

CLIMATE ACTION TOOLKIT #2

Retrofit Existing Housing Stock



PENOBSCOT
CLIMATE ACTION



VERY HIGH POTENTIAL
to achieve greenhouse gas
emissions reductions



HIGH POTENTIAL
to build community
resilience

Description of the Action

Energy efficient homes have cheaper utility bills, provide better protection in extreme weather, and produce fewer greenhouse gas emissions—contributing to a more affordable, resilient, and low-carbon community. A wide range of organizations and initiatives support housing retrofits throughout the State and region: Efficiency Maine and MaineHousing offer financing, incentives, information, and technical assistance; initiatives like retrofitMAINE, Window Dressers, and the Maine Energy Americorps Program offer outreach, education, implementation support, and trainings; and workforce development partners, including the Maine Community College system, are expanding a skilled workforce for building retrofits. The Penobscot Climate Action region can build on these state and local initiatives to create an expanded and coordinated program to support housing retrofits in the region. This program could include the following components:

1) Connect residents to energy audits - This component would involve working with a network of community partners and/or a team of “Energy Ambassadors” that would lead outreach and connect homeowners and landlords with resources to complete an energy audit. Energy audits will help identify the highest priority actions for increasing energy efficiency, provide residents with next steps and resources, and ensure that residents are able to strategically weatherize their homes so that any future installations of energy efficient heating and cooling systems are more effective.

2) Expand financial support for retrofits - Create a local program that can supplement and expand the rebates and financial incentives offered by Efficiency Maine, making energy efficient retrofits even more accessible and affordable. Bangor is currently using Community Development Block Grant (CDBG) program funds to provide **additional rebates** of up to \$2,000 to low- to moderate-income homeowners to help cover any remaining costs above Efficiency Maine rebates for heat pump installation and weatherization. This program could be modeled similarly, but would focus on also providing support to landlords to ensure energy efficiency benefits are accessible to renters, as well. Retrofits could focus on weatherization, energy efficiency, electrification, and/or renewable energy options.

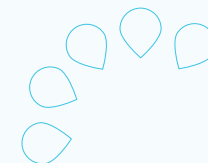
3) Connect residents with retrofit resources, case studies, and testimonials - This component would focus on outreach and community conversations with homeowners, landlords, property managers, and renters about opportunities for energy efficiency and/or renewable and resilient energy system retrofits and the barriers or challenges that residents may be facing when trying to take action. The goal would be to develop a set of tailored resources, testimonials, and/or other support as needed to help residents navigate those challenges. This could be led and developed in collaboration with community partners supporting building retrofits, or with an undergraduate or graduate school class or program.

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How This Action Supports the Goals of Penobscot Climate Action

- ★ **Equity and Environmental Justice.** Ensuring that housing retrofits are accessible to residents with low incomes, older adults, residents with disabilities, new Mainers, renters, and other priority populations – through expanded financial support, specialized programs, and targeted outreach – will ensure that everyone has access to the cost-savings, comfort, resilience, and environmental health benefits that energy efficient housing can provide.
- ★ **Environmental Health.** Increasing housing energy efficiency will reduce greenhouse gas emissions and other pollutants, slowing the effects of climate change with the additional potential to improve indoor air quality.
- ★ **Community Resilience.** Energy efficient housing can decrease energy cost burden, increase healthy living conditions, and better protect residents in extreme weather, contributing to a healthier, safer, and more resilient community.
- ★ **Regional Collaboration.** This action requires knowledge, resources, and capacity of the local community to support, and will foster collaboration between regional groups, initiatives, academic partners, and companies during implementation.

Photo in upper left: Homes at the intersection of Clinton, High, Ohio, and Hammond Street in Bangor • Photo by Tony Webster



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4) Create partnerships with workforce development partners

- Identify ways to strengthen connections between workforce development programs, and the residents who will be making housing retrofits through the housing retrofit campaign. Ensure that local workforce development programs are setting up students to become certified / authorized vendors through Efficiency Maine.

5) Consider a regional approach - Consider creating a regional sustainability energy coordinator position that could coordinate with utilities around data requests on behalf of municipalities in the region, serve as a spokesperson and coordinator of regional energy projects, as well as coordinate this type of building retrofit campaign at a regional scale. If this building retrofits program were to be implemented regionally, a municipal cost-share structure would need to be established to offer the expanded financial support to residents across communities.

KEY PARTNERS

- **Organizations that support energy and building retrofits**, such as Efficiency Maine, retrofitMaine, passivhausMaine, Window Dressers, and the Maine Energy Americorps Program
- **State partners**, such as MaineHousing and the Maine Office of Energy Efficiency and Renewable Energy
- **Communities with success in building retrofit programs**, such as the Penobscot Nation
- **Homeowners, landlords, and landlord associations**
- **Construction sector**, such as approved / registered contractors through Efficiency Maine
- **Academic partners and building trades and certification programs**, such as Eastern Maine Community College and Kennebec Valley Community College

Steps for Implementation

COMPONENT 1

Connect Residents with Energy Audits

Launch a campaign with a coalition - Launch a campaign to support homeowners and landlords in completing an energy audit. This may include building out a network of local community partners who can champion this outreach (e.g., Maine Energy Americorps, retrofitMAINE, Window Dressers) and/or hiring a team of part-time energy ambassadors to lead outreach. Seek out energy ambassadors who bring an ability to connect and personally relate to people who have lived experience that may make it more challenging to pursue energy retrofits – including people who are low-income, people with disabilities, older adults, people who primarily speak a language other than English, and New Mainers, among other priority populations. Outreach should also focus on connecting with landlords to ensure rental properties are able to benefit. Outreach may include activities at community events; workshops hosted by community-based organizations, community groups, or associations; door-to-door outreach; advertisements in local media outlets; podcast episodes; or other creative means.

Connect residents with (free) energy audits - Connect residents with Efficiency Maine, Campus Climate Action Corps programs (e.g., at UMaine), and/or other local energy service providers that provide energy audits. If energy audits are not already offered for free, identify ways to provide gap financing, through grant funding, third party partnerships, or another source.

Gather energy audit data - Set up means to collect data on who is reached through the outreach, who pursues an energy audit, and the energy retrofits recommended from the energy audit. This data will both help in assessing the impact of the outreach, as well as support follow-up outreach related to funding, technical assistance, or other support related to home energy retrofits.

COMPONENT 2

Expand Financial Support for Retrofits

Identify the scope of the program - Identify the range of activities that will be supported through the program – for example, weatherization, energy efficiency, electrification, and/or renewable energy retrofit options. Identify whether the program will specifically aim to reach certain communities, demographics, or types of property owners and whether the program will have any eligibility requirements.

Establish expanded financing structure - Work with Efficiency Maine to develop a funding structure whereby



Building window inserts for weatherization at the 2023 Town of Orono Community Window Insert Build • Photo by Dan Dixon

the municipality provides additional incentives / financial support on top of what is offered through current Efficiency Maine programs. This program could be capitalized through Community Development Block Grant funding, particularly to reach low-income households, and supplemented through other Federal / State funding for energy efficiency efforts. To the extent possible, consider models whereby the service provider is paid directly by the program (rather than requiring that the homeowner or landlord front the cost).

Consider rolling out a bulk buy program - Consider rolling out a bulk purchasing program as an alternative or additional way to reduce the cost of renewable and/or energy efficient technology (such as heat pumps or solar hot water systems) for residents. In a bulk purchasing program, the municipality coordinates a “bulk purchase” of a particular technology at a discount, which allows residents to access that technology at a reduced price.

PRECEDENTS

- **South Portland Electrify Everything Program** - South Portland, ME launched a municipal program that offered rebates that extend beyond what is offered by Efficiency Maine.
- **Lexington HeatSmart Program** - Lexington, MA launched a program in collaboration with the [HeatSmart Alliance](#) that offered incentives, outreach, and advising to homeowners.
- **Tacoma Income Qualified Property Assessments** - Example of incentives and resources for landlords, established through collaboration with the local utility.
- **Boston Retrofit Resource Hub** - Example of a clearinghouse of resources for building retrofits for all types of properties.

COMPONENT 3

Connect Residents with Retrofit Resources, Case Studies, and Testimonials

Set up a partnership for expanding retrofit resources –

Develop a partnership (or a set of partners) to collaborate with on the development of retrofit resources, which may include local non-profits or advocacy organizations or an undergraduate or graduate school class or program. Identify what would be needed (funding, academic credit, learning opportunities, etc.) for the partnership to be valuable for all parties.

RESOURCES TO GET STARTED

- **Meeting Maine's Energy Code and Retrofit Trainings** - One-day, in-person local trainings on understanding the new energy code, retrofits, and high performance buildings for builders, general contractors, architects, code enforcement officers, planning boards, electricians, plumbers, HVAC, enthusiasts, and more.
- **Efficiency Maine** - Efficiency Maine provides guidance, tools, and resources for building retrofits.
- **retrofitMAINE** - retrofitMAINE provides technical information, data, and case studies on building retrofits.
- **Multifamily Retrofit Toolkit** - Toolkit by Enterprise Green Communities with guidance for retrofitting multifamily buildings
- **Mainer's Guide to Climate Incentives** - A State resource that provides guidance and highlights financial support through Efficiency Maine, MaineHousing, and Federal Tax Credits
- **Strategy Recommendations to Mitigate Emissions and Support Resilience in Maine Buildings** - A report provided to the Maine Climate Council from the Buildings, Infrastructure, and Housing Working Group

Connections Across Existing Work and Other Climate Action Strategies

Maine's climate plan, *Maine Won't Wait*, sets targets for transitioning to cleaner and energy efficient heating and cooling systems, and for accelerating energy efficiency improvements. Much of this work is being rolled out through programs, resources, and incentives coordinated through Efficiency Maine and MaineHousing. Efficiency Maine offers resources, tools, and tips to homeowners (as well as for businesses and municipalities), and provides incentives for energy efficiency projects including heat pumps, weatherization, and appliances. MaineHousing likewise provides programs to assist low-income residents improve weatherization, purchase energy efficient equipment, and offset energy costs.

Locally, the Penobscot Nation on Indian Island has been working to install heat pumps in homes of Tribal members with the greatest need, and recently received an EPA grant to install 150 more. The Penobscot Nation is simultaneously launching a Wabanaki workforce development initiative that will support the community's ability to expand residential energy efficiency retrofits. Many other workforce development partners, including Maine's Community College system, are working to expand relevant green building trades. Kennebec Valley Community College in Fairfield, for example, just opened a new heat pump workforce training lab in 2021.

This action builds on, expands, and fosters coordination across this wide range of initiatives that currently support building retrofits, including connecting residents to existing funding and technical assistance offered by Efficiency Maine and MaineHousing. This toolkit also dovetails closely with Toolkit #7 (Developing resources for businesses) and Toolkit #8 (Supporting green workforce development).



Identify information and other resource needs – Work with partners to connect with homeowners and landlords about where they run into sticking points when considering or pursuing building retrofits, and what additional resources may be needed to take advantage of Efficiency Maine or MaineHousing resources.

Develop resources - Develop resources to address gaps, collaborating with Efficiency Maine and MaineHousing in the process. Resources may include expanded information, connections to local service providers, or testimonials and case studies from other community members.

Connect people seeking retrofits to trades programs

- Work with trades training programs to connect new contractors with home retrofit projects facilitated through this program. See Toolkit #8 (Supporting green workforce development) for more details.

COST CONSIDERATIONS



- The scale of the program to support building retrofits (and the scale of financial support) can be calibrated to fit available funding streams. Bangor has traditionally provided up to \$2,000 (per home) in additional incentives beyond what's provided by Efficiency Maine.
- Beyond direct financial incentives, the primary cost is staff time to coordinate the program and compensation for additional program staff (e.g., Energy Ambassadors) to lead outreach, connect residents to audits, and to develop resources, case studies, and testimonials.
- Consider partnerships with nonprofits and academic programs who may already be doing similar work or seeking similar goals in order to share costs, staff capacity, or educational opportunities. Consider coordinating the program regionally to share costs.

POTENTIAL SOURCES FOR FUNDING

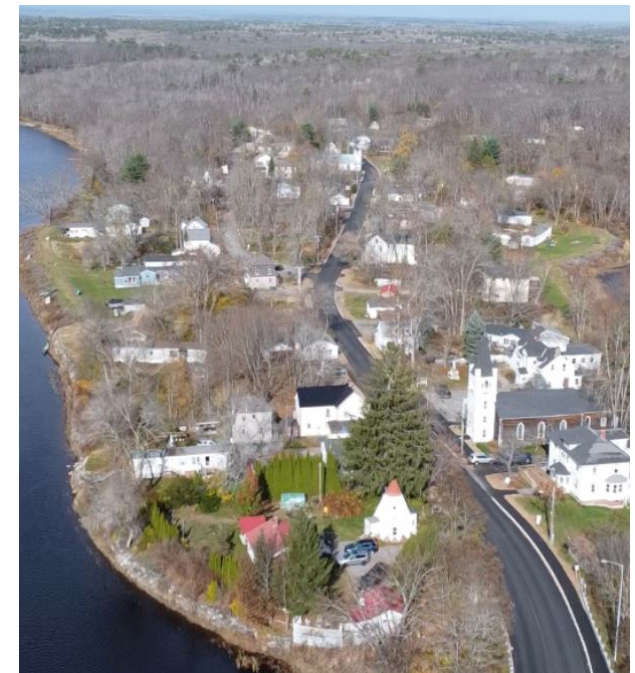
For toolkit implementation:

- **Maine Community Action Grants** – Funding for climate mitigation and adaptation efforts, including capacity building, planning, and implementation projects.
- **Community Development Block Grant (CDBG) funding** - Funding that can be allocated to a program to fund building retrofits, particularly for housing retrofits for low-income families. Communities that are not CDBG entitlement communities would need to apply for CDBG funding.
- **The Environmental Justice Government-to-Government Program** - “Provides funding at the state, local, territorial, and Tribal level to support government activities that lead to measurable environmental or public health impacts in communities disproportionately burdened by environmental harms.” The Penobscot Nation just received a \$1 million grant to install 150 heat pumps in homes of Tribal citizens with the greatest need.
- **Energy Efficiency and Conservation Block Grant Program (EECBG)** - Federal funding designated to assist states, local governments, and Tribes in implementing strategies to reduce energy use, to reduce fossil fuel emissions, and to improve energy efficiency.
- **State Based Home Energy Efficiency Contractor Training Grants** - “This program provides \$200 million in grants for States to develop and implement a State program which shall provide training and education to contractors involved in the installation of home energy efficiency and electrification improvements, including improvements eligible for rebates under a HOMES or HEEHRA rebate program.”

For funding or financing housing retrofits:

- **Efficiency Maine Residential Incentives** - List of rebates and discounts (and federal tax credits) for homeowners investing in energy efficiency and renewable energy, with different tiers of support based on income. Rental properties with one or two units qualify for these incentives.

- **Efficiency Maine Incentives for Multifamily Buildings** - List of incentives and financing options for commercial buildings (including multifamily buildings with three units or more).
- **MaineHousing Weatherization Program** – MaineHousing’s Weatherization Program provides grants to low-income homeowners and renters to reduce energy costs by improving home energy efficiency.
- **MaineHousing Heat Pump Program** - MaineHousing’s heat pump program pays for the cost and installation of a heat pump for eligible Maine homeowners.
- **New England GrassRoots Fund** - Provides funding for community based climate action initiatives.



Homes on Penobscot Indian Island • Photo by Matthew Dewitt