7.2 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 updated 2020)

Objective

Reduce energy use intensity for municipal buildings and public spaces.

What to Do

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

   All elements must be completed to receive credit.

   a. Complete Sustainable CT Action Benchmark and Track Energy Use (Track Energy Use in Municipal and Board of Education Buildings).

   Submit: Proof of successful completion of Action Benchmark and Track Energy Use, which can be achieved by responding to the SCT Portfolio Manager data request.

   Timeframe for Credit: Eligible for new action credit. This action falls under the action type "Data Tracking/Benchmarking and Meeting Performance Metrics" (see "Timeframe for Credit" Guidance Document for submission requirements).

   b. 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 Benchmark and Track Energy Use) as compared to the baseline year. You may select a baseline year within the past five years of the year seeking Sustainable CT certification, and you may use different baseline years for different buildings if you have added buildings to your portfolio over time. ***Note:*** EPA PM automatically selects your baseline as the first 12 months of complete data for each building. 10 points will be awarded for each 10% interval reduction. **(maximum 50 points)**

   Submit: Submit the report generated through the SCT Portfolio Manager data request and follow the instructions within the data request on how to submit for points under this action.

   Timeframe for Credit: Eligible for new action credit. This action falls under the action type "Data Tracking/Benchmarking and Meeting Performance Metrics" (see "Timeframe for Credit" Guidance Document for submission requirements).

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

   a. Successfully complete Sustainable CT Action Benchmark and Track Energy Use for Wastewater 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.

Timeframe for Credit: Eligible for new action credit. This action falls under the action type "Data Tracking/Benchmarking and Meeting Performance Metrics" (see "Timeframe for Credit" Guidance Document for submission requirements).

Timeframe for Credit

Actions can either be "New" or considered for "Rolling Credit."

New Action Credit. Any action completed within the past three years (from January 1 of the year seeking certification) is eligible for potential certification points. If you are applying for recertification in your year of expiration, you may not claim New Action Credit for items that previously received credit.

Rolling Credit. For any action older than three years (from January 1 of the year seeking certification), you must demonstrate ongoing, currently relevant, and meaningful impact in your community to be considered for certification points. If you are applying for recertification in your year of expiration, you must apply for Rolling Credit for any item that previously received credit, even if it was completed within the past three years.

View the "Timeframe for Credit" Guidance Document for detailed submission requirements.

Engaging Partners

Sustainable CT encourages regional collaboration and other forms of partnership. For every action, please complete the "Partners" box in your submission, indicating the name(s) of any municipalities and/or organizations you partnered with (if any) and a brief description of your municipality's role. If you collaborate with other municipalities, each community will receive points. For additional information, please see the "Partners Guidance Document".

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

If available, 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 Support for Your Town page for opportunities for technical assistance and other supports.

- Urban Act Grant Program
- Municipal Grant Program (MGP)
- 2021 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

- Free ENERGYSTAR Portfolio Manager Benchmarking Assistance for Sustainable CT Communities
- 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

- Glastonbury - Oct 2018 Certification
- Litchfield - Jun 2021 Certification