



Wells College takes a smart approach to energy management solutions with RTEM

Case Study

Institution Name:
Wells College

Enrollment:
Approximately
450 FTE

Total Investment:
\$2.2 million

RTEM Investment:
\$635,000

Annual Estimated Savings:
\$229,000

Annual RTEM Savings:
\$56,470

Annual CO₂ Reductions:
1,190 tons

Industry:
Higher Education

Location:
Aurora, New York

Introduction

Wells College (Wells), a recognized leader when it comes to sustainability on campus, recently implemented a comprehensive energy efficiency upgrade project that greatly enhanced the quality of life at the school.

Wells, a liberal arts school located in the Finger Lakes region of New York, has been recognized by the Princeton Review and the Sierra Club for its sustainability efforts, and in 2015 Wells became a REV Campus Challenge member, committing to sustainability, clean energy, and energy efficiency on campus and in the classroom.

In keeping with its long history of being environmentally responsible, Wells sought to improve the energy efficiency of its aging building stock by implementing a range of energy efficiency improvements that would create a more eco-friendly—and comfortable—living and learning environment.

Financing the project and the need for more robust energy use data were key challenges. Wells needed a way to pay for the improvements that wouldn't adversely impact its balance sheet or interfere with covenants on other existing financing arrangements. The college also needed a way to gain more insight on how energy is consumed on campus.

Finding Solutions

Wells brought in highly experienced partners to plan and implement the project. Trane is a longstanding partner of the college that offers a wide spectrum of solutions including performance contracting, building automation systems and intelligent facility services in addition to manufacturing heating, ventilating, and air conditioning systems. Metrus Energy, which finances and owns energy retrofit and building upgrade projects through its Efficiency Services Agreement (ESA), was also brought on board. Their efforts were super-charged by the New York State Energy Research and Development Authority's (NYSERDA) Real Time Energy Management (RTEM) program.





“There’s too much room for error in facility management when you don’t have access to real time energy management data. The ongoing services and monitoring that our partners Trane and Metrus Energy provide Wells College enables us to address issues proactively, saving time and money on our operations and maintenance costs”

— *Brian Brown, Director of Facilities Operations and Services, Wells College*

Trane provided a detailed energy study to identify opportunities for making improvements and analyzed systems in 14 buildings on campus, both residential and academic. The study established an energy-use baseline and provided detailed recommendations for upgrades and enhancements of current systems, including lighting in their buildings.

The recommendation was to upgrade the building automation system (BAS) to help run campus equipment and systems more efficiently. A properly functioning, state-of-the-art BAS is critical for energy optimization and occupant comfort within a facility. Metrus then funded 100% of the upfront costs of the project under its pay-for-performance ESA structure.

The Results

Meanwhile, Metrus’ innovative efficiency-as-a-service (EaaS) solution enabled the college to make significant improvements to key residential dormitory buildings and academic spaces while maximizing Wells’ savings.

Beyond energy and cost savings, one of the major benefits in upgrading the existing controls system is improving the comfort and safety of students, facility, and staff. The upgrade allows easy troubleshooting and addresses occupant comfort issues through the computer interface with access to real-time equipment operation and space condition data. Furthermore, scheduling can allow for unoccupied setback and other similar controls strategies that will yield additional energy savings.

The NYSERDA Real Time Energy Management Program

Through the Real Time Energy Management Program, NYSERDA offers up to a 30% cost-share incentive to support RTEM projects that serve customers in multifamily, commercial, and industrial sectors. The program helps evaluate and qualify vendors, ensuring high-quality RTEM projects that create a smarter building or facility with lower operating and utility costs, and greater appeal, comfort, and marketability.

Discover how to transform the way you manage and consume energy with NYSERDA.

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