

In desperate need of improvements, Montgomery County, Illinois' prison facilities benefit from a guaranteed energy performance contract that covers the cost of all upgrades; no upfront costs required.



## The Challenge

The jail in Montgomery County, Illinois serves as a prison facility for the city of Hillsboro and other smaller towns surrounding Montgomery. The cooling system at the jail was utilizing R22 refrigerant which, because of its negative effects on the ozone layer, has been illegal in the U.S. since January 2020. As such, the County needed to update the cooling system to a newer, more energy efficient and environmentally friendly refrigerant. The jail was also experiencing ongoing plumbing maintenance issues in inmate cells.

## The Solution

The County partnered with Centrica Business Solutions to update their facilities and reduce energy costs — all without impacting the County budget. Cost-saving efficiency upgrades included:

- Successfully replacing the jail's cooling system
- Replacing toilet and sink valves to help control inmate behavior and provide water savings
- Updating lighting to energy-saving LEDs
- Improving building envelope efficiency
- Building Automation commissioning

## The Impact

All upgrades were covered under a Guaranteed Energy Performance Contract, whereby the guaranteed energy savings of \$27,789 covered all project costs. Additionally, 344 gallons of propane and 416,000 gallons of water were saved. Most importantly, no capital was required.

- Financial Impact \$27,7893 / Annual cost savings
- Community Impact 233,948 / kWh saved

\$27,789

Annual utility cost savings

233,948

Kilowatt hours saved 416,000

Gallons of water saved

344

Gallons of propane saved

## Why Centrica Business Solutions?

- 24/7 service, testing and maintenance plan, offering complete peace of mind
- No up-front capital required to fund the project
- Guaranteed energy savings to pay for the project and provide additional annual cost savings

By removing this quantity of CO2 from the atmosphere, this project will have the same effect on the local community as:

- 2,735 tree seedlings grown for 10 years
- 216 acres of U.S. forest preserved
- 35.7 cars off the road for one year
- 18,613 gallons of gas saved

