Projects May 19 2023

# Kom Ombo Solar PV Plant, Egypt

The project is aligned with the Egyptian government's aim to produce 42% of the country's electricity from renewable energy sources by 2035 with the lowest tariffs in Africa.

**Project Type**
Solar power plant

**Location**
Kom Ombo town, Aswan Governorate, Egypt

**Capacity**
200MW

**Developer**
ACWA Power

Expand

Kom Ombo solar photovoltaic power plant is being developed in Aswan Governo

The 200MW Kom Ombo town solar photovoltaic (PV) power plant is being developed in Egypt by ACWA Power, an independent power producer based in Saudi Arabia. It is one of the largest privately developed solar projects in Egypt.

The utility-scale plant is expected to commence operations in January 2024. It is expected to generate electricity sufficient to meet the needs of 130,000 Egyptian households and offset carbon dioxide emissions of approximately 280,000 tonnes a year.

The project is aligned with the Egyptian government's aim to produce 42% of the country's electricity from renewable energy sources by 2035 with the lowest tariffs in Africa. The project is expected to generate 800 local jobs during construction.

### Location

The Kom Ombo solar plant is being developed in the desert area of Kom Ombo in the Aswan Governorate over an area of 5km². It is located 60km north of Aswan city and 10.8km east of the river Nile.

The solar project is located 20km from the 1.465GW Benban complex, another solar park of ACWA Power.

### Kom Ombo solar plant development details

The project was an initiative of the New and Renewable Energy Authority (NREA) with support from the Agence Française de Développement.

ACWA Power won the tender to develop, finance, construct and operate the Kom Ombo PV plant in October 2018.

The government guarantee for the project was signed between ACWA Power and Egypt's finance ministry in January 2021.

### Kom Ombo solar power plant make-up

The Kom Ombo solar plant will incorporate bi-facial solar modules, permitting light to enter from both the front and back sides of the panel, thereby capturing more sunlight and increasing the production from the solar plant.

The power plant will also include a Sungrow SG250HX-IN-20 inverter, a transformer to convert

electricity from medium voltage to 220kV, and a grid connection interface.

An electrical connection facility is also planned to be developed as part of the project.

### Grid connection

A new transmission line will be installed parallel to Faris – Luxor Road 1, a road to the north of the project, to connect with the existing four row 220kV overhead transmission line known as Selwa Ben Ban 220kV, which is located 4km east of the project.

It will be developed, constructed, commissioned and operated by the Egyptian Electricity Transmission (EETC).

The EETC plans to develop a 36km-long double-circuit 220kV overhead transmission line between the project and Wadi Nokra in Aswan.

### Financing

ACWA Power received a financing package of $123m for the development of the solar plant in April 2023. The package comprises a loan of $36m from the European Bank for Reconstruction and Development (EBRD), $14.6m from the OPEC Fund for International Development, $14.4m from the African Development Bank, $34.4m from the Green Climate Fund, $14.8m from the Arab Bank and $10m from the SEFA under the Covid-19 IPP relief programme.

ACWA Power earlier secured a financing package of $114m from the banks in April 2021, but Covid-19 led to changes in the global supply chain, resulting in the need for altering the package.

The project also secured equity bridge loans of $14m from the EBRD and $45m from the Arab Petroleum Investments.

### Power purchase agreement

ACWA Power signed a 25-year power purchase agreement with the government of Egypt in October 2019.

The final power purchase agreement along with the network connection contract and usufruct agreement was finalised and signed between ACWA Power, EETC and NREA in April 2021.

### Contractors involved

Sterling and Wilson Solar (SWS) was awarded the engineering, procurement and construction (EPC) contract for the Kom Ombo PV plant in February 2021. SWS is a solar EPC solutions provider and subsidiary of Shapoorji Pallonji Group.

Sungrow, a solar inverter solution supplier for renewables, was awarded a contract to supply an inverter for the solar power plant in May 2021.

Triple M, a general contracting company, carried out a pull-out, electrical resistivity tomography and thermal response test.

The environmental and social impact assessment report was prepared by environmental and management consultant 5 Capitals – Environmental and Management Consultancy.

The Environmental and Development Group acted as the local consultant for the project.