



Culver-Stockton College

Campus-wide Energy-Efficiency Improvements Canton, Missouri

Summary

Culver-Stockton College is a private, residential, four-year, liberal arts college located in Canton, Missouri. It was founded in 1853 and has an enrollment of nearly 800 students.

Culver-Stockton had been engaged by several other energy services companies in the past, but had never found a company that they felt comfortable working with. ESP was able to work with the College to help them understand every aspect of a guaranteed energy saving project, build trust, and assist them in identifying energy-saving improvements that the College could make to help save energy while improving the facilities.

The College had numerous needs, but limited funds. They had a desire to move away from an old steam system that was a maintenance headache, and lacked effective controls in most buildings to set back or turn off equipment during unoccupied hours.

The resulting project is a comprehensive campus-wide energy-saving performance contract. Improvements included: new interior and exterior lighting, occupancy sensors, water efficiency improvements, sealing doors, windows and roof lines to prevent air infiltration, a new energy management system, occupancy-based heating and cooling, web-based programmable thermostats, new variable refrigerant flow heating and cooling, steam to hot water boiler conversions, variable air volume conversions, behavioral training, energy guidelines, set point optimization, and retro-commissioning of the Science Center which was experiencing severe humidity problems.

Energy Conservation Measures

- interior and exterior lighting
- occupancy based lighting controls
- building infiltration
- water efficiency improvements
- energy management system
- occupancy-based heating and cooling
- web-based thermostats
- VRF heating/cooling
- steam to hot water conversion
- VAV conversions
- behavioral training
- energy guidelines
- set point optimization
- retro-commissioning



Quick Facts

Completed: 2015

Total Square Feet: 465,000

Number of Buildings: 26

Total Project Cost: \$3,900,000

Annual Savings: \$355,000