Challenge Statement:

How will Maine customers prosper in a world of rising energy prices and low-carbon goals?
Challenge Answer:

Transforming the customers’ buildings, energy systems, equipment, & vehicles.
About Us

- The Trust is the independent, third-party administrator for energy efficiency programs in Maine
- Mission: lower the cost and environmental impacts of energy in Maine by promoting cost-effective energy efficiency and alternative energy systems
- All sectors, all fuels
- Governed by a stakeholder Board of Trustees with oversight from the Maine Public Utilities Commission
The Trust Overcomes Barriers to Next-Generation Energy Equipment

• Market Barriers
  – Higher up-front cost of higher efficiency equipment
  – Limited local stocking / inventory of higher efficiency equipment
  – Limited familiarity with newer technology or understanding of comparisons between product models
  – Split incentives (e.g., landlord vs. tenant)
Trust strategy – A proven approach

- Impartial, expert information and administration
- Technical assistance
- Quality assurance
- Management of financial incentives
- Measurement and Verification
3 Key Energy Challenges in Maine

• Heating
• Lighting/appliances/electronics
• Transportation
Demand-Side Solutions

• Energy efficiency
• Fuel switching / Alternative energy
• Distributed generation
• Storage
• Demand response
Opportunities & Strategies

• Improved home envelopes
• Next generation heating systems
  – Heat Pumps
  – Water Heater Heat Pumps
  – High-efficiency natural gas systems
  – Wood/pellet heat
  – Next gen oil/propane
• Transformation of electronics
  – Lights, appliances, HVAC
  – “Smart” systems
• Electrification of vehicles
What’s needed for transition?

• Informed, motivated customers
• Informed, trained, motivated vendors & contractors
• Promotion to accelerate market-based activity
  — Leverage private investment
• Financing
• Administration of programs for non-market-based activity (e.g., initiatives to serve low-income homes)
Trust drives customer demand and influence purchasing decisions

- Information / education and training
- Promotional tools:
  - Marketing
  - Financial incentives
  - Financing
- Measurement & verification (M&V), reporting
- Impartial, transparent program administration
Compounding savings from 6 years of Trust Programs:

- Reduced annual electricity consumption by 1.1 billion kWh
  - 9% of 2016 annual load statewide
- Reduced peak summer demand on the grid by 117.2 MW
  - 5% of peak demand statewide
- Reduced natural gas, oil, and propane use by 980,000 MMBtu
- Cut GHG emissions by more than 643,000 tons (equivalent to taking roughly 135,400 cars off the road)
Home Energy Savings Program

- 30,000+ homes have participated
- Easy financing available at 4.99% APR
  - 2,000 loans
  - $19.8 million issued to homeowner
- Contractor network of over 700 Registered Vendors
  - Online locator tool with ZIP code, radius and service search
- Ongoing outreach and consumer education
  - Digital marketing – Google Ads, Hulu, Pandora, YouTube
  - Bill inserts in Annual Property Tax bill sent to over 200,000 homes
Heat Pumps

- 16,000 ductless heat pump installations in the past 3 calendar years
  - Highest efficiency models
  - Very popular in far northern areas
  - Continue to provide heat even at below zero (F) temperatures

- Goal: 18,000 more in next 2 years
Water Heating

Ex. Heat Pump Technology

Market Transformation

- 50% less energy than electric resistance water heater
- EMT promoting 3,000 units / year
LED Lights

- 75% -80% more efficient
- 10-20 year lifespan
- Good quality light, no flicker
- Dimmable
- No mercury
- EMT Promoting 25,000/week
What Might Be Next?

• Electric Vehicles & Charging Stations
• NG or H2 Vehicles
Thank You

Contact Us:
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www.efficiencymaine.com