Masdar's Solar Programme in Egypt

Masdar has delivered 30 megawatts (MW) of utility-scale clean energy projects and 7,000 solar home systems in remote and strategically important areas across Egypt. The four projects, customised specifically to the needs of local communities, provide energy to homes, schools, mosques, clinics, and government offices in areas that were lacking reliable electricity or were not connected to the national grid. The projects were part of a UAE-funded grant programme for rural electrification in Egypt, executed in partnership with Egypt's New and Renewable Energy Authority. Masdar's Energy Services Unit, a provider of specialised small and medium-sized renewable energy projects, executed the project on behalf of the Abu Dhabi Government.

Quick Facts

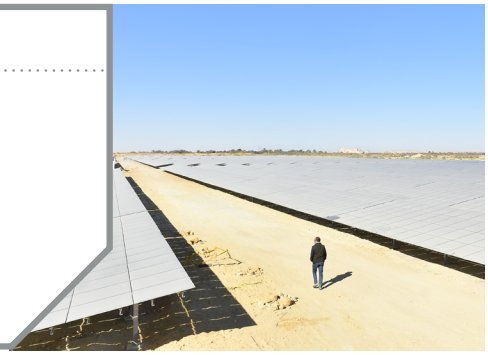
- Four projects, completed between March 2015 and April 2016
- Powers 25,800 homes
- Displaces 42,700 tonnes of CO_2 per year
- 70 villages and 141 communities gained reliable access to electricity
- Project financed by a grant from Abu Dhabi Fund for Development

Siwa Solar PV Plant, Egypt

Masdar's 10 megawatt (MW) solar photovoltaic (PV) power plant in Siwa, Egypt, was the first utility-scale solar power installation in Egypt and accounts for 30 per cent of the grid capacity of Siwa City.

Quick Facts

- Produces 17,500MWh of energy per year
- Eliminates 14,000 tonnes of CO_2 per year
- Powers 6,000 homes
- Consists of 74,640 micromorph thin-film panels
- Covers a land area of 175,000 m^2
- Operated by Al Behira Electrical Distribution Company, owned by Egyptian Electricity Holding Company



Red Sea Solar Power Plants

The four solar PV plants in Egypt's Red Sea Governorate have a total capacity of 14MW and provide reliable energy supply to support the area's vital tourism sector.

Quick Facts

- Built in the Red Sea cities of Marsa Alam (6MW), Shalateen (5MW), Abu Ramad (2MW), and Halayeb (1MW)
- Saves 40% of the fuel required by local diesel power plants
- Supplies electricity to nearly 8,000 homes
- Displaces approximately 20,000 tonnes of CO_2 annually
- Completed in April 2016

Al Wadi Al Jadeed Solar PV Plants

Masdar built three solar power plants in the Governorate of Al Wadi Al Jadeed, the largest and most sparsely inhabited region in Egypt. These new sources of electricity will support efforts to improve the Governorate's local infrastructure, enable cultivation of local land and aid access to underground water supplies, thereby providing a major boost to the growth of an under-developed region. The plants were developed in Al Farafra, Abu Minqar, and Darb Al Arbaeen. They provide electricity for over 4,800 homes and displace over 8,700 tonnes of CO_2 emissions, and reduce the diesel consumption of existing power plants by over 40 per cent.

Quick Facts

- Located in the cities of Al Farafra (5MW), Abu Minqar (0.5MW) and Darb Al Arbaeen (0.5MW)
- Completed in December 2015
- Saves 40% of the fuel required by local diesel power plants
- Supplies electricity to over 4,800 homes
- Eliminates 8,700 tonnes of CO_2 per year

7000 Solar Home Systems

Masdar has provided 7,000 standalone solar home systems (SHS) to homes and public or community buildings in remote areas in six governorates without access to the national electricity grid. Each SHS consists of two solar panels, two batteries, charge controllers, energy saving light bulbs, cables, switches, and a mounting structure.

Quick Facts

- Located in Sohag, Matrouh, Qina, Aswan, Luxor, and Al Wadi Al Jadeed Governorates
- Completed in November 2015
- Nearly 7,000 homes benefit from the systems

Toshka 10MW

The Toshka Solar Power Plant located in Egypt provides power for the large-scale operations of an agriculture company. The electricity generated by the solar plant reduces the company's reliance on the local utility company. The project represents the first large-scale solar PV plant to be implemented in Egypt under the Net Metering incentives scheme.