



Case Study

Humboldt Unified School District 258 Humboldt, KS



PROJECT HIGHLIGHTS

Environmental Benefits

509 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 3.2 acres of forest from deforestation* or
- Conserving 1,074 barrels of oil*

Capital Costs

\$2,083,316

Annual Savings

Energy:	\$41,091
Non-Energy:	\$4,088
Utility Cost Reduction:	32%

* 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

Challenge: The Humboldt Unified School District needed to conduct significant facility upgrades while trying to minimize impact on financial resources. From a planning standpoint, upgrades to existing facilities took priority over constructing a new gymnasium.

PROJECT SCOPE

Solution: Working with ConEdison Solutions, through its subsidiary, Custom Energy Services, the district accomplished both by passing a \$5.9 million bond issue to fund the new gym while using energy and operational savings, a QZAB loan, and capital dollars to fund the renovations. The ground source heat pump well field is used to heat and cool the high school as well as the new gymnasium. The bond issue funds only covered the units in the new gym, while the well field was paid for through the renovation funding. Through this program, the district was able to save energy and better utilize taxpayer dollars to create a more comfortable and functional learning environment for their community.

Contact:

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Construction Start Date:

March 2006

Construction End Date:

November 2006

ENERGY CONSERVATION MEASURES

Lighting and Controls

- High efficiency lighting
- LED exit signs
- Occupancy sensors

Building Controls

- Energy management system
- Vending machine controls

Heating and Cooling

- Boiler

Building Envelope

- Doors
- Windows

Renewable Energy

- Geothermal heat pump

Additional Upgrades

- Lay-in ceiling
- Retro-commissioning