



# 1MW Solar-Powered Containerized Cement Plant in Oman



## Overview

The plant, based on IPIAC's innovative LC3 technology, is set to transform cement production by significantly reducing carbon emissions by approximately 40%. Cement production based on a blend of limestone and calcined clay is gaining traction as the global industry seeks to mitigate CO2 emissions. MUSCAT: A Spanish-based engineering firm has revealed that it has been contracted by an Omani client to supply a cement plant based on its innovative. MUSCAT, September 12 – Oman's renewable energy journey has reached a major milestone as the 500 MW Manah-1 Solar Power Plant in Al Dakhiliyah Governorate has generated 1 terawatt-hour (TWh) of clean electricity since beginning trial operations in January 2025. Oman: IPIAC, a Madrid-headquartered engineering firm, has secured a contract to supply Oman's, and the Middle East's, first low-carbon cement. A Renewables Readiness Assessment report was prepared by IRENA in close collaboration with the Government of Oman, represented by the Public Authority for Electricity and Water (PAEW), to study potential usage of renewable energy. The government seeks to utilize a sizeable amount of solar energy to. Home » Energy » 500 MW Manah 1 solar plant is now generating power for 50,000 households in Oman Oman's Manah 1 solar plant is one of the largest independent power projects (IPPs) in the Sultanate and a central pillar of the country's renewable energy ambitions. Located in the Ad Dakhiliyah.



## Article Content

### Solar Energy in Oman: Potential and Progress

A combination of concentrated solar power and photovoltaic technologies are likely to be deployed for the development in Dakhiliyah ...

### Oman's solar transition roadmap

The report said several projects will go into operation in the coming years - namely, the Manah I and Manah II solar plants in the first half of next ...

### Manah-1 Solar Plant Surpasses 1 TWh: A Landmark for ...

This achievement underscores the growing role of solar power in meeting the Sultanate's energy needs. The project, operated by Wadi Noor ...

### 500 MW Manah 1 solar plant is now generating power for 50,000 ...

Construction of the 500-megawatt (MW) photovoltaic facility began in September 2023 under a public-private partnership model. In August 2025, the plant achieved commercial operation ...

### Performance Evaluation of 1 MW On-grid Solar Photovoltaic Plant with ...

This research provides the first time comparative study for a 1 MW solar plant with a single axis tracker at Muscat. The actual results show a significant power generation output ...

### Techno-economic feasibility analysis of 1

With the growing needs of the Sultanate in the energy sector, Grid Connected PV (GCPV) system could help in reducing peak load demand and offer an alternative energy source. This study ...

### ME's first low-carbon cement plant planned in Oman

IPIAC says it plans to ship the plant machinery for the Omani LC3 cement project in "plug and play" mode, with all parts and equipment assembled in flat-rack containers.

### SolarContainer Successfully Deployed in Oman

We are pleased to announce the successful deployment of a SolarContainer in Oman, where it is now supplying clean and autonomous energy for a mobile Oil & Gas site.

### Oman Plans Middle East's First Low-Carbon Cement ...

The outcome is the creation of environmentally sustainable, durable, and cost-effective cement and concrete. IPIAC, known for pioneering the first ...

## Contact Us

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