



Mohammed Bin Rashid Al Maktoum Solar Park Phase 3

Shuaa Energy 2

Dubai, UAE

Shuaa Energy 2 Company, a joint venture between Dubai Electricity and Water Authority (60%), Masdar (24%) and EDF Renewables (16%), developed the third phase of the Mohammed bin Rashid Al Maktoum Solar Park, an 800 megawatt (MW) solar photovoltaic (PV) plant, which was inaugurated in November 2020. Phase 3 is part of what will be the largest single-site solar park in the world, with a planned capacity of 5,000 MW by 2030.

The plant is located on a 18 square kilometre area in Seih Al Dahal, on the outskirts of Dubai.

In July 2016, the consortium won the project after offering the lowest recorded bid for a solar plant at the time, valued at 2.99 US cents per kilowatt hour (kW/h). Construction started on the project in December 2016, with financial close achieved in June 2017.

The project utilises PV modules with solar tracking technology increasing the power production from the PV plant compared with fixed structures and bi-facial modules.

Phase 3 was constructed in three stages: the first 200 MW was completed in 2018; the second 300 MW was completed in 2019; and the final 300 MW in 2020.

QUICK FACTS

- One of the largest solar PV plants in the world with a capacity of 800 MW
- Developed by Shuaa Energy 2 company (DEWA 60%, Masdar 24%, EDF 16%)
- Construction occurred over three phases: The 200 MW first stage was completed in 2018, the 300 MW Stage 2 was completed in 2019 and the final 300 MW Stage 3 was completed in 2020
- Phase 3 displaces 1.4 million tonnes of CO₂ emissions each year and powers 240,000 homes
- Largest solar power plant in the world to use single-axis tracker technology to follow the path of the sun
- The first stage of Phase 3 utilises custom-made robots that clean the panels without the need for water

The 800 MW facility has the capacity to power 240,000 homes in Dubai and offsets 1.4 million tonnes of CO₂ emissions per year.