

# Implementation and Cross-Cutting Actions



The first few years after plan adoption are critical to its success. Establishing roles and identifying funding will help establish the implementation phase of the plan and ensure the community is on track to achieve its goals. This plan includes robust goals for significant GHG emission reductions and addressing climate resilience. This vision requires commitment and integration of the REP into Town operations, functions, and services. Ultimately, however, successful implementation of this Renewable Energy Plan will require the support and commitment of Peterborough residents and businesses.

## **Implementation Is For Everyone**

The causes and impacts of climate change are broad. Solving it must be equally broad. Some actions will need to be led by the Town Select Board, Town departments, and/or the business community. In addition, there are steps that households and individuals can take to make an impact. Ultimately, achieving the visionary goals outlined in this plan will require engagement and a sense of responsibility not only by the Town of Peterborough leadership and staff, but by the community as well. It is critical for all to remain engaged and active, advancing and advocating for actions you feel are important.



### **Strategies as Minimum Goals**

As aspirational goals, the Peterborough Renewable Energy Plan's strategies and goals should be understood as minimums. The intent, ideally, is that implementation of the plan will ultimately exceed the goals set forth in the plan.

### **Implementation Is a Journey**

It is not possible at the beginning to have all of the detailed answers on decades' worth of actions. Both the Renewable Energy Plan and its implementation are a journey. Although the actions outlined in the REP are designed to demonstrate a pathway for Peterborough to achieve its climate goals, there is much uncertainty in predicting future technologies, costs, and regulations. For this reason, a full cost-benefit analysis of every action is not possible at this time.

We anticipate that refinement of detailed actions will occur while they are rolled out. Accordingly, actions are designed to provide guidance on intent but flexibility of details and design. Actions which may modify/create policy or ordinances or which may have Town expenses incurred should be anticipated to go through the typical Town process for approval.

### **Cross-Cutting Actions**

This section includes Cross-Cutting Actions which are foundational recommendations that apply to multiple sectors. The following actions support the long-range implementation of the Renewable Energy Plan including: Building Internal Capacity, External Support, Funding, and Improved Energy Efficiency within the building sectors supporting the renewable energy transition.

### **Implementation Support Tools**

To support the Town in its initial implementation phase, the paleBLUEDot team has created implementation support tools:

### **Implementation and Monitoring Matrix**

### **Example Climate Action Policies and Ordinances**

The paleBLUEDot team has assembled example policies and ordinances supporting some of the strategies and actions included in the Peterborough Renewable Energy Plan. The examples can be found on the following webpage: <https://palebluedot.llc/peterborough-rep-policy-examples>

# STRATEGIES

The strategies on the following pages guide our path in meeting our climate goals for the Implementation and Cross-Cutting Actions sector. Each strategy is supported by a series of detailed actions to be explored and undertaken in order to carry out the vision and goals.

## Action Implementation

The following are the proposed strategies and detailed actions in support of this section.

Actions are anticipated to be implemented in three phases:\*

Phase 1: action initiation anticipated within 0-3 years of REP approval

Phase 2 action initiation anticipated within 2-5 years of REP approval

Phase 3 within 3-7 years of REP approval

\*Phasing will be established by the PREP Team in collaboration with Town staff and interested residents at initiation of plan implementation (see strategy CC1).

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**CC 1: Continue to Build Internal Capacity for Support of Renewable Energy Plan Implementation.**

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**CC 2: Facilitate External Support Needed for Renewable Energy Plan Implementation.**

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**CC 3: Maintain appropriate funding to support plan implementation.**

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**CC 4: Support cost effective financing options for Peterborough residents and businesses seeking to invest in plan-compatible upgrades.**

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**CC 5: Improve total municipal building electric energy efficiency by 15% by 2030** (electricity and heating/cooling; as 2030 nears, establish additional goals for 2040).

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**CC 6: Improve total Community-wide residential, commercial, educational, and industrial building energy efficiency by 15% by 2030** (electricity and heating/cooling; as 2030 nears, establish additional goals for 2040).

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## ACTIONS

**CC 1:****Continue to Build Internal Capacity for Support of Renewable Energy Plan Implementation.**

CC 1-1	<p>Designate (or establish) and support Planning Assistant / Energy Coordinator staffing required to support the Renewable Energy Plan implementation through tasks such as:</p> <ul style="list-style-type: none"> <li>• Facilitate discussion among large users to reduce emissions through business and industrial strategies.</li> <li>• Participate in technical resource programs as they are available through County, State, Federal, and non-profit provider partners.</li> <li>• Support Town of Peterborough department managers and staff as they implement plan actions within their service area or area of expertise.</li> <li>• Convene an internal Town Renewable Energy Action Team working group that meets regularly and provides updates on progress and success, identifies additional support or resources needed to advance actions of the plan, and collaboratively discusses strategies for more complex challenges.</li> <li>• Ensure the establishment and maintenance of a Peterborough Renewable Energy Action webpage supporting Renewable Energy Action Plan resources for the community.</li> <li>• Coordinate and organize volunteer groups and events.</li> <li>• Engage Town boards and commissions to ensure the Renewable Energy Action Plan is integrated into their work plans.</li> <li>• Seek and pursue funding opportunities</li> </ul>
CC 1-2	<p>The Planning Assistant / Energy Coordinator, under the supervision of appropriate town staff, will work with staff and volunteer committee members to develop annual priorities and implementation workplans that specify implementation tasks, estimated necessary funding and staffing resources needed to support on-going plan implementation. Progress updates will be reported to the PREP team and Town Select Board annually.</p>
CC 1-3	<p>The Select Board shall establish clear guidance and direction for the participation in and support of the Renewable Energy Plan implementation actions by all Town of Peterborough departments. Encourage continuing education of municipal staff relevant to the Renewable Energy Plan, for example, encouraging planners to earn continuing education credits related to bicycle infrastructure.</p>
CC 1-4	<p>Establish clear direction that motions, resolutions, ordinances, or other legislation reviewed by the Town Select Board and commissions/committees that establish or modify policy or appropriations shall be accompanied by a Renewable Energy Plan Alignment Statement.</p>
CC 1-5	<p>Review Renewable Energy Plan implementation progress and impacts on a regular basis (1-2 year cycle). Periodically updating the community-wide and municipal operations GHG inventory will be considered. Strategies and actions should be reviewed for implementation progress and for continued appropriateness. Based on the review, adjust, add, and remove detailed Renewable Energy Plan actions as appropriate.</p>

# ACTIONS

## CC 2:

### Facilitate External Support Needed for Renewable Energy Plan Implementation.

CC 2-1	<p>Task the current PREP Team to act as a primary community member body to support the implementation of the Renewable Energy Plan. Committee's annual work plans should include support of the implementation of the Plan; supporting Town staff in any relevant departments; receiving updates on Town sustainability projects and progress; being provided with opportunity to comment on identification of annual Plan implementation priorities and projects; and providing input on plan adjustments as needed.</p>
CC 2-2	<p>Establish a coordinated communication and education campaign including materials and outreach/activities supporting the communication and educational needs of each of the Plan sections. The campaign should also look to help Peterborough residents and businesses:</p> <ul style="list-style-type: none"> <li>• Understand why change at the individual, community, Town, and business level needs to occur</li> <li>• Understand the environmental, public health, and social benefits of energy efficiency, renewable energy, active transportation, and electric vehicle use</li> <li>• Be informed about programs and offerings supporting the Renewable Energy Plan such as Energy Audits and Group Purchase campaigns.</li> <li>• Be informed about existing federal incentives, including tax incentives, grants, and funding that supports energy efficiency, renewable energy, fuel switching for heating and cooling systems, electric vehicles, and EV charging.</li> <li>• Know the advantages of enrollment in the Peterborough Community Power program</li> <li>• Know the advantages of renewable energy over fossil fuel energy</li> <li>• Know the advantages of electric, solar, and high efficiency wood pellet heating systems over fossil fuel systems</li> <li>• Know the advantages of EVs over combustion vehicles, including: the importance of zero emissions to public health, the contribution EVs make in reducing Climate Change, the lower operating and maintenance costs, the increased torque and performance, etc.</li> <li>• Take advantage of the Town's "one-stop" webpage, voluntary Net Zero Building Guide, voluntary Solar Ready Guide, and voluntary EV Ready Guide resources.</li> </ul>
CC 2-3	<p>Establish, promote, and maintain a "one-stop" webpage to providing residents and businesses with relevant resources, incentives, access to the Town's relevant guides and checklists, information, and links supporting the goals of this Plan.</p>
CC 2-4	<p>Establish a Green Landlords / Bed and Breakfast (B&amp;B) certification program promoting and recognizing residential (rental and B&amp;B) and commercial leased property owners who implement actions in support of this Plan.</p>
CC 2-5	<p>Collaborate with other communities, industry, and State agencies to support the State adopting policies and regulations supporting the goals of this plan such as: incentives supporting energy efficiency, renewable energy fuel switching, and EV adoption; advanced energy efficiency codes; rapid adoption of renewable energy and energy storage; and grid modernization.</p>
CC 2-6	<p>The Town should partner with local businesses, contractors, and installers to offer workshops and training on energy efficiency, renewable energy, and fuel switching for residents and businesses.</p>
CC 2-7	<p>Partner with institutions and businesses within Peterborough to secure commitments to reduce energy consumption, adopt renewable energy, and reduce transportation-related greenhouse gas emissions in line with the goals of this Renewable Energy Plan. Promote and support organizations making commitments.</p>

## ACTIONS

**CC 3:****Maintain appropriate funding to support plan implementation,**

CC 3-1	Establish and maintain funding for staff dedicated to the implementation of the Renewable Energy Action Plan.
CC 3-2	Establish and maintain a Renewable Energy Plan Reserve Fund to support projects on an annual basis as per annual implementation plans.
CC 3-3	Utilize no-cost technical assistance offerings and participate in innovative utility programs as available.
CC 3-4	Explore additional sustainable funding, such as redesigning existing Town fees to progressive fee structures which align with the goals of the Renewable Energy Action Plan as well as State and Federal funds such as the Inflation Reduction Act.
CC 3-5	Explore establishing a new or use of an existing Guaranteed Energy Savings Program (or another option such as a tax-exempt bond or performance contracting) to finance all possible municipal energy efficiency and renewable energy projects.

**CC 4:****Support cost effective financing options for Peterborough residents and businesses seeking to invest in plan-compatible upgrades.**

CC 4-1	Explore partnering with local financial institutions to create loan products to help residents and businesses finance energy efficiency upgrades, fuel switching upgrades, renewable energy installations, and electric vehicle purchases in line with the goals of this plan. Examples include Loan Loss Reserve Funds and Green Bank funds.
CC 4-2	Educate appraisers to become knowledgeable about the value of the green characteristics of residential and commercial buildings and businesses supporting their ability to perform Green Appraisals. By incorporating the value of energy-efficient and other “green” measures into building appraisals, tenants and building owners will see a higher return on investment.
CC 4-3	Explore establishing a privately funded Clean Energy Fund to provide incentives and support residents and businesses in financing energy efficiency upgrades, fuel switching upgrades, renewable energy installations, and electric vehicle purchases in line with the goals of this plan.
CC 4-4	Conduct a study to explore potential income qualified renewable energy and energy efficiency incentives supporting this plan. Based on study, identify and implement pilot incentive programs.
CC 4-5	Explore establishing a Renewable Energy TIF Policy, requiring on-site renewable energy for all projects receiving TIF financing. Explore establishment of a Renewable Energy TIF District specifically identifying TIF financing potential for properties receiving redevelopment which include on-site renewable energy.

## ACTIONS

**CC 5:**

**Improve total municipal building energy efficiency by 15% by 2030** (electricity and heating/cooling; as 2030 nears, establish additional goals for 2040).

CC 5-1	Introduce a policy that requires all municipal buildings to be benchmarked with the current Energy Score rating, the energy use intensity (kBtu/square foot) and the energy reduction goal. These benchmarks and goals shall also be posted on the Town's "one-stop" webpage. Encourage the Contoocook Valley School District to implement a similar policy.
CC 5-2	Finish converting all of the Town's building and site lights to LEDs.
CC 5-3	Conduct new energy audits for all municipal facilities to build on the work done in 2014. Establish an Energy Efficiency Plan by 2024 to outline strategies to achieve deep energy retrofit targets for all municipal buildings and implement improvements by 2030.
CC 5-4	Introduce a policy that requires all new and existing municipal buildings to meet or exceed a sustainability standard including an energy efficiency target. Require new and existing municipal buildings without solar PV installations in place or planned to install cool roof or green roofing. Introduce a policy to require all new municipal capital projects to use Town's voluntary Net Zero Energy Guide and Checklist and voluntary Solar Ready Guide and Checklist to support integration of sustainability measures supporting this plan. Encourage the Contoocook Valley School District to implement a similar policy.
CC 5-5	Continue development and implementation of energy management plans for water supply and wastewater treatment facilities and infrastructure.
CC 5-6	Conduct an occupancy and plug load energy efficiency study of primary Town-owned facilities and establish a "Plug Load and Occupancy Energy Efficiency Guide" outlining operational practices to advance the Town's energy efficiency goals for Town facilities. Provide training to all existing Town employees and provide on-going training to all new Town hires.

**CC 6:**

**Improve total community-wide residential, commercial, educational, and industrial building energy efficiency by 15% by 2030** (electricity and heating/cooling; as 2030 nears, establish additional goals for 2040).

CC 6-1	Partner with established Energy Audit/Energy Efficiency Program (such as NHSaves) to establish or expand and promote residential or multifamily energy efficiency audit and upgrade programs, or establish a new program through Peterborough Community Power to implement an annual Energy Efficiency / Weatherization campaign to achieve significant residential energy efficiency improvements. Make the program accessible to all Peterborough residents, with a priority on low and moderate income households and buildings constructed before 1980. The program should offer building envelope tests, infrared thermal scanning, light weatherization projects, LED light bulb replacement. Additionally, offer building operations and behavioral suggestions, as well as track carbon, energy, and financial savings. Offer reduced participation costs for low income households. Program should explore including competitively selected energy efficiency contractors with discounted rates established for energy efficiency recommendations arising from energy audits. Goal: 75 households annually achieving a 15% decrease in energy consumption.
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## ACTIONS

CC 6-2	Work with Eversource, NH Saves and other local partners to establish commercial/industrial energy efficiency audit and upgrade program. Develop specific energy efficiency programs for hard-to-reach segments of commercial properties (e.g., commercial rental, restaurants, affordable multifamily housing, schools). Program to have enhanced energy efficiency targets meeting Town of Peterborough plan goals. Program should explore including competitively selected energy efficiency contractors with discounted rates established for energy efficiency recommendations arising from energy audits. Goal: 25% of commercial/industrial buildings by 2030 achieving a 20% decrease in energy consumption per location.
CC 6-3	Establish a communication campaign to promote energy efficiency strategies (like use of LED light bulbs) programs, rebates, and incentives available to Peterborough households and businesses.
CC 6-4	Recommend use of a residential energy benchmarking (performance tracking and reporting) and labeling program for all homes listed for sale. Program examples include Vermont Home Energy Profile, HERS and ENERGY STAR Portfolio Manager.
CC 6-5	Recommend energy audits (working with NH Saves) and disclosure statements for all commercial buildings at the point of sale and at the building permitting process for renovations and expansions.
CC 6-6	Explore establishing a Building Energy Performance Standard ordinance. The building energy performance standard for all buildings over 10,000 square feet shall be no lower than the 65th percentile site energy use intensity (EUI) for buildings of each property type collected through benchmarking reported by ENERGY STAR Portfolio Manager.
CC 6-7	Develop one or more "Green Roof" / "Cool Roof" pilot projects to educate on and exhibit heat island mitigation strategies and measure potential for effectiveness. Identify Town building with low solar PV prioritization/feasibility for inclusion as pilot project location. Alternatively, pilot program could be advertised for submission by Town of Peterborough residents, businesses and neighborhoods for potential sites to be considered for pilot project selection. Preference should be given to sites serving low income or at risk communities with high energy efficiency impact potential.
CC 6-8	Based on pilot project findings, explore a Green/Cool Roof policy to promote and advance the development of green roofs and cool roofs on existing buildings and new construction where appropriate. Encourage rooftop garden / farm installations which advance food security.
CC 6-9	Explore establishing and promoting policy allowing outdoor clothesline use for all residential properties.
CC 6-10	Review and revise local lighting ordinances to support reduction of electricity use and achievement of Dark Sky Community certification.
CC 6-11	Explore adopting and promoting a voluntary green building stretch code including stretch energy efficiency requirements in line with Architecture 2030 goals by 2025. Make stretch code required for all municipal facility projects and all projects receiving \$50,000 or more in municipal tax abatement, financing or funding by 2028.
CC 6-12	Work with the Contoocook Valley School District to promote and support energy efficiency programs, renewable energy installations, and other strategies supporting this plan at all school district facilities and to promote these strategies through curricula with students and communication with families.
CC 6-13	Continue to plant trees along and within paved areas to minimize heat island effect, particularly in locations which can support reduced energy consumption in surrounding residential and or commercial buildings.