



## SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Sustainability Bond Framework

Centrais Elétricas Brasileiras S/A

19 September 2023

### VERIFICATION PARAMETERS

Type(s) of instruments contemplated

- Sustainability, Green, and Social Bonds

Relevant standards

- Green Bond Principles (GBP), as administered by the International Capital Market Association (ICMA) (as of June 2021 with June 2022 Appendix 1)
- Social Bond Principles (SBP), as administered by the International Capital Market Association (ICMA) (as of June 2023)
- Sustainability Bond Guidelines (SBG), as administered by the ICMA (as of June 2021)

Scope of verification

- Centrais Elétricas Brasileiras S/A Sustainability Finance Framework (as of September 14, 2023)
- Centrais Elétricas Brasileiras S/A Selection Criteria (as of September 14, 2023)

Lifecycle

- Pre-issuance verification

Validity

- Valid as long as the cited Framework remains unchanged

## CONTENTS

SCOPE OF WORK .....	3
ELETROBRAS BUSINESS OVERVIEW .....	3
ASSESSMENT SUMMARY .....	4
SPO ASSESSMENT.....	6
PART I: ALIGNMENT WITH GBP, SBP and SBG .....	6
PART II: SUSTAINABILITY QUALITY OF THE ISSUANCE .....	9
A. CONTRIBUTION OF THE SUSTAINABLE BONDS TO THE UN SDGs.....	9
B. MANAGEMENT OF ENVIRONMENTAL & SOCIAL RISKS ASSOCIATED WITH THE SELECTION CRITERIA.....	14
PART III: LINKING THE TRANSACTION(S) TO ELETROBRAS’S ESG PROFILE .....	18
A. CONSISTENCY OF SUSTAINABLE FINANCE INSTRUMENTS WITH ELETROBRAS’S SUSTAINABILITY STRATEGY .....	18
B. ELETROBRAS’S BUSINESS EXPOSURE TO ESG RISKS.....	20
ANNEX 1: Methodology .....	25
ANNEX 2: ISS ESG Corporate Rating Methodology .....	25
ANNEX 3: Quality Management Processes .....	26
About this SPO .....	27

## SCOPE OF WORK

Centrais Elétricas Brasileiras S/A (“the Issuer”, “the Company”, or “Eletrobras”) commissioned ISS Corporate Solutions (ICS) to assist with its Green, Social, and Sustainability Bonds by assessing three core elements to determine the sustainability quality of the instrument:

1. Eletrobras’ Sustainability Bond Framework (the “Framework”) (as of September 14, 2023) – benchmarked against the International Capital Market Association’s (ICMA) (GBP), Social Bond Principles (SBP), and Sustainability Bond Guidelines (SBG).
2. The selection criteria – whether the project categories contribute positively to the United Nations Sustainable Development Goals (UN SDGs) and how they perform against proprietary issuance-specific key performance indicators (KPIs) (See Annex 1).
3. Linking the transactions to Eletrobras’ overall Environmental, Social, and Governance (ESG) profile – drawing on the issuance-specific Use of Proceeds (UoP) categories.

## ELETROBRAS BUSINESS OVERVIEW

Eletrobrás Participações SA engages in the generation and transmission of electric energy. It is classified in the Electric Utilities industry, as per ISS ESG’s sector classification. It also offers telecommunications services. The company was founded on January 29, 1996, and is headquartered in Rio de Janeiro, Brazil.

## ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION <sup>1</sup>
<b>Part 1: Alignment with GBP/SBP/SBG</b>	The Issuer has defined a formal concept for its Green, Social, and Sustainability Bonds regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA's Green and Social Bond Principles, and the Sustainability Bond Guidelines.	<b>Aligned</b>
<b>Part 2: Sustainability quality of the Eligibility Criteria</b>	<p>The Sustainable Bonds will (re)finance eligible asset categories which include:</p> <p>Green categories: Renewable Energy, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use, and Climate Change Adaptation.</p> <p>Social categories: Affordable Basic Infrastructure, and Access to Essential Services.</p> <p>Product and/or service-related use of proceeds categories<sup>2</sup> individually contribute to one or more of the following SDGs:</p>  <p>Process-related use of proceeds categories<sup>3</sup> individually improve (i) the Issuer's/Borrower's operational impacts and (ii) mitigate potential negative externalities of the Issuer's/Borrower's sector on one or more of the following SDGs:</p>  <p>The environmental and social risks associated with those use of proceeds categories are partially managed.<sup>4</sup></p>	<b>Moderate</b>

<sup>1</sup> The evaluation is based on the Eletrobras' Sustainable Bond Framework (September 14, 2023 version), on the analysed selection criteria as received on September 14, 2023, and on the ISS ESG Corporate Rating updated on the August 11, 2023, and applicable at the SPO delivery date.

<sup>2</sup> Renewable Energy, Pollution Prevention and Control, Affordable Basic Infrastructure and Access to Essential Services

<sup>3</sup> Climate Change Adaptation, and Environmentally Sustainable Management of Living Natural Resources and Land Use.

<sup>4</sup> The risk assessment focuses on the existence of policies mitigating environmental and social risks relating to projects financed under the Green Financing Framework (Renewable Energy and Energy Efficiency). Those policies do not ensure the absence of allegations. However, it is worth noting that the existing allegations (see part 3) are not associated with projects financed under this Framework.

<p><b>Part 3:</b> <b>Linking the transaction(s) to Eletrobras' ESG profile</b></p>	<p>The key sustainability objectives and the rationale for issuing Sustainable Finance Instruments are clearly described by the Issuer. All of the project categories considered are in line with the sustainability objectives of the Issuer.</p> <p>At the date of publication of the report and leveraging ISS ESG Research, the Issuer is exposed to indigenous rights and biodiversity controversies.</p>	<p><b>Consistent with Issuer's sustainability strategy</b></p>
--	--	--

## SPO ASSESSMENT

### PART I: ALIGNMENT WITH GBP, SBP and SBG

This section evaluates the alignment of the Eletrobras' Sustainability Bond Framework (as of September 14, 2023) with the Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.

GBP, SBP, SBG	ALIGNMENT	OPINION
<b>1. Use of Proceeds</b>	✓	<p>The Use of Proceeds description provided by Eletrobras' Sustainable Bond Framework is <b>aligned</b> with the Green Bond Principles, the Social Bond Principles, and the Sustainability Bond Guidelines.</p> <p>The Issuer's green and social categories align with the project categories as proposed by the GBP, SBP, and SBG. Criteria are defined in a clear and transparent manner. Disclosure of an allocation period and commitment to report by project category or on individual projects has been provided, and environmental and social benefits are described and quantified.</p> <p>The Issuer defines exclusion criteria for harmful projects categories, which is in line with best market practice.</p> <p>The Issuer defines a look-back period of two years, which is in line with best market practice.</p>
<b>2. Process for Project Evaluation and Selection</b>	✓	<p>The Process for Project Evaluation and Selection description provided by Eletrobras' Sustainable Bond Framework is <b>aligned</b> with the Green Bond Principles, the Social Bond Principles, and the Sustainability Bond Guidelines.</p> <p>The project selection process is defined and structured in a congruous manner. ESG risks associated with the project categories are identified and managed through an appropriate process.<sup>5</sup> Moreover, the projects selected show alignment with the sustainability strategy of the Issuer and clearly show the intended benefit to the relevant population.</p> <p>The Issuer has established a Sustainable Finance Working Group ("SFWG"), which will be responsible for the</p>

<sup>5</sup> The environmental and social risks associated with the eligible projects will be mitigated in line with the Company's environmental and social risk management policies.

		<p>evaluation and selection of eligible projects under the Framework. The SFWG will be comprised of members from the Generation, Transmission, Treasury, Environment, Social Responsibility, Sustainability, Risk, and business Strategy departments. The inclusion of various stakeholders in this process, is in line with best market practice.</p>
<p><b>3. Management of Proceeds</b></p>	<p>✓</p>	<p>The Management of Proceeds provided by Eletrobras' Sustainable Bond Framework is <b>aligned</b> with the Green Bond Principles, the Social Bond Principles, and the Sustainability Bond Guidelines.</p> <p>The net proceeds collected will be equal to the amount allocated to eligible projects, with no exceptions. The Treasury department will be responsible for the allocation of proceeds on a bond-by-bond basis and track the proceeds using an internal system. The net proceeds will be tracked using internal systems. Moreover, the Issuer discloses the temporary investment instruments for unallocated proceeds.</p> <p>The Issuer intends to allocate all proceeds to eligible assets within two years of issuance. The Issuer discloses the nature of temporary investments, in line with best market practice (the proceeds will be temporarily held in cash, cash equivalents or other liquid instruments in line Eletrobras' investment guidelines).</p>
<p><b>4. Reporting</b></p>	<p>✓</p>	<p>The allocation and impact reporting provided by Eletrobras' Sustainable Bond Framework is <b>aligned</b> with the Green Bond Principles, the Social Bond Principles, and the Sustainability Bond Guidelines.</p> <p>The Issuer commits to disclose the allocation of proceeds transparently and to report in an appropriate frequency. The reporting will be publicly available on the Issuer's website. Eletrobras explains that the level of expected reporting will be at the project category or on an individual project level and the type of information that will be reported. Moreover, the Issuer commits to report annually, until the proceeds have been fully allocated.</p> <p>Allocation reporting will include information on the net proceeds allocated to each project, the remaining balance of unallocated proceeds, the proportion of financing versus refinancing, and a brief description of the selected projects.</p>

		<p>Impact reporting will include quantitative and qualitative impact indicators, such as annual renewable energy production (MWh), annual production of green hydrogen (ton), and the number of beneficiaries of the social actions implemented.</p> <p>The Issuer is transparent on the level, transparency, reporting frequency, and duration of impact reporting, which is in line with market practice.</p>
--	--	---

## PART II: SUSTAINABILITY QUALITY OF THE ISSUANCE

### A. CONTRIBUTION OF THE SUSTAINABLE BONDS TO THE UN SDGs<sup>6</sup>

Companies can contribute to the achievement of the SDGs by providing specific services/products which help address global sustainability challenges, and by being responsible corporate actors, working to minimize negative externalities in their operations along the entire value chain. The aim of this section is to assess the SDG impact of the UoP categories invested in by the Issuer in two different ways, depending on whether the proceeds are used to (re)finance:

- specific products/services,
- improvements of operational performance.

#### 1. Products and services

The assessment of UoP categories for investing in products and services is based on a variety of internal and external sources, such as the ISS ESG SDG Solutions Assessment (SDGA), a proprietary methodology designed to assess the impact of an Issuer's products or services on the UN SDGs, as well as other ESG benchmarks (the EU Taxonomy Climate Delegated Acts, the ICMA Green and/or Social Bond Principles and other regional taxonomies, standards and sustainability criteria).

The assessment of UoP categories for investing in specific products and services is displayed on a 3-point scale (see Annex 1 for methodology):



Each of the Sustainable Bonds' Use of Proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
<b>GREEN CATEGORIES</b>		
<p><b>Renewable Energy</b></p> <p><i>Expenditures related to the construction, development, acquisition, maintenance and operation of onshore and offshore solar energy generation (photovoltaic generation facilities), and wind energy generation.</i></p>	<b>Contribution</b>	
<p><b>Renewable Energy</b></p> <p><i>Expenditures to modernize, repower and hybridize existing hydroelectric projects,<sup>7</sup> and payments of</i></p>	<b>Contribution</b>	

<sup>6</sup> The impact of the UoP categories on UN Social Development Goals is assessed with proprietary methodology and may therefore differ from the Issuer's description in the framework.

<sup>7</sup> Eletrobras has communicated to ICS that 5 of the existing hydroelectric powerplants receiving financing under the Framework will have capacities exceeding 1,000MW.

existing hydroelectric concessions that meet one of the eligibility criteria defined by the Climate Bonds Initiative:

- Power Intensity higher than 5w/m<sup>2</sup> or flooded area
- Carbon emissions intensity is lower than 100gCO<sub>2e</sub>/kWh

**Renewable Energy**

Expenditures to modernize, repower and hybridize new hydroelectric projects,<sup>8</sup> that meet one of the eligibility criteria defined by the Climate Bonds Initiative:

- Power Intensity higher than 10w/m<sup>2</sup> or flooded area
- Carbon emissions intensity is lower than 50gCO<sub>2e</sub>/kWh

New hydroelectric power projects will undergo environmental and social risks impact assessment by a credible independent body to ensure that no significant environmental and social risks, impacts or controversies have been identified.

**Renewable Energy**

Design, construction, installation, operation and maintenance (Improvement and reinforcement works) of electricity transmission projects that meet the following eligibility criteria:

- Transmission lines dedicated to the creation of a direct connection, or expansion of an existing connection with renewable energy generation units, as defined in (2)
- Transmission lines connected to the grid, where the grid emission factor is less than 100gCO<sub>2e</sub>/kWh generated, considering a rolling average of the five years prior to the issuance.<sup>9</sup>

**Obstruction**



**Contribution**



**Contribution**



<sup>8</sup> Eletrobras has communicated to ICS that new hydroelectric powerplants receiving financing under the Framework will not exceed 1000 MW of capacity.

<sup>9</sup> The Framework notes that transmission lines directly connecting to a thermal power plant will be excluded for financing.

**Pollution Prevention and Control**

*Expenditures related to the construction, development, acquisition, maintenance, storage, distribution of green hydrogen (produced using renewable sources with a carbon intensity lower than 100gCO<sub>2</sub>e/kWh)*

Contribution



**Affordable Basic Infrastructure**

*Provide renewable energy to communities, who often rely on diesel-based electricity for their basic energy needs. Give access to affordable electricity, especially solar, including transmission and distribution programs.*

Contribution



**Target population:**

- *Remote communities that are not connected to the Brazilian Interconnected System (SIN), especially in the Amazon region.*

**Access to Essential Services**

*Education:*

*Expenditures to finance facilities and programs in education in underserved municipalities, including environmental education programs, which will be widely accessible and affordable. Targeted populations will consist of communities living near the company's assets (transmission lines, power plants and sub-stations).*

Contribution



**Target Population:**

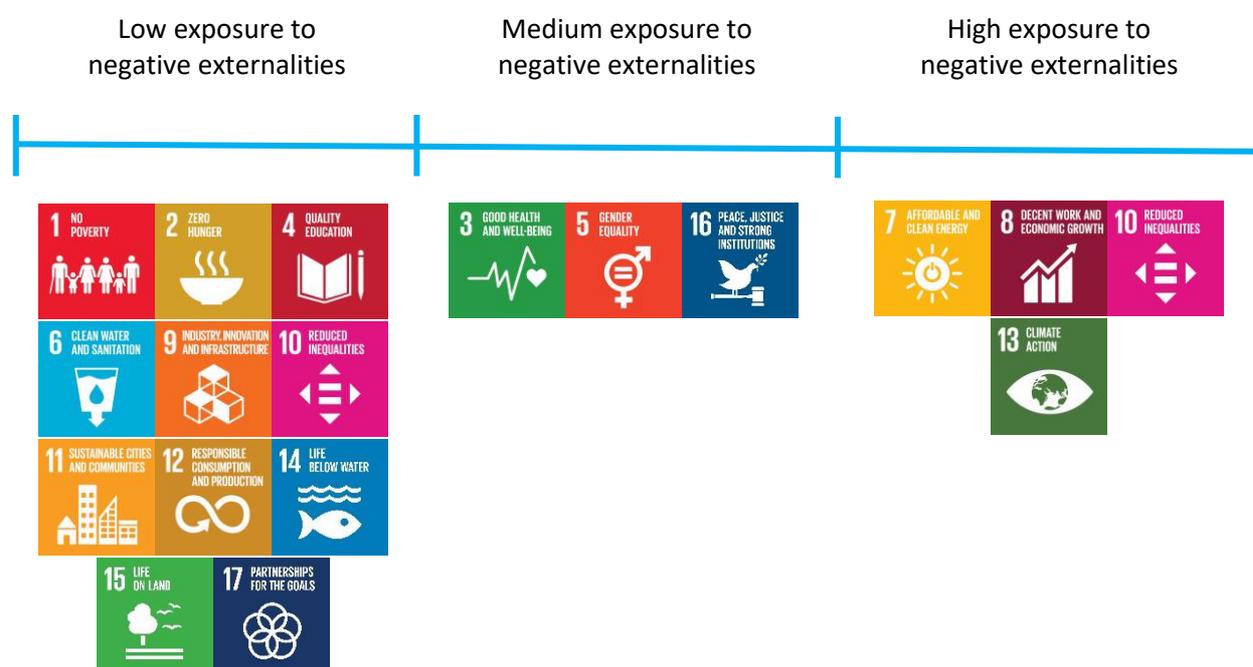
- *Municipalities with a Human Development Index (HDI) below the Brazilian average will be considered underserved.<sup>10</sup>*

<sup>10</sup> Eletrobras has further communicated to ISS that expenditures within this category will include educational programs such as environmental education programs, the financing of vocational training, and entrepreneurship programs in collaboration with the Business School of Artisans in Rio de Janeiro. Additionally, the Company will also finance educational projects in municipalities surrounding the Furnas hydroelectric plant, which intends to invest in providing training to teachers at public schools and vocational educational programs for youth.

## 2. Improvements of operational performance (processes)

The below assessment aims at qualifying the direction of change (or “operational impact improvement”) resulting from the operational performance projects (re)financed by the UoP categories, as well as related UN SDGs impacted. The assessment displays how the UoP categories are mitigating the exposure to the negative externalities relevant to the business model and the sector of the Issuer.

According to ISS ESG SDG Impact Rating methodology, potential impacts on the SDGs related to negative operational externalities<sup>11</sup> in the Electric Utilities industry (to which Eletrobras belongs) are the following:



The table below aims at displaying the direction of change resulting from the operational performance improvement projects. The outcome displayed does not correspond to an absolute or net assessment of the operational performance.

USE OF PROCEEDS (PROCESSES)	OPERATIONAL IMPACT IMPROVEMENT <sup>12</sup>	SUSTAINABLE DEVELOPMENT GOALS
<p><b>Climate Change Adaptation</b></p> <p><i>Projects, works, equipment, programs and measures required for mitigating the consequences of climate change on the Company’s activities and its stakeholders, through adaptive measures, in line with the</i></p>	✓	

<sup>11</sup> Please, note that the impact of the Issuer’s products and services resulting from operations and processes is displayed in section 3 of the SPO.

<sup>12</sup> Limited information is available on the scale of the improvement as no threshold is provided. Only the direction of change is displayed.

*Company's Group Strategic Plan on climate issue, outlined in its TCFD report. The projects will be supported by a vulnerability assessment and an adaptation plan.*

*Projects include:*<sup>13</sup>

- *Efforts to make infrastructure more resilient to impacts of physical climate risk, such as strengthening transmission lines and towers, adapting dams for spillage of excess water*

### ***Environmentally Sustainable Management of Living Natural Resources and Land Use***

*Projects, equipment, programs and measures supporting the protection and restoration of biodiversity and ecosystems. Restoration considers areas that were not previously degraded by the Company's activities.*

*Projects include:*<sup>14</sup>

- *Protection of native forests under the responsibility of the Company as defined by concessions, or areas that Eletrobras and its companies have decided at their own initiative to protect or restore, including permanent preservation areas and legal reserves;*<sup>15</sup>
- *Natural habitat protection initiatives for biodiversity enhancement, especially targeting threatened species as listed by IUCN*<sup>16</sup>



<sup>13</sup> ICS has only provided an assessment on the projects that are currently listed in Eletrobras' Sustainable Finance Framework.

<sup>14</sup> ICS has only provided an assessment on the projects that are currently listed in Eletrobras' Sustainable Finance Framework.

<sup>15</sup> Legal Reserves represent almost one-third of Brazil's native vegetation and are lauded for their role in promoting biodiversity protection and the provision of ecosystem services. For more information, please visit: Perspectives in Ecology and Conservation, Why Brazil needs its Legal Reserves: <https://www.sciencedirect.com/science/article/pii/S253006441930118X>

<sup>16</sup> Eletrobras has further communicated to ISS that expenditures related to the financing of natural habitat protection initiatives include the maintenance of two wildlife preservation zones in the region of Tucuruí HPP and the Ilha de Germoplasma Florestal. The regions are the natural habitats of endangered species of fauna and flora as listed in the List of Threatened Species of Brazil (MMA) in the IUCN Red List.

## B. MANAGEMENT OF ENVIRONMENTAL & SOCIAL RISKS ASSOCIATED WITH THE SELECTION CRITERIA

### Green and Social Categories

The table below evaluates the Selection Criteria against issuance-specific KPIs. All of the assets will be located in Brazil.

#### ASSESSMENT AGAINST KPIs

##### All categories

##### Labor

- ✓ The Issuer has measures in place to ensure high labor standards. Eletrobras adheres to United Nations Global Compact<sup>17</sup>, which commits to internationally recognized human rights standard covering topics such as freedom of association and collective bargaining, forced labor or child labor. Moreover, it is worth noting that Eletrobras' financed assets will be in Brazil who ratified 8 out of 10 ILO labor core conventions.<sup>18</sup>

##### Health and Safety

- Eletrobras has an Occupational Health and Safety Policy<sup>19</sup> referencing to ISO 45001:2018, covering all Eletrobras companies.

##### Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use

##### Community Dialogue

- ✓ The Issuer has measures or polices in place to ensure community dialogue. Eletrobras interacts with local communities during inventory, feasibility, and environmental impact studies, and develops project specific Communication and Social Interaction Plans (CSP). In addition, Eletrobras has a Whistle-Blowing channel available for community members. In engagement with the Indigenous communities and traditional people, Eletrobras has specific guidelines to establish dialogue within the environmental policy. However, there is limited information available on dialogue platform or other feedback mechanisms for public consultation. In addition, there is currently a human rights controversy concerning alleged failure to respect Indigenous rights at Teles Pires dam in Brazil by Eletrobras (further information in Part 3.B).

<sup>17</sup> Eletrobras, United Nations Global Compact, <https://unglobalcompact.org/what-is-gc/participants/1881-Centraes-Elctricas-Brasileiras-S-A-ELETOBRAS>

<sup>18</sup> Brazil did not ratify the two following Fundamental Conventions: C087 – Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) and C187 - Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187). However, the company adheres to the UN Global Compact covering freedom of association and collective bargaining.

<sup>19</sup> Eletrobras, Occupational Health and Safety Policy of Eletrobras Companies, <https://eletrobras.com/en/GestaoeGovernancaCorporativa/Occupational-Health-and-Safety-Policy-of-Eletrobras-Companies.pdf>

## Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Affordable Basic Infrastructure, Pollution Prevention and Control, Climate Change Adaptation

### Conservation and Biodiversity Management

- ✓ Eletrobras systematically conducts Environmental Impact Assessments (EIA) internally to identify and assess biodiversity impact across project design, construction, and operation stage. Within the assessment, special attention is given to habitat of rare, endemic and endangered species in national and international red books and red lists. For each identified impact, Eletrobras will determine mitigation, control and offset measures using best environmental control and monitoring practices. Please note that there is a biodiversity controversy concerning alleged failure to prevent depletion of biodiversity at Belo Monte dam in Brazil (further information in Part 3.B).

## Environmentally Sustainable Management of Living Natural Resources and Land Use

### Conservation and Biodiversity Management

- There is limited information to ensure that Eletrobras will systematically ensure projects financed under this category will provide protection of areas such as Ramsar sites, UNESCO Natural World Heritage, IUCN protected areas I-IV, and Intact Forest Landscape. However, Eletrobras applies land use mapping in protected and forest areas managed by Eletrobras to mitigate impact to the biodiversity and ecosystem.
- There is limited information to ensure assets financed will provide sustainable soil and biodiversity management along the whole value chain. However, Eletrobras' environmental policy ensures projects financed will minimize impact on biodiversity and ecosystem during the planning, implementation, and operation phase.

## Access to Essential Services - Education

### Energy efficiency

- ✓ Eletrobras states that future assets financed under this framework will adhere to the company's existing energy efficiency policy,<sup>20</sup> the action guidelines within the policy suggest the company identify opportunities and possibilities to optimize the supply and control of consumption and demand of energy resources via energy efficiency actions. It is worth noting that the company's energy management system is not certified.

## Pollution Prevention and Control

### Environmental Aspects of Construction (or Production) and Operation

- There is limited information to ensure future financed assets will have ISO certified 14001 Environmental Management System that requires high environmental standards and

<sup>20</sup> Eletrobras' Energy Efficiency Policy, March 2010, [https://q.eletrobras.com/en/GestaoeGovernancaCorporativa/Bylaws\\_Policies\\_Manuals/Energy-Efficiency-Policy.pdf](https://q.eletrobras.com/en/GestaoeGovernancaCorporativa/Bylaws_Policies_Manuals/Energy-Efficiency-Policy.pdf)

requirements during operation. However, Eletrobras has a policy in place to ensure existing operating assets have comprehensive environmental management system.

### **Renewable Energy, Transmission Line, Affordable Basic Infrastructure, Climate Change Adaptation**

#### **Environmental Aspects of Construction (or Production) and Operation**

- There is limited information to ensure financed assets have measures to mitigate noise, dust, vibrations during the construction phase and measures to cover safety of third parties, such as information to the neighborhood, signs and safety devices, and monitoring of precautions. However, Eletrobras states that Environmental Impact Assessment (EIA) will be conducted prior to the construction phase, and within the environmental licensing process, recommendations from the EIA will be implemented and monitored, including electricity consumption, GHG emission, waste and biodiversity indicators.

### **Renewable Energy, Affordable Basic Infrastructure**

#### **Environmental Aspects of Construction (or Production) and Operation**

- There is limited information to ensure Eletrobras will systematically recycle electronic equipment for renewable energy and micro-grid basic infrastructure at the end of their lives. However, there is a solid waste management plan that must be prepared and provided for the federal environmental legislation with the appropriate solutions for each type of waste.

### **Transmission Line, Climate Change Adaptation**

#### **Environmental Aspects of Construction (or Production) and Operation**

- There is limited information to ensure that low impact methods, such as horizontal drilling, consideration of breeding periods, affected fauna, and flora are in place during cable laying process of these financed assets. However, Eletrobras states that the company follows respective installation licenses from state or federal agencies.

### **Access to Essential Services: Education**

#### **Inclusion**

- There is limited information on how the Issuer can ensure assets financed under this framework promote inclusion and non-discriminatory access to education programs through initiatives such as scholarships, distance-learning offers, accessibility of education facility. However, Eletrobras states that it has supported education actions through training women in crafts, sewing and entrepreneurship, and has invested in training teachers for public education network and vocational education for young people.

### **Access to Essential Services: Education**

#### **Quality management**

- There is currently limited information to ensure that Eletrobras will systematically implement quality management system in place for the financed asset to ensure strong education standard is in place.

#### Site Location

- ✓ Eletrobras states that free transportation service will be offered to ensure the target population will have access to the assets financed under this category.

#### User Safety

- There is limited information to ensure that Eletrobras will have user safety measures in place such as emergency exits, fire sprinklers, and fire alarms to provide operational safety in the education facilities. However, Eletrobras has central emergency response plan which include action plans for emergency due to fire and other emergency situations in the company's existing assets. The assets financed will adhere to the company's existing central emergency response plan, which include action plans for emergency due to fire and other emergency situations.

#### Pollution Prevention and Control

##### Waste

- Eletrobras has guidelines within its environmental policy to prioritize the reduction of environmental impacts, waste and effluents generation and operational costs. Eletrobras states that it has a solid waste management for projects, however there is limited information in measures to increase recycling of waste.

#### Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use

##### Water

- There is currently limited information to ensure Eletrobras has water use reduction target and a comprehensive action plan in place for financed assets. However, Eletrobras monitors water consumption from company assets through its in-house Corporate Sustainability Disclosures System (IGS System). In addition, Eletrobras has a water resources policy to ensure water resources are used responsibly across different applications.
- There is limited information to ensure Eletrobras will systematically conduct risk assessment on financed assets using specified tools and methods in area with high level of water stress. In addition, there is limited information to ensure Eletrobras will conduct water impact assessment for assets operating outside of high levels of water stress. However, Eletrobras states that it adopts the National Water Agency's methodology to evaluate the location of assets in relation to water stress annually.

## PART III: LINKING THE TRANSACTION(S) TO ELETROBRAS'S ESG PROFILE

### A. CONSISTENCY OF SUSTAINABLE FINANCE INSTRUMENTS WITH ELETROBRAS'S SUSTAINABILITY STRATEGY

#### *Key sustainability objectives and priorities defined by the Issuer*

Eletrobras aims to achieve its sustainability agenda<sup>21</sup> by 2030 with below:

- Decarbonization strategy to reach Net Zero (until 2030)
- Strengthening the relationship with communities
- Conservation of forests and native biome areas
- Biodiversity conservation and regeneration plan
- Decarbonization of isolated systems in the Amazon
- Social Electricity Program – Distributed generation for low-income communities (actions in the National Interconnected System and isolated systems, with a reduction in the energy tariff)
- Educational Program focused on productive inclusion and improvements in the quality of teaching.

Eletrobras reached a level of Greenhouse gas (GHG) emissions (Scope 1,2,3) as 52 kg CO<sub>2</sub>/MWh in 2022 and is committed to achieve net zero emissions of GHG in all scopes by 2030. However, there is limited information available on the quantity of offsets that will be used to reach net zero. To achieve its net zero emission goal, the company plans to dedicate c. R\$70 to 80 billion capital expenditures toward its decarbonization strategy.

Eletrobras aims to emit 51M of tCO<sub>2</sub>e between 2022 and 2030 by divesting thermal plant, reduce scope 2 emissions with renewable energy certificates, and offset emission with carbon credits through reforestation activities.<sup>22</sup> Recently, Eletrobras has divested its only coal-fired thermoelectric plant in September 2023.<sup>23</sup> Eletrobras has submitted near term and net-zero targets commitment to SBTi with both goals in working progress<sup>24</sup>, and is publishing climate related disclosure through annual reporting to Global Report Initiative (GRI), Carbon Disclosure Project (CDP), and Taskforce on Climate-Related Financial Disclosures (TCFD). Besides climate strategy, Eletrobras plans to include at least one new threatened species according to International Union for Conservation of Nature (IUCN) per year into its conservation projects. As of 2022, the company has included 51 additional species. However, the action plans to achieve the remaining targets within the Sustainability Agenda 2030 remains unclear.

Eletrobras participates in Brazilian Forum on Climate Change (Fórum Brasileiro de Mudanças Climáticas) and the Technical Climate Chamber of the Brazilian Business Council for Sustainable Development (Câmara Técnica de Clima do Conselho Empresarial Brasileiro para o Desenvolvimento

<sup>21</sup> Eletrobras, Sustainability Finance Framework 2023 p.14, 1.6 Eletrobras' Sustainability Agenda and Approach to ESG Controversies

<sup>22</sup> Eletrobras, Sustainability Finance Framework 2023 p.8

<sup>23</sup> Eletrobras concludes sale of its only coal-fired thermoelectric plant, Poder 360, <https://www.poder360.com.br/energia/eletrobras-conclui-venda-de-sua-unica-termeletrica-a-carvao/>

<sup>24</sup> Science Based Targets, Companies taking action, <https://sciencebasedtargets.org/companies-taking-action#dashboard>

Sustentável). In 2016, Eletrobras signed the Position on Carbon Pricing Mechanisms of the Business Initiative for Climate – IEC. In 2017, Eletrobras signed the Open Letter “Carta Aberta - Setor Privado apoia Precificação de Carbono no Brasil” prepared by IEC with the support of the Carbon Pricing Leadership Coalition (CPLC), an initiative of the World Bank. Eletrobras is also a member of IHA (International Hydropower Association).<sup>25</sup> In addition, Eletrobras is one of the founding members of the Global Alliance for Sustainable Energy.

The Eletrobras Management Committee is responsible for monitoring ESG risks, and such risks are reported by the Statutory Audit & Risk Committee.<sup>26</sup> The identified climate change risks include financial losses, disinvestment, fines, sanctions, loss of operating capacity and competitiveness, and damage to company assets. Some of the mitigation measures include modeling climate scenarios for hydroelectric assets, calculating climate-related financial risks, developing action plans to inform measures to minimize the vulnerability of operation to climate change, carbon footprint assessments, carbon pricing studies, and factoring climate variables in project site selection.

The Eletrobras Group Executive Sustainability Management Committee oversees the development of Annual Report in accordance with the GRI standard and IFRS foundation’s Integrated Reporting Framework. In addition, the Strategy, Management & Sustainability Committee advises the Board of Directors in sustainability practices, social and environmental impacts of Eletrobras initiatives and projects, ESG issues are also discussed in monthly meetings. Eletrobras has also voluntarily responded to CDP questionnaires since 2010.

Eletrobras issued its first green bonds to finance electricity transmission lines in 2021 after publishing its Green Bond Framework<sup>27</sup> in 2020.

### *Rationale for issuance*

Eletrobras intends to leverage this Sustainable Bond Framework to achieve its Sustainability Agenda through tackling topics such as reaching net zero emission at 2030, strengthen relationship with communities, conserve forests and native biome areas, formalize biodiversity conservation and regeneration plan, decarbonize isolated energy systems in the Amazon, distribute electricity generation for low-income communities, and promote educational programs for productive inclusions and improvements in the quality of teaching.<sup>28</sup>

**Opinion:** *The key sustainability objectives and the rationale for issuing Green, Social, and Sustainability Bonds are clearly described by the Issuer. All of the project categories financed are in line with the sustainability objectives of the Issuer.*

<sup>25</sup> Eletrobras, Annual Report (2022), <https://eletrobras.com/en/SobreaEletrobras/Annual-Report-2022.pdf>

<sup>26</sup> Eletrobras, Annual Report (2022), Risks and opportunities GRI 201-2, <https://eletrobras.com/en/SobreaEletrobras/Annual-Report-2022.pdf>

<sup>27</sup> Eletrobras, Green Bond Framework (2020), <https://q.eletrobras.com/pt/ri/SiteAssets/Paginas/Certificados-e-Relatorio-Annual/Green%20Bond%20Framework%2020200114%20final.pdf>

<sup>28</sup> Eletrobras, Sustainability Finance Framework (2023), p.8

## B. ELETROBRAS'S BUSINESS EXPOSURE TO ESG RISKS

This section aims to provide an overall level of information on the ESG risks to which the Issuer is exposed through its business activities, providing additional context to the issuance assessed in the present report.

### *ESG risks associated with the Issuer's industry*

The Issuer is classified in the Electric Utilities industry, as per ISS ESG's sector classification. Key challenges faced by companies in terms of sustainability management in this industry are displayed in the table below. Please note, that this is not a company specific assessment but areas that are of particular relevance for companies within that industry.

ESG KEY ISSUES IN THE INDUSTRY
Protection of human rights and community outreach
Accessibility and reliability of energy supply
Environmentally safe operation of plants and infrastructure
Promotion of a sustainable energy system

### *ESG performance of the Issuer*

Leveraging ISS ESG's Corporate Rating research, further information about the Issuer's ESG performance can be found on ISS ESG Gateway at: <https://www.issgovernance.com/esg/iss-esg-gateway/>.

Please note that the consistency between the issuance subject to this report and the Issuer's sustainability strategy is further detailed in Part III.A of the report.

### *Sustainability impact of products and services portfolio*

Leveraging ISS ESG's Sustainability Solutions Assessment methodology, the contribution of the Issuer's current products and services portfolio to the Sustainable Development Goals defined by the United Nations (UN SDGs) has been assessed as per the table below. This analysis is limited to the evaluation of final product characteristics and does not include practices along the Issuer's production process.

PRODUCT/SERVICES PORTFOLIO	ASSOCIATED PERCENTAGE OF REVENUE <sup>29</sup>	DIRECTION OF IMPACT	UN SDGS
<b>Energy generation based on hydropower (&gt;1,000MW), energy generation based on hydropower (&gt;10MW)</b>	53.8%	Contribution	 

<sup>29</sup> Percentages presented in this table are not cumulative.

Energy generation based on nuclear power	2.5%	Contribution	
Energy generation based on hydropower (>1,000MW), energy generation based on nuclear power	47%	Obstruction	
Energy generation based on nuclear power	2.5%	Obstruction	

### *Breaches of international norms and ESG controversies*

#### At Issuer level

The company is exposed to 2 severe controversies related to indigenous rights and biodiversity:

- Indigenous Rights: Alleged failure to respect indigenous rights at Teles Pires dam in Brazil.**  
 The company's subsidiaries CGT Eletrosul and Furnas each own a 24.5% stake in Companhia Hidrelétrica Teles Pires (CHTP), the consortium created to operate the 1,820 MW Teles Pires dam on the namesake river in Brazil which has allegedly been built without having obtained the Free, Prior and Informed Consent (FPIC) of indigenous Munduruku communities. From 2010 to 2016 court rulings called for the suspension of the project, citing the consortium's alleged inadequate assessment of anticipated severe impacts on indigenous communities' livelihood and cultural heritage. However, the Brazilian Supreme Federal Tribunal overturned the decisions using the Suspension of Security, a legal instrument allowing it to reverse legal decisions over significant risks of national security or economic damages. The dam became operational in September 2016. In 2017, indigenous communities reportedly accused CHTP of having destroyed sacred rapids in the river and of having impacted their health and access to livelihoods. In a public hearing held in December 2020 indigenous representatives stated that, since the construction of the Teles Pires dam, water was no longer drinkable while fish stocks were decreasing progressively. The representatives also deemed water supply systems installed by CHPT to be inadequate. Later that month, a Federal Court ordered that the Federal government ensure the effective supply of drinking water to the communities. In communication with ISS ESG in January 2021, Iberdrola SA, the company holding the remaining 51% stake in CHTP, stated that the implementation of any consultation process was the responsibility of the government, since initial impact studies are conducted prior to the tendering process. According to the company, after CHPT was awarded the concession, negotiations involving indigenous communities and the National Indigenous Foundation (FUNAI) were executed in order to carry out necessary studies as well as compensation and mitigation socio-environmental programs. ISS ESG continues to monitor the allegations raised by indigenous communities.

- **Biodiversity: Alleged failure to prevent depletion of biodiversity at Belo Monte dam in Brazil.** The company owns through its subsidiaries Chesf and Eletronorte, a 49.98% stake in Norte Energia SA, the consortium operating the 11,233 MW Belo Monte dam on the Xingu River in Brazil, which has been repeatedly criticized by local stakeholders, including the Brazilian Federal Prosecutor's Office (MPF) and academic experts, for allegedly altering the flow of the Xingu and severely impacting the river's biodiversity. Since 2018, indigenous and riverine communities have been accusing Norte Energia of having failed to maintain water levels to allow fish reproduction. The Brazilian Institute of Environment and Renewable Resources (IBAMA) expressed similar concerns in January 2021 and, in February 2021, reached an agreement (TCA) with Norte Energia allowing the implementation of the Consensus Hydrograph, which establishes minimum flows to be allocated in the river, in exchange for additional mitigation measures. In February 2023, local researchers reported millions of dead eggs in one of the spawning grounds, and filed a complaint with IBAMA, which has reportedly conducted a site inspection. In a statement, Norte Energia maintained that the incident is not related to the project's operation and cited natural causes, according to the local NGO SUMAUMA. In response to investor queries facilitated by ISS ESG in June 2021, Eletrobras stressed that the Consensus Hydrograph was approved by all relevant authorities in the licensing process, and that any changes in the agreement would be illegal, and affect power supply to the national grid. In further communication with ISS ESG in May 2023, Eletrobras shared that Norte Energia is implementing the Consensus Hydrograph in accordance with the TCA, and was ratified until the completion of analyses by IBAMA. Taking note of the continued allegations, ISS ESG will monitor the disclosure of monitoring assessments demonstrating the sustainability of the dam's operations.

At industry level

Based on a review of controversies over a 2-year period, the top three issues that have been reported against companies within the Electric Utilities industry are as follows: Failure to prevent radioactive pollution, Failure to prevent water pollution, and Anti-competitive behaviour.

Please note that this is not a company specific assessment but areas that can be of particular relevance for companies within that industry.

## DISCLAIMER

1. Validity of the Second Party Opinion (“SPO”): Valid as long as the cited Framework and benchmarks to the Sustainability Performance Targets remain unchanged./Valid as long as the cited Framework remains unchanged.
2. ISS Corporate Solutions, Inc. (“ICS”), a wholly-owned subsidiary of Institutional Shareholder Services Inc. (“ISS”), sells, prepares, and issues External Reviews, on the basis of ICS’ proprietary methodology. In doing so, ICS adheres to standardized procedures designed to ensure consistent quality.
3. Second Party Opinions are based on data provided by the party to whom the Second Party Opinion is provided (“Recipient”). ICS does not warrant that the information presented in this Second Party Opinion is complete, accurate or up to date. ICS will not have any liability in connection with the use of these Second Party Opinions, or any information provided therein.
4. Statements of opinion and value judgments given by ICS are not investment recommendations and do not in any way constitute a recommendation for the purchase or sale of any financial instrument or asset. In particular, the Second Party Opinion is not an assessment of the economic profitability and creditworthiness of a financial instrument, but refers exclusively to the social and environmental criteria mentioned above. Statements of opinion and other judgments given by ICS are based on the information provided by the Recipient during the preparation of the Second Party Opinion and may change in the future, depending on the development of market benchmarks, even if ICS is requested by the Recipient to provide another Second Party Opinion on the same scope of work.
5. This Second Party Opinion, certain images, text, and graphics contained therein, and the layout and company logo of ICS, are the property of ICS (or its licensors) and are protected under copyright and trademark law. Any use of such ICS property requires the express prior written consent of ICS. The use shall be deemed to refer in particular to the copying or duplication of the Second Party Opinion wholly or in part, the distribution of the Second Party Opinion, either free of charge or against payment, or the exploitation of this Second Party Opinion in any other conceivable manner.
6. Recipient’s distribution of this Second Party Opinion is limited to third parties participating in the transaction contemplated within the Second Party Opinion, as set forth in the terms and conditions of the agreement between ICS and Recipient.

The Recipient that commissioned this Second Party Opinion may have purchased self-assessment tools and publications from ICS or ICS may have provided advisory or analytical services to the Recipient. If you are an institutional client of ISS, you may inquire about any Recipient’s use of products and services from ICS by emailing [disclosure@issgovernance.com](mailto:disclosure@issgovernance.com).

This Second Party Opinion has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While ICS exercised due care in compiling this Second Party Opinion, it makes no warranty, express or implied, regarding the accuracy, completeness or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. In particular, the research and scores provided are not intended to constitute an offer, solicitation or advice to buy or sell securities nor are they intended to solicit votes or proxies.

The parent company of Institutional Shareholder Services (“ISS”), ISS HoldCo Inc., has since February 2021 been principally owned by Deutsche Börse AG (“DB”) with the remainder owned by Genstar

Capital (“Genstar”) and ISS management. In April 2023, DB announced its intention to combine ISS with Qontigo, another entity controlled by DB, with General Atlantic to become the sole minority shareholder of the combined entity. The combination is expected to be completed in the third quarter of 2023. In July 2023, the stakes of Genstar and ISS management in ISS HoldCo Inc. were acquired by DB. The non-interference and similar policies implemented by ISS related to Genstar are no longer applicable and disclosures regarding Genstar and ISS management’s ownership of ISS are withdrawn.

© 2023 | Institutional Shareholder Services and/or its affiliates

## ANNEX 1: Methodology

The SPO provides an assessment of labelled transactions against international standards using ISS ESG proprietary methodology. For more information, please visit:

<https://www.issgovernance.com/file/publications/SPO-Use-of-Proceeds-Bonds-and-Loans.pdf>

## ANNEX 2: ISS ESG Corporate Rating Methodology

ISS ESG Corporate Rating provides relevant and forward-looking environmental, social, and governance (ESG) data and performance assessments. For more information, please visit:

<https://www.issgovernance.com/file/publications/methodology/Corporate-Rating-Methodology.pdf>

## ANNEX 3: Quality Management Processes

### SCOPE

Eletrobras commissioned ICS to compile a Sustainable Finance Instruments SPO. The Second Party Opinion process includes verifying whether the Sustainability Finance Framework aligns with the GBP, SBP, SBG administered by ICMA and to assess the sustainability credentials of its Sustainable Finance Instruments, as well as the Issuer's sustainability strategy.

### CRITERIA

Relevant Standards for this Second Party Opinion:

- Green Bond Principles (GBP) 2021 (with June 2022 Appendix 1)
- Social Bond Principles (SBP) 2023
- Sustainability Bond Guideline (SBG) 2021

### ISSUER'S RESPONSIBILITY

Eletrobras's responsibility was to provide information and documentation on:

- Framework
- Eligibility criteria
- Documentation of ESG risks management at the project level

### ISS ESG'S VERIFICATION PROCESS

ISS ESG is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS ESG has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Second Party Opinion of the Sustainable Finance Instruments to be issued by Eletrobras has been conducted based on a proprietary methodology and in line with ICMA's Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines.

The engagement with Eletrobras took place in August and September 2023.

### ISS' BUSINESS PRACTICES

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

## About this SPO

ISS ESG is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the Issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: <https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/>

For more information on SPO services, please contact: [SPOsales@isscorporatesolutions.com](mailto:SPOsales@isscorporatesolutions.com)

For more information on this specific Sustainable Finance Instruments SPO, please contact: [SPOOperations@iss-esg.com](mailto:SPOOperations@iss-esg.com)

### Project team

#### Project lead

Allen Ng  
Associate  
ESG Consultant

#### Project support

Anchal Verma  
Senior Associate  
ESG Consultant

#### Project supervision

Marie-Bénédicte Beaudoin  
Associate Director  
Head of ISS ESG SPO Operations