About the Project

In 2017, CEG Solutions (formerly Clark Energy Group) (CEG) was awarded a contract to deliver $26 million of infrastructure upgrades financed via an Energy Savings Performance Contract at Fort Knox. Fort Knox is a large Army base in Kentucky whose core missions include cadet training and military personnel management.

Key Challenges:

- Low utility rates: The blended cost of electricity at the site was only $0.06 per kWh; natural gas cost $0.27 per therm; and the site did not pay for water.
- Recent large-scale upgrades: The site had recently completed over $250 million in energy upgrades through 108 separate Utility Energy Service Contract task orders.
- Aggressive schedule: Detailed audits and analysis of almost 500 buildings (~10 million square feet) needed to be completed within six months.

The CEG Solution:

In its search for cost-effective upgrades, CEG applied an analytics-based approach to analyze data on the operation and energy consumption of tens of thousands of pieces of equipment.

This analysis of millions of data points allowed CEG to identify 16 cost-effective energy and water conservation opportunities, including the following:

- HVAC and control upgrades in 204 buildings
- Domestic water upgrades in 439 buildings
- Interior LED lighting upgrades of over 50,000 fixtures in 117 buildings
- Exterior LED lighting upgrades in 147 buildings
- Data center upgrades at one of the Army's enduring data centers

CLIENT
US Army Corps of Engineers

LOCATION
Fort Knox, KY

YEAR
2017–Ongoing

PROJECTED RESULTS:

- 20% reduction in grid electricity usage
- 30 billion Btu per year in natural gas savings
- 50 million gallons of water savings annually
- Reduced operations and maintenance costs
- Improved occupant comfort and productivity
- Annual cost savings of $2.3 million

FINANCIAL
Project Cost:
$26,400,000

PROJECTED SAVINGS:
$66,109,138

Simple Payback:
11.5 Years

For more information please contact us at info@cegsolutions.com