The Lake Turkana Wind Power Project Kenya

The African Development Bank Group is leading the process of financing one of the largest wind farm projects to be built in Africa, and the first of its kind in Kenya.

The Lake Turkana Wind Power Project is located in northwestern Kenya, near Lake Turkana, a relatively desolate spot without any transmission line networks. The winds sweeping the area start in the Indian Ocean and are channeled through the "Turkana corridor" created by Ethiopian and Kenyan highlands. They move consistently at 11 miles per second, making this an ideal area for situating wind turbines.

The project includes building 365 wind turbines, reinforcing 200 km of roads and bridges which will make it possible to haul them to northeastern Kenya from the Indian Ocean port of Mombassa, and adding an estimated 426 km of transmission lines to connect and supply power to the national electric grid at an optimal point. The reliable, continuous clean power will add an additional 30% to Kenya's current total installed power. The project is forecast to reduce carbon emissions by 16 million tons during its 20-year lifespan.

According to the Kenyan government's projections through 2029, Kenya will need additional installed electric energy capacity of 2396 MW by 2020 and 7539 MW by 2029. To meet these needs, the country will have to import nearly half the energy for 2020 and more than one-quarter for 2029. The Kenyan government is seeking to reduce its reliance on imported energy and fossil fuel while ensuring a reliable supply of electricity based on clean low-cost energy. It therefore included the Lake Turkana Wind Power Project into its power development plan, issued it an independent power producer license and negotiated the costs of the electricity that it generates. The negotiated costs are lower than the costs of generating equal amounts of energy by thermal power plants.

In addition to reliable, inexpensive electricity in rural areas, the project will also provide access to carbon credits, make it possible to use ICT, light schools and electrify health centers, and ultimately create new jobs.

The first phase of the project is slated to start providing 50 MW of clean power in 2011. The wind park will be generating 300 MW when it is fully commissioned in 2012. Projected costs are approximately €459 million. The African Development Bank, the lead broker, will facilitate the entire debt tranche through the African Financing Partnership facility; it has also committed to a loan of up to €100 million.