

Triennial Plan III

(for FY2017-2019)

Breakout Session 1

Consumer Products

Home Energy Savings Program

Low Income Initiatives

Stakeholder Forum 2

September 24, 2015



Breakout Session Purpose

- Provide brief overviews of proposed Triennial Plan III programs
- Answer clarifying questions and hear stakeholder feedback on program plans

Note: The purpose of today's session is not to deliberate on the issues or solve challenges.



Consumer Products



Program overview

- Incentives - mark downs, in-store coupons, and mail-in rebates
- Products – lights, appliances, electronics
- Customers
 - Principally residential
 - Significant non-residential through wholesale channel
- Channels – retailers, wholesalers

Program objectives

- Provide energy efficient options for the greatest number of Maine ratepayers
- Reduce peak load demand for electricity
- Reduce total energy costs
- Low delivery costs

Measures promoted

- Lighting
 - CFLs
 - LEDs
- Appliances
- Water heaters
- Potential future measures to add:
 - Other self-install measures like controls and tank wrap

Eligibility

- **Product** – must meet an efficiency threshold (e.g., ENERGY STAR)
- **Person** – possible incentive for referrals
- **Place** – in Maine, limits per location (e.g., one water heater per year per address)
- **Timing** – time limited promotions

Financial incentives

- **Bulbs** – markdown/in-store rebate to make efficient bulb lower price than inefficient alternative
- **Water heaters** – enough to reduce gap between efficient and inefficient option
- **Appliances** – just big enough to initiate conversation with store sales person
- **Tiered rebates** – possibly offer larger incentives for more efficient product
- **Referral bonuses** – consider incentive for participants that enroll others



Marketing

Depending on product:

- Email
- Web advertising
- Direct mail
- Trade associations
- In-store demos and point-of-purchase (POP)
- Shows and presentations
- Print ads



Technical assistance, education, and training

- In-store training
- Wholesaler demo days
- Technical webpages
 - Technologies
 - Retailer/installer locators
 - Savings calculators
 - Usage tips
 - Purchasing guides

Quality assurance / quality control

- Field team verifying prices and POP materials
- Incentive application reviews for eligibility
- Customer satisfaction surveys
- National best-practice benchmarking

Proposed program budget

Year	Electric Budget	Natural Gas Budget	All Fuels Budget (RGGI)	Total Budget
FY 2017	\$12,877,795			\$12,877,795
FY 2018	\$12,048,525			\$12,048,525
FY 2019	\$11,579,581			\$11,579,581



Program benefits

Year	MWh Savings	MW Savings	MMBtu Savings	Lifetime Benefit	B:C Ratio
FY 2017	79,642	10.35	n/a	\$40,754,768	2.62
FY 2018	82,852	10.53	n/a	\$39,098,469	2.71
FY 2019	87,770	10.95	n/a	\$40,713,585	2.95

Home Energy Savings Program



Program overview

- Home Energy Savings Program (HESP)
 - umbrella program for all residential home-based energy efficiency activities
 - includes weatherization (envelope and heating systems)
 - excludes measures offered through the Consumer Products Program
- HESP program design
 - leverages loans and financial incentives
 - encourages Maine residents of all income levels to improve the energy performance of their homes
 - supports measures that are safe, durable, and cost-effective
- Other program activities include:
 - targeted marketing
 - web-based information and tools to help customers compare equipment options
 - network of energy contractors who practice weatherization industry best practices

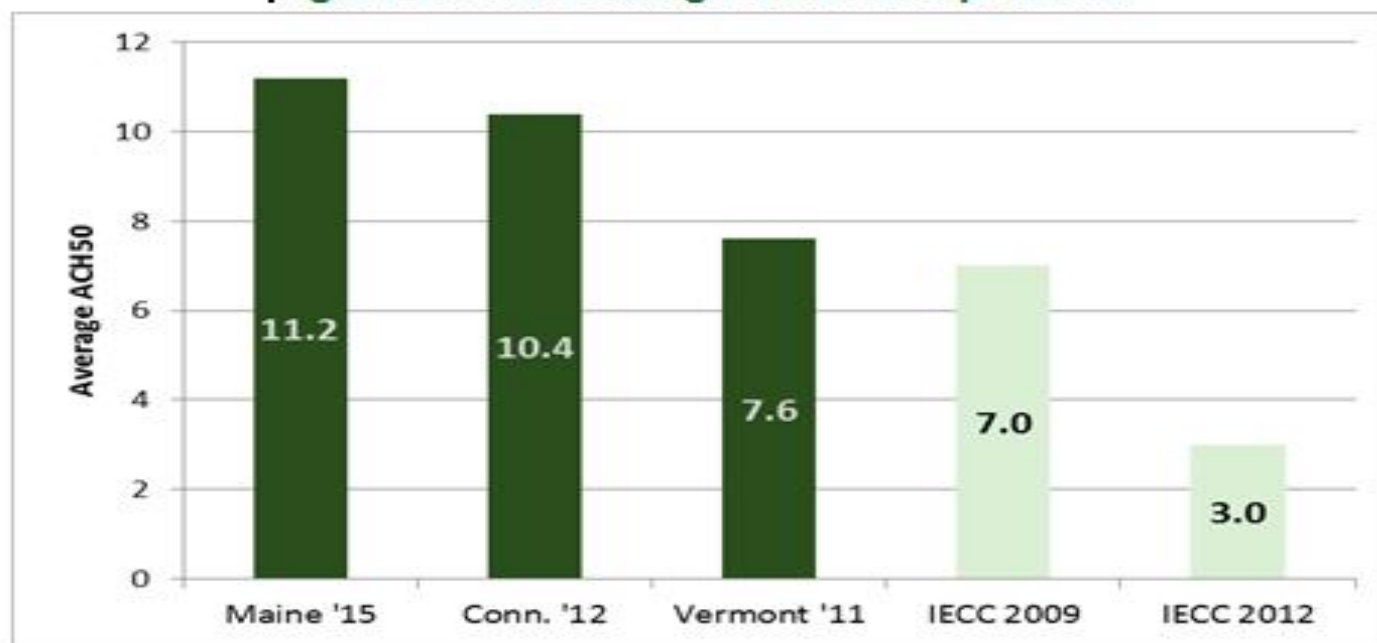


Program objectives

- Invest in measures that lower residential heating energy demand and reduce greenhouse gas emissions
- Significantly advance the statutory goal of weatherizing substantially all homes whose owners or occupants are willing to participate in and share the costs of cost-effective home weatherization
- Increase consumer awareness of cost-effective options for conserving conventional heating fuels, including natural gas
- Promote sustainable economic development and reduce environmental damage through the more efficient use of all fuel types

Residential Baseline Study

Figure 29: Air Leakage State Comparisons



Reducing the average air leakage rate of Maine's existing housing stock to IECC 2009 levels would save the equivalent of 62 million gallon of oil per year from excess air flow alone.

Goal: Reach Average 7.0 ACH50 by 2030

Program Design



Program design overview

- Rebates available for cost-effective measures and projects
 - Energy assessments with basic first-step measures
 - Best-in-class heating systems of all fuel types
 - Thorough thermal envelope upgrades
- Financing available for prescriptive measures to comprehensive projects
 - 4.99% APR to 5.99% APR with terms up to 15 years
 - Supporting projects from \$1,000 to \$25,000
 - Modest underwriting criteria
 - Online application and quick processing

Measures promoted

- Energy assessment with basic air sealing and basic insulation measures
- Complete attic, wall, and basement insulation improvements
- Highest efficiency supplemental heating systems
 - Ductless heat pumps
 - Wood and pellet stoves
- Best-in-class conventional fuel boilers and furnaces
- Ultra-low greenhouse gas heating systems

Eligibility

- 1- to 4-unit buildings where occupants use building as legal principal residence
- Limitations on total amount of rebates provided to individual buildings
- Equipment efficiency and installation criteria based on requirements for safety, cost-effectiveness, best practices for high performance and operational longevity

Program Implementation



Financial incentives

- Rebates
 - Entice and lower costs associated with the uptake of higher efficiency equipment and envelope upgrades than would normally be selected in the marketplace
- Financing
 - Provide attractive options to homeowners who do not have funds on hand to pay for upfront costs that are not otherwise covered by rebates, or do not have access to or interest in conventional lending sources

Marketing

- Marketing efforts may include:
 - Conventional TV and radio campaigns
 - Print advertising
 - Local informational forums
 - Public events
 - Brochure insertion into property tax bill mailings
 - Digital marketing channels
 - web ad campaigns
 - search engine optimization
 - online radio and video ad spots
 - social media platforms

Technical assistance, education, and training

- Continue to offer technical assistance to weatherization contractors and homeowners.
- Review each project as it relates to compliance with program guidelines and eligibility for rebates and loans
- Ongoing dedication to encourage contractor workmanship and customer service through training opportunities and direct communication

Quality assurance / quality control

- Registered Vendor Criteria and list management
 - Code of Conduct
 - Applicable trade licenses
 - Current Insurance Policies
- Link to Maine Attorney General's Model Home Repair Contract
- In-home inspections conducted by highly experienced and certified building analysts
- Quality assurance inspections of 15% of the HESP projects

HESP Proposed program budget

Year	Electric Budget	Natural Gas Budget	All Fuels Budget (RGGI)	Total Budget
FY 2017	\$5,577,641	\$1,804,689	\$7,685,000	\$15,067,330
FY 2018	\$6,322,672	\$1,734,901	\$8,302,500	\$16,360,073
FY 2019	\$7,912,481	\$1,735,742	\$9,756,000	\$19,404,223

Non-low income budget amounts.

Program benefits

Year	MWh Savings	MW Savings	MMBtu Savings	Lifetime Benefit	B:C Ratio
FY 2017	16,223	0.40	138,195	\$135,698,250	2.20
FY 2018	18,183	0.45	145,177	\$144,601,719	2.21
FY 2019	22,657	0.57	164,781	\$170,643,917	2.24

Low Income Initiatives



Program overview

- Targeting funds for low-income residential customers to participate in energy conservation
- 4 channels
 1. Consumer Products Program
 2. Home Energy Savings Program
 3. Food Pantry Light Bulb Distribution
 4. Direct Install

Program objectives

- Reduce total energy cost
- Help reduce utility arrearages and “bad debt”
- Weatherize substantially all homes whose owners or occupants are willing to participate in and share the costs of cost-effective home weatherization

Program Design



Measures promoted

- Consumer Products – lighting, appliances, electronics
- HESP – weatherization and heating systems
- Direct Install – water heaters, heat pumps, lighting, hot water savings

Eligibility

- LIHEAP-eligible
- Cost-effective
- Maine installation
- Registered installer (as appropriate)

Program Implementation



Financial incentives

- Consumer Products – markdown, in-store rebate, mail-in rebates
- HESP – elevated rebates provided to homeowners or contractors for direct discounting of eligible services on invoices
- Direct Install – no-charge installation

Marketing

- Consumer – all traditional methods
- LIHESP – direct mail, Community Action Agencies (CAAs), municipal General Assistance (GA) offices
- Direct Install – CAAs or other community-based initiatives, direct mail

Technical assistance, education, and training

- No- and low-cost energy tips
- Home energy calculators
- Case studies
- Vendor locators
- Kill-A-Watt meters available at public libraries

Quality assurance / quality control

- Quality control inspections of 15% of the HESP and direct installation projects
- Registered Vendor list management

Proposed program budget

Consumer Prod	Electric Budget	Nat Gas Budget	All Fuels Budget	Total Budget
FY 2017	\$2,060,447	0	0	\$2,060,447
FY 2018	\$1,927,764	0	0	\$1,927,764
FY 2019	\$1,852,733	0	0	\$1,852,733

LI HESP	Electric Budget	Nat Gas Budget	All Fuels Budget	Total Budget
FY 2017	0	\$457,907	\$300,000	\$757,907
FY 2018	0	\$468,735	\$300,000	\$768,735
FY 2019	0	\$532,483	\$300,000	\$832,483

Direct Install	Electric Budget	Nat Gas Budget	All Fuels Budget	Total Budget
FY 2017	\$3,191,632	0	0	\$3,191,632
FY 2018	\$3,234,332	0	0	\$3,234,332
FY 2019	\$3,527,935	0	0	\$3,527,935

Program benefits

LI Consumer Products	MWh Savings	MW Savings	MMBtu Savings	Lifetime Benefit	B:C Ratio
FY 2017	12,743	1.66	0	\$6,520,763	2.62
FY 2018	13,256	1.68	0	\$6,255,755	2.71
FY 2019	14,043	1.75	0	\$6,514,174	2.71

LI HESP	MWh Savings	MW Savings	MMBtu Savings	Lifetime Benefit	B:C Ratio
FY 2017	0	0	8,786	\$2,747,442	2.00
FY 2018	0	0	8,994	\$2,812,410	2.00
FY 2019	0	0	8,999	\$3,194,897	2.00

LI Direct Install	MWh Savings	MW Savings	MMBtu Savings	Lifetime Benefit	B:C Ratio
FY 2017	12,241	1.51	0	\$7,035,891	2.20
FY 2018	12,471	1.53	0	\$6,135,265	1.98
FY 2019	12,837	1.56	0	\$6,268,056	1.93