

Environmental and Social Data Sheet

Overview

Project Name:	2010-0544
Project Number:	WIND FARM GULF OF SUEZ
Country:	EGYPT
Project Description:	<i>The project involves design, construction and commissioning of a large-size (up to 200 MWe) onshore wind farm to be located on the west bank of the Gulf of Suez, Egypt; some 400 km southeast of Cairo. The project includes a 22/220 kV substation from which a new 220kV transmission line (to be built by the Egyptian transmission company) will be connected.</i>
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

Environmental Assessment

If the project were located within the EU it would fall under Annex II of the EIA-Directive (2011/92/EU), requiring the competent authorities to determine whether a full EIA is required. An Environmental and Social Assessment Study (ESIA Study) was conducted by a well reputed international consultant for the larger region in 2011 ("1000 MW wind farm") covering an area of about 200 km² (overarching ESIA). This study area is to a large extent located inside a preferential development zone that was identified in a previous study from 2007 looking at the whole 630 km² area originally attributed to the promoter. Based on the overarching ESIA Study the competent authority (EEAA) has screened the project in and decided that a preliminary impact assessment (or "Form B") is required and needs to be approved before the start of construction. Based on the information provided, EEAA has determined certain specific studies that will have to be carried out as part of the Form B analysis. As the "Form B" is less comprehensive than a full EIA, the Bank has analysed the gaps with respect to its Environmental and Social Standards and will require the developer to strengthen and fill any gaps with the preliminary site specific E&S impact assessment and bring these assessments into alignment with EIB E&S Standards, namely with respect to the stakeholder engagement, EIA disclosure and dissemination, social assessment, biodiversity assessment and implementation of an environmental and social management system. A corresponding undertaking is proposed.

A separate ESIA shall be carried out for the 30 km connecting transmission line (outside the scope of the project). It and shall include a scoping session, alternatives analysis, impact assessment and identification and management measures, including stakeholder engagement. A condition is proposed to ensure that this associated infrastructure is also acceptable to the EIB. This includes, amongst others, that an alternative analysis for the routing of the connecting transmission line should be assessed and where the section of the transmission line will have any impact on migratory birds and avi-fauna, appropriate mitigation measures should be put in place including the installation and maintenance of bird flight detectors.

¹ 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 CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

The overarching ESIA Study focused on inter-alia the present land use in the area, a survey on non-avifauna and on flora, and the results of an autumn and spring monitoring of bird migration and bird habitat. The study revealed certain limitations of the region for wind power development, such as bird migration routes and topography which resulted in zoning of the region into three parts. The study recommended that one of these three zones be totally banned for any infrastructure development including wind power as it belongs to the main bird migration corridor, the second zone may be used for wind energy production, subject to mitigation actions and shut-down in the migratory season; and the third zone was considered appropriate for development, provided that satisfactory mitigation measures respecting bird migration routes are implemented. Given the unique site for bird migration and that the interaction between birds and wind turbines is poorly understood, the overarching ESIA Study recommends an adaptive post construction monitoring programme for at least two years in the main migrating periods.

The Project is situated mainly in the second zone with a minor part in the third. Consequently it will be subject to shut-down in the migratory seasons. It is important that the mitigating actions for the whole development area, including proper micro-siting, bird surveillance and curtailment strategies, are properly implemented and operated.

As confirmed by the overarching ESIA Study, the project site is characterised by desert ground (compacted gravel or rocky) and appears to be not ecologically sensitive or unique to the region with little flora and limited presence of common fauna. In the project area there are wadis, i.e. channels that are dry except for in occasional rainy seasons, that need to be protected by the wind farm design and during construction. No endangered species (registered in Red Lists) are recorded in the area or expected to occur in it.

EIB Carbon Footprint Exercise

The project has no direct emissions of greenhouse gases. Estimated emissions savings are 358 000 tonnes of CO₂ equivalent per year, compared to the alternative solution in Egypt which is natural gas CCGT.

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

A large area of desert land has been allocated to the promoter for the development of renewable energy. The project will be implemented on this land and will not impact on any settlements or assets belonging to other parties. The overarching ESIA describes that the project will have no direct impact on land use or terrestrial resources for communities surrounding the project area. The connecting transmission line is also unlikely that it will have such impacts as it will be built on the same area allocated to the promoter.

However the social assessment, as part of the requested additional studies, shall include a review on potential project related impacts (including community health and safety) on the semi-nomadic Bedouin communities. As part of this assessment, the project will conduct a stakeholder mapping exercise to identify and consult with herding communities and other relevant stakeholders in the project areas and its surrounding. During the consultations carried out with the "settled" Bedouin communities under the overarching ESIA, the project was well received.

The promoter has in place policies and procedures to ensure that construction and operation is carried out in accordance with Egyptian regulations and in line with international standards for good practice. It further has an Operational Health and Safety Plan, with appropriate training provided to all staff. The project will be implemented by an EPC contractor and sound Health and Safety procedures will be a qualification criteria in the tendering process.

Public Consultation and Stakeholder Engagement

A formal public consultation procedure was carried out for the 1000 MW development plan, including the presented project and neighbouring developments, project according to national and EIB requirements. This included stakeholder consultations in scoping phase and full public consultation (public hearing on 21.9.2011). Results of public consultation were incorporated into final overarching ESIA Study (October 2011). Additional public consultations will be required regarding the site-specific E&S assessment and the transmission line related to the project.

Other Environmental and Social Aspects

Based on the overarching ESIA and project specific ESIA studies to be submitted to the EEAA for the attainment of the environmental permit and for the project to be in line with the Bank's E&S requirements, the promoter will put in place an environmental and social management system (ESMS) which will largely consist of an E&S policy and H&S policy, and environmental and social management plan for construction and operation (ESMPs) with monitoring actions, an overarching system for reporting and tracking non-compliances and an organisational framework.

Conclusions and Recommendations

The final beneficiary to the project should:

- Ensure that the environmental and social assessments for the Project are in line with EIB E&S Standards, to the satisfaction of the Bank.
- Ensure that a separate ESIA for the connecting transmission line is conducted and acceptable to the Bank.
- Prepare an Environmental and Social Management System (ESMS), satisfactory to the Bank.
- Follow appropriate shut-down procedures in the bird migrating seasons. The procedures should be regularly reviewed and accepted by the Egyptian Environmental Affairs Agency.
- Conduct an adaptive post-construction monitoring programme to verify the assumed environmental impacts, determine deviation in impacts and test the effectiveness of mitigation measures. The behavior of migrating bird in the vicinity of the wind farm should be monitored and the effectiveness of the shut-down procedures employed should be assessed. The monitoring programme should be accepted by and resulting recommendations should be implemented in agreement with the Egyptian Environmental Affairs Agency.

With the above-listed conditions in place, the Project is acceptable to the EIB for financing in environmental and social terms.