

Projects | July 19 2019

Lekela Egypt Wind Farm

The Lekela Egypt wind farm is a 250MW project farm proposed for development in the Gulf of Suez near Ras Ghareb, Egypt.

Project Type

Onshore wind farm

Location

Near Ras Ghareb, Egypt

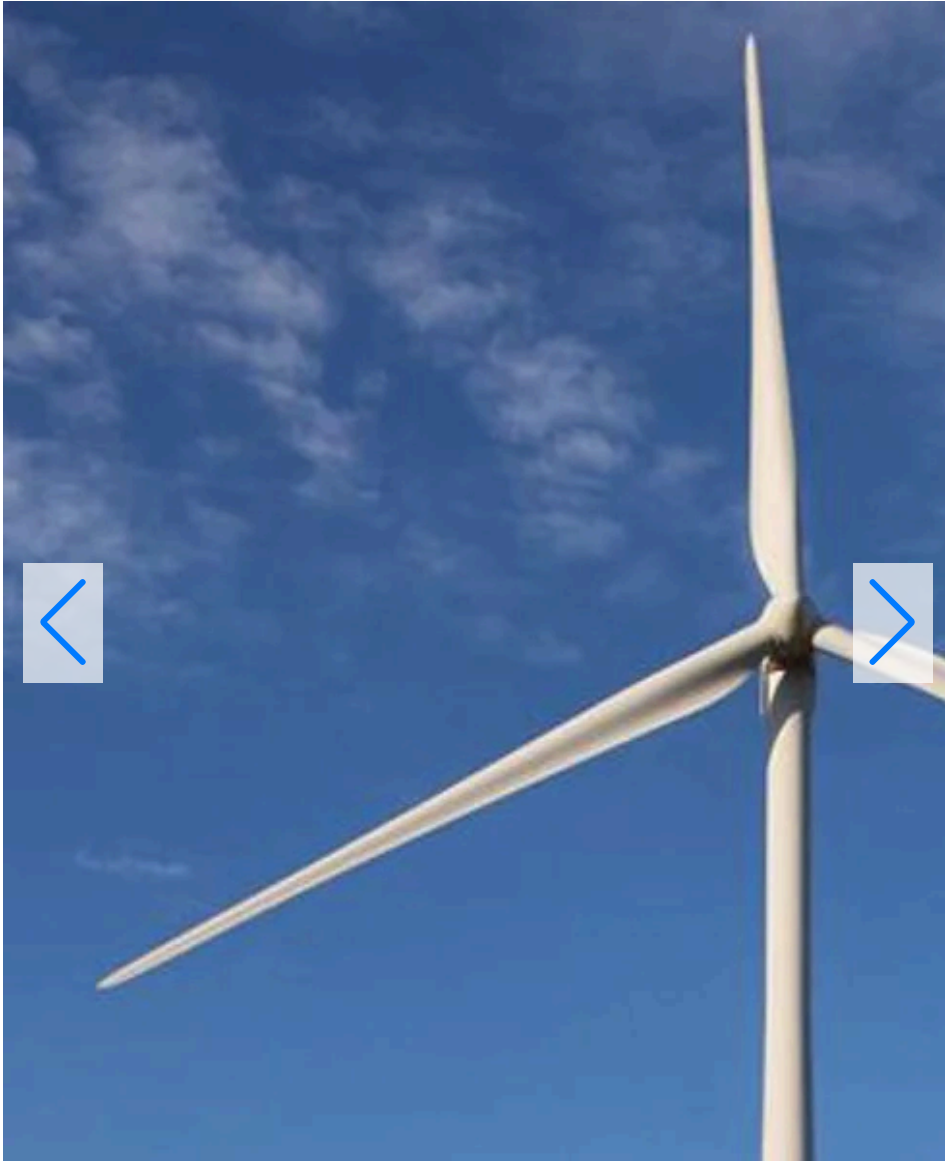
Capacity

250MW

Investment

£316m (\$325m)

Expand 



The 250MW Lekela wind farm is located in the Gulf of Suez, 30kr



The Lekela Egypt wind farm is a 250MW project farm proposed for development in the Gulf of Suez near Ras Ghareb, Egypt.

The project is expected to support Lekela's plans to install 1.3GW of renewable energy across Africa. It is expected to increase wind energy capacity of Egypt by 14%, towards the target of 20% by 2022.

Lekela Power, an African renewable energy generation company, is developing the [wind farm](#) with an investment of approximately £316m (\$325m). Actis owns 60% stake in Lekela, while the remaining 40% is held by a consortium of Mainstream Renewable Power, IFC, and the Rockefeller Brothers Fund.

The project is expected to achieve financial closure in 2019 and is expected to be operational by 2021. It is expected to offset more than 550,000 tonnes (t) of carbon dioxide (CO₂) emissions a year.

The wind farm will produce more than 1,120GWh of power a year to supply 350,000 homes with clean and renewable electricity. It is expected to create up to 550 jobs during peak construction.

Lekela Egypt wind farm location

The Lekela wind farm will be located by the Red Sea coast in the eastern desert, north of Ras Ghareb in Gebel El Zeit. The complex area is primarily desert area with no residential or other human activities.

The site is accessible via the Ras Ghareb-Zafarana Highway from the east as well as the Ras Ghareb-Minya Road to the South.

The wind farm will be situated within the wind complex north of Ras Ghareb, where New and Renewable Energy Authority (NREA) has allocated a 328km² land for wind power generation.

Lekela Egypt wind farm make-up

The Lekela wind farm will be installed with 96 Siemens Gamesa SG 2.6-114 turbines having a capacity of

2.625MW each.

The turbine will have a tip height of 120m, hub height of 63m, and a rotor diameter of 114m. The blades extend 56m to create a total rotor swept area of 10,207m².

Offtake and transmission of power from the Lekela Egypt wind farm

Lekela and the Egyptian Electricity Transmission Company (EETC) entered a power purchase agreement (PPA) in February 2019 for the offtake of the entire electricity generated at the wind farm.

The generated power will be evacuated to the national grid by two overhead transmission lines to be constructed by EETC.

The power will be evacuated through a 15km-long, 500kV overhead line parallel to the Ras Ghareb-Minya road and a new 15km-long 220kV transmission line alongside the existing Ras Ghareb-Zaafarana highway.

The generated power will be stepped-up at an interim substation before transmitting to the 500kV line.

Infrastructure

The power required during construction and commissioning activities will be provided by a small diesel generator.

Potable water supply will be collected from the Hurghada-Ras Ghareb water pipeline by using tankers.

Workers are proposed to be accommodated in nearby local communities or temporary construction camps, during construction.

Lekela wind farm financing

European Bank for Reconstruction and Development granted a senior secured loan of up to £79m (\$89m), which was co-financed with other parties.

International Finance Corporation (IFC) also proposes to provide a loan of £20.08m (\$25m) and mobilisation under IFC's Managed Co-Lending Portfolio Program of £45.78m (\$57m) for the wind project.

Contractors involved

Siemens Gamesa is the supplier of wind turbines and was also awarded the engineering, procurement, and construction (EPC) contract. The contractual scope also includes the site operation and maintenance works.

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