

Efficiency Maine Trust

Maine's Energy Challenges and Strategies: Positioning Customer's to Prosper

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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

Getting Results: 2010 - 2016

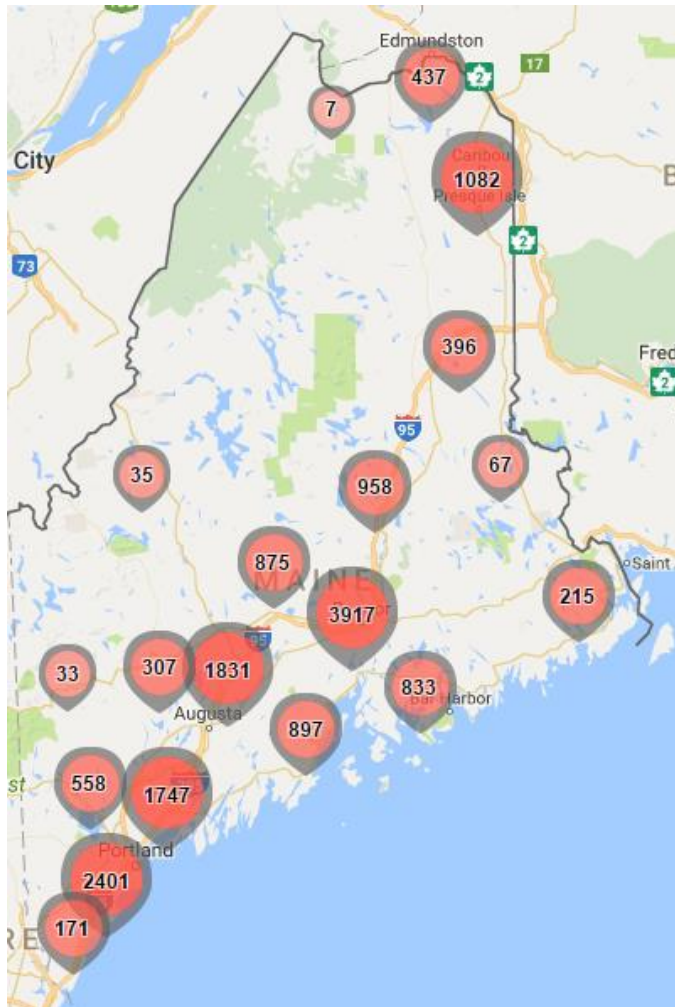
Compounding savings from 6 years of Trust Programs :

- 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, You Tube
 - 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.energycymaine.com

