

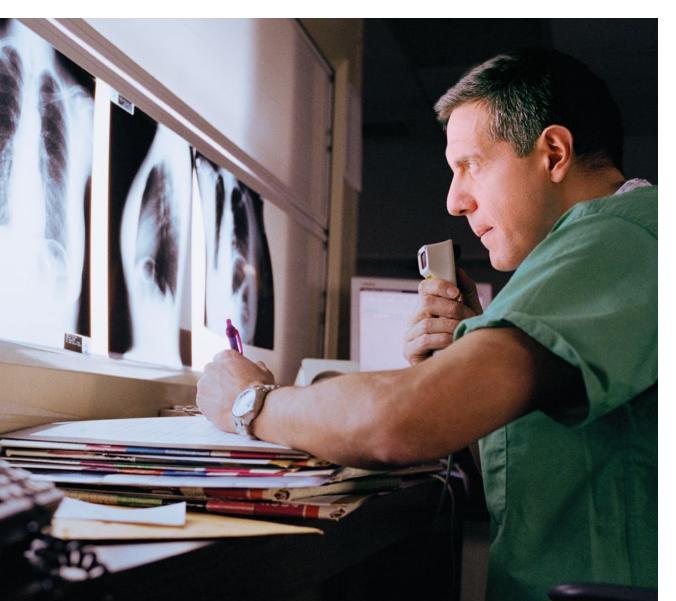
# Program Overview

NYSERDA's Existing Facilities Program, recognized as an exemplary program by the American Council for an Energy-Efficient Economy (ACEEE), has one primary goal: to help you make energy-efficiency improvements that measurably reduce energy costs and improve return on investments.

No matter how large or far-reaching your business' energy improvement plans may be, NYSERDA can guide you through your investments and provide incentives to help offset their costs. All businesses that pay into the System Benefits Charge (SBC) through their monthly utility bills are eligible to participate.

Together, we can take a comprehensive look at your entire facility to determine all the ways energy improvements and financing opportunities can help you meet your business goals.

Read on to learn more about how the Existing Facilities Program can help your business implement strategic energy-saving projects and improve your return on investment.



NYSERDA helps healthcare institutions reduce energy costs while enhancing patient care.

## Offset Total Project Costs

## Electric and Gas Incentives

### Performance-Based Incentives

Performance-based incentives help improve the return on energy-efficiency investments that deliver your mission and have long-lasting benefits. Incentives are based on the amount of energy that you save annually as a result of the project.

#### Eligible electric efficiency improvements can include:

- · Lighting and Lighting Control Systems
- · Control and Building Automation Systems
- · Chiller Systems
- · Demand Response and Energy Storage
- Motors and VFDs
- · HVAC Systems

#### Eligible natural gas efficiency improvements can include:

- · Boilers and Boiler Control Systems
- Furnaces
- · Water Heaters
- · Steam and Hot Water Distribution Piping and Insulation
- · Heat Recovery (e.g., flue gas economizers)

Considering other improvements not listed here? Any costeffective project that enhances energy performance is a good candidate for financial incentives. Contact NYSERDA to determine if your project may be eligible.

## Pre-Qualified Incentives

NYSERDA also provides pre-qualified incentives to purchase and install more energy-efficient equipment for smaller-sized energy projects. If your project qualifies, you can receive up to \$60,000 in pre-qualified incentives (\$30,000 for electric, \$30,000 for natural gas) per facility per calendar year.\*

For more information about incentives available through the Existing Facilities Program, call 1-866-774-8818 or email us at Outreach@nyserda.ny.gov.

<sup>\*</sup>When both electric and natural gas funds are available.

## Partner with NYSERDA

Enhance operations. Improve occupant comfort.

Retrofit systems. In addition to incentives that make energy-efficiency initiatives more cost-effective, NYSERDA also provides objective technical staff who will ensure your business goals are achieved.

Our technical experts—many of which are LEED® accredited or Certified Energy Managers®—are at the leading edge of their respective fields, and are resourceful partners who will help you clearly understand the value of your energy-efficiency initiatives.

In addition to our staff, NYSERDA is supported by a network of specialized energy consultants, all competitively selected for their proven expertise. They will meet with you to discuss your energy and business priorities, provide assistance in understanding and applying for NYSERDA Existing Facilities Program funds, and are available to address any questions or concerns.



The NYSERDA team can present program options available to you.

- "The real challenge in New York City is making existing buildings sustainable. And our partnership with NYSERDA is essential to identifying opportunities and implementing energy-efficiency projects."
- DAVID GREENBAUM, PRESIDENT, NEW YORK OFFICE, VORNADO REALTY TRUST
- "I don't think we would have been able to accomplish nearly as much as we did with (our) building without the great help NYSERDA provides."
- ANDREW MATONAK, PRESIDENT,
  HUDSON VALLEY COMMUNITY COLLEGE
- "(Our) new chiller equipment reduces energy consumption by about 20 or 30 percent. We are obligated to be at the forefront of energy management, and NYSERDA has been a good partner with Columbia for a long time."
- FRANK MARTINO, VP OF OPERATIONS, COLUMBIA UNIVERSITY

#### DETERMINE WHAT'S BEST FOR YOUR BUSINESS

When it's time to identify and prioritize which projects can maximize your facility's energy productivity, turn to NYSERDA. The Existing Facilities Program team can help you:

- · Identify opportunities for energy savings
- Evaluate return on investment
- Navigate the application process
- Contact us with any questions at: Outreach@nyserda.ny.gov

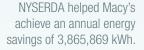
## **Lighting and Lighting Controls**

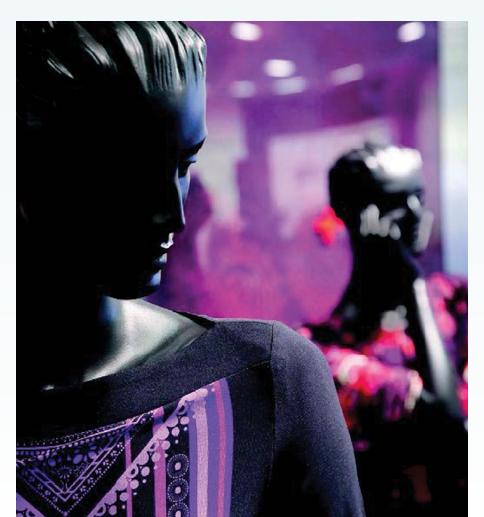
Lighting accounts for approximately 35% of the electricity consumed by commercial buildings in the U.S., according to the U.S. Environmental Protection Agency's ENERGY STAR® Program. Energy-efficient lighting system upgrades save money through reduced energy consumption, as well as through reduced maintenance costs. Lighting system improvements can also increase employee and customer comfort, enhance showcasing of retail products, and improve employee productivity.

The Existing Facilities Program offers incentives to promote the design and implementation of effective, energy-efficient lighting in commercial buildings or spaces. Our team can work closely with you to improve lighting system performance and maximize savings, frequently by combining new technology with an integrated fixture layout and controls design.

#### Examples of eligible lighting projects and technologies include, but are not limited to:

- · Installation of high-performance or reduced-wattage lighting, including LEDs
- Installation of lighting controls—Hard-wired passive infrared and/or ultrasonic occupancy sensors
- · Workstation-specific lighting systems Dimmable ballasts, occupancy sensors and lighting management control systems
- · Daylighting—Reduces the need for artificial light, while also providing passive solar heating and cooling benefits
- For more information, please visit nyserda.ny.gov/efp/tools-and-resources.





# Control Technologies and Monitoring-Based Commissioning

Controls play an important role in improving energy efficiency by allowing operators to centralize the monitoring of equipment, track building energy usage in real time, identify anomalies in operation, and program equipment schedules to reduce operating hours and automate set points. Implementing capital improvements with complementary controls can help maximize energy and cost savings, while also increasing building occupants' comfort.

The Existing Facilities Program can help you offset the costs of materials as well as engineering and energy management service fees associated with upgrading energy-related automation and data collection systems.

Automated controls—Achieve energy savings without human intervention. Eligible automation projects include, but are not limited to:

- · Installation of new Building Management Systems (BMS)
- · Converting pneumatic controls to Direct Digital Control (DDC), adding new control capabilities, and other BMS upgrades
- · Advanced occupancy controls such as:
  - · Demand control ventilation (DCV)
  - · Installation of card reader controls

Monitoring-based commissioning (MBCx)—Systems that continuously measure energy use through whole-building and/or subsystem monitoring and the use of metering equipment. The MBCx process helps diagnose equipment problems, while also tracking and helping to ensure continued energy savings.

Need to implement a combination of energy efficiency, demand response and/or MBCx control strategies? You may be eligible for higher incentives and raised cost-share.

For more information on controls, visit nyserda.ny.gov/efp/tools-andresources.



## **Chillers**

The Existing Facilities Program can help you achieve significant energy savings by funding improvements to chilled water systems. While the program encourages a "wire-to-water" approach, any chilled water system improvements that save energy are eligible. If your proposed chiller exceeds the current ASHRAE standard energy-efficiency threshold, you could also qualify for a Super-Efficient Chiller Bonus.

#### Eligible improvements include:

- Installing new, energy-efficient electric chiller(s)
- Reconfiguring chilled water distribution piping and control structures, including adding variablespeed pumping
- Improving air handling systems (for example, by adding variablefrequency drives)
- Adding or increasing the capacity for free cooling
- For more information on chilled water systems, please visit nyserda.ny.gov/ efp/tools-and-resources.



Process chillers provide an energy-efficient alternative to a strictly mechanical cooling system.

## **Demand Response**

Demand response projects play a vital role in alleviating stress on the state's power grid when reliability is at risk of being compromised. Local utilities offer demand response programs to help compensate end-users for reducing energy usage or using backup generators at peak demand times.

The Existing Facilities Program offsets the costs of installing these new load curtailmentenabling systems. It also supports projects that combine demand response capabilities with energy-efficiency initiatives.

Projects eligible for demand response incentives include, but are not limited to:

- · Controls that enable the curtailment of load in specific building systems
- · Load-shedding ballasts
- · Direct load control and automated demand response infrastructure
- New, clean demand response generator projects in the Con Edison electric service area
- For more information on demand response, visit nyserda.ny.gov/efp/tools-and-resources.

An excellent model of energy efficiency, the Empire State Building retrofit project will allow the landmark to reduce energy use by 38%.

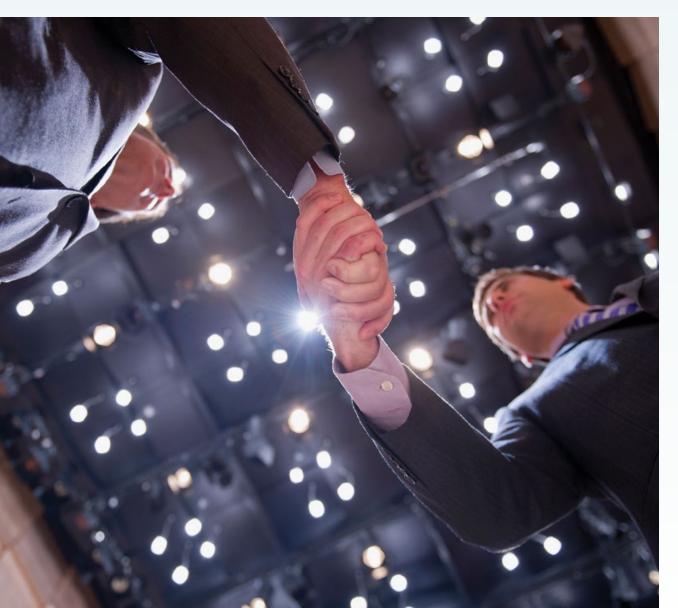


## Natural Gas Efficiency

Improving the operational efficiency of your heating equipment will lower your energy bill and reduce your facilities' overall emissions. NYSERDA's Existing Facilities Program provides incentives for cost-effective natural gas projects that produce verifiable energy savings. These incentives can help reduce the cost of your next energy-efficient heating improvement and improve your return on investment.

#### Eligible natural gas improvements include, but are not limited to:

- · Boiler and/or furnace retrofits and replacements
- · Water heater upgrades
- · Heat recovery systems (e.g., flue gas economizer)
- · Process heating equipment upgrades
- · Steam/hot water distribution piping insulation
- · Boiler controls systems
- For more information on natural gas incentives, visit www.nyserda.ny.gov/efp/toolsand-resources.



Work with NYSERDA to determine improvements to your heating equipment that could be eligible for incentives.

## Invest in Energy Efficiency

Need financing for your energy-efficiency projects? There are a variety of financing options available, and the NYSERDA team can help you identify the best fit for you. **Some options include**:

- Dormitory Authority of the State of New York (DASNY) Provides financing and construction services to higher education, healthcare facilities and other not-for-profit institutions which serve the public good. DASNY's Tax-Exempt Equipment Leasing Program (TELP) is often used as a funding source for energy-efficiency equipment. (www.dasny.org)
- Energy NY Finance, a Property Assessed Clean Energy (PACE) Program Provides an alternative to traditional loans by offering PACE financing, by which a property owner opts to pay for energy-efficiency and renewable-energy improvements via a special finance charge added to the property tax bill. Under the Energize NY Finance Program, the value of the energy saved or produced will exceed finance costs, and the financing automatically transfers to the new owner if a property is sold. (www.energizeny.org/finance)
- New York City Energy Efficiency Corp (NYCEEC) Provides loans to building owners, ESCOs, and project developers to finance energy-efficiency, cogeneration, and fuel conversion projects. NYCEEC tailors its financing products to meet the needs of its borrowers as they relate to their clean energy projects. (www.nyceec.com)
- New York Power Authority (NYPA) Provides comprehensive energy-efficiency services to identify, design and install improvements for government agencies, municipalities, institutions of higher education, and school districts, along with low-cost financing options for implementing energy-efficiency projects. NYPA has been designated as the lead entity via Executive Order 88 by Gov. Andrew M. Cuomo to carry out his Build Smart NY (www.buildsmart.ny.gov) plan to reduce energy use by state facilities by 20% by 2020. (www.nypa.gov)
- Small Business Administration (SBA) Provides loan guarantees to small, for-profit businesses to support the creation and expansion of small businesses. Loans may be used for a variety of purposes including short- and long-term working capital, the purchase of land, inventory and machinery, and the construction, purchase, or renovation of buildings. (www.sba.gov)
- Small Commercial Energy Efficiency Program Provides access to energy assessments, implementation assistance, and low-interest energy-efficiency financing for small businesses and not-for-profits. (www.nyserda.ny.gov/small-commercial-financing)
- For more information about financing your next energy-efficiency project, call 1-866-774-8818 or email us at Outreach@nyserda.ny.gov.

The NYSERDA team can help you identify the best funding opportunities for your business.



## WE HAVE EXPERTISE IN YOUR VERTICAL

Partner with a technical expert who really knows your business. NYSERDA has programs and staff dedicated to serving several industry verticals, including:

- · Colleges and Universities
- · Commercial Real Estate
- · Data Centers
- · Healthcare
- Manufacturing
- · Retail
- For more information, visit nyserda.ny.gov.



NYSERDA has provided Columbia University with millions of dollars in incentives for energy-efficient improvements.

"Macy's dropped display lighting costs by nearly 73% per year in New York. Now we're taking the program nationwide."

- BILL LYONS, VP OF ENERGY MANAGEMENT, MACY'S

"NYSERDA played a tremendous role in the successful energy-management strategies that we've implemented at Northeast Health.... The initial studies helped us measure the money we've saved and made it easy to justify the initial investments."

DAVIE CAESAR, AVP—FACILITIES AND PROJECT
 MANAGEMENT, NORTHEAST HEALTH

"New York State's willingness to invest in energy-efficient technology through the NYSERDA program enabled the University of Rochester to meet the computational needs of the research community. The NYSERDA funding was invaluable as the university sought to reduce its energy footprint without compromising its ability to support world-class computational research."

 DAVID E. LEWIS, VP FOR IT AND CHIEF INFORMATION OFFICER, UNIVERSITY OF ROCHESTER

## **Process Overview**

## Submit Your Application

Within 90 days of contracting, and prior to any demolition or removal of existing equipment, applicants should provide the following:

- · A Consolidated Funding Application (CFA)
- · A utility bill documenting your SBC
- · Preliminary energy savings calculations

#### NYSERDA Issues a Purchase Order

- · Once energy savings are estimated, a purchase order is issued for the anticipated incentive amount.
- The applicant has two years from the purchase order issue date to complete installation.

## Submit an Engineering Analysis

- NYSERDA will assign a technical consultant to assist in the process and review the energy savings for each project (at no cost to you).
- · A pre-installation inspection is conducted to understand the project and document the base case.
- · Energy-savings calculations are completed based upon data supplied by the applicant.
- · A Measurement and Verification (M&V) plan may be required for large projects.

**CONTINUED ON REVERSE** 

## Process Overview, continued

#### Receive Post-Installation Verification

- · Once the improvement is installed and operational, contact the technical consultant for verification.
- · If there are any changes, your energy savings estimate is updated.
- · Documentation of project cost is collected.
- If the project is below the M&V threshold, 100% of the incentive is paid upon approval of the post-installation report.
- · For projects requiring M&V, up to 60% of the incentive may be paid upon approval of the post-installation report and the initiation of data collection for M&V.

### Measurement and Verification

- · If M&V is required, data are collected per the M&V plan which, depending on the project, may be up to one year in duration.
- Once the M&V is completed, the technical consultant will review the results and issue a report to NYSERDA.
   Final incentive levels may be adjusted based upon data gathered during M&V.
- · Final incentive payment is issued.

For more information or assistance with the application process, please contact the NYSERDA-contracted representatives:

Luthin Associates, Inc. and Willdan Energy Solutions Luthin Associates, Inc.
ENERGY MANAGEMENT CONSULTING

P: 1-866-774-8818

E: Outreach@nyserda.ny.gov



#### **About NYSERDA**

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create cleanenergy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit NYSERDA.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

Toll Free: 1-866-NYSERDA



