6.2 Reduce Energy Use Across All Municipal Buildings

10 – 100 Points

Action Updates

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

Objective

Reduce energy use intensity for municipal buildings and public spaces.

What to Do

If you collaborate with other municipalities or other stakeholders to implement this Action, please describe the partnership in the "partners" box of your submission. Please also consult this guidance document to help your municipality earn points for actions pursued in partnership. Regional collaboration and other forms of partnership are highly encouraged.

1. Achieve an Energy Efficiency Target in Municipal Buildings **(Up to 50 points)**

   All elements must be completed to receive credit.

   a. 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.

   b. 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.

   c. 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.

2. Achieve an Energy Efficiency Target in Wastewater Treatment Plants **(Up to 50 points)**

   a. 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

For spring certification, count back from February 1st of the current year. For fall certification, count back from August 1st of the current year. For further clarification on determining if your prior work is eligible to earn points, click here.

- **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.

- Urban Act Grant Program
- Municipal Grant Program (MGP)
- 2020 Sustainable CT Community Match Fund

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 Protections'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%](#)