

## Pittsburg State University

### Energy Savings Performance Contract (ESPC)



RWE Clean Energy through its subsidiary, Custom Energy Services, worked with Pittsburg State University to complete two projects. The first was a comprehensive campuswide effort, and the second was upgrades to Nation Hall. The main focus of the project was to implement energy and operational saving measures that would pay for themselves. These measures included retrofit and replacement of lighting, domestic water systems (i.e., toilets, shower heads and faucets), boilers, dormitory laundry equipment, and expansion of the energy management system. While the primary goal was to save energy, each improvement was also designed to enhance system functionality and improve the environment for students, faculty and staff. The focus of the Nation Hall project was on the critical infrastructure needs and leaking water lines.



#### PROJECT DATA

##### LOCATION

Pittsburg, KS

##### CONSTRUCTION DATES

Completed on time

##### CAPITAL COSTS

\$6,050,401

##### ANNUAL SAVINGS

\$419,219

##### ENVIRONMENTAL BENEFITS

4,634 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 29.3 acres of forest from deforestation\* or
- Conserving 9,776 barrels of oil\*

\*Sources:

- Leonardo Academy's Cleaner & Greener<sup>SM</sup> Emissions Reduction Calculator: <http://www.cleanerandgreener.org/resources/pollutioncalculator.html>
- U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

The university staff worked together with RWE Clean Energy through its subsidiary, Custom Energy Services, to provide a truly holistic energy efficiency project that addressed significant facility needs in academic, administration, housing, and athletic buildings—improving the entire campus.

The work completed impacted nearly every building, student, faculty, and staff member on campus. The president of the university indicated that he was amazed that such a comprehensive project could be completed without complaints from faculty or students.



## PROJECT DATA

### ENERGY CONSERVATION MEASURES

#### Lighting and Lighting Controls

- High efficiency lighting
- LED exit signs

#### Heating and Cooling

- Boiler
- Constant volume AHU to variable air volume
- Replace fan coil units

#### Building Controls

- Energy management system
- Occupancy sensors
- HVAC controls

#### Water Conservation

- Low-flow water fixtures

#### Additional Upgrades

- Replace domestic water lines and piping