

6.2 Reduce Energy Use Across All Municipal Buildings

10 Points

20 Points

30 Points

40 Points

50 Points

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

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 efficiency target. If you have participated in the Clean Energy Communities program you may use your most recent baseline year and provide proof that you have benchmarked this year. If you have not participated in the Clean Energy Communities program or would like to set a new baseline, establish and benchmark a baseline year within the past five years. **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 weighted energy use intensity reductions of at least 10% of the municipal buildings included in your benchmarking portfolio (see list under 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.

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.

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

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

Credit for Past Action

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