



Managing Energy Emissions Across 34 Locations



Enrollment:
Approx. 20,000
(9,000–10,000 FTE)

Institution Type:
2-year associate,
4-year undergraduate,
and graduate degrees

Institution Size:
233,330 gross sq. ft.

Region:
Statewide
(Capital District HQ)

Unique Campus, Distinct Challenges

“We’re not like other colleges” best describes SUNY Empire State College’s (ESC) unique campus and approach to teaching.

“We’re thrown into the pool of other higher ed institutions across the State, but we’re a very unique facility. No dining facilities, no dorms. Just office buildings.”

—Sadie Ross, Director of Compliance and Environmental Sustainability

With 34 locations across the State and more than 20,000 students—primarily working adults—that mix online and in-person learning, ESC faces unique challenges in managing energy usage and greenhouse gas emissions.

ESC estimates its use of distance learning means greenhouse gas emissions are nearly 10 times lower per FTE than other higher ed institutions across the U.S. However, the distributed campus presents substantial challenges. ESC is primarily a tenant and does not directly manage energy usage and operations at most of its 34 locations. With a variety of landlords and metering arrangements, inventorying greenhouse gas emissions and further reducing energy consumption can be challenging.

Overcoming Obstacles

Despite the limitations ESC faces, there has been substantial progress toward its carbon and energy goals as well as State mandates. In spite of substantial growth in student body and facilities, ESC achieved many of the goals from its first 2010 sustainability plan, including an initial greenhouse gas reduction target of 10% by 2023 below 2010 baseline.

Numerous energy conservation projects—including an extensive retrocommissioning project, optimization of controls and building management systems, and installation of geothermal heat pumps at two of its buildings—reduced energy use by approximately 6% between 2014 and 2018.





Summary of Clean Energy Activities and Accolades

Second Nature:
American College and University Presidents' Climate Commitment (2008)

Climate Targets:
10% below 2010 baseline by 2023

- Clean Energy Highlights:
- Retrocommissioning project in 2015
 - Over \$120,000 in energy savings (2013–2016)
 - Geothermal installed in coordinating center in Saratoga Springs



Maintaining Momentum and Driving Behavior Change

While ESC has achieved significant milestones, the university faces more complex challenges pursuing further progress.

“Taking the next step is tough,” said Ross. “Some of the ‘big and exciting’ projects that often heavily promoted are neither economical nor simple for ESC to take on due to the small physical footprint and comparatively already low energy usage.” Better submetering and analysis of building use patterns will be a big next step for identifying more energy reduction opportunities.

Where other colleges can rely on an on-campus student body to engage with sustainability and energy issues, raise awareness, and augment staff capacity, ESC has no such cohort of student leaders. Instead, Ross managed to identify and rely on several staff “champions” to drive behavior change across various facets of energy conservation.

“Everyone has their own pet projects,” said Ross. “Whether it’s planting trees, turning out the lights, or shutting down equipment. It’s not about a dedicated group [with a clear goal/mandate]. Everyone has their own personal values. It’s up to me to give people the capability to apply those values in their workplace.”

Aligning these values to better engage other ESC staff and faculty is a critical part of Ross’ role and how she’s managed to drive substantial progress in spite of the school’s unique challenges.

Getting Started on the Right Foot

“For ESC, it’s the simplest things that have the most impact. People often want the more visible cogen, solar, and other projects, but start by reducing the load first and doing the small things with existing equipment.” Ross notes that many of New York’s 30 SUNY community colleges share similar characteristics as ESC, including tenancy issues, lack of dorms and central campuses, and more transient student bodies.

“Don’t overlook a project because you think it doesn’t need to get done,” said Ross. She pointed to the retrocommissioning project completed in 2015 at the buildings ESC owns and operates. The project identified a range of energy conservation measures that achieved almost double the projected savings—some of the most substantial of which came from ESC’s newest buildings and equipment.

Ross also emphasized the importance of building good relationships and establishing trust and understanding between sustainability, facilities, and communications offices. Understanding how different individuals and offices work, as well as the processes they work through, is critical to getting a project implemented.

“Just posing a project that’s off the top of your head won’t go very far. You have to understand the procurement rules, budget, contractors you could work with, and more.”

And while a passion for addressing climate change drives many in Ross’ position to achieve ambitious carbon and energy goals, She recommends leaving that at the door once it comes to working with the people necessary to get projects done.

“Everyone has their responsibilities, thinks what they’re doing is the most important thing, that it’s underfunded, and doesn’t get enough attention. Being humbled by that understanding is critical—and the first step in building a trusted relationship.”

Ready to join? Get started today.

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