

## 6.2 Reduce Energy Use Across All Municipal Buildings

10 – 100 Points

### Action Updates

This action has been revised for the **2019 certification cycle**. A version of this action from the prior program year is [available for comparison](#). Edits are highlighted in yellow.

### Objective

Achieve at least 10% weighted energy use intensity reductions for overall municipal building energy. Energy use intensity means energy use per square foot of building area.

### What to Do

#### Achieve an Energy Efficiency Target in Municipal Buildings (Up to 50 points)

*All elements must be completed to receive credit.*

1. Complete the Sustainable CT action: [Benchmark and Track Energy Use](#).

**Submit:** Proof of completion of the Benchmark and Track Energy Use action, which can be achieved by responding to the [SCT Portfolio Manager data request](#).

2. Choose an energy baseline year that is consistent for all municipal buildings included in your benchmarking portfolio. **Note:** Use Kilo-British Thermal Units (kBtu) per square foot as the measurement.

**Submit:** Identify your baseline year. Respond to the [SCT Portfolio Manager data request](#) and follow the instructions within the data request on how to submit for points under this action. If using a different energy benchmarking platform, please provide benchmarked data for your baseline year.

3. Achieve an overall weighted energy use intensity reduction of at least 10% for the municipal buildings included in your benchmarking portfolio (see list under Action 6.1, Benchmark and Track Energy Use) as compared to the baseline year. Additional points will be awarded: 10 points for each additional 10% interval reduction (maximum 50 points).

**Submit:** Respond to the [SCT Portfolio Manager data request](#) and follow the instructions within the data request on how to submit for points under this action. If using a different energy benchmarking platform, please provide documentation that shows your energy reduction below your baseline.

#### Achieve an Energy Efficiency Target in Wastewater Treatment Plants (Up to 50 points)

1. Complete the Sustainable CT action: Benchmark and Track Energy Use for Waste Water Treatment Plants. Achieve measurable reductions in energy use for water treatment or wastewater treatment facilities. Earn 10 points for each 10% energy use reduction in water treatment or wastewater treatment facilities, as measured by MMBtu (million British Thermal Units) per million gallons throughput, against a baseline year (maximum 50 points). You may select a baseline year within the past five years of the year seeking Sustainable CT certification.

**Submit:** Submit the SCT Portfolio Manager data request or equivalent documentation showing energy

use data compared to your baseline year.

## Credit for Past Action

- Proof of energy use reduction must be demonstrated for the most recent, complete year for each time certification is sought.

## Potential Municipal and Community Collaborators

Staff from the following municipal departments could be helpful in implementing this action: planning, building, public works, and purchasing. In addition, the following committees or community groups could help implement this action: energy commission and planning and zoning commission.

## Funding

Below are potential funding sources specific to this Action. For a complete listing of potential funding opportunities to assist with implementing Sustainable CT Actions, please visit the [Sustainable CT Grants Portal](#), which is searchable by Action. Please also visit the [Sustainable CT Resources for Certification](#) page for opportunities for technical assistance and other supports.

- [Collins Aerospace Green Communities Grants](#)
- [Urban Act Grant Program](#)
- [Municipal Grant Program \(MGP\)](#)
- [CHEJ Small Grants Program](#)

Many energy efficiency projects can be structured so that the savings fully finance the cost of the upgrades. Electric and natural gas utilities in Connecticut administer nationally-recognized energy efficiency programs that can provide technical assistance, financial incentives, and low-cost financing to help your municipality develop and implement energy efficiency projects. Also, check out the CT Department of Energy and Environmental Protection's [Energy Savings Performance Contracting](#).

## Resources

### *Toolkits, Calculators, Guidance Documents, General Information*

- [Eversource manual on automated data transfer to Portfolio Manager](#)
- [United Illuminating \(UIL\) Integration with ENERGY STAR Portfolio Manager](#)
- CT Department of Energy and Environmental Protection, "[Energy Efficiency](#)"
- Acadia Center, "[Community Energy Vision, Action Guide for Connecticut](#)"
- Common energy efficiency measures in municipal buildings include, but are not limited to:
  - LED lighting and lighting controls (outdoor and indoor);
  - High efficiency heating, ventilation, and air conditioning (HVAC) equipment and controls;
  - Building envelope improvements to reduce air infiltration and improve insulation;
  - Plug load controls;
  - Co-generation; and
  - Energy efficient appliances and equipment.

### *Organizations and Relevant Programs*

- [Energize CT](#)
- [Building Operator Certification Training](#)
- [Energy Savings Performance Contracting Program](#)
- [Connecticut Energy Efficiency Fund](#)
- [American Council for an Energy Efficient Economy \(ACEEE\)](#)
- [Energy Star](#)
- Various energy efficiency programs and technologies available:
  - LED lighting and lighting controls:

- LED bulbs use significantly less energy than do incandescent and CFL bulbs.
- Occupancy sensors increase efficiency and save money.
- Lumination controls help to take advantage of daylight lighting.
- HVAC equipment and controls:
  - **Wireless HVAC Controls allow automatic temperature control.**
- [Building envelope improvements](#)
- [Plug load controls](#)
- [Co-generation](#).
- [Energy efficient appliances and equipment](#).
- Computerized building management systems: These systems better help building managers understand building performance, as well as their impact on building operating efficiencies.

## Benefits

Energy efficiency has many benefits, including:

- Saving money by reducing utility bill costs and operations and maintenance costs;
- Improving public health through reduction of greenhouse gases and criteria pollutants;
- Reducing reliance on finite natural resources; and
- Improving indoor air quality, working conditions, and public health.

There are a number of positive energy efficiency actions a municipality can take to lower energy costs, operations and maintenance costs, and harmful emissions while improving working conditions and extending the useful life of municipal infrastructure.

## CT Success Stories

- [2018 Glastonbury - Recognized Data](#)
- Scotland, CT: [Reduced Municipal Energy Use by 20%](#)