

Challenge

In order to move forward the solar photovoltaic footprint in the United Arab Emirates (UAE) while contributing to the clean energy and sustainability objectives of the UAE, the Al Dhafrah PV2 Energy Company launched the Al Dhafrah Solar Power Project in Abu Dhabi. To ensure the success of the 2.5 GW PV plant, site owner Dhafrah PV2 Energy Company needed partners that could provide solar monitoring expertise, along with best-in-class solar and environmental measurement and monitoring instrumentation.

Solution

Understanding the importance of having accurate and reliable measurement and monitoring solutions in order to validate the performance of the plant, Dhafrah PV2 Energy Company brought in OTT HydroMet. With in-house brands Kipp & Zonen and Lufft, the team at OTT HydroMet was trusted to deliver custom PV Meteorological Monitoring Stations (Solar Weather Stations) for the PV site. The team also provided the installation and supports the maintenance of the stations via a local CP.

Benefits

- 1

The Al Dhafrah PV2 Power Project features 20 custom Solar Meteorological Stations equipped with Kipp & Zonen Solys2 Sun Trackers and SMP10 pyrometers, as well as Lufft WS200 and WS400 Weather Sensors. These stations play a key role in supporting the UAE's clean energy goals.
- 2

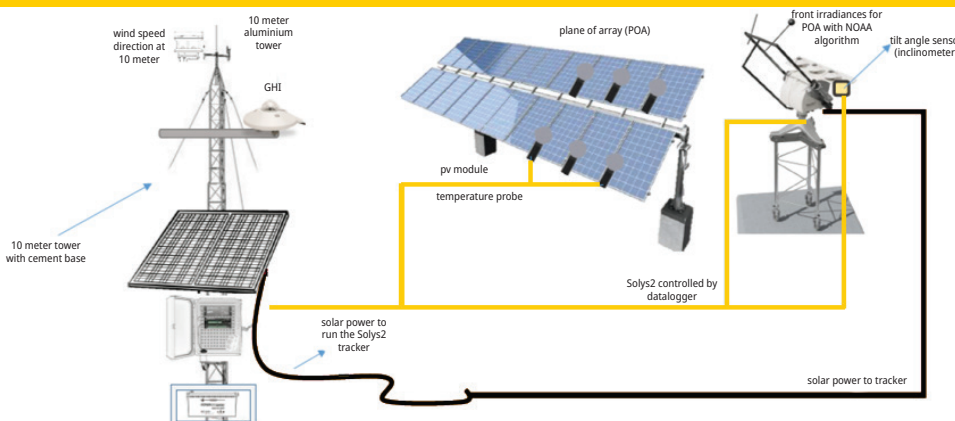
By partnering with OTT HydroMet, the Al Dhafrah PV2 Energy Company was able to meet stakeholder specifications and simplify procurement by working with a single manufacturer capable of delivering the required quantity and quality of instrumentation for their stations.
- 3

These deployed stations provide the high-quality data needed to meet the site's annual commitment to supply clean power to 200,000 homes. Additionally, the plant's CO₂ reduction is equivalent to taking 470,000 cars off the road each year.



PV Met Station & Solys2 Sun Tracker at the Al Dhafrah Plant

Solar Meteorological Station Schematic



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Ready to optimize the performance ratio of your PV sites or looking to assess the data integrity of your sensor technology?

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