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New York State Energy Research and Development Authority (NYSERDA)

Clean Energy Communities Program

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Clean Energy Communities Program

Provides **rewards and recognition** to city, town, village, and county governments that demonstrate clean energy leadership

STEP 1: Earn the **Clean Energy Communities** designation by completing **4 out of 10 high-impact actions**

STEP 2: Access **grant funding**, up to $250K with no local cost share, to support additional clean energy projects

Dedicated and knowledgeable local coordinators are available to assist communities as they implement high-impact actions i.e. free on-demand technical support, decision support, step-by-step guidance, case studies, model ordinances, RFPs, etc.

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10 High-Impact Actions

1. Benchmarking
2. Clean Energy Upgrades
3. LED Street Lights
4. Clean Fleets
5. Solarize
6. Unified Solar Permit
7. Energy Code Enforcement Training
8. Climate Smart Communities Certification
9. Community Choice Aggregation
10. Energize NY Finance

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Benchmarking

- Benchmarking is a policy that a local government adopts that requires the annual reporting of energy used in buildings.
- It's important because buildings account for over 60% of the energy used in New York State.
- Allows you to compare energy usage against other buildings, and better identify opportunities to cut energy waste.
- Helps to make smarter investment decisions, reward efficiency, and drive widespread, continuous improvement.

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Benchmarking Legislation

The applying jurisdiction must duly adopt either a local law, ordinance, or resolution.

A template resolution and local law is available in the Benchmarking toolkit at www.nyserda.ny.gov/cec

Key provisions of the template legislation include:

- The local government may exempt a particular Covered Municipal Building from the benchmarking requirement if it is determined that it has characteristics that make benchmarking impractical.
- The local government shall issue a report to the legislative body annually including but not limited to summary statistics on Energy consumption for Covered Municipal Buildings derived from aggregation of Benchmarking Information, a list of all Covered Municipal Buildings identifying each Covered Municipal Building that were determined to be exempt from the benchmarking requirement and the reason for the exemption, and the status of compliance with the requirements of this Policy.

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ENERGY STAR Portfolio Manager

Management Tool

Helps business and organizations by offering a platform to:

- Assess whole building energy and water consumption
- Track changes in energy, water, greenhouse gas emissions, and cost over time
- Track green power purchase
- Share/report data with others
- Create custom reports
- Apply for ENERGY STAR certification

Metrics Calculator

Provides key performance metrics to integrate into a strategic management plan

- Energy consumption (source, site, weather normalized)
- Water consumption (indoor, outdoor)
- Greenhouse gas emissions (indirect, direct, total, avoided)
- ENERGY STAR 1-to-100 score (available for many building types)

→ ***Accessible in a free, online secure platform: www.energystar.gov/benchmark***

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Requirements

Demonstrate completion of the Benchmarking action by submitting the following documentation:

For small and medium size communities (0-39,999 population) and all county governments
Submit a copy of an executed local law, ordinance, or resolution (template legislation can be accessed in the Benchmarking toolkit at www.nyserda.ny.gov/cec) that requires the applying jurisdiction to make available to the public on the internet on an annual basis, energy use information for each municipal building that is owned or occupied by the applying jurisdiction that is 1,000 square feet or larger. At a minimum, publicly disclosed energy use information shall include each building's energy use intensity (EUI), annual greenhouse gas emissions, and an energy performance score where available.

For large size cities, towns, and villages (40,000+ population)
Submit a copy of an executed local law, ordinance, or resolution (template legislation can be accessed in the Benchmarking toolkit at www.nyserda.ny.gov/cec) as described for small and medium-size communities above, and/or to establish the same requirement for the owners of commercial and multifamily buildings 25,000 square feet or larger.

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Benchmarking

Local government officials that implement Benchmarking can expect to:

- ✓ Identify energy saving opportunities in buildings
- ✓ Spark investment in energy saving upgrades
- ✓ Address a major source of emissions: buildings

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Clean Energy Upgrades

- Clean Energy Upgrades are energy efficiency and renewable energy projects in municipal buildings and facilities.
- By replacing outdated equipment with new smart and efficient technology, municipalities are well positioned to save energy and money over time.
- State programs can help get these projects accomplished with no or low up-front cost while generating net savings to your bottom line.
- Everything from municipal headquarters to public works facilities, fire stations, police precincts, parks facilities, and even water treatment plants are good candidates for upgrades.

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Examples of Clean Energy Upgrades

Lighting Upgrades

- Interior
- Exterior

Building HVAC

- Controls / Building Management Systems
- Motors and VSDs
- Boiler and chiller plant upgrades

Building Envelope

- Doors and windows
- Insulation

Domestic water heating systems

Water and Waste Water Facilities

- Motors and Variable Frequency Drives (VFDs)
- Controls
- Digester Gas Systems

Renewable Energy Projects

- Solar photovoltaic (PV)
- Geothermal Heat Pumps
- Wind Turbines

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Requirements

Demonstrate completion of the Clean Energy Upgrades action by submitting the following documentation:

- Submit an ENERGY STAR Portfolio Manager benchmarking report including energy use information for each municipal building that is owned or occupied by the applying jurisdiction that is 1,000 square feet or larger. The report shall include each building's energy use intensity (EUI), annual greenhouse gas emissions, and an energy performance score where available. The report should cover at least 12 months but not more than 36 months of energy use of the portfolio from the year(s) prior to the commencement date of the upgrades as the baseline.

- Submit succinct and relevant documentation that demonstrates a minimum 10 percent reduction in greenhouse gas emissions against the baseline with projects that are substantially complete by the date of submission. The documentation may include 1) an ASHRAE Energy Audit, 2) an approved pre-and-post engineering study that identifies implemented Energy Conservation Measures, 3) an executed contract or agreement, or 4) comparable information.

Clean Energy Upgrades

Local government officials that implement Clean Energy Upgrades can expect to:

- ✓ Improve municipal facilities while saving energy costs
- ✓ Complete upgrades with no or low up-front costs
- ✓ Lead by example with energy efficiency and solar

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LED Street Lights

- By replacing conventional street lights with energy efficient LED technology, communities can reduce street light energy use by as much as 65 percent, generating cost savings and emission reductions.
- In addition, street light projects can contribute to creating a well-lit, safer, and more attractive community.
- LED street lights last up to 100,000 hours and require much less maintenance than conventional street lights.
- The opportunity to incorporate smart, connected technology such as dimming functions or parking management offers a world of almost unlimited possibilities.
- Even those communities that do not own their own streetlights have options for converting street lights in their jurisdiction to LED.

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LED Street Lights

- LEDs are energy-efficient – 60% to 70% energy savings
- Last up to 100,000 hours or over 20 years
- Low-maintenance, high-reliability
- Improved lighting, color rendering, and safety
- Platform for smart, connected technology
    - Dimming, shot-spotters, intelligent parking systems, etc.

Examples of LED Street Lights

LEDs in foreground, HPS in background

Requirements

Demonstrate completion of the LED Street Lights action by submitting the following documentation:

- Submit a completed LED Street Light Certification Form (accessed in the LED Street Lights toolkit at www.nyserda.ny.gov/cec) or comparable information demonstrating that a minimum of 50 percent of all municipal and utility-owned cobra-head-style street lights have been converted to LED within the geographic jurisdiction. This documentation should include the number of street lights converted, including the proportion of converted cobra-head street lights to total cobra-head street lights.

- A minimum of 10 fixtures must be converted to LED to qualify per jurisdiction.

LED Street Lights

Local government officials that implement LED Street Lights can expect to:

- ✓ Cut costs by up to $1 million per year
- ✓ Create a well-lit, safer, and more attractive community
- ✓ Reduce the carbon footprint

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Clean Fleets

- Clean Fleets is an effort by local governments to invest in alternative fuel vehicles and infrastructure while increasing opportunities for constituents to access electric vehicle charging stations.

- Compared to gasoline-powered cars, Electric Vehicles (EVs) are more energy efficient and cost about 50 to 70% less to operate per mile. Clean vehicles reduce greenhouse gas emissions and pollutants that cause smog and acid rain.

- Charging stations are being installed at a wide variety of locations across New York State. In communities large and small, urban and rural, there are sites well-suited to hosting charging stations.

- Simple and consistent EV charging station permitting processes can cut costs and reduce delays associated with installing charging stations.

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Requirements

Demonstrate completion of the Clean Fleets action by submitting the following documentation:

- Submit a completed Clean Fleets Certification Form (accessed in the Clean Fleets toolkit at www.nyserda.ny.gov/cec) or comparable information to demonstrate municipal provision of at least one electric vehicle charging station or compressed natural gas (CNG) fueling station. Electric vehicle charging stations must consist of either two (2) or more Level 2 charging ports or one (1) or more DC fast charge ports. Equipment may have been installed at any time prior to the application date, but must be active at the time of submittal. The municipality must own or lease the equipment. Alternative fuel supply infrastructure may be used for government operations or public use.

  OR

- Submit a completed Clean Fleets Certification Form (accessed in the Clean Fleets toolkit at www.nyserda.ny.gov/cec) or comparable information to demonstrate municipal deployment of at least one alternative fuel vehicle in the municipality's fleet. Qualifying alternative fuel vehicles include plug-in hybrid vehicles, battery-electric vehicles, and CNG vehicles. Vehicles must be manufactured for use primarily on public streets, roads, and highways and have a maximum speed capability of at least fifty-five miles per hour. Vehicles may have been purchased or leased at any time prior to the application date, but must be active at the time of submittal.

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Clean Fleets

Local government officials that implement Clean Fleets can expect to:

- ✓ Spend less on fuel costs / total cost of ownership
- ✓ Leverage the spending power of EV early adopters
- ✓ Contribute to cleaner local air quality

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Solarize

- Solarize is a short term (approximately 6-9 months, including planning and outreach), local effort that brings together groups of potential solar customers through widespread outreach and education.
- This model helps customers choose a solar installation company that is offering competitive, transparent pricing. Historically, Solarize campaigns lower the cost of solar 10 to 20 percent.
- After a thorough pre-qualification process, a designated solar installer(s) will be named for the campaign.
- Residents and businesses who sign up for solar installations by a specific deadline will be able to take advantage of group rates below market prices. The more customers who sign up, the lower the price will be for everyone.
- Well-organized Solarize campaigns are a great way to support solar while being active and visible in your community.

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Steps to Implementing a Campaign

Step 1 – Create a Team

Step 2 – Select an Installer

Step 3 – Pre-launch Planning

Step 4 – Campaign Launch

Step 5 – Maintain Momentum

Step 6 – End Campaign

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Typical Solarize Timeline

Months 1 to 2

Pre-launch: Installer Selection, Outreach and Marketing Planning

Months 3 to 4

Launch: Campaign Set Ups Begin

Months 5 to 6

Public Outreach Campaign: Educational Events, Bi-weekly Calls, Solar Tours

Months 7 to 8

Campaign Ends: Celebrate Success

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Requirements

Demonstrate completion of the Solarize action by submitting the following documentation:

- Submit documentation to demonstrate direct municipal participation in previous rounds of NYSERDA Community Solar NY. To earn credit for this action, the Solarize campaign must have been launched after January 1, 2014. Documentation may include one or more of the following: a letter of commitment submitted with the Community Solar NY application, a press release, a flyer from an event hosted by the jurisdiction, a screenshot of the solarize website, newspaper article, a passed resolution, or comparable information.

- Submit a completed Solarize Customer List (a template can be accessed in the Solarize toolkit at www.nyserda.ny.gov/cec) that includes at least ten (10) solar customers that resulted from the solarize campaign within your jurisdiction including the address, name of the installer, and either the date contract was signed, the date the project was installed, the date the installation was permitted, or the date the NY Sun incentive application was submitted.

OR

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Requirements (cont.)

Demonstrate completion of the Solarize action by submitting the following documentation:

- For new Solarize campaigns, before you start the planning process, please send an email to cec@nyserda.ny.gov to ensure all NYSERDA requirements are met to earn credit for this action, including those outlined in the Solarize Scoping Document Terms and Conditions.

- Submit a completed Solarize Campaign Scoping Document, available in the Solarize toolkit at www.nyserda.ny.gov/cec. Please be sure to complete the most recent version. The scoping document will detail the campaign's goals and objectives, roles and responsibilities of project partners, deliverables, and milestones. The applicant shall sign off on the Terms and Conditions included with the Scoping Document to earn credit for this action.

- Submit a completed Solarize Customer List (a template can be accessed in the Solarize toolkit at www.nyserda.ny.gov/cec) that includes at least ten (10) solar customers that resulted from the solarize campaign within your jurisdiction including the address, name of the installer, and either the date contract was signed, the date the project was installed, the date the installation was permitted, or the date the NY Sun incentive application was submitted.

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Solarize

Local government officials that implement Solarize can expect to:

- ✓ Save money with bulk purchasing
- ✓ Create good local jobs in the solar industry
- ✓ Be visible and active in the community

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Unified Solar Permit

- The Unified Solar Permit is a standardized permit application designed to streamline the approval process for installing solar in the community.
- The standardized permit is expected to cut costs by creating a uniform permitting process in municipalities across the State.
- As municipalities adopt the permit, installers and municipalities alike will save time and resources permitting solar electric systems.
- An expedited process will allow these standard systems to pass quickly though the jurisdictional review process, freeing up time for all involved parties, decreasing the overall installation time for customers, and allowing non-standard systems the necessary time for detailed review.

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Requirements

Demonstrate completion of the Unified Solar Permit action by submitting the following documentation:

- Submit a copy of an executed local law, ordinance, or resolution adopting the New York State Unified Solar Permit (the permit can be accessed in the Unified Solar Permit toolkit at www.nyserda.ny.gov/cec)
- Submit a copy of the Unified Solar Permit being used by the applying jurisdiction.
- Please note that an updated version of the New York State Unified Solar Permit was released in October 2016. NYSERDA will only accept the new version of the permit.

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Unified Solar Permit

Local government officials that adopt the Unified Solar Permit can expect to:

- ✓ Efficiently handle large numbers of solar permits
- ✓ Help applicants get in and out quickly
- ✓ Support the local solar industry

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Energy Code Enforcement Training

- The Energy Code is a minimum building standard for energy efficiency, applicable to new construction and renovation of commercial and residential buildings in New York State.
- The Energy Code is a complex document and one of nine building codes in New York State, making implementation and enforcement complex and time consuming.
- Since buildings represent roughly 60% of New York's total energy consumption, there is significant opportunity for energy savings through improved Energy Code compliance.
- This free training focuses on what code enforcement officials need to know about the Energy Code in the context of its practical application on active construction projects.

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Requirements

Demonstrate completion of the Energy Code Enforcement Training action as follows:

For small and medium-size communities (0-39,999 population)
At least one code official must complete a NYSERDA-approved Clean Energy Communities Energy Code Enforcement Training series including both residential and commercial workshops. Small and medium-size communities that enrolled in the Energy Code Enforcement Training prior to August 8, 2017 may complete the requirements as they were originally defined at enrollment, provided the community completes the training by April 1, 2018, or they have the option of participating in the offering as described above.

For large-size communities (40,000+ population)
This training module begins with a preliminary orientation meeting and is followed by collaborative plans review and joint onsite inspection (the footing and foundation inspection and the final inspection are not eligible) of two (2) building projects, followed by a close-out meeting summarizing the results of the module, including key considerations and guidance for moving forward. The local code enforcement officer and at least two other municipal staff, officials, or planning board and zoning board of appeals members must participate in the preliminary meeting and close-out meeting. The entire building department staff is encouraged to participate in all aspects of the training.

Submit a copy of the notification of completion email, or comparable information to earn credit for this action. For more information or to enroll in the training program, please send an email to cec@nyserda.ny.gov or visit www.nyserda.ny.gov/cec.

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Energy Code Enforcement Training

Local government officials that implement Energy Code Enforcement Training can expect to:

- ✓ Receive free training in the community
- ✓ Focus on the practical application of the code
- ✓ Save energy at a community-wide scale

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Climate Smart Communities Certification

- The Climate Smart Communities Certification (CSC) program provides local governments with a robust framework to guide their climate action and enables high-performing communities to achieve recognition for their leadership.
- Designed around the CSC pledge elements, the certification program recognizes communities for their accomplishments through a rating system leading to four levels of award: Certified, Bronze, Silver and Gold.

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Climate Smart Communities Certification

Action 6.11 Install electric vehicle charging equipment (8 points).

How do you earn points?

- 1-10 points per action
- Over 120 total possible actions
- Wide range of action types: planning, policies, outreach, implementation, etc.

NEW YORK STATE OF OPPORTUNITY. Climate Smart Communities

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Requirements

Demonstrate completion of the Climate Smart Communities Certification action by submitting the following documentation:

- Submit a screenshot of the New York State Department of Environmental Conservation (NYSDEC) website or comparable information, that demonstrates your community has been listed as a Certified Climate Smart Community at the certified, bronze, silver or gold level.

- For communities that have already been listed as Certified Climate Smart Communities, achieving a higher level of Climate Smart Communities Certification after August 1, 2016 shall be counted as a new action.

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Climate Smart Communities Certification

Local government officials that implement Climate Smart Communities Certification can expect to:

- ✓ Develop a comprehensive environmental program
- ✓ Create a healthier, more vibrant community
- ✓ Reduce the carbon footprint 80 percent by 2050

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Community Choice Aggregation

- Community Choice Aggregation (CCA) is a municipal energy procurement model that replaces the utility as the default supplier of electricity for virtually all homes and small businesses within your jurisdiction. The utility remains responsible for energy delivery and billing.

- CCA puts control of choosing energy supply in local hands. By pooling demand, communities build the clout necessary to negotiate lower rates with private suppliers, and are able to choose cleaner energy.

- A CCA can allow whole communities to participate in the clean energy economy by ensuring that a greater percentage of electricity is coming from renewable sources.

- CCA has the potential to simultaneously deliver lower monthly bills and cleaner energy for your constituents.

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How CCA Works

source

CCA

buying and building electricity supply

delivery

UTILITY

delivering energy, maintaining lines, billing customers

customer

YOU

benefitting from affordable rates, local control, cleaner energy

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CCA Requirements

To earn credit for the Community Choice Aggregation action under NYSERDA's Clean Energy Communities (CEC) Program, the municipality must submit the following documentation to NYSERDA at www.nyserda.ny.gov/cec:

- Submit a copy of the adopted legislation authorizing the municipality's participation in an opt-out CCA program.

- Submit a copy of an executed electric service agreement between the applying jurisdiction and an Energy Services Company (ESCO) to supply electricity to participating customers on an opt-out basis that is a default 100% renewable clean energy product mix. Renewable energy credits must be certified by Green-e or be Clean Energy Standard (CES) Tier 1 and retired in the New York State Generation Attribute Tracking System (NYGATS).

- For communities that are already part of a CCA, executing an addendum to the electric services agreement after August 1, 2016 to switch to a default 100% renewable clean energy product mix shall be counted as a new action.

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Community Choice Aggregation

Local government officials that implement Community Choice Aggregation can expect to:

- ✓ Be well positioned to secure lower energy prices locally
- ✓ Exercise more local control over energy resources
- ✓ Increase the percentage of renewables in the fuel mix

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Energize NY Finance

- Energize NY Finance, also known as Property Assessed Clean Energy (PACE) Financing, is a program adopted by an eligible local government that allows property owners to pay back the cost of clean energy upgrades to commercial or non-profit property through a special charge on their property tax bill.

- Energize NY Finance enables eligible buildings to secure funds to tackle significant energy upgrades and renewable energy projects.

- This financing structure is available through the Energy Improvement Corporation (EIC). EIC is a local development corporation and a New York State nonprofit established specifically to assist municipalities and property owners achieve long-term energy savings and/or generate renewable power for use on site.

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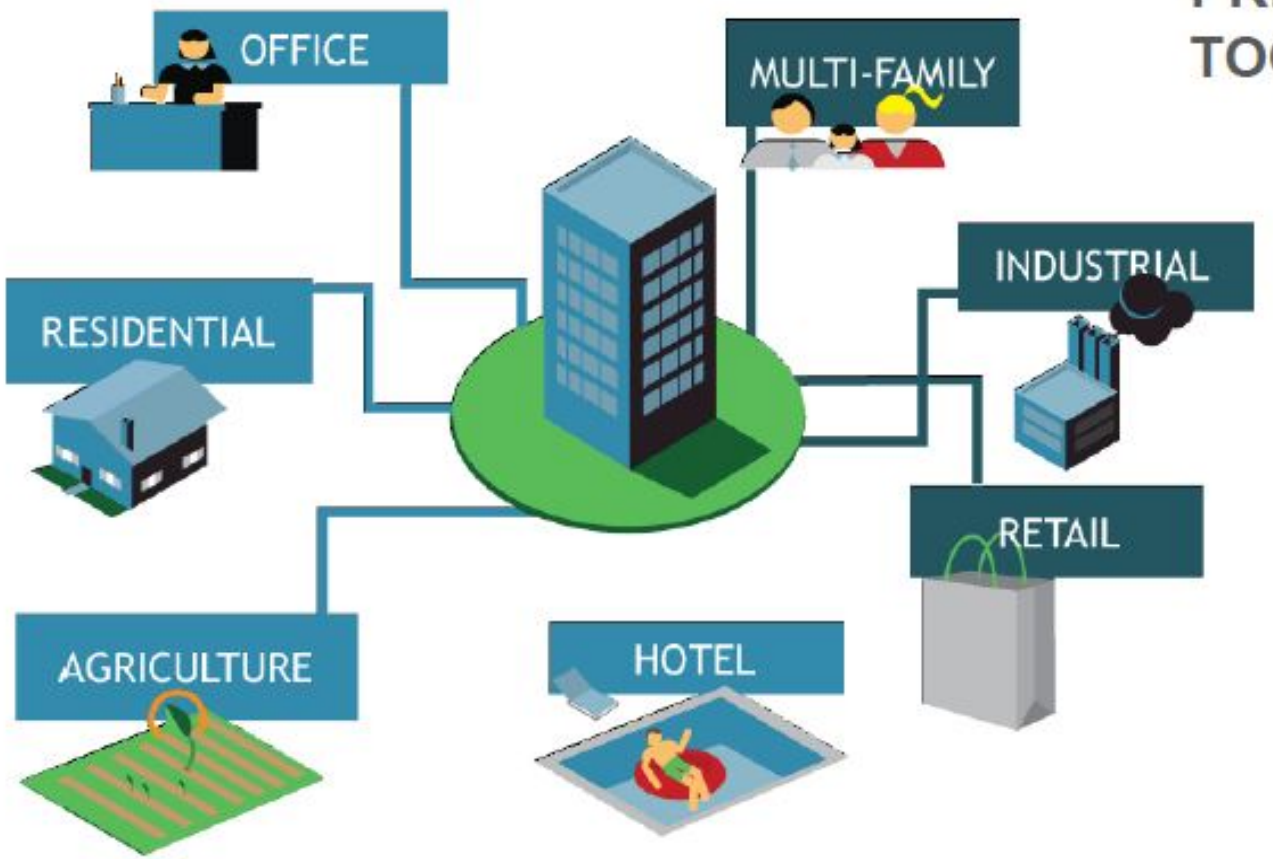
Eligible Building Types

Commercially-owned including Non-Profits

PRIVATE COLLEGES TOO!



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Examples of Clean Energy Upgrades

Lighting Upgrades

- Interior
- Exterior

Building HVAC

- Controls / Building Management Systems
- Motors and VSDs
- Boiler and chiller plant upgrades

Building Envelope

- Doors and windows
- Insulation

Domestic water heating systems

Renewable Energy Projects

- Solar photovoltaic (PV)
- Geothermal Heat Pumps
- Wind Turbines

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Benefits of PACE to Community & Building Owner

- Covers up to 100% of project cost
- Long terms with competitive rates
  - Rates at 4% - 5.75%
  - Flexible terms 5 - 20 years
  - Deeper upgrades
  - Positive cash flow

- Automatically transfers to next property owner
- Aligned with community goals
  - Job creation
  - Keep dollars local
  - Improve building stock
  - Meet sustainability goals

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Requirements

Demonstrate completion of the Energize NY Finance action by submitting the following documentation:

- Submit a copy of the official letter from the Energy Improvement Corporation (EIC) confirming the local government's EIC membership or a screenshot of EIC's Participating Municipalities webpage that shows the applying jurisdiction listed as a current member.

Energize NY Finance

Local government officials that implement Energize NY Finance can expect to:

- ✓ Help businesses save money with energy-saving upgrades
- ✓ Provide financing to improve the local building stock
- ✓ Spark new energy efficiency and solar projects

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Thank You!
Questions?

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