

# Clean Energy Workforce Development

## Building Operations & Maintenance – Higher Education



Get more out of your building with NYSERDA's **Building Operations & Maintenance Workforce Training Program**

**IDENTIFY**  
training needs

**PARTNER**  
with a training organization or develop your own training

**SUBMIT**  
an [application](#)

**\$11.5 MILLION**  
available

**Have a Question?**

Email the Workforce Development Team at [wfinfo@nyserdera.ny.gov](mailto:wfinfo@nyserdera.ny.gov)

or visit [nyserdera.ny.gov/BOM](https://nyserdera.ny.gov/BOM)

## Custom, hands-on, and funded training for your higher education facilities team

In the U.S., higher education institutions spend almost \$14 billion annually on energy.<sup>1</sup> According to U.S. Energy Information Administration, colleges and universities spend an average of \$1.10 per square foot on electricity and 18¢ per square foot on natural gas annually.<sup>2</sup> This means that a typical campus building can consume more than \$100,000 worth of energy each year, making building energy use the single largest source of campus greenhouse gas (GHG) emissions.

Keeping up with all the requirements for new equipment, new staff, new training, new best practices, and even new tenants can seem overwhelming. However, NYSERDA can help. It offers operations and maintenance (O&M) training initiatives designed to support your transition to clean energy.

### Pathways to Improvement

By participating in [NYSERDA's Building Operations and Maintenance program Training Program](#), your workforce will be properly trained in today's clean energy systems, which translates into cleaner, more efficient buildings. With proper workforce training, you can expect:

- Improved indoor air quality and reduced infection transfer rates
- Reduced energy/water use and related costs
- Increased occupant satisfaction
- Improved skilled employee retention due to promotion and career advancement opportunities
- Real-world educational opportunities for campus students
- Reduced equipment breakdowns and maintenance costs
- Increased engagement in risk management instead of crisis management
- Compliance with NYC Local Law 97 (or penalty avoidance due to non-compliance)

Just as importantly, upgrading your buildings and workforce will contribute to New York's ability to reach its ambitious goal of reducing economy-wide GHG emissions 40% by 2030, and no less than 85% by 2050 (when compared to 1990 levels<sup>4</sup>).

**Incoming students care about the environment: 74% of applicants say a college or university's commitment to environmental issues would affect their decision to apply or attend.<sup>3</sup>**

<sup>1</sup> U.S. Environmental Protection Agency ENERGY STAR program, <https://www.energystar.gov/ia/partners/publications/pubdocs/Healthcare.pdf>

<sup>2</sup> E Source, <https://esource.bizenergyadvisor.com/article/colleges-and-universities>

<sup>3</sup> Princeton Review College Hopes & Worries Survey 2022, <https://www.princetonreview.com/college-rankings/college-hopes-worries>

<sup>4</sup> New York Climate Act, [climate.ny.gov/Our-Climature-Act](https://climate.ny.gov/Our-Climature-Act)



**NYSERDA**

## Funds for Change

By applying to [Program Opportunity Notice \(PON\) 5357](#),<sup>5</sup> employers and building owners can receive funding for the development and implementation of building O&M training programs. Specifically, PON 5357 is aimed at workforce educational strategies, on-site training frameworks, and the tools needed to advance the skills of building O&M workers. It provides funding coverage for 70–90% of these types of project costs, which translates into low out-of-pocket expenditure.

Additionally, employees' wages can be included in the cost-share even while they are working on project tasks, while in training, and while using equipment specifically designed for training purposes. Training fees offset by a third party can also be included in the cost-share. Have a look at the Project Spotlights below, which illustrate ways that PON 5357 is useful.

*Through NYSERDA's Building O&M Training Program, thousands of employees have been trained, impacting operations of more than 450 million sq. ft. of floor space. Organizations that applied for funding are already reporting benefits.*

### 1. PROJECT SPOTLIGHT – COOPER UNION

In partnership with Smith Engineering, the Cooper Union project has applied nearly \$400,000 in NYSERDA funding to launch a multifaceted training program. Successful outcomes include:

- Trained 10 facility staff, 26 students, 2 faculty, and 1 trainer.
- Supported a new HVAC and Energy Efficiency Building Systems course.
- Established a culture of continuous training and building recommissioning by pairing a building energy industry professional with faculty.
- Developed training materials for on-site operations staff.
- Gave students hands-on experience.

#### Cooper Union Engineering Faculty had this to say:

"A Best Practices and Optimization project establishes a shadowing and mentoring program to build the skills of facilities staff and build a culture of proactive system maintenance, monitoring and verification and energy management as well as train students to enter the workforce as capable building controls engineers."

### 2. PROJECT SPOTLIGHT – NEW YORK UNIVERSITY (NYU)

NYU worked with Steven Winter Associates to create a training program with three key tracks that engaged both staff and management in the enhanced educational opportunities. Successful outcomes include:

- Recycling training for 50 cleaning and maintenance staff.
- Shop training for 30 people on the repair and technical services team (plumbing, electrical, HVAC).
- O&M training for more than 100 people including building operators, engineers, handymen, supervisors, foremen, and leadership staff.
- Paired lecture component with hands-on classes where participants were grouped by building heating system type.
- Created sustainability and replicability by incorporating new training sessions to NYU's learning management system for staff.

#### NYU Office of Sustainability Staff Member had this to say:

"Participants feel like they are walking away with additional skills and knowledge that is inline and relevant to the work they are doing."

If your building portfolio has annual energy expenditures of \$1 million or more, now is the time to take advantage of resources offered through PON 5357 and invest in an innovative, forward-looking workforce development program.

## Ready to Get Started?

Visit [PON 5357](#) for more information.

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Become familiar with **additional NYSERDA programs** that support building performance and can help New York's organizations achieve significant benefits and savings!

#### FlexTech Program

Questions: [FlexTech@nyserderda.ny.gov](mailto:FlexTech@nyserderda.ny.gov)

Schedule an energy check-up at: [nyserderda.ny.gov/All-Programs/FlexTech-Program](https://nyserderda.ny.gov/All-Programs/FlexTech-Program)

#### On-site Energy Manager Program

Questions: [OnsiteEnergyManager@nyserderda.ny.gov](mailto:OnsiteEnergyManager@nyserderda.ny.gov)

Hire a dedicated energy manager at: [nyserderda.ny.gov/All-Programs/On-Site-Energy-Manager](https://nyserderda.ny.gov/All-Programs/On-Site-Energy-Manager)

#### New Construction – Commercial Program

Questions: [NewConstructionProgram@nyserderda.ny.gov](mailto:NewConstructionProgram@nyserderda.ny.gov)

Build sustainability into your facility at: [nyserderda.ny.gov/All-Programs/New-Construction-Program](https://nyserderda.ny.gov/All-Programs/New-Construction-Program).

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<sup>5</sup> [nyserderda.ny.gov/PON5357](https://nyserderda.ny.gov/PON5357)

