

Environmental and Social Data Sheet

Overview

Project Name:	IREDA-RE & EE FL OSTRO ANANTPUR WIND FARM
Project Number:	2016-0058
Country:	India
Project Description:	The project is an allocation under IREDA-RENEWABLE ENERGY AND ENERGY EFFICIENCY FL (2013-0338). The project will contribute to the financing of a 100 MW farm within Andhra Pradesh state to replace electricity generation from fossil-fuel based plants.
EIA required:	Yes
Project included in Carbon Footprint Exercise ¹ :	Yes

Environmental and Social Assessment

Environmental Assessment

The wind farm consists of 50 wind turbines with a unit capacity of 2 MW and a hub height of 104 m & rotor diameter of 97 m each. Each WTG location is connected to the pooling substation located in the vicinity of the project by a 33 kV overhead line. Power will be evacuated from 33/220 kV wind farm pooling substation to APTRANSCO's 220 kV Uravakonda substation located at distance of 12 km from the project site.

The project, if located inside the EU, would fall under Annex II of the EIA Directive 92/2011/EU leaving to the competent authority the decision as to whether an EIA is required or not. According to applicable Indian law, wind power projects and related power evacuation facilities do not require an EIA. Consequently, no screening took place. However under the conditions established by the Bank under the related Framework Loan the final beneficiary was required to carry out an Environmental and Social impact Assessment (ESIA) study for the project.

A comprehensive ESIA study including Environmental and Social Management Plan (ESMP) has been produced by an external consultant and completed in August 2015. The study articulates the potential adverse and beneficial impacts of the project on environment, resources, biodiversity, labours and community in principle in line with the requirements set by EIB (but following the structure of the IFC standards. Mitigation measures are proposed to avoid or minimise negative impacts.

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.



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The Bank's services carried out a site visit to make an assessment of the implementation status of ESMP stated in ESIA report and other E&S aspects associated with the project site. The Promoter is considered capable of implementing the Bank's E&S standards. The major observations and recommendations are summarised below:

The initial project developer developed a large wind farm project comprising of 150 WTGs (300 MW) and has sold a part (50 WTG, 100 MW) to the promoter. The Bank is financing only the promoter's 100 MW of the project through this operation. The current ESIA study was carried out however for all 150 WTGs locations.

The project has all the necessary permits and approvals from various regulatory bodies. (Wind Power is classified as "White Category" under the classification scheme for the Indian industrial sectors, established by the Central Pollution Control Board (CPCB) and therefore is exempted from the requirement to obtain the Consent to Establish and the Consent to Operate from the State Pollution Control Board.)

No part of the project activity falls under forest land and there is no protected area, wild life sanctuary or national park within 10 km of the project site. There is a resident population (about 50 families) of Black Buck in the project region which is protected and conserved under the Indian Wildlife Protection Act (WPA). These animals are protected as per Schedule I of WPA while according to IUCN classification they are classified as 'Near Threatened' species. The project promoter informed the Bank that a "Black Buck Management Programme" is developed as recommended in ESMP. The Bank requests the promoter to implement the relevant protection measures.

As part of the ESIA, a limited bird and bat survey was conducted during the summer season, i.e. outside migration period. Around a local reservoir a flock of Painted Stork (IUCN listed as near threatened) was observed. According to the ESIA, a more detailed study related to effects on birds shall be carried out during migration period. The Bank will follow-up this activity closely and request, if necessary, appropriate mitigation and monitoring measures to be adopted into the ESMP to protect birds and bats.

The ESIA identifies four WTG locations within the larger 300 MW wind farm with a distance of 220 to 300 m to receptors potentially influenced by shadow flicker and noise risks above relevant thresholds. According to the project promoter, the 50 WTG sites were selected in a way to avoid excessive shadow flickering and increased noise levels at nearby receptors. Nevertheless, if disturbances should appear during the operation phase of the selected 50 WTGs, it will be addressed through effective implementation of the grievance redressal system.

EIB Carbon Footprint Exercise

The operation of the wind farms has no direct greenhouse gas (GHG) emissions. Estimated GHG emissions savings in a standard year of operation are 243 kT of CO₂ equivalent per year compared to a baseline comprising the current fleet of thermal power plants, new coal power plants, and new renewable energy installations.

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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

The wind farm has neither involuntary resettlement nor indigenous people's issues. There are no reported archaeological or heritage site in the project area.

In line with the recommendations made under the ESMP, local people are employed for works and services that do not require specialist skills, e.g. security. Besides local people (who represent the majority of workers), skilled workers were hired from outside.

Adherence to the child labour policy was found satisfactory at the site as per the requirements of 'The Child Labour (Prohibition and Regulation) Act, 1986'.

The wind farm is built on private agricultural land. During the discussions with the promoter it was confirmed that the private land is procured through land aggregators on "willing to buy and willing to sell" at market rates or above. The land acquisition process does not involve any forceful acquisition of land. Land owners of private land are willing to sell their land because it is very dry. The land is cultivated only once during monsoon and hence not generating any significant income.

During implementation, a labour camp was temporarily established at the project site. Regular internal audits were conducted by the promoter to minimise associated E&S risks. Corresponding audit reports do not reveal significant issues.

The main contractor's incident reports were available at the site for review. The Bank's impression of OHS standards when visiting the wind farm site was satisfactory.

A grievance redressal mechanism is established at the site by the promoter and to be maintained by the EPC contractor. It is deemed essential that villagers and other stakeholders are aware of the system and using it.

Public Consultation and Stakeholder Engagement

There is no requirement by law to pursue public consultation for wind farm projects in India. The developer consulted predominantly Panchayats (village councils) and land owners during project development. The collection of Non-Objection Certificates (NOCs) from Gram panchayats is not legally required either in AP, but deemed business best practice by the Bank.

Additional consultations were carried out as part of the ESIA.

The land acquisition process is not yet completed. Non-Objection Certificates (NoCs) from most village Panchayats are not yet available. Only the NoC from Nimbagullu village was available for verification. The Bank encourages the promoter to submit

the NoCs of all villages which are affected by the project's 50 WTGs once the land acquisition is completed.

Regular transparent communication between the project promoter and the communities is very critical element to keep positive relationships between them. During the site visit it was observed that no formal engagement mechanism is in place with community people. Therefore ESMP advises the promoter to establish a Community Liaison Plan. Full ESMP implementation is a requirement of the Bank.

Consultations during ESIA with diverse stakeholder groups revealed that the region offers little employment to people. Many people migrate to other cities like Hyderabad, Bangalore and other state from the project area for jobs, but some vulnerable group like physically handicapped and widow are available in every consulted village.

It was also observed that there was no demarcated grazing land in the consulted village area. Health care facilities are not adequate in the villages, doctors are mostly not available, basic services are provided through village health sub centre and regular visits of ANM's.

Many of the highlighted concerns are already taken up either through the measures laid out in the ESMP or currently running Corporate Social Responsibility (CSR) programs.

Other Environmental and Social Aspects

Implementation of the ESMP is monitored by the promoter on a monthly basis. The progress is submitted in a prescribed format to management for review. The corrective actions are planned based on the output of the review by management.

The project promoter has not acquired the IMS (Integrated Management Systems: ISO 9001, ISO 14000 & ISO 18000) but planning to get certified in near future. The main contractor is certified with IMS.

Conclusions and Recommendations

The project is deemed acceptable for the Bank under the following conditions:

- Promoter to submit to the Bank, on a best effort basis, Non-Objection certificates from all project-relevant village councils (Gram Panchayats).
- Promoter to fully implement the mitigation measures defined in the ESMP to the satisfaction of the Bank.
- Promotor to improve the community and stakeholder participation and the grievance redressal system particularly to address also the potential impacts caused by noise and shadow flicker.
- Promoter to carry out Corporate Social Responsibility (CSR) measures in the project region over loan lifetime on a best effort basis and in consultation with the local people.



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- Promoter to carry out supplementary site-specific bird and bat surveys to verify the project-related impacts on critically endangered, endangered, and vulnerable species as well as on migratory birds and to verify the appropriateness of the mitigation and monitoring measures proposed.
- Promoter to fully implement its "Black Buck Management Programme" in line with ESMP recommendations.
- Promoter to fulfil the Bank's project-specific E&S information and reporting requirements.

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