

*East-west ground mount on south beach*


## Case Study

## Nurai Island, Abu Dhabi, UAE

Solar-Diesel Hybrid System on luxury resort island



**2400** MWh/year  
Solar production



**5,600** tons/year  
CO2 saved



**1,800,000** AED/year  
Saved on energy cost

### Project Details

<b>Industry</b>	Island resort
<b>Plant type</b>	Solar-diesel hybrid
<b>Capacity</b>	11 MVA of DG 1,3 MWp Solar
<b>Location</b>	Nurai Island, UAE
<b>Deployed</b>	July 2016



### Project Highlights

- Solar-Diesel Hybrid System
- Robotic Cleaning
- 5 types of mounting

### Project Description

Zaya Nurai Island is an award-winning luxury resort island, just off the coast of Saadiyat Island in Abu Dhabi. The island hosts several dozen luxury villas, 5 restaurants, numerous attractions (including a surf pool), as well as a full set of infrastructure with RO plant, STP and staff housing. Due to the off-shore location, the island had been powered by diesel generators for several years. In a quest to reduce the cost and environmental impact of the power generation on the island, Zaya has contracted Enerwhere to supply the power requirement of the island on the basis of a Power Purchase Agreement (PPA).

Enerwhere deployed a customized solar-diesel hybrid system to the island in July 2016, designed to minimize the visual impact on the luxury island atmosphere. The solar plants are largely hidden on the roofs of utility buildings and back-of-the-house areas, with only a low-profile east-west facing solar system visible on the south beach.

The system integrates Enerwhere's solar generator system with multiple synchronized high-efficiency diesel generators at 3 separate sites on the island. The system also integrates the island's existing generators as additional backup capacity to provide cost-effective, reliable power around the clock.



## System Diagram

## Nurai Island, Abu Dhabi, UAE Solar-Diesel Hybrid System on luxury resort island

