



Case Study

Hutchinson Correctional Facility Hutchinson, KS



PROJECT HIGHLIGHTS

Environmental Benefits

3,229 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 20.4 acres of forest from deforestation* or
- Conserving 6,812 barrels of oil*

Capital Costs

\$2,748,100

Annual Savings

Energy: \$275,839
Non-Energy: \$64,575

* 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: Hutchinson Correctional Facility is a maximum-security prison for male inmates. The average inmate population is approximately 1,800. The entire facility needed to be brought up to acceptable standards for energy and water efficiency without impacting the daily operations of the institution.

PROJECT SCOPE

Solution: ConEdison Solutions, through its subsidiary, Custom Energy Services, implemented significant infrastructure improvements such as installing new boilers, and improving cellblock ventilation and heating. These were accomplished through the Facility Conservation Improvement Program (FCIP). Even though Hutchinson Correctional Facility is a maximum-security prison, this project was completed in less than six months and under budget, without sacrificing client satisfaction. The inmate work force was utilized to help minimize costs. This was the first project to be completed under the FCIP in the State of Kansas.

Contact:

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Construction Start Date:

April 2005

Construction End Date:

August 2005

ENERGY CONSERVATION MEASURES

Lighting and Controls

- High efficiency lighting
- LED exit signs
- Occupancy sensors

Building Controls

- Energy management system
- AHU economizer control

Heating and Cooling

- Boiler
- Steam trap replacement
- Steam heating
- Ventilation improvements
- Variable frequency drives
- Domestic hot water tank replacement

Building Envelope

- Doors
- Windows

Water Conservation

- Low-flow water fixtures

Additional Upgrades

- Laundry ozone system
- Removal of cell block fans