

6.4 Increase Use of Renewable Energy in Municipal Buildings

10 Points

20 Points

30 Points

40 Points

50 Points

Objective

Increase the use of renewable energy in your municipal buildings.

What to Do

1. Purchase or install Class I clean energy sources to power municipal buildings (including Board of Education). Electricity produced by the on-site installation that goes through the buildings meter will be counted fully. Renewable Energy Credits (RECs) that are purchased by a community will be counted at 50% of their face value. Points will be awarded in 10 points intervals when 10%, 20%, 30%, 40%, and 50% of your energy use is powered by renewable sources (max 50 points).

Submit: A <u>completed calculator</u> - (see the <u>User Guide</u> for additional assistance), or an equivalent assessment, outlining your renewable energy generation and/or procurement. Please note that any version of the Sustainable CT Renewable Energy Calculator may be submitted.

Credit for Past Action

• The renewable energy calculator must be completed each time certification is sought.

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

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>Sustainable CT Resources for Certification</u> 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

Resources

Toolkits. Calculators. Guidance Documents

- Sustainable CT Renewable Energy Calculator
- User Guide for Municipal Renewable Energy Calculator
- 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, "CT Renewable Energy Portfolio Standard"

- Commercial Property Assessed Clean Energy
- Green Light Solar Power Purchase Agreements
- CT Department of Energy and Environmental Protection, "Renewable Energy"
- Acadia Center, "Community Energy Vision, Action Guide for Connecticut"

Organizations and Relevant Programs

- Energize CT
- CT Green Bank
- CT Green Bank, Solar Power Purchase Agreement
- 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

- <u>2018 Fairfield Extensive Documentation</u>
- 2018 West Hartford Extensive Documentation
- Woodstock, CT: Woodstock CT Green Team
- New Haven, CT: Commits to Power Municipal Buildings with 100% Renewable Energy
- Easton, CT: "Samuel Staples School in Easton Goes Green with 950 Solar Panels"
- Fairfield, CT: Fairfield Clean Energy Task Force