Greenhouse Gas Emissions Inventory – 2024 – Equatorial Energia Company – Holding Company

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Elaborated in: 2025

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Glossary

Operational control – organizational boundary approach in which the organization is responsible for all quantified GHG emissions and/or removals from facilities over which it has operational or financial control

DEFRA – Department for Environment, Food and Rural Affairs

Scope 1 - GHG emissions from sources owned or controlled by the organization. This category includes emissions due to the burning of fuels for electrical, thermal or mechanical power generation, emissions from chemical processes and fugitive emissions.

Scope 2 - GHG emissions originated by the generation of electricity or thermal energy, imported from the distribution network and consumed.

Scope 3 - Referring to indirect emissions, not associated with imported energy, which are related to the organization's activities, but coming from sources that belong to or are controlled by other organizations.

GHG – Greenhouse Gases GWP–

Global Warming Potential

Uncertainty - parameter associated with the result of quantification that characterizes the dispersion of values that can be reasonably attributed to the quantified value (ABNT NBR ISO 14.064-2: 2007).

NDC - Nationally Determined Contribution (Contribuição Nacionalmente Determinada)

UNFCCC – United National Framework Convention on Climate Change

Inmetro - National Institute of Metrology, Quality and

Technology

IPCC – Intergovernmental Panel on Climate Change

CDM – Clean Development Mechanism

MRV – Measurement, Reporting and Verification

Equity interest – organizational boundary approach in which the organization is responsible for the portion of GHG emissions and/or removals proportional to its equity interest in the respective facilities.

Executive Summary

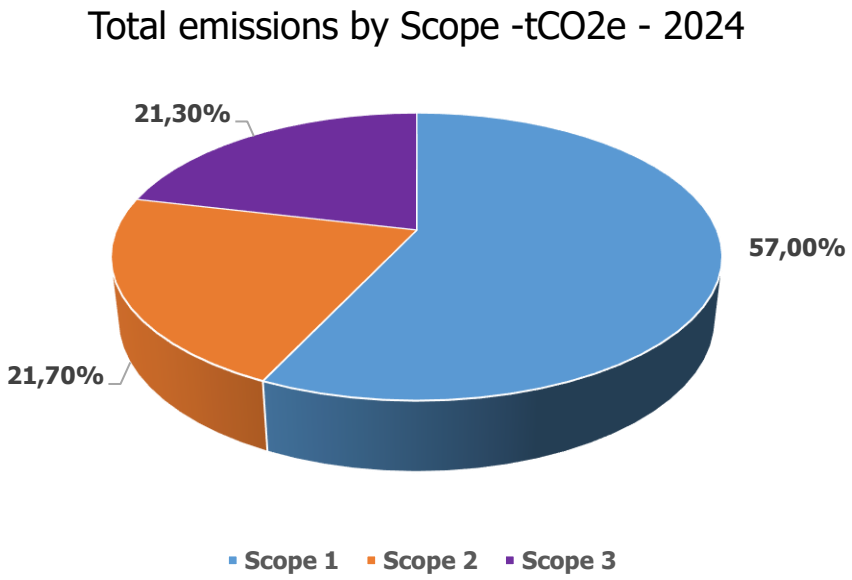
This inventory presents Equatorial Energia S/A's GHG emissions, which occurred between January 1 and December 31, 2024, including 13 facilities in Brazil.

The emission sources across Scopes 1, 2 (Location) and 3 were surveyed.

The table below presents the total emissions of Scope 1, Scope 2 (Location and T&D Losses for Location) and 3, including the percentages that each scope represents in relation to the sum of emissions.

SCOPES	tCO2e emissions	% of Emissions over the Sum of Scopes
Scope 1	923.447,57	57,00%
Scope 2 (Location)	351.503,45	21,70%
Scope 3	345.051,76	21,30%
SUM OF EMISSIONS	1.620.002,78	100,00%
Biogenic CO2	4.277,91	

"Note: CO2 emissions from renewable fuels are reported separately as 'biogenic CO2 emissions'."



In view of what is presented in this inventory, considering the approach by location, it is concluded that the sources present in Scope 1 are responsible for most of the emissions with **923,447.57 tCO2e and** represent **57.00%** of the sum of the scopes. Scope 3 is responsible for **21.30%** of GHG emissions with **345,051.76 tCO2e.** Scope 2 (Location), represented by the purchase of electricity from the National Interconnected System (SIN) and Technical Losses in Equatorial Holding's transmission, represents **20.70%** of emissions with **351,503.45 tCO2e.**

Based on the diagnosis presented in this inventory, corporate GHG emissions management strategies can be defined that direct Equatorial's activities towards a low-carbon scenario.

Summary

Introduction

The greenhouse effect is a natural phenomenon in which the heat reflected by the planet's surface is retained in the atmosphere, promoting an increase in temperatures. This retention is made by GHGs (Greenhouse Gases), to a greater or lesser extent, depending on their concentration.

The greenhouse effect, at the level of natural balance, is a facilitator for the maintenance of life, as it reduces temperature variations. In the absence of the effect, the oscillations in temperature between sunny and shady areas would be around hundreds of degrees centigrade, making the environment quite hostile and unfavorable to life forms adapted to our planet's climate.

The appeal on the subject of climate change is the result of the significant increase in GHG emissions by human activity, which has raised the concentration of these gases to levels unprecedented in the history of the Earth, having intensified since the industrial revolution, mainly as a result of the burning of fossil fuels.

The increase in the concentration of GHG in the atmosphere promotes the phenomenon known as global warming, which unbalances the climate system and makes it difficult to predict the need for adaptation.

IPCC reports have shown that the manageable limit of temperature increase is 1.5 ºC by the end of the century. This limit would allow adaptation to changes in most living species and current social economic systems.

According to the latest Emissions Report from the United Nations Environment Programme (UNEP), global greenhouse gas emissions need to fall by 42% by 2030.

For this to be possible, the ambition of the measures and cuts provided for in the national plans needs to be five times greater. This means reducing emissions by 43% by 2030 and achieving emissions neutrality by 2050 (UNEP).

In the national scenario, according to the NDC (2022), Brazil should reduce its emissions by 48% by 2025 and 53% by 2030, using the year 2005 as a baseline.

In this context, the global concern with this issue is increasingly prominent in international and national discussions. Studies on pricing, mitigation, adaptation, allocation of permits, emission limitations (cap) and trade of certificates are topics that directly impact the economy and have gained momentum as the problem worsens.

In this sense, it is imperative that organizations address the topic in order to prepare their GHG emissions management strategies. For proper decision-making, it is essential to have quality information about corporate issuances, with consolidated methodologies and clear results.

The emissions inventory is the activity that generates the relevant information for the proper management of emissions and, therefore, has the function of providing clarity and subsidies to organizational decision-making based on the specific context in which it was developed.

The GHG Emissions Inventory includes all gases regulated by the Kyoto Protocol, which is:

- Carbon Dioxide (CO2);
- Methane (CH^4);
- Nitrous Oxide (^{N2O});
- Sulfur Hexafluoride (SF^6);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbonos (PFCs);
- Nitrogen Trifluoride (NF^3).

Regulatory environment in Brazil

Brazil, by making commitments to the UNFCCC (United National Framework Convention on Climate Change), should promote the emission reductions presented in the NDC (Nationally Determined Contribution). The legal framework around emissions is still being formed and has entities and legislation, at the national and state levels, for which the following stand out:

Interministerial Commission on Global Climate Change and Green Growth– CIMGCCV

The CIMGC was created on October 25, 2021, through Decree No. 10,845, and aims to establish guidelines, articulate and coordinate the implementation of the country's actions and public policies related to climate change.

National Policy on Climate Change– Law 12.187/2009

The National Policy on Climate Change (PNMC), instituted in December 2009 and regulated by Decree No. 7,390/2010, revoked by Decree No. 9,578/2018, takes the first steps towards regulating the climate issue in Brazil. The PNMC aims, among other objectives, to reconcile socioeconomic development with the protection of the climate system, reduce GHG emissions, implement measures to promote adaptation to climate change, expand protected areas and encourage reforestation, and stimulate the development of the Brazilian Emissions Reduction Market (MBRE).

Climate Change Policy of the State of São Paulo– Law No. 13,798/2009

Its objectives are very similar to those highlighted in the PNMC, encompassing the promotion of projects to reduce emissions, sequestration or sinks of GHG, the establishment of forms of productive transition that generate changes in behavior with a focus on reducing GHG emissions, the encouragement of research and participation of the various segments of society in the management of the instruments of the law and the promotion of a sustainable urban planning system with low environmental impact and energetic.

National Fund on Climate Change - Law 12.114/2009

Created by Law No. 12,114/2009 and regulated by Decree No. 7,343/2010, the National Fund on Climate Change (FNMC) is linked to the Ministry of the Environment and the National Bank for Economic Development (BNDES) and aims to ensure resources to support projects or studies and finance projects aimed at mitigating and adapting to climate change.

INEA

On December 18, 2012, the resolution of the State Institute of the Environment (INEA) No. 64 was published in the Official Gazette, which provides for the presentation of an inventory of GHG emissions for environmental licensing purposes in the State of Rio de Janeiro.

CETESB

On August 24, 2012, the Environmental Company of the State of São Paulo - CETESB published Decision No. 254, which establishes the obligation to carry out an inventory of GHG emissions in some sectors.

SEMA - PR

On December 22, 2014, the Department of the Environment of the State of Paraná published Resolution No. 58, which provides for the implementation of the State Public Registry of Greenhouse Gas Emissions, establishing procedures and criteria to be adopted for: Protocol of Intent, Declaration of Emissions, Inventory of Emissions and granting of seals of public recognition.

ABRAVERI

The Brazilian Association of Companies for the Verification and Certification of Greenhouse Gas Emission Inventories and Socio-Environmental Reports (ABRAVERI) was founded in June 2013 with the objective of:

- Provide technical support for the formulation of programs and public registries, governmental or private practices, of emission inventories and suggest practices that strengthen MRV;
- To be a guiding entity for the promotion of uniformity of information on emissions and socio-environmental reporting and environmental disclosure on the subject.
- Work with the Municipal, State and Federal Programs related to the carbon emissions and participate in groups, working committees and events, in order to provide technical support for the success of policies related to the reporting of emissions.
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The organization

Equatorial Energia is the 3rd largest distribution group in the country in terms of customers. Founded in 1999, the Company has advanced in the consolidation of the energy distribution sector in Brazil and currently operates 6 concessionaires in the states of Maranhão, Pará, Piauí, Alagoas, Rio Grande do Sul and Amapá, serving about 10 million customers in these regions. The Company also operates in the Transmission sector and recently entered the Sanitation sector, becoming the first multi-utility company in the country, in addition to acquiring 100% of the shares of Echoenergia S.A., starting a chapter in the Renewables sector and effectively becoming an integrated player in the energy segment.

Equatorial Energia's operating segments are:

- Energy distribution: through the companies Equatorial Maranhão, Equatorial Pará, Equatorial Piauí, Equatorial Alagoas, CEEE-D (RS) and CEA (AP), covering 24% of the national territory and serving about 10 million customers;
- Transmission: 9 operational assets and more than 3.2 thousand km of lines, totaling more than R$ 1.3 billion in RAP;
- Renewables: through Echoenergia, with 10 operational parks totaling 1.2 GW of installed capacity, and another additional 1.2 GW in projects;
- Distributed Generation: through E-nova, with a strong presence in the state of Maranhão;
- Sanitation: from the Amapá Sanitation Company (in the operational phase since July 12, 2022), serving more than 800 thousand people;
- Energy trading: through Solenergias;
- Telecommunications: through Equatorial Telecom, with more than 4.5 thousand km of network; and
- Services: through Equatorial Serviços, providing support activities to the other businesses of the group.

Equatorial Maranhão is a distribution company and the only concessionaire in the State of Maranhão, with an area of operation of 332 thousand km², almost 4% of the Brazilian territory, covering about 7 million inhabitants, that is, 3.4% of the Brazilian population. Serving about 2.5 million consumers in the 217

municipalities that make up the State of Maranhão, Equatorial Maranhão, in 2021, added 34 thousand new consumers to its market, an increase of 1.3% compared to 2020, and distributed 7,088 GWh.

Equatorial Pará is a distribution company and the only concessionaire in the State of Pará. Controlled by Equatorial Energia since November 2012, with an area of operation of 1,248 thousand km², about 14.7% of the Brazilian territory, which covers 8.2 million inhabitants, 4% of the country's population. Equatorial Pará has 2.6 million customers in 144 municipalities. Energy distribution in 2021 was 13,311 GWh, that is, 529 GWh more compared to 2020.

Equatorial Piauí is an energy distributor and the only concessionaire to cover the entire State of Piauí, whose shareholding control was acquired in October 2018. It has an area of operation of 251 thousand km², almost 3% of the national territory, and serves about 1.3 million consumers in 224 municipalities. Energy distribution from January to December 2021 was 3,955 GWh, against 3,693 GWh in 2020, representing a growth in the volume of energy consumed of 7.1%.

In Alagoas, Equatorial acquired a controlling stake in Equatorial Alagoas in March 2019. It serves about 1.2 million consumers in 102 municipalities of the State in a concession area of 27,848 km², with more than 42 thousand kilometers of lines and distribution networks. Distributed energy grew 3.4% in comparison between 2021 and 2020.

The Amapá Energy Company (CEA) serves a population of about 845 thousand inhabitants, the CEA brings energy to 209 thousand consumer units in the 16 municipalities of the State of Amapá. The Equatorial Group was the winner of the auction held by the National Bank for Economic and Social Development (BNDES) on June 25, 2021 for the privatization of the Company. Control was taken in November of the same year, when a 100-day plan was put into action to serve the cities in the concession area.

On March 31, 2021, Equatorial Energia, a state electric energy company (CEEE-D), won the auction that defined it as the new parent company of CEEE-D, an energy distributor that serves 72 municipalities in the State of Rio Grande do Sul. Energy distribution in the year was 7,804 GWh, which corresponds to 55 GWh more compared to 2020.

The Equatorial Group entered the transmission segment in 2016, with the acquisition of eight auctioned lots that gave rise to Equatorial Transmission. There are eight projects for the construction and operation of transmission lines

and substations, which began to start operating in 2019 and cover about 2.5 thousand km.

The Annual Permitted Revenue (RAP) of the total lots sold by the Company totals just over R$ 1.3 billion in August 2022 values. In addition to these transmission lines, Equatorial holds 100% of the total and voting capital of Intesa, an operating line with approximately R$ 186 million in RAP in 2021.

Intesa, in 2018 Equatorial Energia acquired all the shares owned by Eletrobrás, becoming the owner of INTESA – Integração Transmissora de Energia S.A. and assuming, therefore, the responsibility of managing and complying with the contractual frameworks for the operation and maintenance of the transmission facilities and substations associated with– LT 500 kV Interconnection North– South III– Lot B, located in the states of Tocantins and Goiás. The start date of the commercial operation of the enterprise was May 30, 2008. In 2021, the RAP was R$186 million

In the generation segment, Equatorial has a controlling stake in Enova Installation and Maintenance, a distributed generation company operating in the northeast of the country. Currently, Enova is the largest distributed generation company in Maranhão, the only one in the state that has the Emerald Seal of Portal Solar, and is a member of G5 Solar. He was also the epcist of the pilot project of Coroatá.

In February 2022, Equatorial Energia took an important step towards diversifying its business and completed the acquisition of Echoenergia. The deal is in line with Equatorial's strategic objective of taking advantage of growth opportunities with the opening of the free market, energy transition, investing more in renewable energy and generating value for the company's shareholders, with a focus on financial efficiency.

Echoenergia has 1.2 GW of wind generation capacity, with 12 parks installed. In addition, it is well-positioned to grow in the coming years, with projects already practically ready to start the construction of projects – most of them solar generation, five in all.

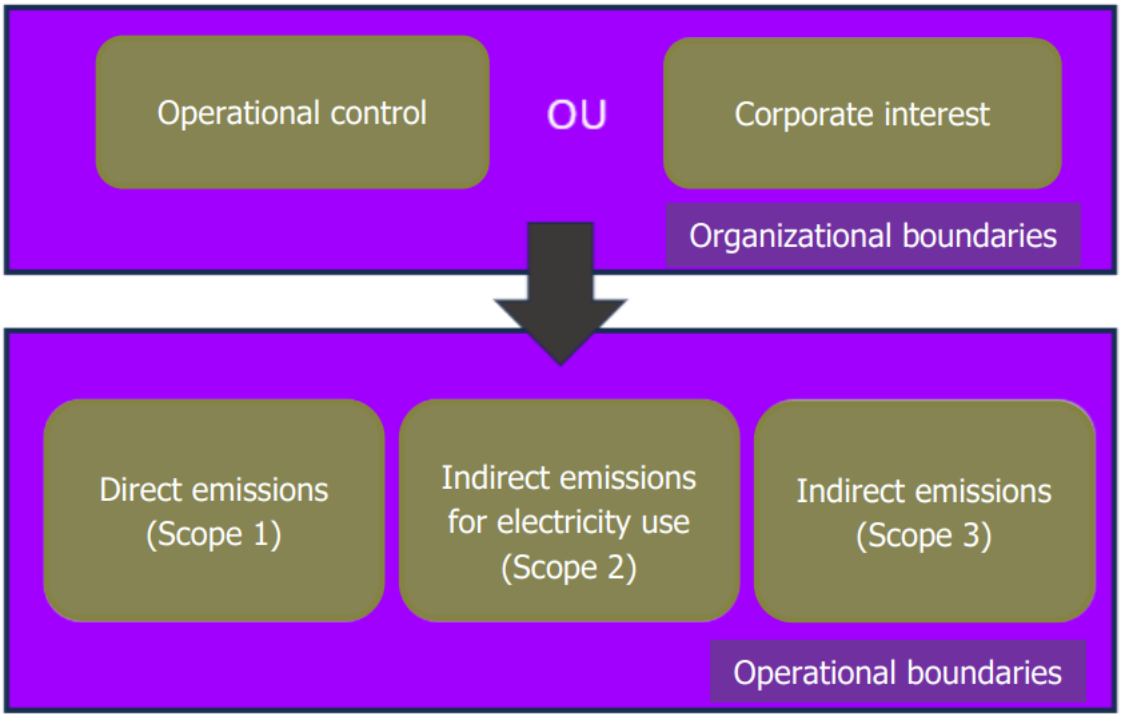
Equatorial Energia also operates in the sanitation sector through Companhia de Saneamento do Amapá (CSA), a Special Purpose Company controlled by Equatorial together with SAM Ambiental.

The company is also present in the telecommunications sector through Equatorial Telecom, a fiber optic telecommunications company and secure telephone service, which currently serves the 0800 services of the Equatorial Group's branches and ombudsman. And finally, Equatorial Serviços, a company with solutions for the market, operating in the states of Maranhão, Pará, Piauí, Alagoas and Rio Grande do Sul, in the segments of call center, sales, backoffice activities and other solutions for customers.

Organizational and operational boundaries

This inventory presents Equatorial Energia S/A 's GHG emissions, which occurred between January 1 and December 31, 2024, including 13 facilities in Brazil.

The definition of organizational and operational boundaries was made in accordance with the definitions contained in the GHG Protocol, as follows:



Organizational boundaries:

Operational control: the organization is responsible for all quantified GHG emissions and/or removals from the facilities over which it has operational or financial control.

Equity interest: the organization is responsible for the portion of GHG

emissions and/or removals proportional to its equity interest in the respective facilities.

Operational limits:

Scope 1: GHG emissions from sources owned or controlled by the organization. This category includes emissions due to the burning of fuels for electrical, thermal or mechanical power generation, emissions from chemical processes and fugitive emissions. Any CO^2 emissions from renewable fuels are quantified and reported separately.

Scope 2: GHG emissions originated by the generation of electricity or thermal energy, imported from the distribution network and consumed.

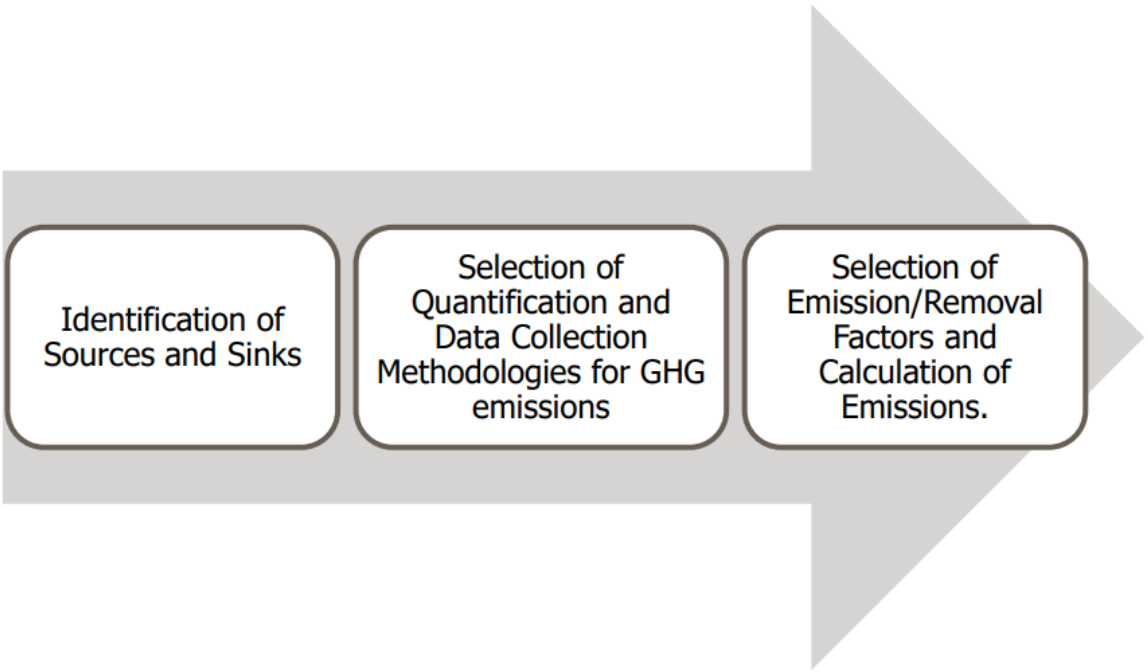
Scope 3: Refers to indirect emissions, not associated with imported energy, which are related to the organization's activities, but come from sources that belong to or are controlled by other organizations.

For the inventory of the company Equatorial Holding, the limits considered were:

Organizational Boundary	Operational limit
Operational control	Scope 1, 2 and 3

Workflow

The quantification of GHG emissions was made according to the following process:



Quantification methodologies

- Specifications of the Brazilian GHG Protocol Program– Accounting, Quantification and Publication of Corporate Inventories of Carbon Emissions Greenhouse Gases.
- Calculation tool of the Brazilian GHG Protocol Version 2025.0.1.
- TeSE (Trends in Ecosystem Services) calculation tool of GVCes version 2.0.

Selection of emission factors

The parameters, emission factors and reference sources used can be found in the calculation tool of the Brazilian GHG Protocol Program.

Due to gaps in the tool, it may be necessary to use complementary parameters and emission factors. If this occurs, it will be referenced in the calculation section in which they were used.

Calculation of GHG emissions

The calculation of GHG emissions is prepared according to the peculiarities of each source considered, such as:

- For combusted fuels, published emission factors are applied;
- For solid waste displacement, anaerobic effluent treatment and emissions due to the use of fertilizers, the equations of the IPCC;
- For fugitive emissions, the basis of qualification is the potential for global warming of each gas;
- For air travel, the provisions of DEFRA are used.
- For emissions from electricity consumption, the factor of emission from the national distribution network.

In this way, each source has a specific treatment for quantifying the emissions documented by them.

Uncertainties

The process of compiling an emissions inventory is subject to variation in the quality of the data due to inherent uncertainties.

The analysis of these uncertainties allows the understanding of the existence of a relevant quantification risk and is essential to ensure the adherence of the emissions inventory to the desired levels of materiality.

The analysis of uncertainties that follows promoted an evaluation of the process and the calculation of emissions vis-à-vis the causes of the uncertainties pointed out by the IPCC, with potential impact on the quantification of GHG emissions, and is organized to allow an evaluation of uncertainties by source of emissions.

- **Lack of Integrity:** Occurs when there is a lack of available data, either due to the non-recognition of the process or the non-existence of measurement methods. Generally, a lack of integrity can generate a tendency towards incomplete concepts, but it can also contribute to random errors depending on the situation.

- **Model:** It can be simply a simple multiplication factor or given its degree of complexity until it becomes a complicated process model. The use of models to estimate GHG emissions and removals may present uncertainties, both as a trend or a random error.

- **Lack of Data:** In some situations, there is simply not enough data available needed to characterize a particular removal or issue. In these situations, it is customary to use substitute data from similar categories or to perform interpolation or extrapolation to estimate the missing data.

- **Lack of Data Representativeness:** It happens when the available data do not fully correspond to the real conditions of GHG emission/removal.

- **Random Statistical Sampling Error:** This source of uncertainty is associated with the data that it is a random sample of finite size and usually dependent on the variance of the population from which the sample was extracted and the size of the sample itself.

- **Measurement Uncertainties:** It can be random or systemic; the result of the archiving and transmission of information; the resolution of finite instruments; the inaccuracy of the values of measurement standards and material references; the inaccuracy of the values of constants and other parameters, obtained from external sources, used in mathematical reduction; the approximation and assumption incorporated into the methods of measurement and estimation of procedures; and/or the variations in repeated observations of the emission or removal or associated variable under apparently identical conditions.
- **Misrepresentation or Classification Errors:** The uncertainties are in this case due to wrong, incomplete, and confusing definitions of emissions or removals.

- **Lost Data:** When there is an attempt to measure, however, there are

no values available.

The uncertainties of this emissions inventory are associated with data collection and the calculation of emission factors.

Analysis of uncertainties

Nature of Uncertainty	Origin of Uncertainty	Analysis
Emission Factors	Construction of the factors	They are inherent to the emission factors used in the calculation tool and the responsibility of the agents who publish them.
Meters	Scales	The inherent uncertainty is the deviation allowed by INMETRO for scales (±2%).
	Fuel Pumps	The inaccuracy in fuel pumps is established by the INMETRO (±0.5%).
	Canisters	The inaccuracy in the exact weight of each cylinder is established by IPEM (±2.3%).
	Fire extinguishers	Recharging should be done only with the nominal charge of the extinguishing agent, with a charge tolerance of 5% or less (INMETRO - Ordinance No. 005, of January 4, 2011).
	Liquid effluent flow meters	The effluent flow is obtained through flow meters with an accuracy of around ±1%, and the other characteristics are obtained through specific meters of good accuracy, which must be calibrated periodically so as not to lose acuity.
	Natural Gas Meters	The accuracy of the devices for measuring natural gas consumption is established at ±1.5% (INMETRO ANP Ordinance No. 1 of June 19, 2000).
	Electricity Meters	The accuracy of the measurements is subject to control by both the user and government agencies. Therefore, it is expected that, in these parameters, the uncertainties will be greatly reduced– less than 3.5% (ANEEL).
Records	Data Collection and Transcription	The organization's records are subject to recurring audits, so that it can be considered that any deviations are reviewed in a timely manner in order to remain accurate and complete for the Emissions inventory.

Quality management

GHG Information Management

Accenture's conduct is to guide the probate organization to ensure that GHG information management is carried out to promote:

- The relevance of the inventory, selecting the sources, Sinks GHG reservoir, as well as data and methodologies appropriate to the needs of the intended user;
- The completeness of the inventory including issuances and removals relevant GHG and documenting any exclusions and their justification;
- Consistency, in order to allow meaningful comparisons of information related to GHGs;
- Accuracy, mitigating and uncertainties and asymmetries within the principle of reasonableness; and
- Transparency, disclosing sufficient and appropriate information, related to GHGs in order to allow the user to take decisions based on quality information.

Accenture's GHG information management procedures are:

- Definition and critical analysis of the responsibility and authority of the responsible for the development of the GHG inventory;
- Appropriate training of those responsible for the development of the inventory;
- Identification and critical analysis of organizational boundaries;
- Identification and critical analysis of GHG sources and sinks;
- Selection and critical analysis of quantification methodology, including data of GHG activities and GHG emission and removal factors that are consistent with the intended use for the inventory;

- Critical analysis of the application of quantification methodologies to ensure consistency across multiple sites;

Procedures, document retention, and record keeping

The probate organization attests that the GHG information management procedures consider:

- Use, maintenance and calibration of measurement equipment;
- Development and maintenance of a data collection system efficient;
- Regular verification of accuracy;
- Periodic critical analysis of opportunities to improve the processes of information management.

The probate organization undertakes to maintain the documentation to support the planning, development and maintenance of the GHG inventory to enable any independent verification of the same.

Selection and establishment of the base year

An organization should establish a historical base year for GHG emissions and removals for the purpose of making comparisons or to meet GHG program determinations or other intended uses of the Emissions Inventory.

Equatorial Holding adopted its first GHG inventory period of 2021 as the base year, considering the availability of verifiable GHG emissions data.

Identification of sources and sinks

The quantities used for the calculation of each of the identified emission sources were provided by the executing organization.

Scope	Category	Emission source
Scope 1	Stationary Combustion	Commercial Diesel Oil
	Mobile Combustion	Liquefied Petroleum Gas (LPG)
		Commercial Diesel Oil
		Automotive Gasoline (commercial)
		Hydrous Ethanol
	Fugitive Emissions	Carbon dioxide fire extinguishers
		Sulfur Hexafluoride (SF6)
		R-407C
		R-410A
	Non-Kyoto Fugitive Emissions	HCFC-22
	Land use change	Suppression of vegetation
	Effluent	Liquid effluents
Scope 2	Purchase of Electricity	Energy by Location
	Technical T&D Losses	Energy by Location
Scope 3	Fuel and energy-related activities not included in Scopes 1 and 2	Non-technical losses
		Import of power from UTE
	Business Travel	Air Travel
	Solid Waste	Landfill
	Home-work commute	Public transport
		Private Transport

Quantification of emissions

The quantities used to calculate GHG emissions for each of the sources considered were obtained or calculated based on the organization's records.

To determine the direct GHG emissions by type of source, emission factors, equations, parameters and calculations adhering to the ABNT NBR ISO 14064:2007 standard and the GHG Protocol - Brazilian Program were used.

Scope 1: Direct emissions

To determine the direct GHG emissions by type of source, emission factors, equations, parameters and calculations adhering to the ABNT NBR ISO 14064:2007 standard and the GHG Protocol - Brazilian Program were used.

Stationary Combustion

Stationary combustion is the burning of different fuels, to generate energy with the use of stationary equipment (boilers, furnaces, burners, turbines, heaters, incinerators, engines, beams, etc.).

The data for calculating emissions were made available by Equatorial's corporate area.

GHG emissions from the burning of Diesel Oil

Definition: Diesel Oil is a fossil fuel derived from petroleum. It is a compound formed mainly by carbon and hydrogen atoms and in low concentrations by sulfur, nitrogen and oxygen. This is produced at high temperatures through the atmospheric distillation of crude oil.

Uncertainty: Imprecision at the fuel pumps.
Data considered: Amount of Diesel Oil consumed in generators in 2024: 94,322.01 liters.

Source: Equatorial

Summary of GHG Emissions

Unit	Emissions Source	Quantify	Unit	Emissions				
				tCO_2	tCH_4	tN_2O	tCO_2e	biogenic CO_2
Holding	Diesel Oil (pure)	81,431.34	Liters	214.24	0.01	0.00	215.05	*
	Biodiesel (B100)	12,890.67		*	0.00	0.00	*	31.66
Total		**94,322.01**	**Liters**	**214.24**	**0.01**	**0.00**	**215.05**	**31.66**

Note: The diesel fuel sold in Brazil has a biodiesel component. The CO2 emissions from biodiesel (renewables) added to diesel oil are reported separately as biogenic ^{CO2} emissions.

Mobile Combustion

Mobile combustion is the burning of different fuels, for general transport (the company's operational fleet) and off-highway vehicles, such as those used in construction, agriculture and forestry.

GHG emissions from the burning of Diesel Oil

Definition: Diesel Oil is a fossil fuel derived from petroleum. It is a compound formed mainly by carbon and hydrogen atoms and in low concentrations by sulfur, nitrogen and oxygen. This is produced at high temperatures through the atmospheric distillation of crude oil. **Uncertainty:** Imprecision at the fuel pumps.

Data considered: Amount of Diesel Oil consumed in 2024: 4,190,134.24 liters.

Source: Equatorial

Summary of GHG Emissions								
				Emissions				
Unit	Emission Source	Quantify	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	Biogenic CO2
Holding	Diesel oil (pure)	3,616,747.11	Litros	9,414.393	0.69	0.51	9,569.54	*
	Biodiesel	573,387.13	Litros	*	0.00	0.00	*	1,393.90
Total		**4,190,134.24**	**Litros**	**9,414.39**	**0.69**	**0.51**	**9,569.54**	**1,393.90**

GHG emissions from gasoline burning

Definition: Gasoline is a mixture of hydrocarbons, being a fossil fuel derived from crude oil and produced through refining processes, generally it is made through the distillation of petroleum.

Uncertainty: Imprecision at the fuel pumps.
Data considered: Amount of Gasoline consumed in light vehicles in 2024: 1,425,038.12 liters.

Source: Equatorial

Summary of GHG Emissions								
				Emissões				
Unit	Emission Source	Quantity	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	Biogenic CO_2
Holding	Automotive Gasoline (Pure)	1,040,277.83	Liters	2,301.095	0.93	0.27	2,399.65	*
	Anhydrous Ethanol	384,760.29	Liters	*	0.00	0.00	*	587.14
Total		**1,425,038.12**	**Liters**	**2,301.09**	**0.93**	**0.27**	**2,399.65**	**587.14**

Note: Gasoline sold in Brazil has an ethanol component. CO2 emissions from ethanol (renewable) are reported separately as "biogenic CO2 emissions".

GHG emissions from burning ethanol

Definition: Ethanol (ethyl alcohol) is an organic substance obtained from the fermentation of sugars, hydration of ethylene or reduction to acetaldehyde. In Brazil, sugarcane is used for ethanol production.

Uncertainty: Imprecision at the fuel pumps.
Data considered: Amount of Ethanol consumed in 2024: 616,718.05 liters.

Source: Equatorial

Summary of GHG Emissions								
				Emissões				
Unit	Emission Source	Quantify	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	biogenic CO_2
Holding	Ethanol	616,718.05	Liters	*	0.24	0.01	8.73	898.56
Total		**616,718.05**	**Liters**	*****	**0.24**	**0.01**	**8.73**	**898.56**

Note: Ethanol is a fuel of renewable origin and, therefore, CO2 emissions are allocated as "Biogenic CO2 emissions".

GHG emissions from the burning of Liquefied Petroleum Gas (LPG)

Definition: LPG (Liquefied Petroleum Gas) consists of a gaseous mixture of hydrocarbons obtained from natural gas from underground reserves, or from the oil refining process. This is produced in the process of refining crude oil and processing natural gas containing propane and butane.

Uncertainty: Inaccuracy in the exact weight of each cylinder.
Data considered: Amount of LPG consumed in 2024: 47,010.00 kilograms.

Source: Equatorial

Summary of GHG Emissions								
				Emissions				
Unit	Emission Source	Quantify	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	Biogenic CO_2
Holding	Liquefied Petroleum Gas (LPG)	47,010.00	kg	137.856	0.14	0.00	141.76	*
Total		**47,010.00**	**kg**	**137.86**	**0.14**	**0.00**	**141.76**	*

Fugitive Emissions

Fugitive emissions can be due to: (i) releases from the production, processing, transmission, storage, and use of fuels, and (ii) unintentional releases of substances that do not pass through chimneys, drains, exhaust pipes, or other functionally equivalent openings, such as the release of sulfur hexafluoride (SF^6) in electrical equipment, leakage of hydrofluorocarbons (HFCs) during the use of refrigeration and air conditioning equipment, and leakage of methane (CH_4) in the transportation of natural gas.

Definition: The gases used for refrigeration have different GWP values, which vary according to their compositions. The main refrigerant gases are HFCs (miscellaneous).

Uncertainty: Inherent in the allowable deviation for scales.
Data considered: Amount of refrigerant gases consumed in 2024: 911.63 kilograms.

Summary of GHG Emissions			
Unidade	Fonte de Emissão	Quantidade	Total emissions
		kg	tCO_2e
Holding	R-410A	707.40	1,360.68
	R-407C	31.00	50.35
	Sulfur hexafluoride (SF6)	173.23	4,070.91
Total		**911.63**	**5,481.94**

Non-Kyoto fugitive emissions: These refer to greenhouse gas emissions that are not covered or regulated by the Kyoto Protocol. These emissions can occur unintentionally and may include various types of greenhouse gases that are not directly related to the specific obligations of the Kyoto Protocol. HCFC-22 (R22) is a fluid that is not controlled by the Kyoto Protocol or Paris Agreement and for this reason its emissions are accounted for and reported separately.

Uncertainty: Inherent in the allowable deviation for scales.
Data considered: Amount of refrigerant gases consumed in 2024: 417.30 kilograms.

Summary of GHG Emissions			
Unit	Emission Source	Quantify	Total emissions
		kg	tCO_2e
Holding	HCFC-22	417.30	734.45
Total		**417.30**	**734.45**

GHG emissions from^{CO2} recharged in Fire Extinguishers

Definition: Carbon Dioxide (CO^2) is the gas used in some types of fire extinguishers, coming from the refills of fire extinguishers, which happen regularly.

Uncertainty: Inherent in the permissible deviation for CO2 fire extinguishers.
Data considered: Quantity considered for 2024: 18,362.00 kilograms.

Summary of GHG Emissions			
Unit	Emission Source	Quantify	Total emissions
		kg	tCO_2e
Holding	Carbon dioxid (CO2)	18,362	18.36
Total		**18,362**	**18.36**

Land Use Change

The change in land use occurs when conversions are made between the different categories of use and, consequently, can generate CO2 flows (emissions and removals). This category groups, within the scope of the Brazilian GHG Protocol Program, for example, emissions related to deforestation of a forest area for the construction of an industry; and so on.

Suppressions resulting from change in land use Definition: Calculation of the change in land use carried out in the TESE tool (GVCES), considering the data of the area and projects applied. **Uncertainty:** Inherent in the report is the inaccuracy of the reported data.

Data considered: Suppression of Vegetation in a total area of 3,704.43 ha.

Source: Equatorial

Summary of GHG Emissions		
Emission Source	Quantify	Total Emisions
	ha	tCO_2e
Vegetation Suppression	3,704	903,944
Total		**903,944**

Effluent Treatment

Definition: Emissions resulting from the treatment of effluents from the inventoried organization. Emissions vary according to the physicochemical characteristics of the effluents and the type of treatment applied to them.

Uncertainty: Inherent deviation in effluent flow measurement.
Data considered: Amount of liquid effluents generated in 2024: 778,551.08 m³.

Summary of GHG Emissions							
Unit	Emission Source	Type of treatment applied to the effluent	Quantify	Degradable Organic Component of the Effluent.	Emissions		
			m³/year	kgDBO/m³	tCH_4	tN_2O	tCO_2e
Holding	ETE - Floresta Tropical	Anaerobic Reactor + Aerobic Treatment (activated sludge, aerated lagoon, etc).	70,910.40	0.02	5.90	0.00	165.22
	ETE - Miracema	Anaerobic Reactor + Aerobic Treatment (activated sludge, aerated lagoon, etc).	95,040.00	0.10	4.81	0.00	134.76
	ETE - Pedrinhas	Deep Anaerobic Lagoon (depth > 2 meters) + Deep Anaerobic Lagoon (depth > 2 meters).	556,208.68	0.15	48.71	0.00	1,363.90
	ETE - Serra do Navio	Aerobic Treatment (activated sludge, aerated lagoon, etc) + Aerobic Treatment (activated sludge, aerated lagoon, etc).	56,392.00	0.06	0.16	0.00	4.36
Total			**778,551.08**	*	**59.58**	**0.00**	**1,668.24**

Scope 2: Indirect emissions

To determine indirect GHG emissions resulting from electricity consumption, emission factors, equations, parameters, and calculations were used according to GHG Protocol Tool Version 2025.0.1.

GHG emissions from imported from the distribution network — Energy Consumption — Electric

Uncertainty: Inherent to the electric energy meter.
Data Considered: Amount of Electricity imported from the distribution network in 2024: 76,480.00 MWh.

Source: Equatorial

Summary of GHG Emissions					
Unit	Emission Source	Quantify	Unit	Emission tCO_2e	Unit
Holding	Energy	76,480	MWh	4,305.4	tCO2e
Total		**76,480**	**MWh**	**4,305.4**	**tCO2e**

Data Considered: Amount of technical transmission and/or distribution losses on electricity imported from the distribution network in 2024: 6,292,358.00 MWh.

Source: Equatorial

Summary of GHG Emissions					
Unit	Emission Source	Quantify	Unit	Emission	Unit
Holding	Technical T&D Losses	6,292,358.00	MWh	347,198.082	tCO2e
Total		**6,292,358.00**	**MWh**	**347,198.08**	**tCO2e**

Scope 3: Other indirect emissions

To determine the other indirect GHG emissions by type of source, emission factors, equations, parameters and calculations were used according to the GHG Protocol Tool– Version 2025.0.1.

The emission sources for which the tool does not perform the calculation (it only presents spaces for reporting) were calculated according to IPCC and UNFCCC methodologies and others. Explanations are presented in the items of each source (if applicable).

GHG emissions from Commuting - Road Transport

Uncertainty: Inaccuracy in the number of kilometers traveled.
Data considered:
Vehicle: Public Transport Number of kilometers traveled in 2024: 40,845.00 km per day per segment traveled on public transport.

Source: Equatorial

Summary of GHG Emissions								
				Emissions				
Unit	Emission Source	Quantify	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	biogenic CO_2
Holding	Public transport bus	40,845.00	km	831.31	0.06	0.05	845.01	122.90
Total		**40,845.00**	**km**	**831.31**	**0.06**	**0.05**	**845.01**	**122.90**

Vehicle: Private Vehicles Number of kilometers traveled in 2024: 158,541.00 daily kilometers traveled in private vehicles.

Source: Equatorial

Summary of GHG Emissions								
				Emissions				
Unit	Emission Source	Quantify	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	Biogenic CO2
Holding	Private	158,541.00	km	4,528.96	0.18	0.74	4,731.42	1,155.60
Total		**158,541.00**	**km**	**4,528.96**	**0.18**	**0.74**	**4,731.42**	**1,155.60**

GHG Emissions from Business Travel

Uncertainty: Inaccuracy in the record of the segments flown.
Data considered: Air travel - Mileage flown in 2024: 14,596,668.00 km.

Source: Equatorial

Summary of GHG Emissions								
				Emissions				
Unit	Emission Source	Quantify	Unit	tCO_2	tCH_4	tN_2O	tCO_2e	Biogenic CO2
Holding	Air	14,596,668.00	km	1,672.85			1,672.85	*
Total		**14,596,668.00**	**km**	**1,672.85**	**0.00**	**0.00**	**1,672.85**	*****

Fuel and energy-related activities not included in Scopes 1 and 2

Uncertainty: Inherent to the electric energy meter.
Data Considered: Amount of commercial transmission and/or distribution losses on electricity imported from the distribution network and import of energy from UTE in 2024: 6,299,977.36 MWh.

Source: Equatorial

Summary of GHG Emissions				
Unit	Emission Source	Quantify	Unit	Emissions
Holding	Non-Technical Losses	6,037,396.83	MWh	337,177.85
	Import of Energy from TPP (Thermal Power Plant)	262,580.53	MWh	598.66
Total		**6,299,977.36**	**MWh**	**337,776.51**

GHG emissions resulting from the disposal of Solid Waste in Landfills

Uncertainty: Imprecision in the volume of waste and lack of control over treatment characteristics

Data considered: Volume of waste destined for landfill in 2024: 15.10 t

Source: Equatorial

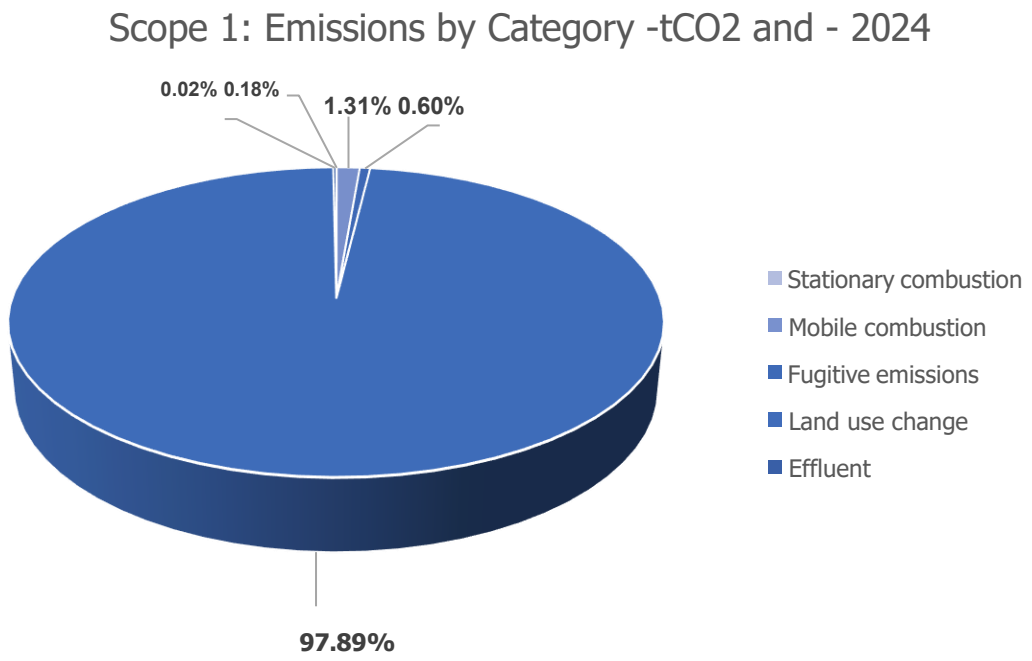
Summary of GHG Emissions				
Unit	Emission Source	Quantify	Unit	Emissions
Holding	Landfill	15.10	t	25.97
Total		**15.10**	**t**	**25.97**

Summary of GHG emissions

The summed emissions of the Equatorial Energia– Holding unit inventoried Scope 1, 2 (Location Approach) and 3 for the year 2024 are presented in the tables below.

Scope 1: Direct GHG emissions

SCOPE 1	CO2e Emissions	% of Emissions in the Category	% of Emissions over the Total Scope 1	% of Emissions over the Sum of Scopes
Stationary Combustion				
Generator	215.05	100.00%	0.02%	0.01%
Total	**215.05**	**100.00%**	**0.02%**	**0.01%**
Mobile Combustion				
Forklift	141.76	1.17%	0.02%	0.01%
Vehicles - Diesel Oil (commercial)	9,569.54	78.96%	1.04%	0.56%
Vehicles - Ethanol	8.73	0.07%	0.00%	0.00%
Vehicles - Automotive Gasoline (commercial)	2,399.65	19.80%	0.26%	0.14%
Total	**12,119.68**	**100.00%**	**1.31%**	**0.71%**
Land use change				
Vegetation Suppression	903,944.31	100.00%	97.89%	52.83%
Total	**903,944.31**	**100.00%**	**97.89%**	**52.83%**
Fugitive Emission				
CO2 Extinguishers	18.36	0.33%	0.00%	0.00%
Refrigerant Gas - R-410A	1,360.68	24.74%	0.15%	0.08%
Refrigerant Gas - R-407C	50.35	0.92%	0.01%	0.00%
Refrigerant Gas - SF6	4,070.91	74.01%	0.44%	0.24%
Total	**5,500.30**	**100.00%**	**0.60%**	**0.32%**
Fugitive Emission in Kyoto				
Refrigerant Gas - HCFC-22	734.45	100.00%	-	-
Total	**734.45**	**100.00%**	**0.00%**	**0.00%**
Effluents				
WWTP (Wastewater Treatment Plant)	1,668.24	100.00%	0.18%	0.10%
Total	**1,668.24**	**100.00%**	**0.18%**	**0.10%**
TOTAL SCOPE 1	**923,447.57**	*	**100.00%**	**53.97%**



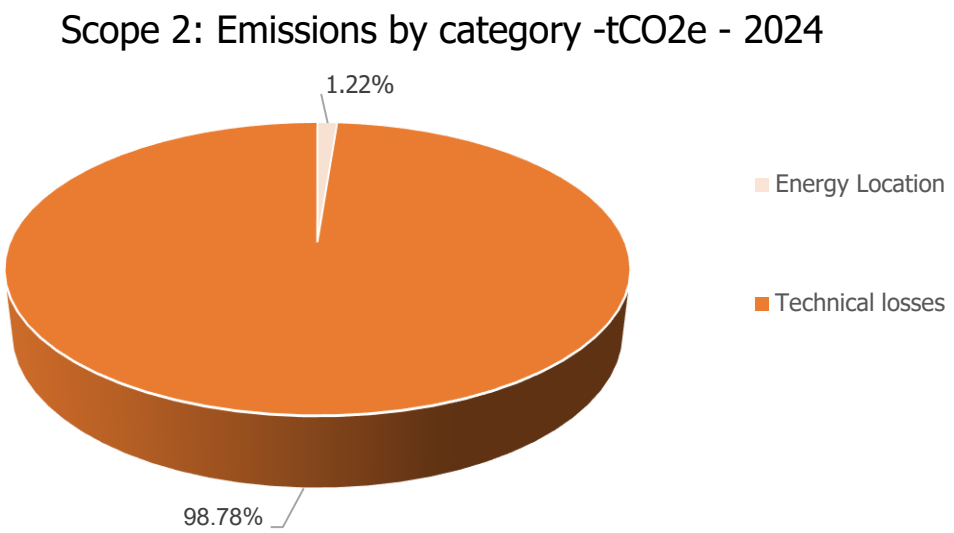
From the table and graph above, it can be seen that the Land Change and Land Use category is responsible for **97.89%** of scope 1 GHG emissions, followed by Mobile Combustion with **1.31%.** The category of Fugitive Emissions corresponds to about **0.60%** of the total emissions of this scope, Effluent Treatment corresponds to **0.18%,** and Stationary Combustion **0,02%.**

Scope 2: Indirect GHG Emissions – Location and Technical T&D Loss Approach.

The location-based approach is the model adopted by the Brazilian GHG Protocol Program for Scope 2 accounting, in which the average emissions for electricity generation that make up the National Interconnected System (SIN) are used as an emission factor.

In the location-based approach, all electricity consumed from the distribution network is reported, without any type of discount for the purchase of RECs or a certificate of purchase in the free market. The location approach reflects the actual physical situation of the distribution network to which the Organization is connected.

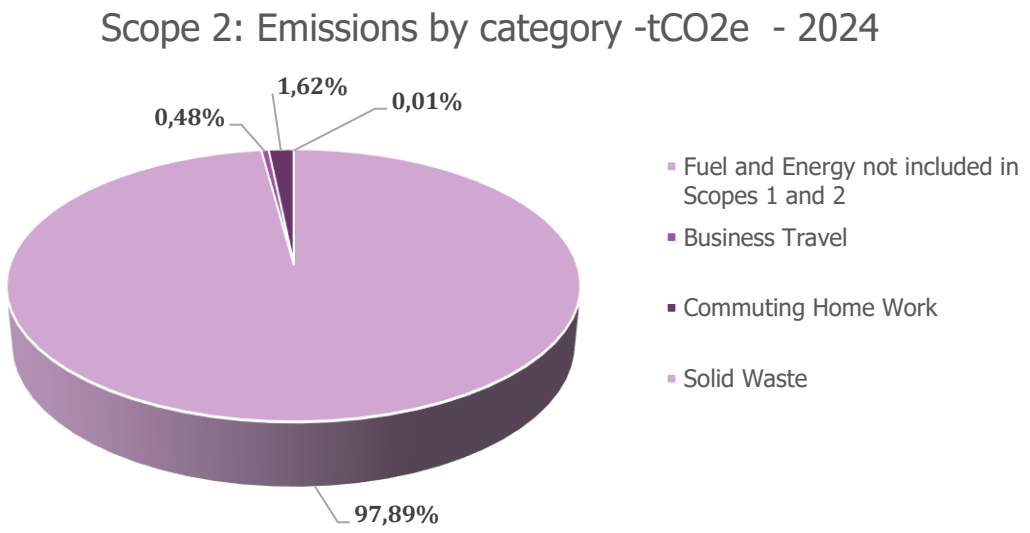
SCOPE 2	CO2e Emissions	Consumption (MWh)	% of Emissions over the Total Scope 2	% of Emissions over the Sum of Scopes
Purchase of Electrical Energy				
Energy Location	4,305.37	76,480.22	1.22%	0.25%
Transmission and Distribution				
Technical Losses	347,198.08	6,292,358.40	98.78%	20.29%
TOTAL SCOPE 2	**351,503.45**	**6,368,838.61**	**100%**	**20.54%**



Scope 2, represented by the purchase of electricity approach by location, is responsible for **1.22%** of scope 2 emissions, being **4,305.37 tCO2 e.** And emissions related to Technical T&D Losses represent **98.78%** of Scope 2 emissions, being **347,198.08 tCO2 and.**

Scope 3: Other indirect GHG emissions

SCOPE 3	CO2e Emissions	% of Emissions in the Category	% of Emissions over the Total Scope 3	% of Emissions over the Sum of Scopes
Fuel and energy not included in Scopes 1 and 2				
Non-Technical Losses	337,177.85	99.82%	97.72%	20.81%
Thermal Power Plants	598.66	0.18%	0.17%	0.04%
Total	337,776.51	100.00%	97.89%	20.85%
Business Travel				
Air Travel	1,672.85	100.00%	0.48%	0.10%
Total	1,672.85	100.00%	0.48%	0.10%
Commuting home work				
Private transport	4,731.42	84.85%	1.37%	0.29%
Public Transport	845.01	15.15%	0.24%	0.05%
Total	5,576.43	100.00%	1.62%	0.34%
Solid waste				
Landfill	25.97	100.00%	0.01%	0.00%
Total	25.97	100.00%	0.01%	0.00%
TOTAL SCOPE 3	**345,051.76**	*	**100.00%**	**21.30%**



From the table and graph above, it can be seen that the category Activities related to fuel and energy not included in Scopes 1 and 2 is responsible for **98.33%** of scope 3 GHG emissions, followed by Commuting with **1.28%.** The Business Travel category corresponds to about **0.38%** of the total emissions of this scope and the emissions of Solid Waste represent **0.01%.**

Total emissions

Scopes	Total emissions by Scopes -tCO2 and - 2024	% of emission
Scope 1	923,447,57	57.00%
Scope 2	351,503,45	21.70%
Scope 3	345,051.76	21.30%
SUM OF EMISSIONS	1,620,002.78	100.00%

Total emissions of the last 3 years

Total emissions by Scopes in tCO2e - from 2021 to 2024				
Year/Scope	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
2021	1.628.468,68	575.524,98	910.142,85	3.114.136,51
2022	1.181.291,73	192.243,21	396.043,42	1.769.578,36
2023	378.872,09	239.614,17	367.842,48	986.328,74
2024	923.447,57	351.503,45	345.051,76	1.620.002,78

THE TOTAL GREENHOUSE GAS EMISSIONS RESULTS IN THIS REPORT PRESENT PRECISE FIGURES. THE GHG PROTOCOL CALCULATION SPREADSHEET SUMMARY VERSION 2025.0.1 MAY CONTAIN ROUNDING

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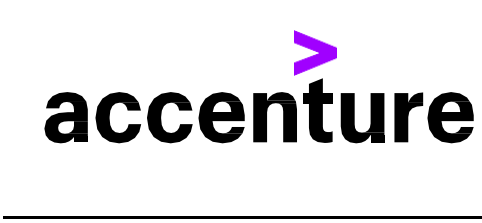

Sustainability Services