

### **Benchmarking**

A High-Impact Action for the Clean Energy Communities Program

**Communities and Local Government Team at NYSERDA** 

### **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.



### **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





## **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.



### 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 <a href="www.nyserda.ny.gov/cec">www.nyserda.ny.gov/cec</a>) that requires the applying jurisdiction to make available to the public on the internet on an annual basis, energy use information for each municipal

in the Benchmarking toolkit at <a href="www.nyserda.ny.gov/cec">www.nyserda.ny.gov/cec</a>) 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 <a href="www.nyserda.ny.gov/cec">www.nyserda.ny.gov/cec</a>) as described for small and medium-size communities above, but also include a requirement for the owners of commercial and multifamily buildings 25,000 square feet or larger to also comply.

### **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 <a href="www.nyserda.ny.gov/cec">www.nyserda.ny.gov/cec</a>

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.



### **Benchmarking Legislation**

The legislation must require the following:

#### Benchmark

- Create a ENERGY STAR Portfolio Manager Account
- Gather basic information required by Portfolio Manager and set up property profile(s)
- Obtain monthly, whole building energy use data for all fuel types including, but not limited to, electricity, natural gas, fuel oil, chilled water, steam, and diesel
- Enter property uses and details into profile(s)
- Enter energy use data for all fuel types

#### Report

- Generate and review the building's report in Portfolio Manager
- Submit the report to the municipality through Portfolio Manager
- Make available to the public on the internet annual summary statistics for each covered
  property including Energy Use Intensity (EUI), annual greenhouse gas emissions, an energy
  performance score where available, and other descriptive information as required by Energy
  Star Portfolio Manager

  NYSERDA

### **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: <u>www.energystar.gov/benchmark</u>



# Case Study 1 – New York City Local Law 84

- Local Law 84 has been applicable since 2010 for public sector buildings and since 2011 for large private sector buildings.
- 23,417 buildings are required to annually benchmark energy and water use including 2.3 billion square feet of private sector buildings and over 281 million square feet of public sector buildings
- 84% compliance rate in 2012, the third year of required benchmarking
- According to the US Department of Energy, New York saw a cumulative energy savings of 5.7% during the first four years of the policy from 2010 through 2013 including a total dollar savings of \$267,492,147.

## Case Study 2 – Cambridge, Massachusetts

- Cambridge, MA (pop. 105,162) enacted a Building Energy Use Disclosure Ordinance by a vote of 9 to 0 in July 2014.
- Energy use in buildings accounts for about 80% of GHG emissions in Cambridge, with two-thirds of the total related to commercial, institutional, and large multifamily buildings.
- Disclosure places the information in the marketplace, where various users such as potential property buyers, tenants, realtors, energy service providers, and others can use the data and to help create value for higher energy performing properties.
- The data will also aid the City and others in planning for higher energy performance in the building stock.



### **Tools and Resources**

#### **Model Benchmarking Resolution for Small Communities and Counties**

This Model Benchmarking Resolution provides a template for local legislation to meet the requirements of the Benchmarking action for small / medium size municipalities (with a population of 39,999 or less) and all county governments.

#### Model Benchmarking Local Law for Small Communities and Counties

This Model Benchmarking Local Law provides a template for local legislation to meet the requirements of the Benchmarking action for small / medium size municipalities (with a population of 39,999 or less) and all county governments.

#### **Model Benchmarking Local Law for Large Communities**

This Model Benchmarking Local Law provides a template for a local legislation to meet the requirements of the Benchmarking action for large size cities, towns, and villages (with a population of 40,000 or more).

#### **ENERGY STAR Portfolio Manager Training Resources**

This website offers a series of videos and training resources on using the ENERGY STAR Portfolio Manager. This website offers a series of videos and training resources.

#### **Technical Support**

Dedicated and knowledgeable local Clean Energy Coordinators are available to help municipal officials implement Benchmarking.

To access this support, please send an email to cec@nyserda.ny.gov

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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



### Contact

Communities and Local Government
New York State Energy Research and Development Authority (NYSERDA)
Email: cec@nyserda.ny.gov

www.nyserda.ny.gov/cec

