

Action Implementation Blueprints



ACTION NAME

Set progressive sustainability standards for new municipal buildings and schools and develop a phased plan for deep energy retrofits to existing town buildings.

DESCRIPTION OF ACTION

Concord can lead by example by reducing emissions from municipal buildings. Policies and planning will enable new municipal and school buildings to achieve high sustainability standards including net zero energy, all-electric, and resilient design. A zero net energy building is an energy-efficient building that generates as much renewable energy as it uses annually. Developing a plan to complete deep energy retrofits including electrification and renewable energy to existing municipal and school buildings will put Concord on track to achieve 50% emissions reduction in the municipal sector by 2040.

CHAMPION

Sustainability Division, Facilities Division, and Schools

IMPLEMENTATION STEPS	PLANNING CONSIDERATIONS	
	TIME FRAME	KEY PARTNERS
<p>1. Update Town's Municipal Energy Reduction Plan</p> <ol style="list-style-type: none"> Gather town staff to create a task force responsible for facilitating energy performance improvements to existing buildings. Perform portfolio wide energy efficiency assessment/audit, including inventory of equipment and building envelope status. Update the municipal energy reduction plan required by Green Communities using the updated building energy audits and energy analysis. Municipal energy reduction plan should indicate top priorities for energy reduction with priority on electrification. 	2020-2022	<ul style="list-style-type: none"> Town Facilities Division Sustainability Division School administration Senior Management Team Energy services consultants Mass Save and National Grid CMLP DOER-Green Communities
<p>2. Make public pledge to lead by example and achieve high sustainability standards in all new construction of town facilities, including zero net energy (ZNE).</p> <ol style="list-style-type: none"> Agree on standards for new construction. Set date for when requirements go into effect. Consider setting standards for major renovation. 	2021-2024	<ul style="list-style-type: none"> Climate Action Advisory Board CSEC Town Manager Select Board
<p>3. Use Municipal Energy Reduction plan to develop capital improvement plan for town facilities.</p> <ol style="list-style-type: none"> Evaluate costs for energy efficiency and electrification improvements. Work with a phased approach, as funds become available and needs are addressed in order of priority (energy use reduced per dollar spent). Develop sustainability checklist for all capital planning projects to integrate sustainability. Develop plan for solar PV and storage (as appropriate) for existing municipal buildings and facilities. 	2020-2024	<ul style="list-style-type: none"> Building operators Energy manager School administration Finance committee CMLP

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FINANCING RESOURCES AND MECHANISMS

- [MAPC Technical Support](#)
- [MA DOER Green Communities Grants](#)
- [Mass Save](#) and National Grid rebates
- CMLP rebates and incentives for electric measures
- [Performance Contracting](#) with an Energy Services Company (ESCO)

TRADEOFFS (CHALLENGES/BARRIERS)	EQUITY CONSIDERATIONS
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- For existing buildings, up-front costs may be significant for retrofits
- Some town facilities are historic and/or in historic districts
- Grants available but have specific timelines for implementation and cost share
- Procurement process requires low bidder

- Town may use phased approach and take advantage of grants and incentives to ensure best use of taxpayer funds.

TRACKING SUCCESS	ENGAGING THE COMMUNITY
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- Outputs:
 - Updated Municipal Energy Reduction Plan
 - ZNE policy for new buildings
- Outcomes:
 - Reduced GHG emissions
 - Reduced energy use intensity (EUI) of buildings
 - Improved indoor environmental quality
 - More resilient community

- Town can lead by example and share successes in energy reduction with community.
- Community groups and committees should be engaged to help bolster public support for setting a municipal target. In particular, CSEC who has experience working on municipal energy efficiency projects through Green Communities.