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Environmental and Social Data Sheet

Overview

Project Name:	*BRAZILIAN WIND PORTFOLIO (NEOENERGIA FL I)*
Project Number:	*2021-0592*
Country:	*Brazil*
Project Description:	*The project consists of two clusters of onshore wind farms. Each wind farm has a capacity between 27 and 49 MW, for an aggregate installed capacity of 613 MW. The first cluster is located in the Brazilian State of Paraiba in the northeast of the country, and is composed of 7 sub-projects for a total installed capacity of 239 MW. The second cluster is located in the Brazilian State of Piaui, and is composed of 8 sub-projects for a total installed capacity of 374 MW. The operation consists of an allocation under Framework Loan Neoenergia Green Energy FL (2019-0576).*

EIA required: *yes*

Project included in Carbon Footprint Exercise[1]: *yes*

(details for projects included are provided in section: “EIB Carbon Footprint Exercise”)

Environmental and Social Assessment

The project consists of two clusters of onshore wind farms. Each wind farm has a capacity between 27 and 49 MW, for an aggregate installed capacity of 613 MW. The first cluster (Chafariz) is located in the Brazilian State of Paraiba in the northeast of the country, and is composed of seven sub-projects for a total installed capacity of 239 MW. The second cluster (Oitis) is located in the Brazilian State of Piaui, and is composed of eight sub-projects for a total installed capacity of 374 MW. The projects include the required ancillary infrastructure, such as substations and transmission lines, for the interconnection to the national transmission grid. It is noted that both Chafariz and Oitis clusters are each part of a bigger complex, each complex approx. double the size of the corresponding cluster included under this operation.

The Promoter is Neoenergia, a Brazilian subsidiary of Iberdrola, an international utility in the renewable energy sector based in Spain. Neoenergia is active in power generation (hydro, wind and gas), networks (transmission and distribution) and energy commercialisation. Iberdrola’s activities cover the whole value chain in the electricity sector, from renewable and conventional generation to transmission and distribution networks, commercialisation of energy and integrated contractor. It operates in Europe, North America and LATAM.

Environmental Assessment

[1] Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.

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If the wind farms were located in the EU, they would fall under Annex II of EIA Directive 2014/52/EU, requiring the environmental authority to screen the projects and determine if they are subject to Environmental Impact Assessment based on Annex III.

In Brazil, wind farms are allowed to follow a simplified EIA process if they are considered of low impact, which is defined in the resolution CONAMA 462/2014 as developments not located in i) dunes and wetlands, ii) Atlantic forest area, iii) coastal areas, iv) protected areas and their buffer zones, v) routes for the migration, nesting and reproduction of birds, vi) areas which require resettlement, and vii) areas with presence of protected or endemic species. In the case of the transmission lines, they are also allowed to follow a simplified process, as per the resolution CONAMA 279/2001, if they do not affect protected areas, indigenous lands, public health, endangered species or historical heritage sites.

Based on the Bank's review, it can be established that the basic principles of the EIA Directive are present in the Brazilian environmental regulations, since projects likely to have significant effects on the environment are made subject to an environmental assessment prior to their approval or authorisation, including stakeholder participation and transparency. Projects which require standard EIA process are subject to publication of EIA report and public hearings. For the projects subject to simplified process, the environmental authority publishes issuance of the licences in the official journal and may decide to organise full public consultation on a case-by-case basis.

It is noted that permits conditions include provisions to decommission the projects at their end of life, dismantling all equipment to bring the land in its original state, in accordance with laws NBR 15,515 and CONAMA resolution 420/2009.

Licensing Process

The Promoter split the two clusters into seven and eight sub-projects respectively, each with a size between 27 and 49 MW each. The 15 wind farms have gone through an environmental assessment process that complies with Brazilian legislation. In accordance with the guidelines established in Resolution CONAMA No. 462-2014, all 15 wind farms were classified as low impact projects by the licensing regulatory agency, as they do not affect protected areas, indigenous lands, public health, endangered species or historical heritage sites.

This classification allowed each of these 15 wind farms to follow a simplified licensing procedure and present a Simplified Environmental Report (SER or 'RAS' by its acronym in Portuguese) in order to attest to its environmental viability and obtain the Preliminary License (PL). The simplified process entails the development of a SER, of which minimal content is also prescribed.

Although the simplified process does not reduce the level or quality of the studies, and the Project has adopted a robust structure for compliance with permitting and relevant national and local regulations, some gaps were identified in comparison with the EIB E&S standards. The main gaps are related to: (i) the area of influence at the complex level[2] should include all wind farms and their associated facilities, (ii) significant impacts, such as noise and shadow flicker, were not considered in the cumulative impact assessment, and (iii) a critical habitat analysis and biodiversity assessment was not conducted.

[2] Chafariz cluster is part of a complex that amounts to a total of 475 MW. Oitis cluster is part of a complex that amounts to a total of 566 MW.

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Biodiversity

The location of the wind farms does not overlap with fragile ecosystems or areas of importance for biodiversity conservation, such as Ramsar or IBAs sites. However, several areas affected by the Project overlap with habitat of a large number of endemic species, about 63 species in total. Therefore, it is necessary to assess the impact of the Project at the complex level with respect to each of these endemic species in order to rule out any negative impact on critical habitats.

Neoenergia has included, as part of the environmental impact management, a series of plans and programs describing actions aimed at mitigating impacts on biodiversity, however, these plans and programs need to include detailed descriptions of methodologies and indicators. Specific strategies should be included for impacts such as collisions of birds and bats with wind farm infrastructure, and/or electrocution risks.

The Project requires a comprehensive Biodiversity Management Plan, which should include the different programs that are being carried out and those that are being planned, in addition to those proposed measures that will be based on the updated analysis of the impacts on biodiversity.

Environmental, Health and Safety

The main source of air pollution is associated with (i) the emission of dust (particulate matter) generated by vehicles and/or trucks on the internal and external access roads, and (ii) the emissions generated by the operation of the vehicles. Neoenergia has developed a series of measures aimed at mitigating air pollution.

Noise modelling was conducted in 2018; however, the study only considered local noise legislation and was not in line with international best practice and the Bank's E&S Standards. In addition, a shadow flicker analysis was not undertaken pre-construction. In agreement with the EIB, further noise and shadow flicker modelling were carried out between July and October 2022. This will be followed up by site investigations and measurements in order to confirm that only a relatively limited number of properties are affected by high levels of noise and a higher than acceptable number of hours of shadow flicker, and define the most appropriate mitigation measures to be implemented.

Domestic wastewater is generated within the Project. Chemical toilets are used on the work fronts, and the worksites and the substation have a septic tank and biodigesters. The biodigesters are cleaned periodically by site personnel, while the waste sludge is collected by an authorized company.

Neoenergia has an Occupational Health and Safety Policy, and an Occupational Health and Safety (OHS) Plan that establishes general guidelines. The OHS plan is aimed at workers and contractor companies. The accident control register for the year 2021 shows zero fatal accidents and zero disabling accidents (with injuries that prevent return to work), which demonstrates good safety management.

Paris Alignment

The project is fully aligned to the goals and principles of the Paris Agreement as set out in the Bank's Climate Bank Roadmap and the Energy Lending Policy.

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EIB Carbon Footprint Exercise

Estimated emissions savings are 669000 tonnes of CO2 equivalent per year. Project boundary has been defined in line with the Bank's methodology. Baseline for the calculation is the pre-construction status and country's energy mix.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment, where applicable

Land Acquisition

Both clusters are located within uncultivated areas with a dispersed rural population, at a distance of approximately five kilometres on a straight line from the nearest urban centres. The main economic activities in the area are subsistence agriculture and small-scale livestock farming. During the Project design process, a minimum buffer of 400 metres from the wind turbines to the dwellings was established. Therefore, no cases of physical displacement have occurred so far apart from four instances within the Oitis cluster where people were moved within their own properties, and suitably compensated for it (including construction of better quality housing). However, noise and shadow flicker studies to be carried out in order to fill the gaps identified in the original E&S assessment may potentially result in physical displacements. It is noted, however, that alternative mitigations such as localised screening, planting of vegetation or operation of some wind turbines in noise-reduced mode will be given priority to any physical displacement, which will therefore be a worst-case scenario type of mitigation. In addition, the Promoter needs to carry out an assessment to identify whether all the persons who suffered economic displacement (project-affected persons) were part of the compensation process. Therefore, a formal Livelihood Restoration Plan will be required by the EIB, and a formal Resettlement Action Plan will also be required in case of significant physical displacements.

The negotiation process is concluded for all the properties affected by the projects, with the signing of land acquisition or lease contract and payment of the agreed price.

Based on the assessment made by the promoter so far, the properties affected by the wind farms have signed rights of use contracts, while the properties affected by the transmission and medium voltage lines have signed administrative easement contracts.

For both types of contracts, the Project compensated titled owners as well as possessors and inheritance beneficiaries. In order to verify the veracity of the possession of the latter two, the affected parties were asked to provide some kind of documentation to support the claims. The testimony of neighbors was also collected. In addition to the amount compensated for the value of the area, the affected parties were compensated for pre-existing crops and infrastructure. The negotiation process with each affected party began based on the total compensation value (area plus crops and/or improvements). The compensation meets EIB E&S Standards requirements.

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Indigenous and Quilombolas People

There is no indigenous or Quilombola[3] population in the direct area of influence. Two Quilombola communities located within a five-kilometre radius (indirect area of influence) were identified. The Palmares Cultural Foundation (PCF)[4] granted a certificate indicating that the Project does not impact indigenous or Quilombola population. In addition, it is noted that INCRA[5] is in charge of setting requirements to manage any impact on Quilombola communities. Based on the steps required by INCRA, the assessment, engagement, and community development activities carried out are broadly in line with those of a Free Prior Informed Consent (FPIC) process and therefore the EIB is satisfied that the Project should not have any negative impact on the nearby Quilombola communities.

Labour Conditions

Neoenergia has a Human Resources Policy and a Human Rights Policy. In addition, the contracts with contractors and suppliers include labor clauses that require compliance with national legislation. Therefore, workers are hired under the Consolidation of Labor Laws regime (CLT – 'Consolidação das Leis do Trabalho'), which guarantees (i) freedom of association, (ii) prohibition of child and forced labor, among other core labor rights.

Neoenergia provides non-discriminatory and equal opportunities to workers regardless of race, national or social origin, birth, religion, disability, gender, sexual orientation, union membership, political opinions and promote equal opportunities.

Public Consultation and Stakeholder Engagement

Under the simplified process, the environmental agency can require a public information phase, namely Technical Information Meeting ('Reunião Técnica Informativa'), where the stakeholders are informed in person about the technical features of the Project and may express concerns or complaints. Even though the authority did not expressly require such meetings, Neoenergia has proactively organised disclosure activities, in order to engage with local stakeholders, in line with the main principles of the EIB E&S Standards.

The main engagement activities conducted by Neoenergia are: (i) the use of a car as a mobile communication unit that disseminates Project's information on a daily basis, (ii) a community grievance mechanism, (iii) daily visits to the communities and social organizations, and (iv) distribution of quarterly newsletters.

In addition, as part of its Corporate Social Responsibility, Neoenergia supports the communities living in the vicinity of the Project through: (i) donations of solar panels to government institutions, (ii) donation of groceries to families, and (iii) providing training in productive activities, among others activities. All engagement activities have been conducted following Covid-19 security protocols.

Although in practice Neoenergia has been conducting several engagement activities, the Project does not have a written or documented Stakeholder Engagement Plan (SEP). A formalized Stakeholders Engagement Plan (SEP) and improved grievance mechanism will be required from the promoter.

[3] https://en.wikipedia.org/wiki/Quilombola

[4] The PCF is the public agency in charge of assessing projects whose impacts may affect, respectively, protected cultural and historical assets, indigenous communities, and/or afro-descendant (Quilombola) communities

[5] National Institute of Colonization and Agrarian Reform

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Other Environmental and Social Aspects

The promoter's capacity to implement the projects in compliance with the EIB's Environmental and Social Standards is deemed acceptable. All issues related to the gaps identified in order to comply with the Bank's E&S Standards are being addressed by the Promoter, as detailed below within the Conclusions and Recommendations section.

The promoter's parent company, Iberdrola, has committed to reduce absolute scope 1, 2 and 3 GHG emissions 43% by 2030 from a 2017 base year; its decarbonisation plan has been assessed by SBTi (https://sciencebasedtargets.org/companies-taking-action), resulting in a near-term target aligned with the 1.5ºC scenario.

Conclusions and Recommendations

The finance documentation (allocation letter) will include a number of environmental and social conditions that will provide the subsequent measures and actions required in line with the Bank's Environmental and Social Standards. Progress monitoring on compliance with such environmental and social conditions will further be included as a requirement in the allocation letter.

The Project is expected to have limited social and environmental impact, provided that all mitigation measures, defined in the allocation letter, are implemented. The following main loan conditions and undertakings are proposed:

- Based on the latest noise and shadow flicker desktop modelling carried out for the projects, the Promoter shall investigate (also through site inspections and field measurements) the actual noise and shadow flicker impact on the dwellings within the site area and, if necessary, implement the required mitigation measures (e.g. localised screening, planting of vegetation, operation of some wind turbines in noise-reduced mode, or in a worst case scenario involuntary resettlement) in accordance with the EIB E&S 1. In case of significant displacements resulting from the noise/shadow flicker assessment, the promoter shall also prepare a Resettlement Action Plan.
- The Promoter shall carry out a social impact audit, with the main objective of identifying all project-affected people who have been negatively impacted by any physical or economic displacement process, and design and implement socio-economic interventions to alleviate such impact.
- The Promoter shall carry out a critical habitat analysis following the EIB E&S 4 criteria and the related guidance note[6], which should include recommendations for mitigation and/or compensation of residual impacts on natural or critical habitats. The results should be integrated into the Biodiversity Management Plan.
- The Promoter shall consolidate the existing management policies, plans and procedures into a formal and integrated Environmental and Social Management System (ESMS) and manual.
- The Promoter shall update environmental, social, health and safety impact and risk assessment matrices.
- The Promoter shall provide a Stakeholders Engagement Plan (SEP) and a community and workers grievance mechanism, to the satisfaction of the Bank.

[6] https://www.eib.org/en/publications/guidance-note-on-biodiversity-and-ecosystems

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- The Promoter shall prepare a formal Livelihood Restoration Plan covering the economic displacements related to the entire area of influence, to the satisfaction of the Bank.
- The Promoter shall prepare an Environmental and Social Management Plan (ESMP), including a Biodiversity Management Plan, Waste Management Plan, Occupational Health and safety (OHS) Plan, among others.

The allocation letter will also contain an undertaking that the project will be implemented and operated in compliance with EIB's Environmental and Social Standards, including being in line with the measures and actions outlined in the environmental and social documentation[7] and the environmental permits.

Provided the actions above are implemented, the operation is deemed acceptable for the Bank under environmental and social aspects.

[7] SER, ESMP and related plans, ESAP, RAP, SEP