



## Case Study

## Jumeirah Gate, JBR, Dubai, UAE

Solar-Diesel Hybrid System on Construction Site



**98,930** kWh/year  
Solar production



**300** tons/year  
CO2 saved



**325,935** AED/year  
Saved on energy cost



**183** TR capacity  
Ultra Efficient AC Units

### Project Details

Industry	Construction
Plant type	Solar-diesel hybrid
Capacity	1.2 MVA of DG 71 kWp Solar 183 TR Cooling 1670m <sup>2</sup> LRA
Location	JBR, Dubai, UAE
Deployed	March 2018

### Project Highlights

- Solar-Diesel Hybrid System
- Ultra Efficient Cooling Units
- Energy Efficient Labour Rest Area

### Project Description

Jumeirah Gate, also known as The Address Jumeirah Resort + Spa is a beachfront development consisting of two towers connected by a skybridge that integrate a hotel and luxury residences at the end of JBR in Dubai Marina. The construction site of this 77 storey skyscraper provided Enerwhere with an opportunity to install it's first solar-diesel hybrid powered ultra-efficient cooling system at the site office and energy efficient labour rest area for the welfare of more than 3,000 labours.

The site offices are powered by Enerwhere's custom designed solar-diesel hybrid system and cooled by highly efficient inverter-based air conditioners reducing the energy consumption by over %30 resulting in significant environmental and commercial benefits.

Enerwhere's enhanced labor rest area replaces the conventional poorly insulated tents by using state of the art heat and infiltration resistant architectural sandwich panels. The labour rest area, with a total range of 1,670m<sup>2</sup>, is equipped with multiple energy efficient retrofits such as LED lights, dual inverter-based cooling units and control systems that assist in energy conservation whilst improving overall comfort level.

**MULTIPLEX**



## System Diagram

## Jumeirah Gate, JBR, Dubai, UAE Solar-Diesel Hybrid System on Construction Site

