

7.4 Increase Use of Renewable Energy in Municipal Buildings

10 - 145 Points

Action Updates

This action has been revised for the **current certification cycle**. The previous version of this action is <u>available for comparison</u>. Edits are highlighted in yellow. (Last updated 2024)

Objective

Increase the use of renewable energy in your municipal buildings and public spaces.

Note: The US Environmental Protection Agency defines "renewable energy certificate" (REC, pronounced "rek") as a market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable energy generations. RECs are issues when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy source.

What to Do

Note: No-cost assistance is available for this action. Please allow six weeks to work with SmartBuildings CT.

1. Increase renewable energy use in municipal buildings.

All elements must be completed to receive credit.

a. Successfully complete Sustainable CT Action 7.1 Benchmark and Track Energy Use.

Submit: Proof of successful completion of Action 7.1.1, <u>Benchmark and Track Energy Use</u>, which can be achieved by responding to the <u>SCT Portfolio Manager data request</u>. This subaction is included in the Sustainable CT <u>Climate Leader Designation</u>.

b. Power municipal buildings (including Board of Education) with electricity produced by on-site solar installation and/or via virtual net metering. Electricity produced by the on-site installation and via virtual net metering will count towards this action. 10 points will be awarded for each 10% of your energy use that is powered by renewable sources. The purchase of renewable energy certificates (RECs) can also earn credit toward your municipality's increased renewable energy use. For more information, click here. **(up to 100 points)**

Submit: Submit the report generated through the <u>SCT Portfolio Manager data request</u> and follow the instructions within the data request on how to submit for points under this action. This subaction is included in the Sustainable CT <u>Climate Leader Designation</u>.

2. Participate in a solar energy installation. This participation may be in the form of providing funding or space on municipal land or buildings or participating as an off taker of an installation's generation. To earn points under this action, solar installations must be a minimum size of 40kW or generate 40,000 kWh per year. Solar energy installations must have been completed within the last three years to be eligible for points. (15 points per solar installation, up to 45 points)

Examples of eligible solar installations include:

o Sign an agreement to install a project on municipal property and receive benefits from the system (i.e.,

system purchase, lease or power purchase agreement)

- Sign an agreement to install a project on municipal property (i.e., land lease)
- Participate in an installation not located on municipal property (i.e., an off taker)

Submit: A brief description of the renewable energy installation, including the system size (in kW or kWh), location, installation date; documentation of your municipality's participation in the installation; and documentation that the system is actively in use at the time of submission. This subaction is included in the Sustainable CT <u>Climate Leader Designation</u>.

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 public works, town council, finance, purchasing, information systems, planning and zoning departments, building managers, and energy commission could be helpful in implementing this action.

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 <u>Sustainable CT Grants Portal</u>, which is searchable by Action. Please also visit the <u>Support for Your Town</u> page for opportunities for technical assistance and other supports.

- <u>Urban Act Grant Program</u>
- Municipal Grant Program (MGP)
- Sustainable CT Community Match Fund
- The Energy Efficiency and Conservation Block Grant Program
- The Energy Improvements in Rural or Remote Areas Program
- <u>Strategies to Increase Hydropower Flexibility</u>
- Grid Resilience and Innovation Partnerships (GRIP)

Resources

Toolkits, Calculators, Guidance Documents

- Free ENERGYSTAR Portfolio Manager Benchmarking Assistance for Sustainable CT Communities
- <u>US Environmental Protection Agency's ENERGYSTAR Portfolio Manager</u>
- CT DEEP, Permit Information for Solar Projects: An Environmental Permitting Factsheet
- CT DEEP, STEPs is Sustainable, Transparent and Efficient Practices for Solar Development
- CT DEEP, Renewable Energy Development Initiatives
- CT DEEP, <u>Permitting and Pre-Application Assistance</u>
- Connecticut Green Bank, Solar Programs
- Eversource, <u>Connecticut Non-Residential Renewable Energy Solutions</u>
- UI, Renewable Energy Solutions

Organizations and Relevant Programs

- Energize CT
- CT Green Bank
- US Department of Energy, Office of Energy Efficiency and Renewable Energy

Why This Matters

Other than personnel costs, energy (electricity and heating fuel) is usually every municipality's highest expense. Traditional fossil fuels, like natural gas, propane, diesel, and heating oil, are not renewable, have fluctuating costs, and generate significant adverse environmental impacts through their extraction and combustion.

The use of fossil fuels to generate electricity leads to harmful emissions of both greenhouse gases and air pollutants. Greenhouse gases have a long-term detrimental effect on public health and the environment. Additionally, criteria pollutants such as sulfur dioxide, nitrous oxide, ozone and particulate matter immediately affect public health. These emissions include known carcinogens and contribute to an increased incidence of pulmonary diseases in both children and the elderly. Connecticut is nonattainment for both particulate matter and ozone.

Benefits

Renewable energy generation reduces your community's reliance on finite fossil fuels and shields your town or city from the price volatility of the fossil fuel market.

Converting to renewable energy can reduce or eliminate the detrimental impacts of fossil fuels. Your community may save money after the initial upfront cost on renewable energy installation is paid back by generating on-site, clean energy.

CT Success Stories

- Chester Nov 2021 Certification
- West Hartford Nov 2021 Certification
- Rocky Hill Oct 2022 Certification
- Vernon Oct 2022 Certification
- Wilton Oct 2022 Certification
- Bristol Sep 2023 Certification