

Environmental Examination Report

- (1) Project Name  
Construction of transmission-related facilities
- (2) Project Site  
Federative Republic of Brazil, state of Santa Catarina and state of Parana
- (3) Project Outline  
Construction of transmission lines and substations
- (4) Category Classification  
Category A
- (5) Reason for Classification  
This project falls into the sensitive sector (power transmission and distribution sector) under the Environment Guidelines and has sensitive characteristics. The project site is also located in or near sensitive areas.
- (6) Environmental Permits and Approvals  
The EIA was prepared in accordance with national regulations and approved by Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) in March 2021, and by the Santa Catarina Environmental Institute (IMA-SC) in September 2020 and in March 2021.
- (7) Pollution Mitigation Measures  
It has been confirmed that appropriate measures have been implemented to address air quality, water quality, waste management, soil contamination, as well as noise and vibration.
- (8) Natural Environment  
Under the supervision of the environmental authorities, mitigation measures and compensation plans have been formulated and implemented to minimize impacts on the ecosystems and biodiversity

within protected areas. It has also been confirmed that appropriate measures have been taken with respect to other potential impacts on the natural environment.

( 9 ) Social Environment

There are no ethnic minorities or indigenous peoples present at the project site or in the surrounding areas. It has also been confirmed that appropriate measures have been taken with respect to other potential impacts on the social environment.

( 1 0 ) International Standard

IFC Performance Standards

( 1 1 ) Others, Monitoring

Based on the above environmental review, monitoring is planned with respect to compliance with EIA approval conditions, the status of complaints, and the existence of any issues or observations raised by the relevant authorities.

## Questions

### **2 Q1. Please provide the address of the project site.**

Address of the project site :

<https://www.neoenergia.com/w/linha-transmissao-itajai>

<https://www.neoenergia.com/transmissao>

Neoenergia Vale do Itajai Transmissao de Energia S.a., Rua Ary Antenor de Souza, 321, Sala R - Jardim Nova America, Campinas - SP, 13.053-024.

Transmission Line in the states of Paraná and Santa Catarina, Brazil.

### **Q2. Please provide a brief explanation of the project.**

NEOENERGIA won the Lot 1 of Auction No. 04/2018-ANEEL (Brazilian regulatory agency for electric energy) for construction of 6 electric power transmission lines (LT) in the states of Paraná and Santa Catarina, as well as related substations and sectioning. The project covers the states of Paraná (Areia, Jaraguá do Sul) and Santa Catarina (Joinville Sul, Itajaí, Gaspar 2, Itajaí 2, Biguaçu, Indaial), approximately 1,107 km of transmission lines.

**Q3.** Is it a new project to be implemented or a project that has been implemented? If it has been implemented, has it received a serious complaint from local residents or a directive for improvement, a stop-work order, a project suspension order, etc., from a local environmental authority?

- New project to be implemented
- Project that has been implemented (with a complaint)
- Project that has been implemented (without a complaint)
- Other ( )

**Q4.** Do the laws or regulations of the country where the project will be implemented require the project to conduct environmental and/or social impact assessments (such as an Environmental and Social Impact Assessment (ESIA) and Environmental Impact Assessment (EIA))? If so, have they been conducted or planned?

- Required (Assessments done)                       Required (Assessments in progress or being planned)
- Not Required                       Other ( )

**Q5.** If environmental and/or social impact assessments have been conducted, have they been approved in accordance with the environmental and social impact assessment system of the country where the project will be implemented? If so, please also specify the date of the approvals and the name of the authorities.

- Approved (without condition(s))                       Approved (with condition(s))
- Under approval process                       Other ( )

Date of Approvals : As table on Q6

Name of Authorities : IBAMA and IMA-SC

**Q6.** Are there any environmental permits required other than environmental and/or social impact assessments? If so, have they been obtained? Also, if required, please specify the name of the permits.

- Obtained                       Required, but not obtained yet
- Not required                       Other ( )

Name(s) of required permit(s) : \_Preliminary Environmental License (Licença Prévia), Installation License (Licença de Instalação) and Operation License (Licença de Operação).

An ESIA is required for Transmission Lines in Brazil. Three EIAs were presented to the agencies that provided the Operation and Installation Licenses. With the exception of LT 525 kV Areia – Joinville Sul, C1, CS, and the expansion in SE 525 kV Areia for the connection of this section, both licensed by IBAMA (Brazilian Environmental Agency), all other facilities are licensed by IMA-SC, an agency of the state of Santa Catarina. They were approved as Table below:

Environmental License	Issuing Agency	Number	Issue Date	Valid until
Installation	IBAMA	1433/2022	06/07/2022	06/07/2028
Installation	IMA-SC	4548/2021	08/05/2021	08/05/2027
Installation	IMA-SC	2563/2021	08/05/2021	08/05/2027
Installation	IMA-SC	444/2021	02/11/2021	02/11/2027
Installation	IMA-SC	6030/2022	09/12/2022	09/11/2028
Operation	IMA-SC	3973/2023	14/09/2023	13/09/2027

**Q7.** Will the project be specified after JBIC made a funding commitment (as in the case of a two-step loan, where sub-projects cannot be specified at the time of a funding commitment)?

(Yes /  No)

If “Yes”, please disregard the following questions.

If “No”, please go to Q8.

**Q8.** Will JBIC’s funding be used to serve as support for international balance of payments or to be used for the provision of goods or services that does not involve installation or implementation in particular sites or regions, as in the case of export/import or lease of machinery or equipment that is not connected with a particular project?

(Yes /  No)

If “Yes”, please disregard the following questions.

If “No”, please go to Q9.

**Q9.** Are there any environmentally sensitive area(s) shown below in or near the project site(s)?

Yes / No)

If “Yes”, please mark the applicable items and go to Q10.

If “No”, please go to Q10.

- National parks, nationally-designated protected areas (coastal areas, wetlands, areas for ethnic minorities or indigenous peoples, and cultural heritage, etc., designated by national governments)
- Forests with important ecological value (including primary forests and natural forests in tropical areas)
- (3) Habitats with important ecological value (including coral reefs, mangrove wetlands, and tidal flats)
- (4) Habitats of rare species requiring protection under domestic legislation, international treaties, etc.
- (5) Areas in danger of large-scale salt accumulation or soil erosion
- (6) Areas with a remarkable tendency towards desertification
- (7) Areas with unique archaeological, historical or cultural value
- Areas inhabited by ethnic minorities, indigenous peoples, or nomadic peoples with traditional ways of life (including areas which are used for cultural and spiritual purposes) and other areas with special social value

**Q10.** Does the project involve the following characteristics?

Yes / No)

If “Yes”, please specify their scale and go to Q11.

If “No”, please go to Q12.

- (1) Involuntary resettlement or loss of means of livelihood  
(Number of affected people: \_\_\_\_\_ )
- (2) Groundwater pumping (Scale: \_\_\_\_\_ m<sup>3</sup>/year)
- (3) Land reclamation, land development, and land clearing (Scale: \_\_\_\_\_ ha)
- (4) Logging (Scale: : Total area: 675,07 ha distributed between: a) LT Areia- Joinville: 203,59 ha; b) LT Joinville Sul-Itajaí II- Biguaçu: 296,25ha; c) LT Rio do Sul-Indaial-Gaspar 2: 175,23ha).

**Q11.** Under the environmental and social impact assessment system of the country where the project will be implemented, do the applicable characteristics (1) – (4) of Q10 above and their scale serve as the basis for executing an ESIA for the project?

- Yes, they do  No, they do not  
 Other ( \_\_\_\_\_ )

**Q12.** Is the project likely to have a significant social impact, including human rights?

(Yes /  No)

If “Yes”, please describe the impacts and go to Q13.

If “No”, please go to Q13.

- Likelihood of a significant impact on human rights ( \_\_\_\_\_ )  
 Other ( \_\_\_\_\_ )

**Q13.** Will JBIC’s funding or NEXI’s insurable value be equal to or less than 5% of the total project cost, or will JBIC’s funding or NEXI’s insurable value be equal to or less than SDR 10 million? (If the funding or insurable value is additional to a project that has been supported by JBIC or NEXI, please add up the previous funding or insurable value and the funding or insurable value being considered to apply for this time.)

(Yes /  No)

If “Yes”, please disregard the following questions.

If “No”, please go to Q14.

**Q14.** Is the project for capital investment or working capital in a project that has been implemented and does it involve no material change in output or function (as in the case of maintenance of the existing facilities, non-expansionary renovation project, and acquisition of rights and interests without additional capital investment)?

(Yes /  No)

If “Yes”, please disregard the following questions.

If “No”, please go to Q15.

**Q15.** Is the project in any of the following sectors?

Yes / No)

If “Yes”, mark the applicable sectors and go to Q16.

If “No”, please disregard the following question.

- (1) Mining
- (2) Oil and natural gas development
- (3) Pipelines
- (4) Iron and steel (projects that include large furnaces)
- (5) Non-ferrous metals smelting and refining
- (6) Petrochemicals (manufacture of raw materials; including complexes)
- (7) Petroleum refining
- (8) Oil, gas, and chemical terminals
- (9) Paper and pulp
- (10) Cement plants (including a greenfield quarry)
- (11) Manufacture and transport of toxic or poisonous substances regulated by international treaties, etc.
- (12) Thermal power
- (13) Nuclear power
- (14) Hydropower, dams, and reservoirs
- (15) Power transmission and distribution lines involving large-scale involuntary resettlement, large-scale logging, or submarine electrical cables
- (16) Roads, railways, and bridges
- (17) Airports
- (18) Ports and harbors
- (19) Sewage and wastewater treatment having sensitive characteristics or located in sensitive areas or their vicinity
- (20) Waste management and disposal
- (21) Agriculture involving large-scale land-clearing or irrigation
- (22) Forestry
- (23) Tourism (construction of hotels, etc.)

**Q16.** Please provide information on the scale of the project (project area, area of plants and buildings, production capacity, amounts of power generation, etc.). In addition, please explain whether an environmental and/or social impact assessment is required on account of the large scale of the project in the country where the project will be implemented.

The project comprises (i) Areia – Joinville Sul Transmission Line, 525 kV, single circuit, with an approximate length of 292 km; (ii) Joinville Sul – Itajaí 2 Transmission Line, 525 kV, single circuit, with an approximate length of 82 km; (iii) Itajaí 2 - Biguaçu Transmission Line, 525 kV, single circuit, with an approximate length of 63 km; (iv) first circuit of the Itajaí – Itajaí 2 Transmission Line, at 230 kV, single circuit, with an approximate length of 10 km; (v) second circuit of the Itajaí – Itajaí 2 Transmission Line, at 230 kV, single circuit, with an approximate length of 10 km; (vi) first and second circuits of the Rio do Sul – Indaial Transmission Line, at 230 kV, double circuit, with an approximate length of 51 km; (vii) first and second circuits of the Indaial – Gaspar 2 Transmission Line, 230 kV, double circuit, with an approximate length of 57 km; (viii) Joinville Sul Substation 525/230/138 kV; (ix) Itajaí 2 Substation 525/230/138 kV; (x) Jaraguá do Sul Substation 230/138 kV; (xi) Indaial Substation 230/138 kV; (xii) new 525 kV yard at Gaspar 2 Substation 525/230 kV; (xiii) connections of transformation units, line inputs, busbar interconnections, reactors and connections, busbars, linked facilities and other facilities necessary for the functions of measurement, supervision, protection, command, control, telecommunications, administration and support; (xiv) section of 525 kV Transmission Line, double circuit, with an approximate length of 39 km, between the sectioning point of the 525 kV Transmission Line Curitiba - Blumenau and the Joinville Sul Substation; (xv) section of 525 kV Transmission Line, double circuit, with an approximate length of 43 km; (xvi) section of 525 kV Transmission Line, double circuit, with an

approximate length of 23 km; (xvii) section of 525 kV Transmission Line, double circuit, with an approximate length of 7 km; (xviii) section of 230 kV Transmission Line, double circuit, with an approximate length of 5.5 km; (xix) section of 230 kV Transmission Line, double circuit, with an approximate length of 5.5 km, between the sectioning point of the 230 kV Transmission Line Blumenau - Joinville and the Joinville Sul Substation; (xx) section of the 230 kV Transmission Line, double circuit, with an approximate length of 13 km; (xxi) section of the 230 kV Transmission Line, double circuit, with an approximate length of 38 km; (xxii) section of 230 kV Transmission Line, double circuit, with an approximate length of 38 km, between the sectioning point of the 230 kV Transmission Line Blumenau - Joinville and the Jaraguá do Sul Substation; (xxiii) section of 138 kV Transmission Line, double circuit, with an approximate length of 2.4 km; (xxiv) section of 138 kV Transmission Line, double circuit, with an approximate length of 2.4 km,; and (xxv) acquisition of the equipment necessary for modifications, replacements and adjustments to the LINE INPUTS of the substations Curitiba, Curitiba Leste, Blumenau, Biguaçu, Joinville, Joinville Norte, Camboriú Morro do Boi, Itajaí and Itajaí Fazenda, in compliance with the attached Operating Conditions.

The Project is under construction and partially began its commercial operation on October 2, 2023. There will be approximately 1,107 km of transmission lines, of which 437 km will be 525 kV, 4 new substations and a new 525 kV yard at SE Gaspar 2. The figure below illustrates the location of the facilities that make up the Project:

