

Park Hill School District

Energy Savings Performance Contract (ESPC)



Park Hill School District has fifteen facilities, including fourteen schools and one administration building. The district required \$600,000 in facility improvements to address lighting and boiler deficiencies, but had no money to make upgrades.

RWE Clean Energy through its subsidiary, Custom Energy Services, utilized a two phase approach which allowed urgent needs to be met, such as replacing the district's failing boiler, while avoiding disruptions to the students or teachers. A major goal of both phases was to use energy savings from the lighting and building control improvements to replace old and failing equipment, eliminating many of the deferred maintenance issues that often plague districts. District staff now focuses their attention on preventative maintenance activities that will be of benefit for years to come.

ENERGY CONSERVATION MEASURES

Lighting and Lighting Controls

- High efficiency lighting
- LED exit signs
- Occupancy sensors

- Chiller
- Rooftop units
- Variable frequency drives
- Variable air volume conversion

Building Controls

- Energy management system

Fuel Conversion

- Steam to hot water

Heating and Cooling

- Boiling plant

Water Conservation

- Low-flow water fixtures



PROJECT DATA

LOCATION

Kansas City, MO

CONSTRUCTION DATES

July 2003 to December 2004

CAPITAL COSTS

\$4,077,711

ANNUAL SAVINGS

\$254,800

ENVIRONMENTAL BENEFITS

4,125 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 26.1 acres of forest from deforestation* or
- Conserving 8,703 barrels of oil*

*Sources:

- Leonardo Academy's Cleaner & GreenerSM 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>