

Masdar City 10 MW – Solar PV Plant

Abu Dhabi, UAE

Masdar's 10 megawatt (MW) solar photovoltaic (PV) power plant is located on the north side of Masdar City and was connected to the Abu Dhabi grid in April 2009. This iconic facility was the first and largest utility-scale solar PV plant in the Middle East when it was connected to the grid back in 2009. The plant continues to provide electricity to projects under construction in Masdar City, and the Mohamed Bin Zayed University for Artificial Intelligence, while excess power creates a clean energy source for Abu Dhabi.

The facility produces approximately 17,500 megawatt-hours (MWh) of clean electricity annually and displaces approximately 15,000 tonnes of carbon emissions per year – equivalent to removing 3,300 cars from Abu Dhabi's roads. The plant consists of 87,780 multi-crystalline and thin film modules supplied by Suntech and First Solar.

In line with its strategy to build in-house operations and management capabilities, Masdar's Clean Energy division took over operations and maintenance of the plant in September 2019 through its newly established company Masdar Specialized Technical Services (MSTSC), with the support of MASE Contractors, a reputable operator in the Middle East.

QUICK FACTS

- First utility-scale solar PV power plant in the region
- Land area: 210,000 square meters
- Installed capacity: 10 MW peak capacity
- Displaces approximately 15,000 tonnes of carbon dioxide annually
- 87,780 PV modules (18,228 supplied by Suntech, 69,552 supplied by First Solar)
- Energy production: approximately 17,500 MWh annually

