

Lekela Wind BOO

Location:	Egypt
Project number:	49794
Business sector:	Energy
Notice type:	Private
Environmental category:	A
Approval date:	05 Jun 2019
Status:	Repaying
English-language PSD published:	23 Oct 2018

Project Description

Provision of long-term senior debt financing of USD 77.5 million (EUR 64.6 million equivalent) to finance the construction of a 252 MW wind power plant located in the Gulf of Suez, approximately 30km North-West of Ras Ghareb in Egypt. The project will be one of the first privately developed utility scale wind power plants in Egypt and will support the country in increasing its renewable energy capacity.

Project Objectives

Through delivery of clean power at one of the most competitive wind tariffs in the region and wider, the project will support Egypt's renewable transition and exploitation of the exceptional wind resources in the Gulf of Suez area.

The Project is expected to further improve the environmental characteristics of Egypt's power sector by reducing emissions of local pollutants and CO₂, as well as water consumption.

Transition Impact

ETI score: 80

By adding 252 MW of renewable energy generation to Egypt energy mix, the Project will assist transition to a low-carbon economy in the country which has a high level of reliance on thermal power generation. The Project is expected to achieve sizeable environmental benefits, with expected annual avoided CO₂ emissions of ca. 450,000 tonnes.

In addition, EBRD is engaged with the Egyptian authorities and the Client to complete a thorough assessment of potential cumulative environmental and social impacts associated with the proposed Project and future wind projects in the Gulf of Suez (one of the world's most important bird migration flyway). EBRD is cooperating closely with key stakeholders and will provide TC support to complete this assessment.

Client Information

LEKELA EGYPT WIND POWER BOO SAE

The Borrower is a special purpose vehicle incorporated in Egypt for the sole purpose of developing, constructing and operating the Project. The Borrower is owned by Lekela Power B.V., an independent renewable energy company focused on renewable energy generation in Africa.

EBRD Finance Summary

USD 77,500,000.00

A senior secured loan of USD 77.5 million (EUR 64.6 million equivalent) co-financed with other parties.

Total Project Cost

USD 329,200,000.00

The total project costs is approximately USD 329.2 million (EUR 274.3 million equivalent).

Environmental and Social Summary

Categorised A (2014 ESP). The Project has been categorised A as it involves the development of a greenfield wind power project on the edge of the Rift Valley/Red Sea bird migration flyway in the Gulf of Suez, which may present a significant collision risk for various migrating bird species. This risk is compounded through the planned development of other state owned and private sector windfarms in the wider area. The Project has been subject to a local ESIA process and various supplementary studies required by the Project Lenders: EBRD, IFC and OPIC. These documents together form the Project ESIA, which was publically disclosed on 22 October 2018 following lender and independent consultant review. Following a change in wind turbine layout and capacity, the Project ESIA was revised and an updated assessment was published in May 2019. The change in turbine layout and capacity does not materially change the conclusions of the original Project ESIA. The Regional Centre for Renewable Energy and Energy Efficiency (RCREEE) has, furthermore, conducted and disclosed a Strategic Environmental and Social Assessment (SESA) for the development of wind power resources in the wider area as well as a five year bird monitoring programme. The Project is expected to avoid approx. 600,000 tCO₂e annually.

The Project, to be located to the north west of the town of Ras Ghareb, involves the installation of 96x2.6MW turbines, and supporting infrastructure, in a wider 284km² area demarcated for private sector wind power projects. The original turbine configuration consisted of 73x3.6MW turbines. The Project will connect to the national grid through a 15km 220Kv transmission line. This line will connect to a substation and in turn export electricity through a 500Kv line. These transmission lines will be installed and operated by the Egyptian Energy Transmission Company (EETC). Multiple future wind farms will connect to the substation while the 220kv line will be installed for the sole purpose of the Project and therefore is considered an associated facility. The Project has developed an ESIA for both transmission lines for the benefit of EETC. The Project and transmission lines will be constructed on state-owned desert land which is distant from any permanently inhabited areas (Ras Ghareb is 28km away).

The Project ESIA has considered typical impacts associated with wind farm projects but with a specific emphasis on ornithological impacts, particularly to migrating birds. The Project ESIA has further considered potential cumulative effects of Project together with other existing and future wind projects in the Gulf of Suez. Considering the Project's location the most significant issue is the need to avoid, monitor and manage impacts to migratory soaring birds. In this respect, the Project ESIA and the E&S

action plan define various measures to be implemented by the Project. The Project will further be subject to measures defined by the SESA and measures to be implemented by the Egyptian authorities. The Project will develop an appropriate E&S management system, which will apply to all Project phases and to contractors. This will include health and safety provisions for workers and off-site receptors. The Project will need to put in place the necessary resources to implement such measures.

The Project is located on the edge of an important migratory flyway (globally-important concentrations of 13 migratory bird species pass through the area during the spring and autumn) and 12 km from Gebel El Zeit Important Bird Area (IBA idesignated for migratory soaring birds) and therefore has been subject to a critical habitat assessment (CHA), which draws on bird survey and other data gathered for the ESIA and the SESA. The CHA has determined that the Project site, and its associated facilities, are not located within critical habitat while the IBA has been assessed to be critical habitat. The ESIA has assessed impacts of the turbines to birds and has concluded that the Project may present a significant collision risk to migratory soaring birds, and mitigation is required, but this risk may be compounded further with the development of numerous other wind farms in the wider area. A change in turbine layout and capacity has shown that collision risk is lower compared to that initially presented in the Project ESIA but the risk is still significant. The change in turbine layout and capacity has been assessed and documented in a supplementary ESIA report. 580MW of turbines are located south of Ras Ghareb and there are plans for further projects in this area and near to the Project. The Project has undertaken a rapid cumulative effects assessment and identified the need for mitigation not just for by Project but by other wind farms. Further, while the CHA has determined that the Project will not impact critical habitat it has concluded that considering the Project's location and presence of various species of migrating birds in globally-important concentrations, the Project should achieve a no net loss of biodiversity. The SESA also identifies the potential for cumulative impacts and as such RCREEE is planning to develop an area-wide shut down on demand programme. The Project will either be subject to this programme or if it is not available at the commissioning stage, the Project will implement its own shut down on demand programme. This will be coupled with pre and post-construction bird monitoring including carcass surveys as well as other measures to ensure no net loss of biodiversity. The transmission line ESIA defines the need for bird diverters and carcass surveys to avoid bird collisions and monitor their effectiveness. The 500Kv line, which will serve multiple projects, will pass through the IBA but will be constructed parallel to an existing transmission line and include bird diverters and impact monitoring.

The Project is expected to require approx. 300 workers during construction and approx. 10 during operations. Most workers will be recruited locally and at this stage a workers camp is not planned. No influx issues have been identified. The Project will define appropriate labour requirements applicable to all workers in line with PR2. Noting the Project location, significant impacts to communities, such as shadow flicker, visual impacts, impacts on land use and air quality during construction, have not been identified. The area is uninhabited and access is restricted by the authorities. The Project will develop an appropriate security management plan and will put in place measures to avoid transport related impacts during construction. Project equipment is expected to be imported from ports on the Red Sea and/or Mediterranean coastline. The Project will engage with local communities, including Bedouin communities which have affiliation with the wider area but do not use the Project area, in terms of Project benefits. No impacts to cultural heritage have been identified.

The Project has developed a stakeholder engagement plan and Non-Technical Summary (including an update to reflect the change in turbines). The Project has undertaken various engagement activities, including public hearings, through the local permitting process and during the disclosure of the ESIA. These meetings have shown general support for the Project but have highlighted the need for the implementation of the proposed mitigation measures and the potential for employment. A public grievance mechanism is in place and will be maintained. The Lenders have agreed an E&S action plan with the Project which has been disclosed. The ESAP includes measures to ensure that the Project is developed in line with lender requirements and significant impacts are mitigated and

managed and will be implemented with Project ESIA and permitting commitments. The Lenders will monitor the project together with independent advisors.

A Project Environmental and Social Impact Assessment (ESIA) is available for the Project.

2022 Update:

The Project reached financial close in August 2019. The Project reached commercial operation in November 2021. The Project is being monitored by an independent lenders consultant and lender specialists. The Project has been constructed and is being managed in line with good international practice using relevant management systems and experienced personnel. This includes a robust approach to managing COVID-19 risks. The Project is predominantly compliant with the Bank's requirements as well as ESIA and permit commitments. Implementation of the ESAP is progressing as expected. Some recommendations have been made to further improve performance and these have been taken on board by the Project. In January 2021, Lekela reached 1 million hours of work with no Lost Time Incidents (LTIs). Lekela in cooperation with RCREEE has started the implementation of an advanced training for junior bird watchers. The aim of this training is to provide well-trained and qualified junior bird observers to be coached on post-operational activities for on-site bird monitoring and shutdown on demand activities (the ATMP) in the upcoming bird migration seasons. The initiative has supported candidates from the nearby community of Ras Ghareb. The Project has also signed a protocol with the Egyptian Environmental Affairs Agency and its Migratory Soaring Birds project to contribute towards the funding and implementation of the Migratory Birds Monitoring training programme.