



Jefferson County Community college striving for excellence in clean energy solutions



Student Enrollment:
2,200 FTE

Institution Type:
2-Year Community College

Institution Size:
285,297 gross sq.ft.

Location:
Watertown, New York

A Leader in the SUNY Community

Jefferson Community College, located in Watertown, New York, has long been recognized among its peers for committing to environmental excellence. Several clean energy solutions were implemented on campus over the past decade, proving that sustainability is a core value. In 2012, the college became a signatory of the American College and University Presidents Climate Commitment and developed a Climate Neutrality Plan.

The college joined the New York State Energy Research and Development Authority's (NYSERDA) Clean Green Campuses in 2015 and immediately pursued new projects to continue meeting their financial, environmental, academic, and community goals. With funding from NYSERDA, Trane, Inc. — an HVAC services and solutions provider — was brought on to identify innovative energy management solutions to maximize annual savings and continue to showcase sustainability.

“The team from NYSERDA was great to work with and were always available throughout the various project phases. I would recommend Clean Green Campuses to any institution that wants to improve their energy efficiency and reduce operating costs.”

— Bruce Alexander, LEED AP, Director of Administrative Services, SUNY JCC



Focusing on Success

Trane reviewed existing energy data to establish a baseline, conducted ASHRAE Level 1 and Level 2 audits of campus buildings, analyzed energy conservation measures and subsequent recommendations, and completed retro-commissioning of the building automation systems. In addition, with Trane's assistance, two more projects were completed by students—inventorying mechanical system components and inspecting building envelopes using thermal imaging.



- **41% greenhouse gas emissions reduction five years ahead of schedule**
- **14.8% energy use reduction**
- **\$69,000 in energy cost savings**
- **271 metric tons of CO₂ emissions reduction**
- **23% reduction overall for electricity and gas**

To further capitalize on opportunities identified through the energy study, the college submitted a proposal to NYSERDA's On-site Energy Manager program (OsEM), which covers 75% of costs for hiring an energy-focused on-site manager. The college was able to hire a part-time OsEM, who was tasked with creating a long-term energy management plan, focusing on achieving energy goals, operational savings, maximizing building efficiencies, carbon footprint reduction, and promoting campus-wide sustainability.

Exceeding Project Goals

Participating in the Clean Green Campuses and OsEM programs led to unprecedented success in energy reduction, greenhouse gas mitigation, and cost savings. The college hopes this project will be replicated by other campuses. The results are easily measurable, the methodology easily transferrable, and all supporting data and reports are available to other educational institutions through the SUNY Energy Office, ACUPCC website, and AASHE Sustainability Hub.

The electricity peak demand on campus has gone from more than 700 kW to an average level 450 kW, despite adding 30,000 square feet of new buildings. And, the college has no plans to slow down on saving energy costs and reducing emissions across campus. Focused on the future, they've set a goal become a net zero campus by 2045.

Ready to join? Get started today.

Learn how at nyserdera.ny.gov/clean-green-campuses.