



MARINE CORPS LOGISTICS BASE

BARSTOW, CALIFORNIA



SAFETY RECORD

ZERO Recordable Events



PROJECT SIZE

38 Buildings / 824,000 sq ft
\$10.7M



PROJECT SCHEDULE

12/2017 – 04/2019



CONTRACT METHOD

ESPC



SAVINGS INFORMATION

Energy Savings of more than
6M kWh per year



Marine Corps Logistics Base (MCLB) Barstow wanted to offset their conventional brown energy production with renewable green energy production as outlined in Executive Order 13693. ESG's team of experts thoroughly analyzed potential Energy Conservation Measures (ECMs), and created a winning approach for MCLB Barstow to achieve compliance. By partnering with ESG on this Energy Savings Performance Contract (ESPC) project, MCLB Barstow is now one step closer to achieving its goal of becoming a "NetZero" installation and improving its resiliency.

SOLUTION

ESG's energy savings performance approach at MCLB Barstow included installing approximately 1.5 MW of solar photovoltaic power generation at two separate sites, upgrading and optimizing HVAC control systems through scheduling, changing temperature set points, as well as adding supply air temperature resets, duct static pressure resets, chilled water resets, and air-side economizers. ESG upgraded over 7,500 fixtures and installed over 510 new control sensors.

The project scope included:

- Photovoltaic Power Generation
- HVAC Controls and Recommissioning
- High-Efficiency and LED lighting upgrades
- Industrial Compressed Air Optimization
- Volatile Organic Compound (VOC) Oxidizer Installation

RESULTS

This project increases renewable energy production to the maximum that is economically viable under new Net Energy Metering; reduces energy use and demand by converting and replacing existing interior and exterior light fixtures with LEDs; and improves air quality and energy efficiency through HVAC controls upgrades.

The project results in savings of over 6 million kWh of electricity per year, and reduces MCLB Barstow's base-wide energy consumption by 32.77%.