Luxembourg, 17th December 2013

Environmental and Social Data Sheet

Overview

Project Name:	ONEE - PROJET EOLIEN
Project Number:	2012-0174
Country:	Morocco
Project Description:	It concerns the development of three wind farms within the framework of phase II of the Integrated Wind Programme on the sites of Tanger II (100 MW), Midelt (150 MW) et Jbel Lahdid (Essaouira - 200 MW)
EIA required:	yes

Project included in Carbon Footprint Exercise[1]: yes

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

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project will help mitigate CO2 emissions associated with electricity production through renewable energy generation. If located within the EU, according to the technical characteristics, the wind farms would fall under Annex II of the Environmental Impact Assessment Directive. This would leave it to the competent national authority to determine the requirement for an EIA based on the screening criteria specified in Annex III of the same directive. The wind farms will in fact undergo a full ESIA procedure in compliance with internationally recognized environmental and social standards. Preliminary Environmental and Social Impact Studies (ESISs) have been carried out by ONEE on the basis of assumed technical features (e.g. turbine characteristics and layouts) of each of the wind farms. Ornithological surveys have been completed on one of the sites and are on-going for the other two sites. Such preliminary ESISs, which are not formal documents required under national law, provide a first indication on the possible project impacts and on the measures that can be adopted to avoid or reduce them. Generally speaking the studies indicate that, to the extent possible, the number of turbines installed should be limited so turbines with larger unit capacity (at least 2-3 MW) should be preferred. Collisions with migratory birds should be minimized by an appropriate selection of the mountain crests so as to avoid barrier or funnel effects and eventually by shut-down on demand procedures. Noise impacts should be avoided by respecting minimum distances between turbines and noise sensitive areas and eventually by reduced turbine speed operation. In order to respect the lenders' environmental requirements (namely IFC EHS Standards), the involuntary resettlement of some houses seems to be unavoidable for two of the sites even after the application of all the possible mitigation measures. A detailed and formal ESIA including public consultation will later be developed by the SPVs on the basis of the effective technical features of the wind farms and the indications contained in the preliminary studies. The final ESIA documentation shall include a Stakeholder Engagement Plan (SEP), the public consultation reports, the Health and Safety Management Plan (HSMP), the Environmental and Social Management Plan (ESMP) and, if applicable, the Resettlement Action Plan (RAP). The Bank will need to review and approve all the final ESIA documentation for each of the wind farms as a condition to disbursement of its loan. Project undertakings shall include public consultation of the preliminary ESISs, 3-year post-construction bird monitoring and RAP audits if applicable.

[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.

Environmental and Social Assessment

Environmental Assessment

The project concerns three wind farms (Tanger II, Midelt and Jbel Lahdid) which are respectively located in the provinces of Tanger, Meknes-Tafilafet and Marrakesh-Tensift-Al Haouz. Associated infrastructures include the construction of the network connections and the upgrade of the roadways that shall allow the transportation of the wind turbines to the sites. Morocco has approved an EIA law in 2003 (n.12) establishing the conditions under which a project will undergo an EIA process and a public consultation and the terms of reference of the environmental studies. The « Comité National des Etudes d'Impact sur l'Environnement » (CNEIE) is the inter-ministerial entity responsible of the EIA process coordination and to which the EIAs are submitted in case of large-sized projects like the wind farms envisaged by this project. The environmental approval is formally provided by the Ministry of Mines, Water and Environment through its Environmental Department ("Departement de l'Environnement"). The project is expected to be financed by EIB, KfW (which has the lead role between the European banks), the African Development Bank (AfDB) and international commercial banks. It is also expected to receive an EU grant under the NIF facility. Besides compliance with national law the project will also be required to comply with the Equator Principles and the IFC Performance Standards. The principles of the EU Habitats Directive (and those of the Commission's guidance note on wind farms[2]) shall also be applied for what concerns biodiversity impacts. Morocco is also a signatory to a number of international conventions that will therefore be applicable to the project, namely the Ramsar Convention on migratory birds, the Bonn Convention on the conservation of migratory species, the AEWA Agreement, the CITES Convention and the Rio Convention on biological diversity

The wind farms will be realized on a PPP (Public Private Partnership) basis according to which ONEE, in association with other state-owned entities, will create, in joint venture with a strategic private partner, Special Purpose Vehicles (SPVs) that will develop, build and own each of the wind farms. The international tender process to select the private partner is currently on-going. The Bank has been involved in this project since 2012 and has had regular conference calls and meetings with ONEE and the other IFIs (especially KfW). It has also carried out a pre-appraisal mission in October 2012 and an appraisal mission in June 2013 including visits to the project sites. The main findings and conclusions of the preliminary ESISs of each of the wind farms are summarized below. The formal ESIA process is expected to take place in the second half of 2014 for Midelt, in 2015-2016 for Tanger II and in 2016-2017 for Jbel Lahdid.

Tanger II wind farm

The Tanger II wind farm project area is located close to the Mediterranean coast, approximately 18km east from the city of Tanger and close to the existing wind farm of Tanger I (140MW). The project area has a surface of 6,800 hectares and includes twenty-two mountain crests over two different sectors, respectively to the east and to the west of the Oude Ledian River. Tanger II is located on an important bird migratory flyway and relatively close to a number of protected areas (Sites d'Interet Biologique et Ecologique), a Ramsar site (Restinga Smir) and the Talasamtane national park. Both spring (April-May 2012) and autumn (September-October 2012) migration surveys were carried out during which over 160 species (85,000 individuals) of birds were identified, 32 of which are endemic, threatened or rare. The results of the surveys have been used for the preparation of the preliminary ESIS. This study concluded that, in order to minimize the impacts of the wind turbines on the local population and on the migratory birds, only four of the available crests should be utilized for turbine locations. This reduces the number of turbines that can be installed and consequently (though this may be partially offset by using larger turbines) the maximum capacity that can be achieved in Tanger II. This aspect has already been taken into account by ONEE in the tender documents according to which bidders will be able to propose for Tanger II an installed capacity as low as 78MW (as compared to an initial idea of 150MW). With the optimal project configuration proposed in the preliminary ESIS still around 400-450 houses would be located less than 600m away from the turbines. This means that the Tanger II project would inevitably

[2] http://ec.europa.eu/environment/nature/natura2000/management/docs/Wind_farms.pdf

cause a significant relocation of houses that may be partially reduced through reduced turbine speed operation. A detailed assessment, including a cumulative impact assessment with the existing Tanger II wind farm, shall be carried out within the formal ESIA process.

Midelt wind farm

The Midelt wind farm project area is located approximately 14km northeast from the city of Midelt in an area located between the Medium-Atlas and the High-Atlas mountains with seven identified crests with an altitude ranging from 1250m to 1670m. Based on the results of the preliminary ESIS the negative environmental impacts created by the wind farm are not expected to be significant with the main impacts taking place during the construction period or visual ones during operation. All turbines are expected to be located more than 800m from the existing houses so no relocation or reduced turbine speed operation is expected. Midelt is located relatively far from the closest protected areas which are Jbel Ayachi (25km) and Jbel Taghioult (40km). No elements with a cultural heritage or archaeological value are present in the project area. There are no other existing or planned wind farms in the area so no cumulative impacts are possible. A spring bird migration study was carried out based on surveys that have taken place between Mars and April 2013. Out of the 63 observed species, two are found on the IUCN Red List and several others (including all birds of prey and the white stork) are classified as protected under the Bonn Convention. Based on such study collision risk with protected bird species is expected to be low given the high altitudes and the possibility to have large turbine interspacing to allow for bird passage. The autumn migration survey is foreseen in October-November 2013 and its results will be used for the preparation of the formal ESIA.

Jbel Al Hadid wind farm

The Jbel Al Hadid wind farm project area is located on 8 crests of the Jbel Al Hadid (5 crests) and Jbel Al Kourati (3 crests) mountains with altitudes up to 725m and 542m respectively. The site is situated approximately 18km north of the Ounagha village in the province of Essaouira. There are two protected areas (Dunes d'Essaouira and Ile de Mogador) which are located respectively 14km and 12km away from the project area. A spring bird migration report was carried out based on surveys that have taken place between Mars and May 2013. Out of the 59 observed species, none are found on the IUCN Red List however several (including all birds of prey and the white stork) are classified as protected under the Bonn Convention. Based on the report, collision risk with protected bird species is expected to be moderate given the possibility to align the crests with the main migration route and to have large turbine interspacing to allow for bird passage. The autumn migration survey is foreseen in October-November 2013 and its results will be used for the preparation of the formal ESIA. The closest existing wind farm is Essaouira (Cap Sim) however since the distance between the two wind farms is more than 35km no significant cumulative impacts can occur. Within the envisaged polygon there are 65 groups of houses and approximately 1236 isolated houses. Based on the assumed layout there would be around 23 dwellings situated at less than 300m from the turbines and which would therefore need to be relocated. In order to comply with noise limits, additional relocation may be necessary for houses located at more than 300m from the turbines even though this may be partially reduced through reduced turbine speed operation. A number of sites of religious interest attracting some pilgrimage are also found on some of the concerned crests for which access routes will need to be maintained and improved. Visual impact is also expected to be considerable as at least one of the crests will always be visible from 80% of the observation points located 10km away from the polygon.

EIB Carbon Footprint Exercise

The three wind farms are expected to produce 1,236 GWh of electricity per year and will not generate any absolute CO2 emissions. Overall the project will result in relative emissions of minus 771 kt CO2e/yr (i.e. a saving of 771kt CO2e/yr) as a result of the operation of the three wind farms. 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

EIB is requiring that ONEE and the SPVs will take all possible measures to avoid any involuntary resettlement both in the form of physical relocation and displacement of economic activities. On the basis of the preliminary ESISs that have been carried out and as previously described it is very likely however that some involuntary resettlement will take place both in Tanger II and in Jbel Al Hadid. If this were to be confirmed by the formal ESIAs, EIB requires that ONEE and the SPV will implement the relocation in compliance with international standards (namely IFC PS 5). In particular relocation activities will have to be conceived and implemented under the form of development programs to be agreed with the affected people through a meaningful consultation. A Resettlement Action Plan (RAP) will need to be reviewed and approved by EIB/KFW. The implementation of the RAP shall also be regularly audited. The land acquisition process to be carried out by ONEE to make the necessary land available for the project should minimize the displacement of economic activities (e.g. pastures, cultivation etc.) and preference shall be given to solutions (e.g. lease) that will allow land owners to continue using their land for the same purposes also after the project is in operation. Temporary displacement during the construction activities shall have to be compensated. Based on the preliminary ESISs no indigenous population will be affected by the project while rights and interests of other vulnerable groups shall be protected in compliance with international standards. At this stage no issues on labour standards are foreseen as Morocco has ratified all the ILO Labour Standards. International standards will also be applied for what concerns occupational and community health and safety.

Public Consultation and Stakeholder Engagement

The Moroccan law foresees a public consultation procedure for EIAs according to which the environmental study is made public to all the population concerned who have the possibility during a given period of time to make their remarks and express their concerns. These are taken into account by the CNEIE that may request the proponent to do further analysis before submitting its final opinion to the Ministry of Environment. For the wind farms concerned by this project the same process is foreseen and this will be launched by the SPVs once these have been formed. The SPVs will also have the obligation to develop a Stakeholder Engagement Plan identifying all concerned stakeholders (e.g. population, NGOs, local authorities etc) and defining the public consultation process to be implemented throughout the development of the project. As far as the preliminary ESISs are concerned EIB has agreed with ONEE that they will be presented to stakeholders during an information day. The report of such information day, which will include comments and concerns of all participants, shall be shared with EIB and taken into account during the formal ESIA process.