

University of Dubai becomes first net-zero energy building in the region



Quick Facts

- ▶ Location - Academic City, Dubai
- ▶ Capacity - 1.7 MWp
- ▶ Annual Solar Plant Output - 2.72 MWh
- ▶ % of consumption offset by solar - 100%
- ▶ Type of System - Ground Mounted
- ▶ Carbon dioxide emissions abated - 2040 tons per annum

Overview

The University of Dubai, a fully owned subsidiary of Dubai Chamber, was named the first net-zero energy building in the region after CleanMax commissioned a 1.7 MW ground mounted solar plant at its campus in Academic City. CleanMax built the solar plant under the EPC model, providing full-scope engineering, design, installation, operation and maintenance services. The solar plant is one of the largest at any university in the Middle East region and will offset 100% of the university's annual electricity requirement.

Challenges

- ▶ The proximity of the university to open desert meant that:
 - The land to be used for installation was un-levelled, consisting mostly of soft sand dunes that were susceptible to corrosion.
 - The arid and dusty environment would require more frequent cleaning of solar panels
- ▶ The entire system, including the civil foundations, had to be moveable in the event the university relocated its campus in the future

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Website:

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Solutions

- ▶ We worked with an experienced civil contractor to completely level and compact the land, making it suitable for the solar installation
- ▶ We implemented the latest, automated robotic cleaning technologies that would clean the solar panels daily without using any water
- ▶ The precast civil foundations were installed on top of the compacted sand in a manner that allows for the entire system to be relocated, if necessary

Outcome

The ground mount solar plant at the University of Dubai's facility has realized a saving of AED 1.2 Million within the first year of operation has made the University of Dubai the first LEED certified net-zero energy building in the region. The solar power project is expected to abate 2040 tons of CO₂ per annum, which equals abating greenhouse gas emission from more than 400 passenger cars driven for an entire year.

About CleanMax



CleanMax is the sustainability partner of choice for leading corporates. Founded in 2011 and Headquartered in Mumbai, we are the largest provider of solar power to commercial and industrial customers.

The company develops projects on turnkey basis, providing cheaper-than-grid solar power under OPEX and CAPEX model. With a highly-skilled in-house team, CleanMax operates across India, Middle East and South East Asia.

Our track record with leading corporates has made CleanMax a preferred partner across sectors such as Automotive, Pharmaceuticals, Food & Beverages, Information Technology, Education, and many other industries.

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