



Case Study

Norton Correctional Facility Norton, KS



PROJECT HIGHLIGHTS

Environmental Benefits

2,234 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 14.1 acres of forest from deforestation* or
- Conserving 4,713 barrels of oil*

Capital Costs

\$1,682,971

Annual Savings

Energy: \$197,336
Non-Energy: \$8,826

* 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: Norton Correctional Facility is a medium-security prison for male inmates. The average inmate population is approximately 700. A few of the building are over seventy years old. The facility is a campus setting, with a central boiler plant that provides heating and domestic hot water to a number of the buildings. One chiller unit continued to fail.

PROJECT SCOPE

Solution: ConEdison Solutions, through its subsidiary, Custom Energy Services, was able to address the needs of the correctional facility that were not being met with existing funds. Through system upgrades, the number of deferred maintenance projects was greatly reduced, allowing staff to focus more on preventative maintenance.

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Construction Start Date:

October 2003

Construction End Date:

May 2004

ENERGY CONSERVATION MEASURES

Lighting and Controls

- High efficiency lighting
- LED exit signs
- Occupancy sensors

Building Controls

- Energy management system
- Steam radiator controls

Heating and Cooling

- Steam trap replacement
- Pipe insulation
- Chiller
- Heat re-claim device on dryer
- Boiler feedwater pumps to VFD

Fuel Conversion

- Kitchen appliances

Water Conservation

- Low-flow water fixtures
- Shower head modifications