

Town Energy Plan Template

Background

- One paragraph overview Roadmap development/baseline (who, what, how, when)
Write out background, how developed energy data, how set goals, about Energy Working Group and how towns adopted 2040 goal
- List of long-term goals that were developed through process
 1. Reduce fossil fuel use on the Island, from a 2018 baseline (50% by 2030 and 100% by 2040) - Town Article approved
 2. (Increase the fraction of our electricity use that is renewable (to 50% by 2030 and 100% by 2040)
 3. Ensure that our energy supply is both adequate and resilient in response to the impacts of climate change

10-year Objectives

Long-term Goal 1: Reduce fossil fuel use on the Island, from a 2018 baseline (50% by 2030 and 100% by 2040)		
10-year SMART Objective	Scale	Mitigation/ Adaptation
Objective 1.1 - 50% of town buildings are better insulated and transitioned to all electric	Municipal	Mitigation
Objective 1.2 - At least 50% town vehicles and equipment (cars, trucks, landscape equipment, etc) are electric	Municipal	Mitigation
Objective 1.3 - Island-wide EV charging infrastructure is in	Regional	Mitigation

place		
Objective 1.4 – At least 50% of homes have transitioned to efficient electric heating, cooling, and hot water	Residential	Mitigation
Objective 1.5 – At least 50% of vehicles are electric	Residential	Mitigation
Objective 1.6 – At least 50% of landscaping equipment is electric	Residential	Mitigation
Long-term Goal 2: (Increase the fraction of our electricity use that is renewable (to 50% by 2030 and 100% by 2040)		
Objective 2.1- Community solar array sites located		
Objective 2.2- ____% buildings have solar arrays		
Objective 2.3- ____% of people buying power from renewable sources		
Long-term Goal 3: Ensure that our energy supply is both adequate and resilient in response to the impacts of climate change		
Objective 3.1 - Town buildings are resilient in the face of climate change.	Municipal	Adaptation
Objective 3.2 - All residents have access to power and water in a prolonged power failure	Residential	Adaptation
Objective 3.3 - Town is prepared to offer needed services during emergencies	Residential	Adaptation

Implementation Plan

Objective 1.1 - 50% of town buildings are better insulated and transitioned to all electric						
Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 1.1.1 A prioritized plan is developed to determine in what order the Town buildings will be transitioned						
Action 1.1.2 Engineering studies are conducted to determine the required scope of work for each building						
Action 1.1.3 A long term capital improvements plan is developed to finance the work needed to make the transition to 100% electric. Grant opportunities are researched						
Action 1.1.4 ____ no of buildings are done in this time period						

*key for funding estimates

\$ = less than 1K

\$\$ = greater than 1K, less than 10K

\$\$\$ = greater than 10K, less than 50K

\$\$\$\$ = greater than 50K

Objective 1.2 - At least 50% town vehicles and equipment (cars, trucks, landscape equipment, etc) are electric

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 1.2.1 An inventory of town vehicles is done and a prioritized plan is in place for transitioning them to all electric as technology allows						
Action 1.2.2 An inventory of town equipment is done and a prioritized plan is in place for transitioning them to all electric as technology allows						
Action 1.2.3 A long term financial plan is developed to allocate funds for the transition of vehicles and equipment						
Action 1.2.4 ___ no of vehicles are transitioned in this time period						
Action 1.2.5 ___ no of equipment is transitioned in this time period						

Objective 1.3 - Island-wide EV charging infrastructure is implemented

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 1.3.1 An island-wide plan is developed as to where charging stations are needed and prioritizes when they should be installed, including mapping where they are already in place						
Action 1.3.2 Town makes their plan to implement their portion of the charging stations including determining funding sources						
Action 1.3.3 Town funds and grants are used to finance the installation of the charging stations						
Action 1.3.4 ____ no of charging stations are in place in this time period						

Objective 1.4 - At least 50% of homes have transitioned to efficient electric heating, cooling, and hot water

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 1.4.1 Town Dissemination of information: Town website, Building Department have information explaining and promoting air source heat pump technology for heat, cool, hot water						
Action 1.4.2 Handouts are prepared and are in place for island-wide dissemination of information about heat pump technology						
Action 1.4.3 Advisory service is in place to advise homeowners about steps, technology, costs, rebates to make the transition						
Action 1.4.4 Home rule petition requiring use of all-electric equipment in new construction and major renovations is prepared and voted on at Town Meeting						
Action 1.4.5 Assessors and Building Dept have system in place to track the installation of heat pumps for heat, cool and hot water (both new and replacements)						

Objective 1.5 – At least 50% of vehicles are electric						
Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 1.5.1 Town dissemination of information: Information is posted and readily accessible on town website about electric vehicles and where to learn more about costs, rebates Excise tax mailings used to provide information about electric vehicles						
Action 1.5.2 Handouts are prepared and are in place for island-wide dissemination of information about electric vehicle technology						
Action 1.5.3 Annual dissemination of information via an electric vehicle event						
Action 1.5.4 System is in place for Town Treasurer to track number of electric vehicles registered in Town						

Objective 1.6 - 50% of landscaping equipment is electric

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 1.6.1 Town website, Building Department have information explaining and promoting electric landscaping equipment						
Action 1.6.2 Town (island-wide?) bylaw is developed and voted on at Town Meeting requiring transition by _____ date						
Action 1.6.3 Way to track how much equipment there is and how much has been transitioned						
Action 1.6.4						

Objective 2.1- Community solar array sites located

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 2.1.1 A prioritized plan is developed to determine where community solar arrays could be located						
Action 2.1.2						
Action 2.1.3						
Action 2.1.4						

Objective 2.2- ____% buildings have solar arrays						
Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 2.2.1 An inventory is done to determine how many solar arrays there are in the town.						
Action 2.2.2 Building Dept sets up a tracking system to keep track of installation of new solar arrays and if they have battery storage systems						
Action 2.2.3 Advisory service is in place to advise homeowners about steps, technology, costs, rebates to install solar						
Action 2.2.4						

Objective 2.3- ____% of people buying power from renewable sources

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 2.3.1 An inventory is done to know where people are getting their power?						
Action 2.3.2 Tracking system is in place to know how many electrical accounts are getting power from renewable sources						
Action 2.3.3 Advisory service is in place to advise homeowners about where can buy power from renewable sources						
Action 2.3.4						

Objective 3.1 - Town buildings are resilient in the face of climate change.

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 3.1.1 Emergency generators are tested and are backing up correct critical loads at each building and are right-sized						
Action 3.1.2 A prioritized plan is developed to determine the order in which the Town buildings will receive solar and back up battery systems and where to have microgrids						
Action 3.1.3 Engineering studies are conducted to determine the required scope of work for each building						
Action 3.1.4 A long-term financing plan is in place to add solar and batteries at each town building (with possibility of grant or other support)						
Action 3.1.5 ___ no of buildings are made resilient in this time period						

Objective 3.2 - All residents have access to power and water in a prolonged power failure

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 3.2.1 A plan is developed as to where to provide emergency water and power across the town—both at Town sites and in specific neighborhoods						
Action 3.2.2 Town public water access sites are in place with signage and information on town website about their locations						
Action 3.2.3 Locations are researched for possible neighborhood power and water hubs (existing generators)						
Action 3.2.4 Locations are researched for possible community solar arrays that could also provide emergency power and water						
Action 3.2.5 Map is created and is available on paper and on town website of available sites						

Objective 3.3 - Town is prepared to offer needed services during emergencies

Objective/ Actions	Lead & Support	Estimated Funding needed*	Date of Completion	Indicator of Progress/ Success	Who will Track?	When do you Track?
Action 3.3.1 CERT Training is offered in Town. Goal of being sure there are CERT volunteers in each area of the town.						
Action 3.3.2 Town is broken up into areas with a system in place that coordinates efforts of CERT volunteers in each area of the town						
Action 3.3.3 Coordination with Council on Aging and Police Dept for emergencies is in place						
Action 3.3.4 Shelter options are in place for those who need more assistance during prolonged power failures/emergencies						