

## Environmental and Social Data Sheet

### Overview

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| Project Name:  | <b>LSPG - Sao Paulo and Rio Grande do Norte</b>  |
| Project Number:  | 2019-0336  |
| Country:   | Brazil   |
| Project Description:   | <p>The project concerns the implementation of three renewable energy plants in Brazil:</p> <ul style="list-style-type: none"> <li>• Boqueirão and Jerusalem, two adjacent wind farms with a combined capacity of 260 MW, in the state of Rio Grande do Norte. The interconnection to the grid is comprised of a substation, located at the project site, and a ~27 km 500 kV aerial power line</li> <li>• Pereira Barreto, a 259 MWp solar photovoltaic plant, in the state of São Paulo. The interconnection to the grid is shared by the two plants, and is comprised of a substation, located at the project site, and a ~8 km 138 kV aerial power line.</li> </ul> |
| EIA required:  | yes  |
| Project included in Carbon Footprint Exercise <sup>1</sup> : | yes  |

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

### Environmental and Social Assessment

#### Environmental Assessment

Based on the Bank's review, the principles of the Brazilian environmental regulations are similar to the basic principles of the relevant EU environmental Directives. Brazil has signed most of the international conventions on the protection of the environment, such as Ramsar, Paris Agreement, CMS (Convention on the Conservation of Migratory Species of Wild Animals), or UNCCD (United Nations Convention to Combat Desertification).

If located in Europe, these plants would fall under the annex II of the Directive 2014/52/EU amending the EIA Directive 2011/92/EU, requiring the environmental authority to screen the plants and decide whether an EIA process is necessary. In the particular case of the wind farms, the interconnection is included in the Annex I of the above-mentioned directive, requiring an EIA to be performed.

In Brazil, projects likely to have significant effects on the environment are subject to a complete environmental assessment, including on impact on biodiversity, prior to their

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

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approval or authorisation, including stakeholder participation and transparency. Projects which require a standard EIA process are subject to publication of the EIA report and public hearings. For the projects subject to a 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.

EIA processes are ruled at national level by the laws “Lei Federal 6.938/1981” and “Resoluções CONAMA 001/1986 e 237/1997”, requiring an environmental licence procedure for all activities considered contaminant; and “Resolução CONAMA 001/1986”, establishing the procedures for ESIA. As Brazil is a federal country, states may have their own subsidiaries, environmental agencies, licence procedures and ESIA study requirements, aligned with the national legislation.

In addition, the Brazilian regulator has decided to simplify the environmental permitting of certain projects, among them some of the projects included in this operation. Wind farms are allowed to follow a simplified EIA process if they are considered of low impact, as defined in the resolution CONAMA 462/2014; and solar PV plants as well as transmission lines 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.

The simplified process entails the redaction of a simplified environmental impact report, of which minimal content is also prescribed. The three schemes are subject to the simplified licensing, as the conditions are met, including the absence of impact by the plants and ancillary infrastructure on protected areas.

It shall be noted that the simplified process does not reduce the level or quality of the studies which are in line with the documents seen in similar projects in all geographies. In this regard, the Bank has reviewed the Environmental Impact Studies carried out and has found them satisfactory. The documents include adequate assessment on the expected impacts, including biodiversity assessment, deemed typical for the technologies involved.

#### *Pereira Barreto Solar PV*

The lands to be occupied by the plant are currently used for agriculture, mostly sugar cane plantations with a small patch of original primary forest of ~70 Ha, which will be preserved. The plant is also adjacent to a major water body, used as a reservoir for hydropower generation and irrigation. The main mitigants during the construction and operational phases refer to the protection of the water quality in the reservoir. The project will implement measures to fight erosion and transport of sediments.

#### *Boqueirao and Jerusalem wind farms*

These lands currently have no economic use, but are very anthropised, with fences separating the different plots. The area possesses a semi-arid climate, characterised by high average temperatures. The rocky terrain and absence of vegetal soil, together with strong winds, make it not favourable for agriculture. As in the case before, some original patches of forestry still remain, and will be preserved.

The promoter carried out a long-term assessment of the impact on birds and flying fauna, which is the most critical impact of this technology. None of the chiropters and bird species found in the study are included in the Brazilian list of endangered species.

The most relevant endangered fauna found at the project site is a rodent, *Kerodon rupestris*, classified as endemic, and present on the Brazilian list of endangered species (MMA, 2014).

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The promoter split the programme into a series of different smaller parts, with an average size of ~30 MW, for administrative purposes, but the environmental studies included the presence of the adjacent sub-plants, and included an adequate assessment of the cumulative effects expressly mentioned.

In all cases, there is no impact on sensitive habitats (i.e. wetlands) or protected areas. In the case of the wind farms, the closest protected area is Parque Estadual Ecológico do Pico do Cabugi, at a 14 km distance.

### **EIB Carbon Footprint Exercise**

The wind farms will not generate any absolute CO<sub>2</sub> emissions. In accordance with the Bank's current Carbon Footprint methodology, CO<sub>2</sub> emissions avoided by this project are calculated based on the replacement of electricity generation from a combination of existing and new power plants in Brazil (50% operating margin and 50% build margin). The total relative effect of the project is a net reduction in CO<sub>2</sub> equivalent emissions of 684 kt CO<sub>2</sub>-e/year.

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 the project cost.

### **Social Assessment, where applicable**

The lands where the projects are located are private and have been leased to the respective owners. The promoter is in the process of securing additional rights of way for the interconnection lines. In case voluntary agreements are not reached, expropriation of such rights might be necessary.

The Bank has not found evidence on the presence of vulnerable groups, including indigenous communities, in the vicinity of the projects and their grid connections or being potentially affected by them.

It is not expected the occurrence of any displacement, including economic. In the case of the wind farms because there isolation and absence of economic use. And in the Solar PV plant because the region offers ample opportunities for the workers to replace the agricultural activities carried out in the site, related with sugar cane industry.

During the construction and operational phases, the promoter intends to apply its corporate labour standards, including health and safety measures, in line with its practices in Europe and the Americas. This is deemed very positive by the Bank, although in Brazil these requirements are also present.

In the case of the Solar PV plant, the project may result in a potential loss of employment opportunities, as the lands are currently used for agriculture (sugar cane), and will no longer maintain such use. However, the region still offers sufficient opportunities, and the surface occupied by the plant is marginal, compared with the surrounding lands still used for agriculture.

### **Public Consultation and Stakeholder Engagement**

As these projects obtained consent using the simplified procedure, there was no previous official public information and disclosure required by law, only the publication of the licence after it was granted, or just a reference to the licence file number in the official journal of the respective states.

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However, the promoter, as part of its Corporate Social Responsibility, decided to engage with the local populations, and carry out some activities, including informative sessions about the project.

It has also voluntarily decided to undertake some additional activities to further support the communities living in the vicinity of the three plants.

## Conclusions and Recommendations

For all plants, the main negative residual environmental and social impacts have been evaluated to be minimal and will mainly be concentrated during construction. These will be comparable to any large civil construction site and will be mitigated with detailed project control mechanisms.

The quality of the Environmental Impacts Studies carried out by the promoter is satisfactory.

Adequate environmental and social mitigation and compensation programmes were put in place as part of the ESMP developed and were included in the ESIA, including measures to avoid, reduce and mitigate the impact, as well as monitoring indicators. The ESIA processes and their results are acceptable to the Bank.

Environmental and social conditions prior to the disbursement of the funds allocated to each project:

- The promoter shall provide the Stakeholders Engagement Plans (including for their interconnections to the grid: substations and transmission lines) to the satisfaction of the Bank. This document shall include evidence that adequate public information has been or will be carried out, in order to allow the participation of the potentially affected communities.
- The promoter shall create and manage a complaints mechanism, both physically located at the project site, and visible on its website. This mechanism will be available for workers and nearby communities.
- The promoter will demonstrate to the Bank how it intends to address the potential climate change risks that might affect the plants.

In view of the conditions above, the operation is deemed acceptable for the Bank under environmental and social aspects.