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Environmental and Social Data Sheet

Overview

Project Name:	CAPE VERDE GREEN ENERGY FL
Project Number:	2022-0821
Country:	Cape Verde
Project Description:	The project consists in the design and construction of a set of inter-related electricity generation, network and storage components during the 2024-2030 period under Cape Verde's National Electricity Masterplan (2018-2040)

EIA required: This is a framework loan operation. Part of the sub-projects under this operation require an EIA under the relevant national legislation or as determined by the competent authority on a case-by-case basis

Project included in Carbon Footprint Exercise¹: no (framework loan)

Environmental and Social Assessment

Background

The operation is a Framework Loan to finance the promoter's key green investments for the period 2024-2030 (the Project) with a view to increase ultimately the national share of renewables to the target set for 2030 and later 2040. The individual sub-projects under this Framework Loan will primarily include the construction of electricity storage facilities and electricity network assets. The main sub-project will be a 20MW pumped storage facility. The other priority sub-projects, which have been pre-identified, will be confirmed during appraisal with the project promoter, which is the Ministry of Industry, Commerce and Energy. It is expected that these additional project components will consist of: (i) SMART grid reinforcement, modernisation and digitalisation; (ii) batteries and converters; (iii) wind and solar investments and (iv) technical assistance to the Project Promoter related to the implementation of its strategy.

The 20MW pump storage powerplant sub-project is located on the archipelago's main island of Santiago in Ribeira Grande de Santiago municipality. The upper and lower off stream reservoirs are located near rivers Ribeira Ribão Seco and Ribeira de São João, respectively. It comprises a lower reservoir with a net capacity of 320 000 m³ and the upper reservoir of 360 000 m³ to deliver 8-hour storage capacity. The two large off stream reservoirs will be connected by a penstock with length of 0.8 km, with a surface powerhouse, a small diversion dam in Ribeira de São João and a desalinated water supply system, both for reservoir filling and compensation of water losses.

Grid reinforcement, modernisation & digitalisation will take place across all nine populated islands. Dedicated grid connection lines below 60kV are planned for each renewable reserved area. For the islands of Santo Antao, Sao Nicolau, Boavista, Maio, Fogo and Brava, a

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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connection to the dispatch centre in Praia is planned, with investments in a SCADA (Supervisory Control and Data Acquisition) system for these islands. Grid reinforcement is also needed for the Boavista Islands to increase grid absorption capacity. The proposed investment aims to modernize the grid and develop a distribution control centre to manage all the power production plants. Other important measures to reduce losses in the grid require the substitution of all analogue meters by advanced meters.

Energy storage, batteries and converters The Project Promoter intends to construct 60MW in aggregate of Li-ion battery storage systems across all nine populated islands. Each BESS is likely to range between 5 and 10MW/10MWh approx. depending on the grid need.

Wind and solar power plants: the national strategy foresees the installation of more than 150 MW of new small to medium sized solar PV projects and more than 60 MW of new windfarms across the country by 2030.

Environmental Assessment

Due to the nature of this operation, the final sub-projects and their environmental, climate and social impacts are not fully known at this stage. The Bank's eligibility criteria and procedures for Framework Loan operations will apply. All sub-projects will require ex-ante approval by the Bank prior to authorising the use of funds in final sub-projects. The Bank's requirements with regard to eligibility including environmental and social criteria will be incorporated into the finance contract. For each allocation requested, the Bank will review the Environmental & Social Impact Assessments (ESIA), as well as other relevant documentation such as Stakeholder Engagement Plan (SEP), Resettlement Policy Frameworks (RPFs), Resettlement Action Plan (RAP) – as and when applicable – during the appraisal of each individual sub-project. Whenever an ESIA is required, the study together with the non-technical summary will be provided in copy to the Bank for approval prior to the Bank's approval of the subproject and will be published. The same requirement will apply in the case of an SEP, RAP or RPF being applicable. During the review, the Bank will assess the compliance of the aforementioned documents with the EIB's Environmental and Social Standards. The Project Promoter will be required to verify that none of the sub-projects has a significant adverse impact on any site of nature conservation importance, nor on critical habitats. Schemes (sub-projects) with significant E&S negative impacts will not be eligible under this operation.

Screening assessment indicates that the pumped storage facility may have low to moderate environmental and social impacts, as well as water resource impacts. The subproject is not located in the vicinity of the two protected areas on the Santiago island, Serra Malagueta Natural Park and the Serra do Pico de Antonia Natural Park. A baseline and screening assessment of two candidate sites (Mato Sancho and Cha Goncalves) for the pumped storage plant have been carried out in August 2021 by reputable international consultants who concluded on similar low to moderate environmental impacts for the two sites. Cha Goncalves upper reservoir will occupy areas with grazing use, not affecting any population. Its lower reservoir will occupy some areas with agricultural potential, close to villages but not affecting them directly. Mato Sancho upper reservoir will occupy areas with agroforestry potential and potential urban development. Thus, Cha Goncalves was selected as the most favourable site with a slightly lower social impact. An initial analysis of the line routes proposed for connection to the energy distribution network was also carried out, identifying the main associated territorial constraints, having been adjusted to avoid the most sensitive situations (areas of greater density of occupation and/or with constraints), concluding that from an environmental and social point of view these lines are viable, given their characteristics (aerial lines), and will not cause very significant impacts. An ESIA shall be completed by mid-2024 prior to allocation of the loan towards this sub-project.

The *grid components' impacts* that typically can be expected relate to visual impact, impact on flying vertebrates, electromagnetic fields, noise nuisance, and disturbances during



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construction, SF6 gas, PCBs polychlorinated biphenyls, as well as the possible impacts on protected fauna and flora.

Wind and solar power plants: a new, modern Environmental Impact Assessment (EIA) system has just been approved (March 2020) in Cabo Verde, which includes premises for wind and solar parks. The legal framework of the electricity system stipulates that the costs of preventing or mitigating environmental, health and safety damage must be borne by concessionaires and licensees. These costs are taken into account by the regulator when setting tariffs. In order to avoid negative impacts on consumer tariffs, the Cabo Verde government has taken some remedial measures. All wind and solar projects are developed in areas designated for investment in renewable energy, the Renewable Energy Development Zones (ZDER), created by Legislative Decree (DL) No. 1/2011, which provides the legal regime for independent production and micro-generation from renewable sources. According to this decree, projects built in the ZDERs are exempt from environmental impact assessment. Despite this legal exemption, all recent renewable projects have been subject to environmental and social impact assessments (ESIA). This process ensures compliance with relevant national and European environmental and social legislation and best practices.

The Project Promoter will be the Ministry of Industry, Commerce and Energy (MICE). The complexity of the project will require additional external assistance to strengthen the Project Promoter's capacity in a form of Project Implementation Unit consultant with both local and international experience. On this basis, the Promoter's capacity to implement this framework loan in compliance with the EIB's Environmental and Social Standards is deemed acceptable.

Finally, the Project aims at decarbonizing the electricity grid of Cape Verde based on quantified steps and targets set in 2018-2040 National Electricity Masterplan and thus is considered eligible for climate change mitigation. The Project will not include infrastructure dedicated to creating a direct connection or expansion of an existing direct connection between a substation or network and a power production plant that is more greenhouse gas intensive than 100g CO₂eq/kWh measured on a life cycle basis. The pumped storage facility is expected to use electricity generated from renewable energy sources only and it may be used to support the development of water supply. The Project is considered 100% climate action.

Social Assessment

The envisaged subprojects may give rise to typical occupational and community health, safety and security risks and impacts. These risks are primarily linked to traffic, dust and noise nuisances, presence of security personnel and the influx of labour force during construction. The subproject Promoter will secure the right-of-way, as necessary. The main mitigation and monitoring measures to address these risks/impacts and others will be considered in the respective Environmental and Social Management Plan (ESMP), and in the respective SEP and RPF, if applicable.

The Bank will require that the assessment of social impacts, including the development of necessary mitigation measures (as applicable), and compliance with national law and ILO Core Labour Standards will need to be ensured by the subproject Promoter at sub-project level in accordance with the Bank's Environmental and Social Standards.

Schemes will require the acquisition, lease or easements of land for the installation of their components. The subproject Promoter will seek to secure voluntary agreements for the lands required for all schemes' assets. It is expected that the implementation of the schemes under this framework loan will not lead to involuntary physical displacement. Schemes with physical displacement will be excluded from the Project scope to be financed by the EIB.



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Public Consultation and Stakeholder Engagement

For all sub-projects to be included in the co-financing portfolio, the Bank will verify that disclosure of information and meaningful public consultation have been carried out or are both planned for, in the context of the ESIA process, as well as prior to and during the construction phase, and – if applicable – throughout the lifetime of the project. At sub-project level, the Project Promoter will ensure that comprehensive grievance mechanisms, both for communities and for the workforce (including EPC contractor and sub-contractors), are in place during both implementation and the entire operation period of the schemes. Stakeholder engagement activities will be conducted in compliance with national legislation and with the Bank's relevant Environmental & Social standards.

Other Environmental and Social Aspects

The sub-projects' promoters are expected to be Electra, the state-owned electricity utility, or private investors. The sub-projects' promoters shall still be selected competitively by the Project Promoter. They may be public or private entity with skills that will be reviewed upon reception of each allocation clarifying the equity structure.

Conclusions and Recommendations

With the below conditions and the implementation of the Environmental & Social Action Plan for each subproject object of an allocation under this framework, the Project is considered acceptable for EIB financing in Environmental & Social terms.

Disbursement Conditions:

- Prior to disbursement, the allocations will be appraised ex-ante by the Bank.
- Additional conditions for disbursement might be established for individual allocations.

Undertakings:

- The Project Promoter shall undertake to put in place a Project Implementation Unit (PIU) and hire an international PIU consultant, whose terms of reference shall be satisfactory to the Bank.
- Sub-projects (i) with significant negative social impacts or (ii) requiring physical resettlement and/or (iii) with impact on indigenous people shall not be eligible.
- Sub-projects with significant negative impacts on areas with a high biodiversity value, nature conservation areas, including bird or fish migration routes shall not be eligible. Further, if a scheme has the potential to affect a nature conservation site, the Promoter of the Subproject shall obtain written confirmation from the competent authority, or an equivalent environmental assessment satisfactory to the Bank that the scheme does not have a significant negative impact on any site of nature conservation.
- For sub-projects, if applicable, the Promoter should deliver the environmental studies and documents related to the ESIA (including environmental consent), Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF) to the Bank and to the Bank's satisfaction before the funds are allocated.
- Whenever applicable, the Promoter undertakes to fulfil the requirements of the environmental impact studies (ESIA report or others) and of the associated environmental permits.
- To carry out climate risk assessment for the pump storage powerplant that is financed from the EIB funds. Based on the assessment results the Promoter should plan the implementation of the proposed measures.