



KIRTLAND AIR FORCE BASE

ALBUQUERQUE, NM



ENVIRONMENTAL BENEFITS

This project reduces Kirtland's carbon footprint by over 400 metric tons of carbon dioxide annually, which is equivalent to the amount of CO2 emitted from:

Charging 49,682,421 smart phones

Using 45,958 gallons of gasoline

Burning 451,430 pounds of coal



PROJECT SIZE

3M+ sq. ft.

\$8.4M



CONTRACT METHOD

ESPC



SAVINGS INFORMATION

Energy savings over \$440K annually



Kirtland Air Force Base (AFB) was seeking to align themselves to meet Air Force security requirements, reduce energy intensity, improve building comfort, and reduce operations and maintenance. Kirtland AFB partnered with ESG to implement critical energy conservation measures that provided significant energy and cost savings..

SOLUTION

- Energy Management Control System
 - Installed fully open controls and a unified user interface (UI) to allow Kirtland AFB facilities personnel to operate building controls from a central location. The UI includes optimal scheduling, temperature resets, energy fault detection, and analytics.
- Lighting Improvements
 - Replaced existing interior T-12 fluorescent and high-intensity discharge (HID) light fixtures (metal halide and high-pressure sodium) with new light-emitting diode (LED) fixtures and Unified Facilities Criteria (UFC)-compliant LED luminaire conversion kits; existing exterior building mounted and parking lot lighting were also upgraded with long-life LEDs
- Fuel Switching from Propane to Natural Gas
 - Converted five buildings in the Starfire Optical Range (SOR) complex from propane to natural gas by installing a new natural gas line extension and associated equipment.

RESULTS

From their partnership with ESG, Kirtland AFB will save over 440K in energy expenditures annually. Additionally, the EMCS portion of the project provided Kirtland with the solution to meet Air Force cybersecurity requirements while improving monitoring, comfort, energy use, and operability.