



Case Study

North Jackson Unified School District 335 Holton, KS



PROJECT HIGHLIGHTS

Environmental Benefits

391 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 2.5 acres of forest from deforestation* or
- Conserving 286 barrels of oil*

Capital Costs

\$2,365,908

Annual Savings

Energy:	\$43,440
Non-Energy:	\$14,268
Utility Cost Reduction:	28%

* Sources:

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

PROJECT DESCRIPTION

Energy Savings Performance Contract

Challenges: North Jackson Unified School District faced new construction needs as well as failing existing infrastructure with limited funding resources. A failing mechanical system at the high school gave ConEdison Solutions, through its subsidiary, Custom Energy Services, a unique opportunity to look at an entirely different system to meet heating and cooling needs. The roof at the elementary school had been leaking and causing problems. The district was able to pass a bond issue but it was unable to fund all of their needs. By combining this funding with an energy savings performance contract (ESPC), available dollars went further and provided greater value to their students, staff and community.

PROJECT SCOPE

Solutions: Working closely with the architect installing an addition on the high schools, ConEdison Solutions, evaluated multiple types of heating and cooling systems. Our analysis resulted in the implementation of a ground-source heat pump system. The well-field was sized to handle the additional load of the new addition and we coordinated electrical needs closely with the architect. Through this program, the district was able to save energy and better utilize taxpayer dollars to create a more comfortable and better functioning learning environment.

Contact:

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Construction Start Date:

March 2008

Construction End Date:

August 2008

ENERGY CONSERVATION MEASURES

Lighting and Controls

- High efficiency lighting
- LED exit signs
- Occupancy sensors

Building Controls

Energy management system

Heating and Cooling

- Installed a boiler
- Installed a chiller

Water Conservation

- Installed low-flow water fixtures