

## PROJECT INFORMATION SUMMARY

Host Country:	Republic of Kenya
Name of Borrower:	Lake Turkana Wind Power Limited (“LTWP”), a company limited by shares incorporated in Kenya.
Project Description:	The proceeds of the loan will be used to finance the development, construction, commissioning and operation of an up to 310MW wind farm near Loiyangalani town, Marsabit County, Kenya.
Proposed OPIC Loan:	Up to \$250 million
Total Project Costs:	Approximately \$846 million
Sponsors:	<p>Kemperman Paardekooper and Partners Africa, B.V., a company duly incorporated under the laws of the Netherlands (“KP&amp;P”).</p> <p>Aldwych International Limited, a company organized and existing under the laws of England (“Aldwych”).</p> <p>Vestas Wind Systems AS, a company existing under the laws of the Kingdom of Denmark (“Vestas”).</p> <p>Sandpiper Limited, a company organized and existing under the laws of Mauritius (“Sandpiper”).</p> <p>Finnish Fund for Industrial Cooperation Limited, a development finance institution established by the Government of Finland (“Finnfund”).</p> <p>The Norwegian Investment Fund for Developing Countries, a development finance institution established by the Norwegian Government (“Norfund”).</p> <p>European Investment Bank, an international financial institution (“EIB”).</p> <p>The Investment Fund for Developing Countries, a development finance institution established by Danish government (“IFU” and collectively, the “Sponsors”).</p>

<b>Policy Review</b>	
U.S. Economic Impact:	The Project is not expected to have a negative impact on the U.S. economy, as it involves the generation of electricity that will be sold to the national grid in Kenya. There will be no U.S. procurement associated with this project. The project is expected to have a negative five-year U.S. balance of payments impact.
Developmental Effects:	This Project will have a strong developmental impact on Kenya through the establishment of a new wind-powered electricity generation facility that will supply renewable power to the country's national grid. This wind power plant will help Kenya diversify its power sources away from high-priced fuel imports, increasing electricity supply and alleviating balance of payments pressures. The Project is expected to create an additional 20% of installed capacity in a country in which there is a critical shortage in supply. The Project will import advanced wind turbine equipment into a country where only a minor amount of wind power generation has been developed. Finally, the Project will create thousands of temporary construction jobs, as well as dozens of new local jobs that will receive extensive technical training in wind power plant management.
Environment:	<p>Screening: The Project has been reviewed against OPIC's categorical prohibitions and determined to be categorically eligible. The Project is screened as Category A because the Project represents a large-scale greenfield wind and road rehabilitation project in a migratory flyway which could have significant adverse environmental and social impacts that are diverse and irreversible. The major environmental and social concerns related to the Project include its potential impacts on resident and migrating birds and bats, potential for significant habitat alteration, visual and noise impacts, and issues related to the relocation of structures and families due to road and wind farm construction.</p> <p>Applicable Standards: OPIC's environmental and social due diligence indicates that the Project will have impacts</p>

that must be managed in a manner consistent with the following Performance Standards:

- P.S. 1: Assessment and Management of Environmental and Social Risks and Impacts;
- P.S. 2: Labor and Working Conditions;
- P.S. 3: Resource Efficiency and Pollution Prevention;
- P.S. 4: Community Health, Safety and Security;
- P.S. 5: Land Acquisition and Involuntary Resettlement;
- P.S. 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- P.S. 8: Cultural Heritage.

Performance Standard 7 is not triggered by the Project at this time; however, an Indigenous Peoples Policy Framework has been developed in the event Indigenous Peoples are affected by the Project.

In addition to the Performance Standards listed above, the IFC's April 30, 2007 Environmental, Health, and Safety (EHS) Guidelines for Wind Energy and the IFC's April 30, 2007 Environmental, Health, and Safety General Guidelines are applicable to this project.

Environmental and Social Risks: The Project involves construction and operation of a 310 MW wind power generation facility in northern Kenya near Lake Turkana. It includes the installation of 365 wind turbines on the site along with an overhead electric grid collection system, high voltage switchyard plant, internal road access, and a construction worker village. Additionally, due to its remote location, the Project requires major upgrading of a 200 km road. Finally, the power will be evacuated via a 428 km, 400 kV transmission line. This transmission line will be built by KETRACO, the state owned transmission company, but is considered an associated facility for the Project and as part of this assessment the environmental and social impacts were examined.

Social and Environmental Impact Assessments (SEIA) were conducted for the road, wind farm and transmission line. Supplemental studies were performed to assure the documents conformed to the requirements of the IFC Performance Standards. The wind farm site and associated road are sparsely vegetated and there are no flora or fauna of ecological significance that will be disrupted by the

construction. Boreholes will be drilled on site and along the road to provide water needed during construction. Studies have been conducted to assure there is adequate supply. Once construction is completed the boreholes will be left in place for local community use. The water will require treatment to make it potable. The village area to be constructed for workers will include a reverse osmosis plant which will treat water for the employees living on site. Bottled water will also be used. Air emissions will be restricted to dust during construction and emissions from construction vehicles. Diesel generators will also be used on site during the construction period. The exact number of generators is not yet known. The Project is expected to avoid 736,615 tons of CO<sub>2</sub> annually.

Solid waste will be incinerated at the employee village. The wind farm is not anticipated to have a negative visual impact given the terrain of the area. It cannot be seen from the on-site Sirima Village, but will have distant views from Mount Kulal. A year's worth of bird and bat data has been collected and has revealed low numbers of resident birds and bats. During the fall migration season, increased numbers of birds of prey were noted, however, based on the turbine layout and observed flight routes undertaken by migrating birds of prey there should not be significant impact. Bat presence was found to be low around the proposed turbine site. Nonetheless, the Project will be required to have a rigorous bird monitoring program in place once the facility is operational. The monitoring plan will include required mitigation measures, including reduced operations of turbines during the migratory season should excessive bird or bat strikes occur.

Construction of the road and wind farm and the transmission line will result in physical and economic displacement. On site the 566 people from Sirima village will be moved one kilometer so as to avoid dangers from construction traffic. They will have the opportunity to move back once construction is complete. Additionally, 150 people along the road will need to be relocated. There has been extensive community consultation and meetings with those affected by the Project.

Risk Mitigation: Detailed management of environmental and social issues during construction is still in the process

of being completed and will be addressed through an Environmental and Social Action Plan (ESAP) that has been agreed to by the Project. This requires the development and continual improvement of an Environmental and Social Management System (ESMS) in accordance with IFC performance Standard 1. It also includes the requirement to develop an Environmental and Social Management Plan (ESMP). The ESMP will include a number of specific plans and mitigation measures that will specify the environmental and social parameters under which the Project must be constructed and operated. The ESMP will require the preparation of the following plans: Construction Oversight Management; Occupational and Community Health and Safety Management; Environmental and Social Management and Monitoring Plan; Traffic Management; Emergency Response; Fuel Management; Waste Management; Temporary Worker Accommodation; Water Resources Management; Biodiversity Management; updated Stakeholder Engagement Plan; Influx Management; Village Resources Management; Indigenous Peoples Policy Framework; and Cultural Heritage/Chance Finds procedures. All of these will be developed in accordance with OPIC and other lender input and will be completed prior to any on-site construction. Finally, management of the transmission line has been agreed to through an agreement between the Project and the Lenders which requires continual oversight during the construction and initial operating stages. As part of the SEMP, a transmission line Oversight Management Plan is required. Public Disclosure and Consultation: The Project's ESIA was posted on OPIC's web site for a 60 day comment period, from January 3, 2014 to March 4, 2014. OPIC did not receive any comments.

During the preparation of the ESIA consultative meetings were held with relevant Kenyan government departments, provincial administrations, and local community leaders in Loiyangalani Division (e.g. representatives from the Turkana, Samburu, Rendille and El Molo communities); gender and youth-based groups; and non-governmental organizations. Stakeholder engagement meetings with project affected people have been ongoing since disclosure of the documentation in Kenya in 2008. OPIC staff also undertook an environmental and social due diligence site visit from December 9 through 13, 2013.

	<p>The site visit involved flying over the transmission line route, driving the proposed 200 km road, visiting the site and meeting with affected communities along the transmission line, road and site. During the community meetings the major issues raised related to concerns about dust, traffic and the potential for increased risks from HIV/AIDs with the influx of construction workers.</p>
<p>Workers' Rights:</p>	<p>In accordance with OPIC's Environmental and Social Policy Statement, this Project has been classified as <i>Special Consideration</i> due to the geographical scale and complexity of the Project, and considering the management factors for a relatively large workforce in a labor-intensive industry in Kenya.</p> <p>At the peak of construction, this Project will rely on approximately 2,460 workers across several contractors, of this an estimated 638 will be unskilled laborers and 1,822 will be managers, technical, or administrative employees. During early operations, this Project will engage approximately 236 workers to support the facilities management (35 management and technical with the remaining semi- or un-skilled employees). This number will reduce to approximately 190 for the duration of operations. Aldwych International, Ltd., who will carry out the management and supervision for the Project, has significant experience in managing large scale power projects under internationally recognized environmental, social, and occupational health and safety management systems. Additionally, there is significant oversight from the consortium of DFIs including requirements for regular monitoring and reporting from an independent consultant. Aldwych has drafted appropriate labor policies To ensure the implementation of these policies within a large-scale and complex power project, and due to the early stage of development, the Project will therefore be subject to additional oversight through the <i>Special Consideration</i> designation.</p> <p>Under <i>Special Consideration</i>, the Project will be required to demonstrate compliance with the OPIC labor requirements set forth in the loan agreement. This will be achieved within the scope of the wider environmental and social requirements set forth by the consortium of DFIs including: 1) labor-specific compliance monitoring during the existing construction period monitoring schedule; and 2) labor-specific compliance reporting, at least annually,</p>

	<p>that summarizes general working conditions including non-compliance issues, grievances, and actions taken to improve the worker-management relationship.</p> <p>OPIC's statutorily required standard worker rights language will be supplemented with provisions concerning the rights of association, organization and collective bargaining, minimum age for employment, hours of work, the timely payment of wages and hazardous work situations. Standard and supplemental contract language will be applied to all workers of the Project. The Project will be required to operate in a manner consistent with the International Finance Corporation's Performance Standard 2 on Labor and Working Conditions.</p>
Human Rights:	Clearance received March 11, 2014.