmental Liability
- Clean Electrical Energy Generation
- Electrification
- Energetic Efficiency
- Operating Efficiency
- GOVERNANCE
- Economic and Financial Performance
- Integrity
- Transparency
- Corporate Governance
- Regulatory Environment
- Corporate Strategy
- Risk and opportunity management
- Cyber and information security
- Innovation
- New business opportunities
- Investments in Electricity Distribution and
Transmission Infrastructure
- Sustainable supplier management
- Engagement with stakeholders
- Sustainable investment
- Sustainable development

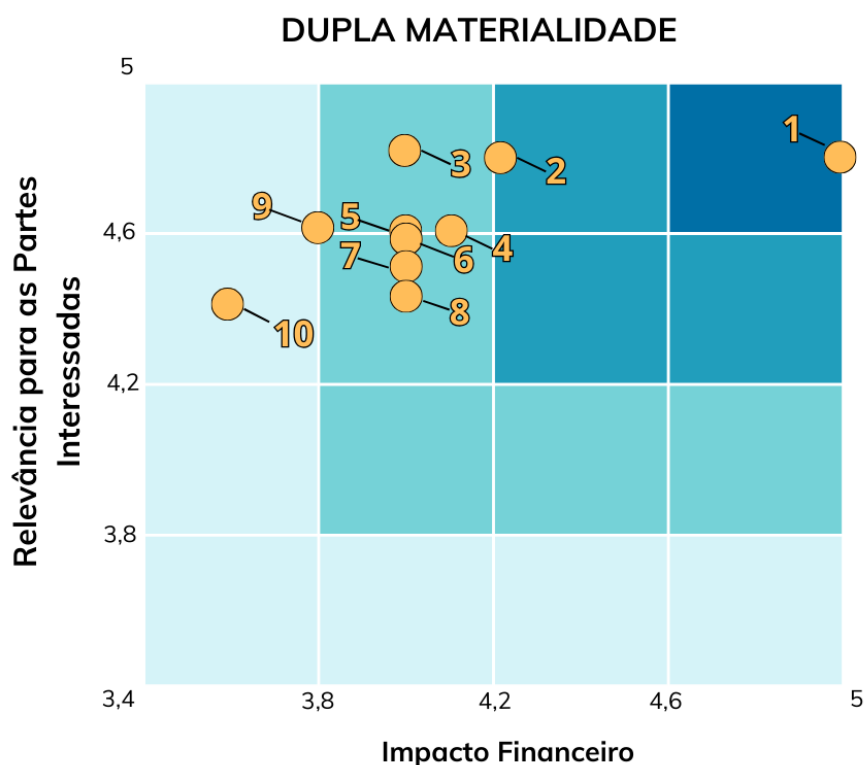
6. Copel Material Topics

Considering the double materiality, the 34 topics were considered material for the Company, with some distinctions in the level of criticality for the business. The topics were organized into ten groups to facilitate practical use, as per GRI guidance:

Grouping of Material Topics	List of Material Topics
Well-being, Health and Safety for the Workforce	Well-being, Health and Safety for the Workforce
Environmental Commitment	Commitment to biodiversity
	Eco-efficiency
	Water resources management
	Climate Changes
	Environmental Liability
Social Commitment	Commitment to the communities
	Commitment to Human Rights
	Engagement with stakeholders
	Social Responsibility
Economic-Financial Performance	Economic and Financial Performance
	Sustainable investment
People Management	Workforce development
	Diversity, equality and inclusion
	People Management
Sustainable Supplier Management	Sustainable Supplier Management
Corporate Governance	Regulatory Environment
	Sustainable development
	Corporate Strategy
	Risk and Opportunity Management
	Corporate Governance
	Integrity

	Transparency
Customer Satisfaction	Affordable electrical energy
	Customer Satisfaction
Population Safety	Population Safety
Energy Sector Transformation	Energetic Efficiency
	Operating Efficiency
	Electrification
	Clean Electrical Energy Generation
	Innovation
Energy Sector Transformation	Investments in Electricity Distribution and Transmission Infrastructure
	New Business Opportunity
	Cyber and information security

The matrix below aims to illustrate the grouped topics of double materiality. They all have high relevance, but the closer they are to the top right corner (or the darker the shade of blue), the more significant the group's relevance is, for stakeholders and financial impact.



Key:

DUPLA MATERIALIDADE	- DOUBLE MATERIALITY
Relevância para as Partes Interessadas	- Relevance to Stakeholders
Impacto Financeiro	- Financial impact

Key:

1. Population Safety
2. Customer Satisfaction
3. Well-being, Health and Safety for the Workforce
4. Social Commitment
5. Energy Sector Transformation
6. Economic-Financial Performance
7. Sustainable Supplier Management
8. People Management
9. Corporate Governance
10. Environmental Commitment

The first aspect to be highlighted is the "Population Safety" group, which is highly prioritized for stakeholders and has a high financial impact. This is mainly about the security of the energy generation infrastructure. The topic did not appear in the Company's previous materiality cycles.

Notwithstanding, the topic includes population safety when interacting with energy transmission and distribution facilities and the risk of accidents involving electricity in general.

Compared to previous cycles, therefore, the entry of "Population Safety", of high priority for stakeholders and in terms of financial impact, and "Sustainable Supplier Management" stands out. The topic "Operational Efficiency" was absorbed by "Energy Sector Transformation". "People Management and Occupational Health and Safety" was divided into two groups based on the emphasis given by stakeholders and due to the specificity of each subject.

The groups "environmental management and actions against climate change" and "environmental responsibility" have become more comprehensive, hence the name change to "Environmental Commitment" and "Social Commitment".

In the figure below, the new topics compared to the previous cycle are highlighted in green:

2020	2021	2023
1- Corporate Governance	1- Corporate Governance and Risk Management	1- Corporate Governance
2- Regulatory Environment		
3- Risk Management		
4- Economic-Financial Performance	2- Economic-Financial Performance	2- Economic-Financial Performance
5- Customer Satisfaction	3- Customer Satisfaction	3- Customer Satisfaction
6- Environmental Management	4- Environmental Management and Actions against Climate Change	4- Environmental Commitment
7- Communities and Social Investment	5- Social Responsibility	5- Social Commitment
8- People Management	6- People Management and Occupational Health and Safety	6- People Management
9- Occupational Health and Safety		7- Well-being, Health and Safety for the Workforce
10- Operational Efficiency	7- Operational Efficiency	8- Energy Sector Transformation
	8- Energy Sector Transformation	
		9- Population Safety
		10- Sustainable Supplier Management

7. Copel Material Topics: impacts, opportunities and GRI Indicators

Next, the material topics are contextualized based on Copel's reality. The main risks are indicated based on the risk portfolio and the topics' opportunities.

Well-being, health and safety for the workforce

At Copel, people's health and safety are fundamental factors in organizational success and longevity, so senior leadership considers them the company's strategy. Based on this premise, all efforts must be made to continuously improve the protection and promotion of the safety, health and well-being.

This involves taking care of people's health, safety, and quality of life and reducing and monitoring the severity rate of accidents involving employees and contractors. This goal is broken down and monitored in the management commitment of all areas of the Company. To this end, risk management and medical and occupational health control programs, policies, regulations and periodic inspections exist.

Previously, "people management" was separated due to its specificity and relevance. The topic is one of the Company's values and involves its owned and outsourced employees.

By prioritizing the health and safety of employees, the company demonstrates its commitment to the care and protection of its team, which positively influences their productivity and engagement. A healthy and safe work environment is reflected in several aspects, such as the quality of relationships between employees, customer service, operational efficiency and the cost/benefit ratio of the products and services offered.

Main possible impacts related to the topic:

- FINANCIAL: absenteeism, fines, sanctions, penalties, increased costs;
- OPERATIONAL: absenteeism, fatalities and reduced productivity;
- REPUTATIONAL: damage to the image.

Main opportunities:

Strengthening an organizational health and safety culture; expansion of the integrated occupational health and safety management system.

Well-being, health and safety of the workforce		
GRI 400: Social	GRI 403-1	Occupational health and safety management system
	GRI 403-2	Hazard identification, risk assessment and incident investigation

	GRI 403-3	Occupational health services
	GRI 403-4	Worker participation, consultation, and communication on occupational health and safety
	GRI 403-5	Worker training on occupational health and safety
	GRI 403-6	Promotion of worker health
	GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships
	GRI 403-8	Workers covered by an occupational health and safety management system
	GRI 403-9	Work-related injuries
	GRI 403-10	Work-related ill health
Sector Supplement GRI for energy 2013	EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors
Energy Sector Supplement	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training

Environmental commitment

The topic considers climate change, commitment to biodiversity, eco-efficiency, water resources management and environmental responsibility. The main implications of climate change for Copel's business are related to historical temperature patterns, wind and rain. For this reason, Copel incorporates climate change into its risk analysis and financial assessment of opportunities, maintaining its energy matrix predominantly from renewable sources and developing low-carbon technologies and energy efficiency and conservation projects. The Wholly-Owned Subsidiaries have plans to adapt to climate change, and the Copel group has targets to reduce and neutralize its emissions.

In terms of biodiversity, significant changes can affect the availability of ecosystem services, such as water and other natural resources, global climate regulation, soil erosion regulation, water quality regulation, pollination and nutrient cycling. Thus, biodiversity conservation helps to reduce the risks of scarcity or resource alteration on which the Company has some dependence.

The environmental studies aim to identify, avoid, reduce and mitigate the impacts caused by the business implementation and operation. In this sense, the engagement of stakeholders and investment in research, as part of problem-solving, is fundamental to the Company's growth.

The topic also involves preserving areas around its business, whether in the urban perimeter, reservoirs or under the transmission lines that cross Brazilian territory. The management of natural resources is fundamental to the sustainability of Copel's business and the management of waste, effluents, emissions and noise arising from the implementation of projects, operations and administrative processes.

The main environmental implications identified in business implementation projects are related to land use, biodiversity changes, and water availability, among others. To mitigate and compensate, Copel monitors and rescues flora and fauna; acts in preserving and recovering Permanent Preservation Areas (APPs); forest replacement; archaeological monitoring and rescue, among other actions.

Main possible impacts related to the topic:

- **FINANCIAL:** fines, sanctions, penalties, increased costs, compromised results; payment of fees arising from greenhouse gas emissions and carbon pricing; increase in direct and indirect operating costs; drop in revenues due to reduced production capacity;
- **OPERATIONAL:** replacement of equipment and facilities; reduction of production capacity; time, availability of human and material resources to reestablish infrastructure in the event of extreme weather events; reduction of generation capacity; reduction in the useful life of assets; unavailability of natural resources for energy generation;
- **REGULATORY:** penalties due to non-generation planned; regulatory changes related to emissions and climate adaptation;
- **REPUTATIONAL:** damage to the image.

Main opportunities:

Expansion of the clean energy and renewable sources market; electrification; diversification of the energy matrix from renewable sources; renewal of the light fleet powered by electricity and/or ethanol; development of new clean energy projects; decarbonization of the matrix, expansion of operations in the Distributed Generation segment and investment in research and development in new technologies related to green and/or low-carbon hydrogen from biomass, biofuels or other organic waste; and the expansion of the commercialization of renewable energy certificates.

Environmental Commitment		
	GRI 301-1	Materials used by weight or volume
	GRI 303-1	Interactions with water as a shared resource

GRI 300: Environmental	GRI 303-2	Management of water discharge related impacts
	GRI 303-3	Water withdrawal
	GRI 303-4	Water discharge
	GRI 303-5	Water consumption
	GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
	GRI 304-2	Significant impacts of activities, products and services on biodiversity
	GRI 304-3	Habitats protected or restored
	GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations
	GRI 305-1	Direct (Scope 1) GHG emissions
	GRI 305-2	Energy indirect (Scope 2) GHG emissions
GRI 300: Environmental	GRI 305-3	Other indirect (Scope 3) GHG emissions
	GRI 305-4	GHG emissions intensity
	GRI 305-5	Reduction of GHG emissions
	GRI 305-6	Emissions of ozone-depleting substances (ODS)
	GRI 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions
	GRI 306-1	Waste generation and significant waste-related impacts
	GRI 306-2	Management of significant waste-related impacts
	GRI 306-3	Waste Generated
	GRI 306-4	Waste diverted from disposal
	GRI 306-5	Waste directed to disposal
GRI sector supplement for energy 2013	EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas

Social Commitment

The topic considers commitment to communities, human rights, stakeholder engagement, and social responsibility.

The management of the social dimension at Copel is based on identifying risks, impacts and opportunities, proposing improvements, and defining goals that help compose management indicators.

The implementation of new businesses generates jobs and revenue for municipalities, as well as local development. However, situations that require mitigation or compensation through social programs are identified in the basic environmental plans, simplified environmental reports, and detailed reports on the environmental programs of each enterprise.

Concerning human rights, to improve its operations, Copel has regulations and guidelines, safety inspections and a due diligence process that allows it to identify, mitigate and respond to adverse impacts caused or potential risks, considering all its activities and operations and internal and external audiences.

Human rights due diligence is a tool that contributes to ensuring the protection of workers' rights and preserving the company's sustainability processes and services, which generates and distributes energy cleanly, considering social justice in its choices and procedures.

In carrying out its social role, Copel works in partnership with the three government spheres, federal, state and municipal, to implement public policies relating to the electricity sector, operationalized through programs that follow legal determinations. Its main purpose is to expand access to energy, considering the socioeconomic characteristics of the population, as well as the specificities and demands of urban and rural areas.

Main possible impacts related to the topic:

- FINANCIAL: fines, sanctions and penalties;
- REGULATORY: loss of licenses;
- REPUTATIONAL: damage to the image;
- HEALTH AND SAFETY: accidents and fatalities among the population;

Main opportunities:

Strengthening relationships and engagement with stakeholders.

Social Commitment		
GRI 200: Governance/economic	GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage
	GRI 202-2	Proportion of senior management hired from the local community
	GRI 203-1	Infrastructure investments and services supported
	GRI 203-2	Significant indirect economic impacts
GRI 400: Social	GRI 411-1	Incidents of violations involving rights of Indigenous peoples
GRI 400: Social	GRI 413-1	Operations with local community engagement, impact assessments, and development programs
GRI 400: Social	GRI 413-2	Operations with significant actual and potential negative impacts on local communities
GRI 400: Social	GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services
GRI sector supplement for energy 2013	EU19	Stakeholder participation in the decision-making process related to energy planning and infrastructure development
GRI sector supplement for energy 2013	EU20	Approach to managing the impacts of displacement
GRI sector supplement for energy 2013	EU22	Number of people physically or economically displaced and compensation, broken down by type of project

Economic-Financial Performance

The economic-financial performance reflects the Company's financial health and the degree of success achieved with the capital invested. This allows stakeholders to evaluate the use of resources, including business efficiency, and the factors that influenced it.

Copel is committed to generating returns for its stakeholders, adequately remunerating the invested capital and maintaining the financial capacity to sustain its activities and generate sustainable growth.

Economic-financial results directly impact management and its decisions, including the application of resources, the ability to maintain and expand its business, the need to continue or review its strategies for efficiency, the decision of investors and shareholders and the ability to pay debts and obligations towards financial institutions, suppliers, employees, the Government, state, municipalities and shareholders.

Copel's economic-financial management is carried out by the Finance and Investor Relations Executive Board, which periodically submits to the executive board an assessment of the economic-financial situation of the business and changes in scenarios. As a publicly held company listed on the stock exchange, Copel publishes its results quarterly and practices clear and accessible communication with internal and external audiences based on transparency, information symmetry, and fair treatment in compliance with Brazilian and North American legislation.

For the executive board, economic-financial performance guides decision-making and the necessary improvements to generate and maintain efficiency. The results obtained in each cycle direct the application of the resources or capture; impact the ability to maintain and expand business; demonstrate the need for continuity or review of strategies for manageable cost efficiency; and influence the investors' and shareholders' decisions.

Main possible impacts related to the topic:

- FINANCIAL: impact on income; failures in capital allocation;
- REPUTATIONAL: damage to the image.

Main opportunities:

Expansion and diversification of resource allocation in new solutions, electrification processes and sustainable projects.

Economic-financial performance		
GRI 200: Governance/economic	GRI 201-1	Direct economic value generated and distributed
	GRI 201-2	Financial implications and other risks and opportunities due to climate change
	GRI 201-3	Defined benefit plan obligations and other retirement plans
	GRI 201-4	Financial assistance received from the government
	GRI 207-1	Approach to tax
	GRI 207-2	Tax governance, control, and risk management

People Management

People management involves investment in human capital, professional and personal development programs, organizational climate, training for owned and outsourced employees, remuneration policies, benefits and relationships with unions.

Labor relations are based on the company's values and respect for universal, constitutional and legal precepts.

Main possible impacts related to the topic:

- FINANCIAL: impact on income;
- STRATEGIC: Loss of intellectual capital; failure to identify and prepare successors for critical business positions; failure to retain talent; reduced workforce engagement; discontinuity of essential activities; inefficiency;
- REPUTATIONAL: damage to the image.

Main opportunities:

Attraction and retention of new talent; workforce professional and personal development; workforce engagement.

People Management		
GRI 400: Social	GRI 401-1	New employee hires and employee turnover
	GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees
	GRI 401-3	Parental leave
	GRI 404-1	Average hours of training per year per employee
	GRI 404-2	Programs for upgrading employee skills and transition assistance programs
	GRI 404-3	Percentage of employees receiving regular performance and career development reviews
	GRI 405-1	Diversity of governance bodies and employees
	GRI 405-2	Ratio of basic salary and remuneration of women to men
	GRI 406-1	Incidents of discrimination and corrective actions taken

	GRI 407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk
	GRI 410 -1	Security personnel trained in human rights policies or procedures
Sector Supplement GRI for energy 2013	EU14	Programs and processes to ensure the availability of a skilled workforce
	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region

Sustainable Supplier Management

The topic has always been considered relevant at the Company, but for the first time, it was highlighted as a specific material topic. It involves supplier hiring and monitoring, including ESG aspects, due diligence, supplier guidance and monitoring.

Sustainable supplier management presupposes a beneficial relationship for both parties, where the company considers the supplier a partner and strives to develop it to improve results in the social, economic and environmental spheres and deliver value to the society.

Copel's suppliers vary depending on the business and include electricity generators and transmitters, material manufacturers, heavy machinery, and service providers, among others.

Among the risks related to the supply chain, the following stand out: accidents involving employees; accidents or damage to the population; precarious facilities and working conditions. Especially in the economic-social dimension, there are risks related to Copel's economic-financial dependence, legal obligations, tax, social and labor charges, and salaries and additional payments. Risks related to the environment involve non-compliance with environmental legislation, inadequate origin of inputs and poor waste treatment.

The suppliers are evaluated by the degree of disruption risk and the degree of impact on Copel, considering legal, financial, environmental, occupational health and safety, population, image, customer and society perception, and process security. Those whose risk is considered significant, from the perspective of a possible supply disruption, as well as those with greater risk in economic, environmental, social and governance aspects, are classified as critical suppliers.

Main possible impacts related to the topic:

- FINANCIAL: increased inflationary pressure on prices and costs; possible global recession;
- OPERATIONAL: supply chain disruption;

- REPUTATIONAL: damage to the image.

Main opportunities:

Reinforcement and promotion of ESG practices among suppliers; implementation of due diligence processes in the supply chain; external assessments.

Sustainable supplier management		
GRI 200: Governance/economic	GRI 204-1	Proportion of spending on local suppliers
GRI 400: Social	GRI 408-1	Operations and suppliers at significant risk for incidents of child labor
	GRI 409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor
	GRI 414-1	New suppliers that were screened using social criteria
	GRI 414-2	Negative social impacts in the supply chain and actions taken
GRI 300: Environmental	GRI 308-1	New suppliers that were screened using environmental criteria
	GRI 308-2	Negative environmental impacts in the supply chain and actions taken

Corporate Governance

A structured governance system, with high transparency and protection for shareholders and investors, is associated with lower capital costs for organizations and is a critical factor for investment decisions and consequent business longevity. Corporate Governance is essential for business longevity, as it supports rational decision-making and enables mitigating financial and reputational risks with stakeholders, especially in the relationship with its shareholders.

Thus, the material topic of Corporate Governance covers the principles that guide the governance model; the Company's governance structure and composition; the practices and mechanisms that guarantee the effectiveness and quality of this governance; the way the compliance process is carried out and its performance; integrated corporate risk management; matters related to the regulatory environment, among others.

The most sensitive implications in the governance dimension are those related to executive board decision-making and strategic planning, which can result in a substantial loss of economic value, as well as those arising from fraud and corruption, which can lead to financial

losses, fines, sanctions and penalties by supervisory bodies, with consequent deterioration of the Company's image.

Main possible impacts related to the topic:

- **FINANCIAL:** fines, sanctions, penalties, increased costs, compromised results, failure to allocate capital and market value;
- **OPERATIONAL:** failures in processes and market practices;
- **REGULATORY:** changes in legislation;
- **REPUTATIONAL:** failures in transparency, reduced reliability and damage to the image.

Main opportunities:

Process innovation based on market trends (such as double materiality); expansion and dissemination of best Governance practices (integrity, compliance, risk management and internal controls);

Corporate Governance		
GRI 200: Governance/economic	GRI 205-1	Operations assessed for risks related to corruption
	GRI 205-2	Communication and training about anti-corruption policies and procedures
	GRI 205-3	Confirmed incidents of corruption and actions taken
	GRI 206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices
	GRI 415-1	Political contributions
	GRI 417-3	Incidents of non-compliance concerning marketing communications
	GRI 418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data

Customer Satisfaction

Customer satisfaction is directly linked to organizations' economic and financial results and reputation. This topic has performance monitoring indicators that measure how well the company meets customer expectations about products and services from different aspects, such as relationship, service, deadline, price, trust, operational efficiency and cost/benefit ratio.

With the sector regulation and despite the division of businesses into generation, transmission, energy commercialization and distribution, customer satisfaction continues to be the focus of the executive board.

Main possible impacts related to the topic:

- FINANCIAL: increase in Default;
- STRATEGIC: loss of concessions;
- REPUTATIONAL: damage to the image.

Main opportunities:

Offering new products and services through electrification; strengthening quality with investments in generation, transmission and distribution infrastructure; improving processes, technologies and service facilities.

Customer satisfaction		
Sector Supplement GRI for energy 2013	EU3	Number of residential, industrial, institutional and commercial consumer accounts
	EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services
	EU24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services
	EU26	Percentage of population not served in licensed distribution or service areas
	EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime

Population Safety

The topic "Population Safety" appeared prominently in Copel's double materiality, having been considered highly relevant for stakeholders and having a high financial impact for the Company.

It is related to the safety of dams and reservoirs and the prevention and monitoring of accidents involving the population with electricity.

The topic has an important link with climate change, as extreme weather events, such as more intense and frequent storms, floods or droughts, can affect energy generation and distribution operations and impact population safety.

Regarding this topic, Copel Geração e Transmissão acts preventively through criteria and procedures aligned with the best engineering practices and current legislation. In addition, it has Dam Safety Plans (PSB); Emergency Action Plans (PAE), and Action Plans for Socio-Environmental Emergencies (PAMA) to ensure rapid mobilization and a structured and efficient response in cases of emergency. The Company also has a Dam Safety Engineering Sector, which comprises professionals dedicated to the safety of these structures, who are responsible for carrying out maintenance procedures and continuous monitoring of dams and associated structures.

It is important to highlight that hydroelectric plant dams have well-established construction standards and safety criteria and that safety verification is carried out at all phases – design, construction and operation.

Within the scope of Copel Distribuição, the potential impacts involve electric shocks and other accidents with the network, which is why the focus is on engaging customers and consumers with the safe use of energy. Copel invests in safety campaigns for the community, with various guidance actions in schools, teaching spaces, civil and rural construction sites, and visits to private construction sites, among others. Copel works to improve energy distribution infrastructure, as well as distributed energy generation, in order to, among other factors, avoid accidents and fatalities among the population.

Main possible impacts related to the topic:

- SOCIO-ENVIRONMENTAL: damage to ecosystems and local communities;
- FINANCIAL: fines, sanctions, compensation and penalties by supervisory bodies; losses to assets;
- HEALTH AND SAFETY: accidents and fatalities;
- OPERATIONAL: interruption of activities;
- REGULATORY: loss of licenses;
- REPUTATIONAL: damage to the image.

Main opportunities:

Improving relationships with local communities; strengthening the safety culture, involving the workforce, local communities, and society as a whole; improving asset infrastructure and investment in distributed generation.

Population Safety		
GRI 400	GRI 417-1	Requirements for product and service information and labeling
Energy Sector Supplement	EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans
	EU25	Number of injuries and fatalities to the public involving company assets

Energy Sector Transformation

It includes energy efficiency, operational efficiency, electrification, clean electrical energy generation, innovation, investments in electrical energy distribution and transmission infrastructure, new business opportunities, and cyber and information security.

The 3D (decarbonization, decentralization and digitalization) are the pillars of the energy sector transformation. Investments in renewable sources drive a strong movement towards decarbonization in the electricity sector. Brazil has a privileged position due to its wide range of renewable sources in its electrical matrix; however, its challenge is maintaining this status in the face of increased demand and climate change.

The decentralization of electrical energy generation in Brazil is represented by GD (Distributed Generation), a movement that began in 2012 and has gained strong prominence recently.

The sector digitalization refers to the use of technologies and systems that enable the integration of different sources, equipment, devices, etc., and data management in a way that benefits the involved parties. Digitalization is crucial to actively manage intermittent generation from solar and wind sources, managing storage devices and creating tariffs and incentives for consumption at times most beneficial to the electrical system's operation.

Copel is one of the protagonists in the sector, and it has several ongoing projects and initiatives: Smart Electrical Grids, electromobility, and energy storage, among others. The global movement to a low-carbon economy transition encourages the creation of markets such as carbon and hydrogen. These markets are still being established in Brazil, and in 2023, the proposal to regulate the carbon market in Brazil was approved. The rules and regulations of this market will still undergo Public Consultation.

Regarding the hydrogen market, Copel has been working on R&D and open innovation projects to evaluate business models, develop certification and test production technologies. To operate in a sector with increasing transformations, entering into strategic partnerships is important to follow trends and capture opportunities for a company's business.

Along these lines, Copel, through the Copel Volt Program, seeks to get closer to the innovation ecosystem and take advantage of the global startups' synergy with the Company's business.

Main possible impacts related to the topic:

- **FINANCIAL:** fines, sanctions and penalties by supervisory bodies; price increase; unavailability or difficulty in raising funds;
- **OPERATIONAL:** failures in workforce preparation; failure to keep up with the effect of the intensification of digitalization in the electricity sector; failure to develop solutions; loss of productivity; failure to complete developed projects; non-compliance with corporate targets for rebuilding and increasing EBITDA and failure to achieve the ideal internal debt structure; increased recovery time to normalize operations;
- **STRATEGIC:** less competitiveness; failure in the ability to prospect, negotiate and structure businesses and services; failure to execute the investment program; information leakage; cyber-attacks;
- **REGULATORY:** delay in signing new concession contracts for the company's main plants;
- **EMERGING:** geopolitical conflicts with an impact on cybersecurity;
- **REPUTATIONAL:** damage to the image.

Main opportunities: increased customer protagonism; technological development; entry into new markets; new strategic partnerships; workforce development; new projects development; consumption electrification; energy-as-a-service.

Energy Sector Transformation		
GRI sector supplement for energy 2013	EU1	Installed capacity, broken down by primary energy source and by regulatory regime
	EU2	Net energy output broken down by primary energy source and by regulatory regime
	EU6	Management approach to ensure short and long-term electricity availability and reliability
	EU7	Demand-side management programs including residential, commercial, institutional and industrial programs
	EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development

	EU10	Planned capacity against projected electricity demand over the long term
	EU11	Average generation efficiency of thermal plants by energy source and regulatory regime
	EU12	Transmission and distribution losses as a percentage of total energy
	EU28	Power outage frequency
	EU29	Average power outage duration
	EU30	Average plant availability factor by energy source and by regulatory regime
GRI 300: Environmental	GRI 302-1	Energy consumption within the organization
	GRI 302-2	Energy consumption outside of the organization
	GRI 302-3	Energetic intensity
	GRI 302-4	Reduction of energy consumption
	GRI 302-5	Reductions in the energy requirements of products and services

8. Relationship of Material Topics with the SDGs

Copel's material topics are directly and indirectly linked to several Sustainable Development Goals (SDGs).

In this context, the most significant Sustainable Development Goals related to material topics are the following:



Key:

Compromisso Ambiental	- Environmental Commitment
Compromisso Social	- Social Commitment
Desempenho Econômico-Financeiro	- Economic-Financial Performance
Gestão de Pessoas	- People Management
Gestão Sustentável de Fornecedores	- Sustainable Supplier Management
Governança Corporativa	- Corporate Governance
Satisfação do cliente	- Customer satisfaction
Transformação do setor de energia	- Energy Sector Transformation
Segurança da população	- Population Safety
ODS prioritários para a Copel	- Priority SDGs for Copel

ANNEXES

ANNEX 1 - Definition of material topics

ENVIRONMENTAL		
Copel Topic	Components	Explanation
Climate Changes	Climate Changes	These are climate changes caused by the increase in greenhouse gases. They can affect the economy, agriculture, industry, city planning and people's well-being. The increase in windstorms, floods and droughts are some examples.
	Reduction of Greenhouse Gases (GHG) Emissions	Greenhouse gases are naturally present in the atmosphere, but human activities, including companies, increase the amount of these gases and the planet's temperature.
Commitment to biodiversity	Commitment to biodiversity	Preservation and protection of animals and plants where Copel activities exist.
Operating Efficiency	Operating Efficiency	It is the company's productivity that increases through good management. For example, machines that consume less energy or require less maintenance and materials that last longer can be used.
Electrification	New Electricity Uses	These are services for new products that use electricity, such as charging stations for electric cars.
Water resources management	Water Availability	It is how the company deals with the lack or excess of water in its activities. Example: The lack of water in reservoirs can harm plant energy production. Heavy rain can bring down power lines.
Energetic Efficiency	Energetic Efficiency	It is the best use of electrical energy for the company's day-to-day activities.

		Example: using equipment that consumes less energy and pollutes less.
Clean Electrical Energy Generation	Generating Clean Energy (without pollution)	It is the company's investment to generate energy from sources that do not pollute (sun, water, wind, etc.).
Eco-efficiency	Eco-efficiency	Eco-efficiency is using resources (such as water, electricity, fuel, and paper) without waste and having actions that do more than the law requires.
	Water Management	This is when the company monitors the amount of water it uses in its activities (production, cleaning, consumption, etc.), respecting laws and rules. It may include actions to better use water and monitoring the quality of water that the company uses or affects.
	Waste and Recycling Management	This is when the company knows the amount and types of waste (organic, recyclable, non-recyclable, etc.) from its activities. They are also the forms of collection, storage and disposal (recycling, landfill, etc.). It may include technologies to reduce the waste generated by the company.

SOCIAL		
Copel Topic	Questionnaire corresponding topic	Explanation
Well-being, Health and Safety for the Workforce	Well-being, Health and Safety for Workers	Prevention and monitoring of accidents, health problems, and deaths caused by activities at work of owned employees and outsourced workers. Concern for the physical, mental and social well-being of workers.

Commitment to the communities	Commitment to the communities	Communities are those located in places where Copel has plants, agencies or other activities. They may include indigenous, riverside and quilombola communities. The commitment to the communities is to follow the laws, respect the agreements made between the company and the communities and contribute to the well-being of these people.
Workforce Development	Employees Professional Development	This is when the company offers training, motivates and evaluates the work of its employees.
	Employee(s) Benefits	A benefit is what a company's employee receives in addition to what is stipulated by law, such as longer maternity leave and home office, among others.
Diversity, Equality and Inclusion	Diversity, Equality and Inclusion	Company practices for a respectful and diverse work environment. Composition of staff and executive board, considering gender, race, color, age, people with disabilities (PWD), LGBTQIA+, among others.
Commitment to Human Rights	Commitment to Human Rights	Human rights are the basic rights of all people. The company must have human rights education, monitoring and inspection actions in its own activities, as well as in the activities of its outsourced employees and suppliers (value chain). It must also have secure and easily accessible reporting channels.
Social Responsibility	Social Responsibility	This is when the company analyzes its social impacts and takes measures to avoid, correct and/or reduce the problems it finds, based on laws and rules.
Customer satisfaction	Quality of Care and Services	Good service from the company and good services.

People Management	People Management	Administration of the company's employees (human resources).
Affordable electrical energy	Affordable Rates and Prices	This is when the company's services and products have good prices for its customers. In other words, fair prices that people can afford.
	Quality of Energy Supply	It is when electricity arrives without failures or outages in homes, businesses, etc.
Population Safety	Population Safety	Prevention and monitoring of accidents involving the population with electricity (shocks) and the safety of dams and reservoirs, among others.
Sustainable development	Sustainable development	Economic development that does not harm the environment or future generations.

GOVERNANCE		
Copel Topic	Questionnaire corresponding topic	Explanation
Economic and Financial Performance	Economic and Financial Performance	These are a company's financial results (e.g., profit or loss, etc.).
Innovation	Innovation	These are improvement processes that bring benefits to the company. For example, creating a new way of doing something or having new ideas for the company.
Sustainable Supplier Management	Sustainable Supplier Management	It is how the company hires, inspects and monitors its suppliers, checking whether they follow environmental laws, labor laws, and human rights, among others.

Integrity	Integrity, Ethics and Compliance	These are the company's principles and standards for following laws and rules. Example: actions to combat corruption and embezzlement of money in the company.
Corporate Governance	Governance	These are the processes to "govern" the company. In other words, they are the rules of how it works and is administered.
Investments in Electricity Distribution and Transmission Infrastructure	Investment in Infrastructure	Investing to improve the structure of energy generation (in plants, for example); energy transmission (the part that leaves the plants and reaches municipalities) and energy distribution (the part that reaches homes, businesses, schools, etc.).
Corporate Strategy	Copel Strategy	It is the route that the company defines to achieve its goals.
Cyber and Information Security	Digital Security and Information Security	Protection of computers, cell phones, internet, networks and company programs against virtual attacks (by hackers) and information leakage. Safe use of all information.
Transparency	Transparency	Clarity and access to company information. Ways for the company to report to society on its activities.
Risk and Opportunity Management	Risk management	Risk is the chance of something happening that affects the company. Risk management is when the company identifies dangers and takes measures to prevent them from happening.
Regulatory Environment	Regulatory Environment	It is the government bodies that create mandatory rules for electricity companies. In the case of Brazil, it is ANEEL (National Electric Energy Agency).
New business opportunities	New Products, Services and Businesses	This is when the company realizes and takes advantage of the possibility of

		creating new products, services and businesses.
Engagement with stakeholders	Copel's relationship with its different audiences (stakeholders)	This is how the company communicates with its different audiences: suppliers, customers, owned and outsourced employees, communities, etc. Example: having a good customer service channel.
Sustainable investment	Sustainable Investments (ESG)	Company investments that consider the environmental, social and economic aspects. For example, investing in businesses that do not harm the environment.



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