

## Westford Sustainable Building Guidelines

### Municipal Buildings

#### PURPOSE OF POLICY

1. To maximize the health and well-being of building occupants and the public at large.
2. To ensure the Town will design and construct its buildings to achieve the highest reasonably attainable and economically viable sustainability performance standards for health, energy use and resilience.
3. To ensure that the town maximizes state and federal grants and subsidies
4. To evaluate and select optimal designs which (1) address the building's intended programmed use and which (2) minimize and mitigate the negative impacts of development, construction and building operations on the natural environment.
5. To maximize onsite renewable energy production given each building's respective site and site use, while minimizing energy use and operational costs of Town buildings.
6. To provide resilient and maintainable buildings.
7. To align Town facility construction and renovation with the [Westford Climate Roadmap](#)

#### SCOPE

Municipal Sustainable Building Guidelines apply to

- New buildings
- Major renovations affecting 15,000 square feet or more with significant upgrades to the mechanical systems and building envelope
- Large additions of 10,000 square feet or more
- Private development on town-owned land
- New roofs: exploration of solar-ready and photovoltaic installations

More modest projects should strive to follow these guidelines as closely as is reasonable.

#### RESPONSIBILITY

##### Project Proponents

Adherence to the Guidelines is the responsibility of the Building Project Proponents, including the Select Board, School Committee and J.V. Fletcher Board of Library Trustees.

##### Project Team

The Clean Energy and Sustainability Committee and Permanent Town Building Committee shall serve in an advisory role to the Project Proponents when there are questions of policy interpretation, implementation, or proposed amendments to this Policy.

## GUIDELINES

The Project Team shall strive to incorporate building features supportive of energy efficiency and minimal greenhouse gas emissions over the projected life of the building or building enhancement.

- The following provisions should apply during all project phases (feasibility, schematic design, design development, construction documents and construction)
- This document shall be included with all Town construction requests for proposals (RFPs) or bid solicitations
- The project team will connect with Mass Save and Westford’s Sustainability Coordinator early in the project life cycle to ensure that all financial incentive programs are considered

<b>Sustainable Design</b>	<p>Sustainable buildings that are cost effective and high performing require a commitment to sustainability at the earliest stages of project development, while considering schedule, budget, and competing or conflicting project objectives.</p> <p>The Request for Qualifications (RFQs) shall reference a sustainable, holistic design approach that seeks to minimize Greenhouse Gas (GHG) emissions over the course of the building’s life. The RFQ should seek responses that project both the overall GHG reductions, and the cost savings expected over the life of the project</p>
<b>Energy Efficiency /EUI</b>	<p>Building energy use intensity (EUI) is the measure of the total energy consumed in a building, expressed as energy per gross square foot of building area, typically expressed in kBtu/sq.ft./yr. Buildings will be designed to achieve a site EUI of 25. If an EUI of 25 is not feasible based on building type, hours of operation or other building characteristics, the Designer shall demonstrate the rationale as to why the EUI is not attainable and will work with the Project Team to set an alternative EUI target.</p> <p>To achieve low energy targets, consideration should be given to strategies and standards set forth in <a href="#">Passive House</a> and <a href="#">Living Building Challenge</a>.</p>

<b>Incentive Programs</b>	The Town should engage with local utility, state, and federal incentive programs as early as possible (ideally during the feasibility phase but no later than the beginning of schematic design) to benefit from design support and to maximize utility incentive payments
<b>Zero Net Energy</b>	A ZNE building, as defined here, is a building in which on- or off-site renewables offset 100% of building energy load. After establishing a target EUI, the Project Team will explore opportunities for ZNE such that on- and off-site renewable systems provide 100% of building energy use. If ZNE is not feasible, the Designer shall provide documentation to demonstrate that ZNE status is not attainable
<b>Peer Review/Commissioning</b>	Engage a Professional Sustainability Peer Reviewer or Commissioning Agent. The Peer Reviewer/Commissioner will consult on and review all sustainability-related aspects of the Project throughout the Schematic Design and Construction phases to ensure that the project meets its sustainability goals.
<b>Solar-ready and PV roofs</b>	The project team shall fully explore the possibility of solar-ready roofs, photovoltaic roof installations, and solar canopies when building a new roof or replacing a roof on an existing building. Installations should be storage-ready.
<b>Electricity and Carbon-Free Energy</b>	To the greatest extent feasible, the project shall utilize electricity or carbon-free forms of energy in heating, cooling, hot water and kitchen appliances. Note: Emergency generators are an exception
<b>LEEDv4.1</b>	In addressing sustainable siting, water conservation, indoor environmental quality and other sustainability criteria, the Project Team will ensure that the Project meets the criteria of <b>LEED v4.1 Silver</b> (or equivalent) and will strive to meet <b>LEED v4.1 Platinum</b> where possible. Official LEED Certification is not required, but the LEED Checklist shall be completed.
<b>Education</b>	Develop the building as an educational resource and exemplar for building occupants and the community at large. Highly sustainable buildings provide opportunities to educate and inspire the community. Sustainable buildings in Westford, especially schools and libraries, should include signs, displays,

	<p>and demonstration spaces, through which students and other community members can learn about mechanical features and how they minimize environmental harm and promote human and environmental well-being.</p> <p>Education will be provided to the users of the building to ensure that the design intent is understood and supported by the building's occupants.</p>
<b>Service Life</b>	Construct the building to have an expected service life of at least 50 years, but preferably much longer, with regular planned system/equipment/finishes replacement.
<b>Sustainable Operation</b>	Develop and implement plans for the sustainable operation of a building guided by a program such as the <a href="#"><u>WELL Building Standard</u></a> .
<b>Recycling, Food Waste Diversion, Food Rescue</b>	Provide sufficient interior and exterior space for the collection, storage and pick-up of recycling. Space for food waste diversion and food rescue items will be provided where applicable.
<b>Electric Vehicle Supply Equipment (charging stations)</b>	The site shall provide for electric vehicle charging stations. Specific requirements are under development by Westford's Planning Board. <a href="#"><u>Reference LEED 4.1 standards for EV Charging Stations</u></a> .