Playbook Lesson Learned
Phase 3: Project Preparation

Maine Islands Achieve Quick Win Through Vendor Coordination, Community Outreach and Engagement

The islands along the coast of Maine pay some of the highest energy prices in the country—up to $0.70/kilowatt-hour (kWh) for electricity and a dollar more per gallon of heating oil than what is paid on the mainland. On 15 Maine islands, citizen groups seeking to reduce vulnerability to energy supply disruptions and improve the resilience of their year-round communities began looking toward new energy technologies as potential solutions. As they sought support in addressing their energy and resiliency challenges, these grassroots island energy transition leaders turned to the Island Institute, a local nonprofit dedicated to sustaining Maine’s island and remote coastal communities through strong economies, education and leadership, and shared solutions.

Working collaboratively with the Island Institute, several islands decided to launch a collective purchasing project called “Weatherization Weeks.”

Challenge
The project addressed a common challenge island communities face as they begin the project preparation phase—the need to execute a “quick win” project in order to build momentum for energy transitions. To get the Weatherization Weeks project off the ground, these remote communities began by targeting the most pressing project barriers they faced: a limited existing supply chain, in part due to lack of economies of scale; high transportation costs; and skewed public perception of the costs and benefits of energy efficiency retrofits.

Solution
Because community buy-in is critical to the success of any energy program or initiative, stakeholder education and engagement was the first priority. To address this need, the Island Institute led an effort to coordinate within and among several communities through outreach to vendors and consumers, as well as community engagement. This step created an opportunity to share an accurate, empirically based assessment of energy retrofit benefits with community members.

Between 2012 and 2017, over 380 island homes on 14 Maine islands participated in Weatherization Weeks, saving $126,400 annually.

A barge unloads a spray foam insulation truck on Monhegan island during a Weatherization Week. Photo from Brooks Winner, Island Institute
Additionally, it raised the visibility of an innovative solution to the economies of scale and transportation issues: banding together to reduce the costs of delivering retrofit services to their communities. Lining up eight houses in a week reduced the transportation costs to homeowners by over 80% and enabled homeowners to take advantage of incentives offered by Efficiency Maine, the state’s efficiency trust, to work with certified energy retrofit contractors who would not normally serve those communities.

Initial informational meetings helped community members understand the program and the benefits of home weatherization while enabling project leaders to identify barriers to the program’s success. These early efforts paved the way for developing and executing locally relevant outreach strategies deployed by local volunteers, which included word-of-mouth advertising from trusted messengers in the community, signage at strategic locations such as the post office and ferry terminal, and advertising in local newspapers. The Island Institute and its island partners then coordinated the logistics of transporting the contracting crew and equipment out to the islands, making it easier and more affordable for homeowners to participate and simplifying the process for the contractors.

Key Takeaways
By combining energy audits and initial retrofit work, the Island Institute’s Weatherization Weeks project resulted in energy efficient upgrades that saved homeowners an average of $350 per year in energy costs—savings they began seeing in their second heating season following the retrofits. Collectively, the Weatherization Weeks have resulted in over $2.3 million in total savings for homeowners in these island communities. Sharing the testimonials of past participants were found to be a particularly effective outreach tactic, and as word about the benefits of participating spread, many communities went on to host many subsequent Weatherization Weeks. “The process felt like a very positive one, not only for me but for the island as a whole,” said Eleanor Morse, a resident of Peaks Island. “It felt like a great thing to do as a community. We went through this very snowy, cold winter with a lot more comfort than we would have otherwise.”

The success of Weatherization Weeks also inspired these communities to pursue bulk purchasing of high-efficiency light bulbs and air-source heat pumps. The benefit of banding together to reduce the delivered cost of the advanced lighting technology again became apparent through the Island Institute’s assistance with project coordination and support from local electric utilities, whose information sharing helped consumers choose from among different available products. On one island, Monhegan, bulk purchasing reduced the cost of 2,300 light bulbs by over half, saving community participants around $15,000 per year while balancing impacts to the utility’s bottom line. These initiatives have also increased local interest and engagement in clean energy solutions for public buildings and community-owned renewable energy, demonstrating the potential of a quick-win project to build momentum for island energy transitions.

This lesson learned is one of many provided in the Energy Transition Initiative Islands Playbook—an action-oriented guide to help island communities successfully initiate, plan, and complete a transition to a clean energy system and eliminate dependence on imported fuels. See the full Islands Playbook at www.eere.energy.gov/islandsplaybook.

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