

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

The plant is being developed on a 16 square kilometre area in Seih Al Dahal, located 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 will utilise PV modules with solar tracking technology increasing the power production from the PV plant compared with fixed structures.

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

When complete, the 800MW facility will be sufficient to power 160,000 homes in Dubai and will offset 1.4 million tonnes of CO_2 emissions per year.

Quick facts

- One of the largest solar PV plants in the world with a capacity of 800MW
- Developed by Shuaa Energy 2 company (DEWA 60%, Masdar 24%, EDF 16%)
- Construction to occur over three phases: The 200MW first stage was completed in April 2018, the 300MW Stage 2 was completed in 2019 and the final 300MW Stage 3 will be completed in April 2020
- When complete, Phase 3 will displace 1.4 million tonnes of CO₂ emissions each year and power 160,000 homes
- Largest solar power plant in the world to use single-axis tracker technology to follow the path of the sun
- Will utilize custom-made robots that clean the panels without the need for water

