EGYPT

Photovoltaic power plant to support renewable energies

In November 2014, AFD allocated a EUR 40m sovereign loan to finance the construction of the first photovoltaic power plant connected to Egypt's grid. The project feasibility study was conducted thanks to the mobilization of a European Union grant delegated to AFD under the Neighbourhood Investment Facility.

CONTEXT

Egypt has 32 GW of installed electrical capacity. Egypt's energy mix is 88% from thermal power plants, while hydroelectricity accounts for only 10% of capacity and wind 2%. This distribution tends to deplete the country's gas and oil reserves, which, combined with energy consumption that is increasing by 6% per year, is generating shortages and power cuts. Given the country's significant wind and solar potential, the authorities have set ambitious targets for the development of renewable energies.

The ratio of electricity produced from renewable sources in the national energy mix should reach more than 20% in 2020. The reform undertaken in the energy sector since 2012, including the reduction of energy subsidies and the implementation of a feed-in tariff for renewable energies, should shape a favourable regulatory environment and improve the attractiveness of solar and wind energy production in Egypt by independent developers.

19/11/2014
Project start date

Assouan
Location

Energy , Climate
sector(s)

Sovereign Concessional Loan
financing tool(s)

40 000 000 EUR
Financing amount

Egyptian State
Beneficiaries

DESCRIPTION

NREA (New and Renewable Energy Authority), the agency in charge of the construction and operation of public renewable energy plants, aims to install 3,500 MWp of capacity produced by solar power plants by 2027. In this context, AFD was asked by NREA to study the financing of a 20 MWp photovoltaic plant connected to the national electricity grid at Kom Ombo in the governorate of Aswan in Upper Egypt. The conditions at the Kom Ombo site are particularly favourable for the production of electricity from solar sources: strong sunlight, flat topography, proximity to major communication routes and intermediate voltage transmission lines. This public photovoltaic plant marks the first milestone in the development of photovoltaic energy

IMPACTS

The Project contributes to the sustainable growth of the Egyptian economy.

The expected climate impacts of this Project should be highlighted:

- Increasing renewable electricity production by 40 GWh per year and contributing to the diversification of Egypt's energy mix.
- The reduction of carbon emissions by 15,000 tons annually.
- The contribution to the preparation of investments by private developers in solar energy in Egypt.
- Contribution to the strengthening of local technical skills in the field of renewable energies.