Building Partnerships to Increase Uptake of Residential Energy Efficiency Measures

BuildingEnergy Boston
Brooks Winner, Island Institute
March 8, 2017
“You can’t get theya from heeya!”
Monhegan Weatherization Week Results

- 27 homes weatherized
- Nearly 90% of year-round housing stock

Photo credit: Portland Press Herald
“Getting a spray foam truck out here is a dream come true!”

-Doug Boynton
Monhegan resident, lobster fisherman
Outline

1. Maine’s energy challenges
2. Program Design – What’s working in Maine
3. Community Perspectives
4. Contractor Perspectives
5. Breakout discussion
Island Institute

The Island Institute works to sustain Maine's island and remote coastal communities, and exchanges ideas and experiences to further the sustainability of communities here and elsewhere.
Challenge: High dependence on heating oil

Source: New York Times
Challenge: Maine Homes – Beautiful, but leaky!
Challenge: High Energy Costs

$1,250
Maine residents spend nearly $1,250 per person per year on residential energy

$750
compared to a U.S. average of about $750

3.09% of Maine's GDP is spent on residential energy.

2.37% is the New England average.

1.54% is the U.S. average.

#1
PER PERSON, MAINE'S HEATING OIL CONSUMPTION IS THE HIGHEST IN THE U.S.

#4
MAINE'S RESIDENTIAL CARBON EMISSIONS PER PERSON ARE THE FOURTH HIGHEST IN THE U.S.
Maine is the most rural state in the country, with 61.3% of residents living outside cities. This makes it extremely difficult to create a natural gas infrastructure.
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Conference + Trade Show of the Northeast Sustainable Energy Association (NESEA)
Who are the partners?

- Community partners
  - Energy committees/clubs
  - Affordable housing orgs
  - Municipal governments
  - Non-profits
  - Faith orgs
  - Neighborhood associations
- Contractor/vendor partners
- Program administrators
  - Efficiency Maine
How does the partnership work?

- Community partners contribute:
  - Community outreach
  - Advertising, lead generation
  - Logistical coordination

- Contractor/vendor partners contribute:
  - Efficiency services/equipment (at a discount?)
  - Joint advertising
  - Expertise

- Program administrators contribute:
  - Incentives & financing
  - Trusted, unbiased education
  - Marketing
Collective purchasing: Weatherization Weeks

• Bundling jobs over the course of one week
• Energy Assessment + air sealing – immediate savings
• Affordable for homeowners - $200
  • 75% discount!
  • Payback in first heating season!
• Coordinated logistics – make it easy to say yes!
• Create a buzz! – Comparing blower door scores at the post office
Impacts to Date

• 375+ island homes air sealed on 14 islands
  • 19% of year-round homes
• >1,600 interior storm window inserts built
• >75 heat pumps installed
• Significant increase in participation since 2012
  • 13 homes before ➔ 375+ since
• Total rebates distributed = >$272,000
Collective Purchasing: Weatherize Rockland

• Partners: City of Rockland, Efficiency Maine, Penobscot Home Performance, other local orgs

• How: RFP for discounted work, targeted outreach, energy fair, door-to-door canvass

• Results: 65 homes signed up so far

Photo credit: Brent Danley
Recommendations for Communities

1. If you’re looking for an effective, low-cost, high-impact project, try organizing a collective purchase.

2. Make it easy to say yes!

3. Find good partners! Be a good partner.
   • Partner with organizations who understand and work with hard-to-reach groups that you're trying to reach
   • Who are the connectors?
   • What are the institutions already working there?
Other Models – Energy Smart Bangor

- **Who:** City of Bangor, Efficiency Maine, Contractors, University of Maine
- **How:** $140k allocated from municipal carry-forward.
  - Energy Fair - Hundreds of residents attended event.
- **Results:**
  - 123 reservations issued by the city.
  - 67+ rebates processed in 10 weeks.
  - Compare to 150 rebates in FY16 to residents.
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Questions?
Bridging the Rural Efficiency Gap

• DOE SEP Competitive award to Maine GEO and Island Institute

• Documenting and disseminating effective program models from ME, NH, AK

• Developing resources for program administrators and implementers
  • Toolkit for implementers
  • Whitepaper for administrators
  • Video, webinar, web content

Photo credit: Matthew Baron.
Other Partnerships

- Maine Energy Work Group, NH Local Energy Solutions Work Group
  - Sharing resources, ideas, best practices
- New England Local Energy Network (NELEN)
- Energizing Maine Communities Guide
  - Collaborative project with NEGEF, Northern Forest Center
  - Best practices for organizations supporting local energy projects
7th Annual Island Energy Conference

April 27 - 28, 2017
South Portland, ME

April 29, 2017
Monhegan Island, ME
Discussion Questions

• What are the biggest barriers to uptake in your market?

• How might new partnerships help address these barriers?

• Who might you partner with to address these barriers?