



Efficiency Maine Trust

Orientation for the Energy, Utilities and Technology Committee

132nd Legislative Session

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About Us – The Efficiency Maine Trust

- a.k.a. “The Trust,” or “EMT,” or “Efficiency Maine”
- Independent, quasi-state agency established by statute in 2009
- Runs programs to promote energy efficiency, beneficial electrification, and greenhouse gas reductions
 - For all customer groups
 - For all energy types
 - In all areas of Maine
- Provides incentives (*e.g.*, rebates, discounts), financing (loans), technical information and registry of vendors
- Governed by an independent Board of Trustees
 - Oversight from the Maine Public Utilities Commission (PUC)

Statutory Authority – The “Efficiency Maine Trust Act” (Title 35-A, Ch. 97)

§10101 - 10108 Purpose, Duties & Powers

§10109 Regional Greenhouse Gas Initiative (RGGI) Trust Fund

§10110 Electric Programs

§10111 Natural Gas Programs

§10113 - 10114 Training

§10115 Federal Funds

§10118 Public Information & Outreach

§10119 Heating Fuels Efficiency & Weatherization Fund

§10122 - 10124 Health Care, Schools, Ag Fairs

§10125 EV Charging Infrastructure

§10126 Electric Vehicles

§10128 Thermal Energy Investment

Efficiency Maine Green Bank

§10116 Small Biz Revolving Loan Program

§10129 Clean Energy Accelerator

§10151 - 10162 Property Assessed Financing (Res)

§10201 - 10210 Property Assessed Financing (Com)

Beneficial Electrification Policy Act

§3801-3805 Policy, Planning, Procurement of BE



Revenue Streams

Utility Funds

- From payments made by electric utilities and natural gas utilities directly to the Trust
- Budget set at the level needed to capture the “Maximum Achievable Cost-Effective” savings (“MACE”) from energy efficiency and beneficial electrification resources

Regional Greenhouse Gas Initiative (RGGI)

- From sale of “carbon allowances” and quarterly auctions remitted directly to the Trust
- Used for programs that reduce electricity consumption or GHG emissions

Forward Capacity Market (FCM)

- From bidding the Trust’s capacity resources into the ISO New England markets

Settlements and Grants

- From settlements such as the VW Settlement, New England Clean Energy Connect Settlement
- From federal funds (*e.g.*, American Rescue Plan Act/Maine Jobs and Recovery Plan, Bipartisan Infrastructure Law, Inflation Reduction Act)

The Trust's Fiduciary Duty

- **Electric conservation funds** are held in trust for the benefit of the electricity utility ratepayers
- **Natural gas conservation funds** are held in trust for the benefit of natural gas utility ratepayers
- **Regional Greenhouse Gas Initiative (RGGI) funds** are held in trust for the benefit of customers who pay for RGGI
- Funds must be expended consistent with statute and 3-Year Strategic Plan (**The Triennial Plan**)
 - as approved by the Trust Board, and
 - as approved by the Maine PUC after a public proceeding

The Trust's Purpose (35-A MRS Sec. 10103(1))

The Legislature established the Trust to develop, plan, coordinate and implement programs that:

- Provide **uniform, integrated** planning, program design and **administration of programs**;
- **Reduce energy costs** and improve security of the state and local economies;
- Administer cost-effective energy and energy efficiency programs to help individuals and businesses **meet their energy needs at the lowest cost** and generally to improve the economic security of the State;
- Ensure that expenditures of the trust are **cost-effective** in terms of avoided energy costs; and,
- Actively **promote investment** in cost-effective energy and energy efficiency measures and systems that use energy resources that reduce overall energy costs for consumers in the State.

Statutory Targets (35-A MRS Sec. 10104(4)(F))

1. Reducing **energy costs**
2. Reduce **greenhouse gas emissions**
 - Consistent with the reduction requirements in state statute and the state's climate action plan adopted by the Maine Climate Council
3. Creating stable private sector **jobs**
4. **Weatherizing** 35,000 homes and businesses from 2020-2029,
 - Including at least 10,000 in low-income households through the combined efforts of the Trust and the Maine State Housing Authority
5. Electricity
 - Achieving the “maximum achievable cost-effective” (MACE) **savings of electricity**
 - Achieving MACE **Peak-load** demand reductions
6. Natural gas – Achieving MACE savings of **natural gas**
7. Promoting **heat pump systems** so that 115,000 homes are wholly heated, and another 130,000 homes are partially heated, with heat pumps, and
8. Electric Vehicles -- Promoting the purchase of at least 220,000* **EVs** registered in ME by 2030

* In 2024, the Maine Climate Council modified this target to 150,000.

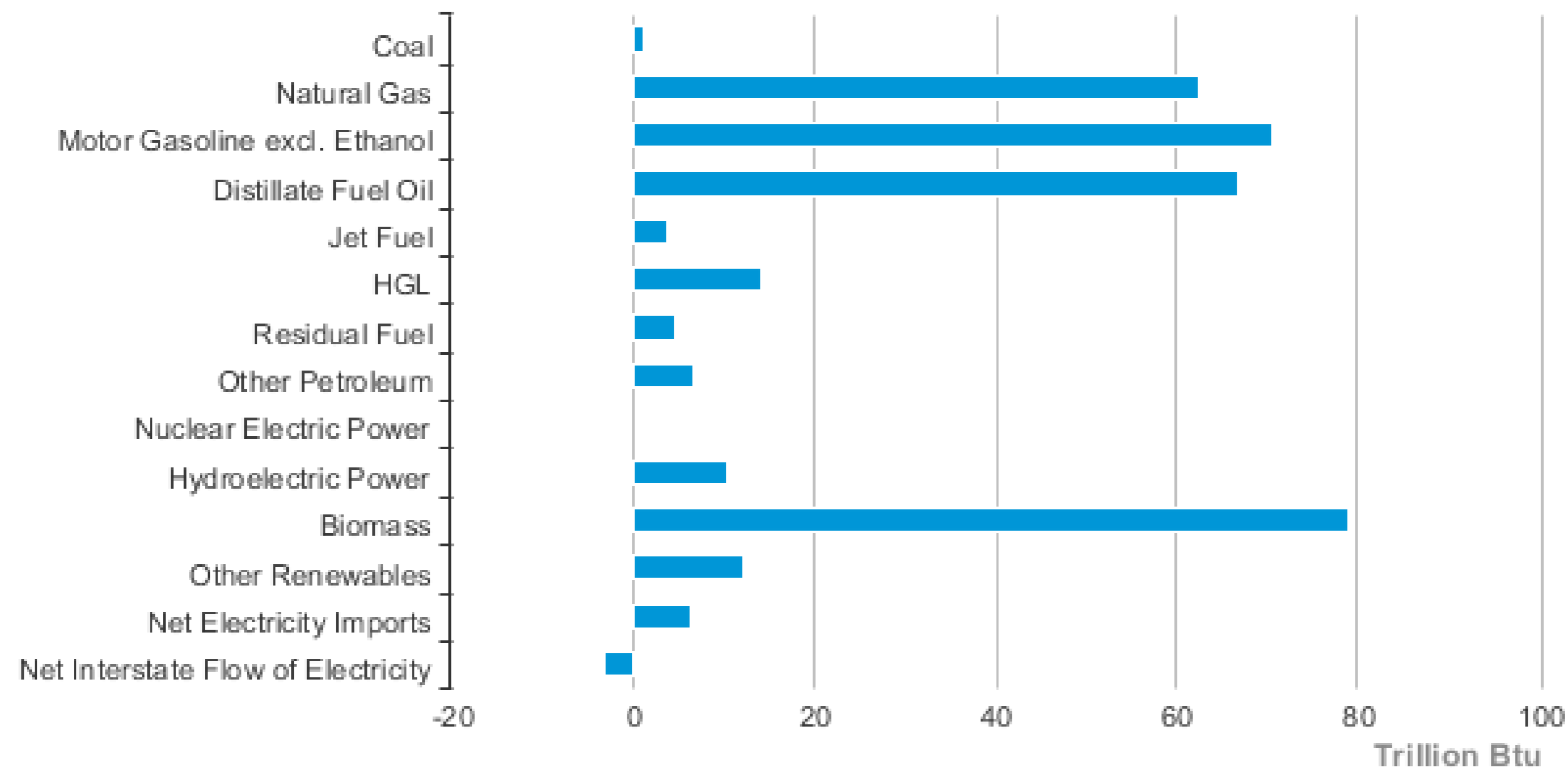
How Efficiency Helps Maine's economy

Economics of Energy Consumption in Maine



Maine State Energy Profile

Maine Energy Consumption Estimates, 2022



Expenditures

» Residential	\$ 2,401 million
» Commercial	\$ 1,322 million
» Industrial	\$ 933 million
» Transportation	\$ 3,692 million

**\$8.34
billion/yr**



Source: Energy Information Administration, State Energy Data System

Addressing Barriers to Customer-Sited Energy Resources

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)

Proven Approach

- Impartial, expert information and administration
- Technical assistance
- Quality assurance
- Management of financial incentives
- Measurement and Verification



Benefits

- Reduces energy bills
- Lowers environmental impacts
- Improves resilience
- Stimulates business

Efficiency Maine FY 2024 Programs helped to:

- **Saved** more than **\$559 million** in unnecessary lifetime energy costs;
- Prompt more than **\$250 million** of incremental **private investment** using approximately \$100 million of program investment;
- Advance the Governor's revised heat pump goal by installing **27,520 high-performance heat pumps** since July 2023, (reaching a milestone of rebating more than 175,000 total heat pumps over the past 12 years);
- Support **2,856 weatherization projects** (of which 953 projects were in homes of low-income and moderate-income homes) through the Home Energy Savings Program (HESP) and Low & Moderate-Income Initiatives;
- Install more than **10,500 heat pump water heaters**;
- Avoid an estimated **62,000 short tons of annual greenhouse gas emissions**; and
- Reduce summer **peak demand** by more than **19 MW**.

Looking Forward: Triennial Plan VI (FY26, FY27, FY28)

Beneficial Electrification of Space Heating

38,000

homes heated entirely with
heat pumps (including 6,500
low-income homes)



Reducing home heating costs and improving comfort

9,900

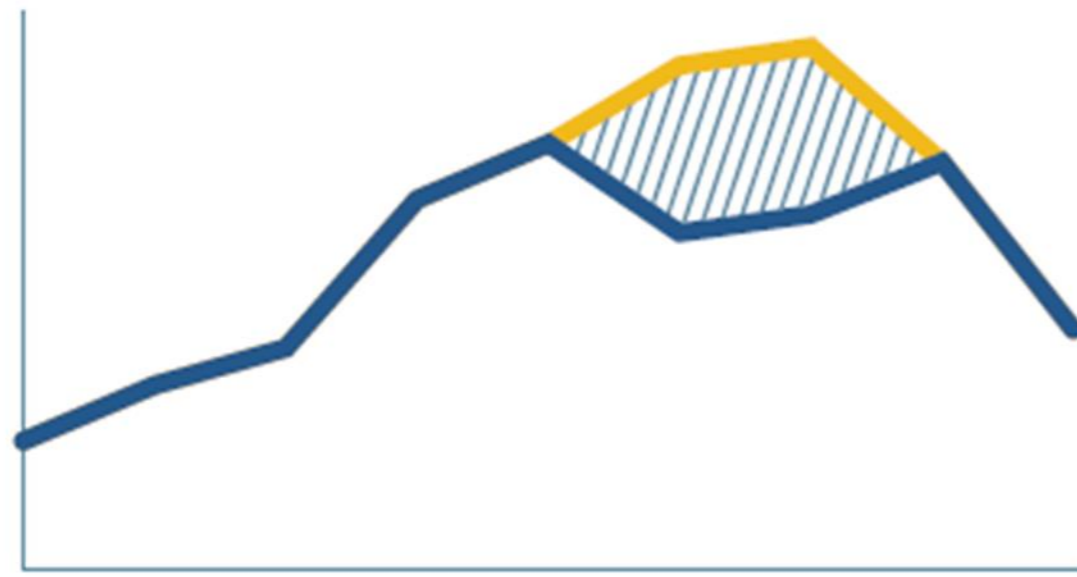
homes weatherized (1,500 low-income,
1,800 moderate-income,
6,600 all-income)



Improving grid efficiency, flexibility, and resiliency

137 megawatts

of summer peak load reductions
by 2028



1,700

new battery systems in homes
and small businesses



Reducing air pollution

333 million

tons of CO₂ reduced, annually,
by the third year



Making more efficient use of the grid and suppressing rates

- Spreading costs of the electric grid across more usage, without adding new costs to the grid, enables utilities to charge lower rates to meet the revenue requirement.
- Increased usage from heat pumps and EVs, in the right circumstances, is both cost-effective and will reliably reduce rates over the life of the equipment.

\$492 million

suppression of electricity rates due to beneficial electrification programs



The Plan is highly cost-effective



- The ratio of total benefits to total incremental project costs exceeds the minimum threshold of 1.0.
- Total costs includes the financial contribution of both the consumer plus the program.
- Total benefits excludes reduced retail costs of transmission & distribution charges.

Highlights of Select Initiatives

Low Income Initiatives - # Homes Improved through EMT Programs

13,130

Heat pump water heaters
in low-income homes since 2015



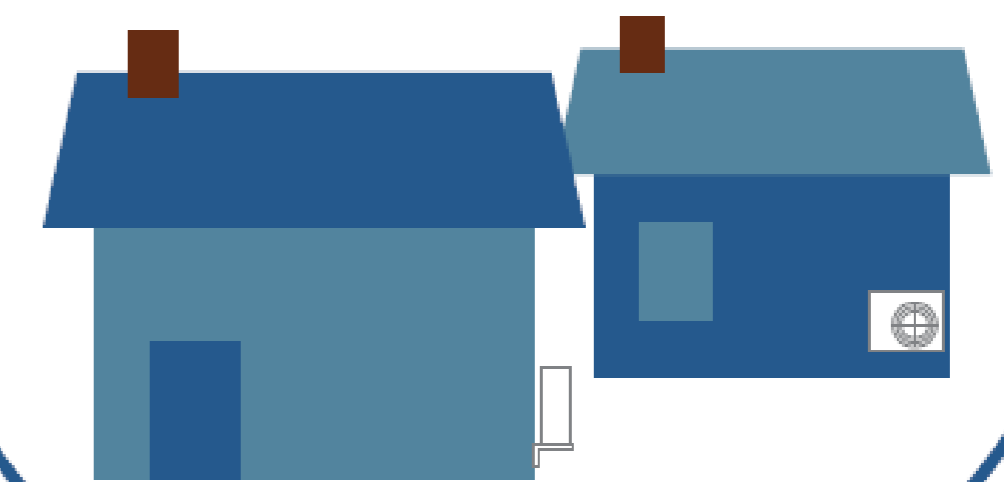
1,201

Low-income homes weatherized
since 2022



2,008

Low-income homes heated entirely
with heat pumps since September, 2023

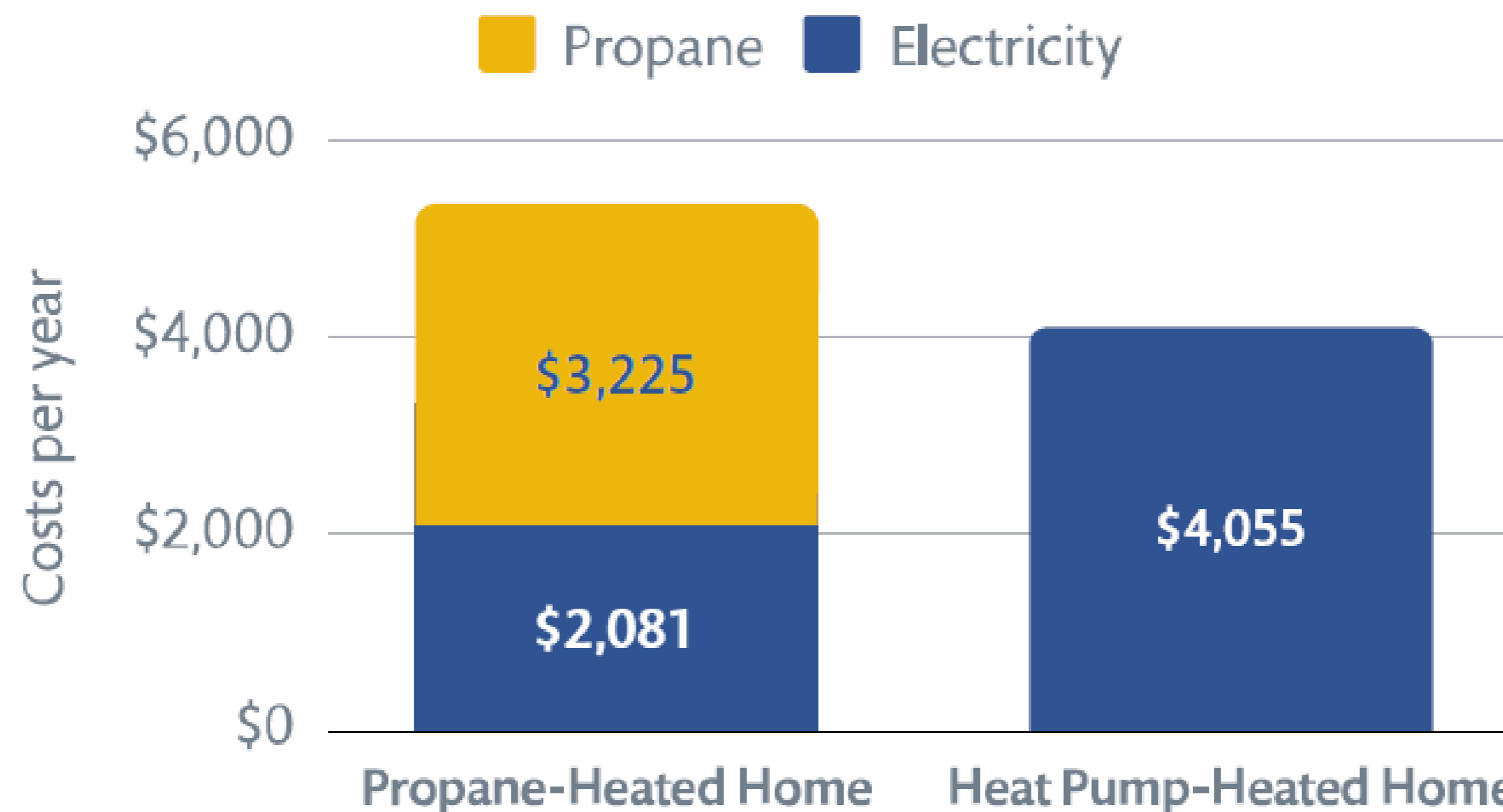


Low Income Initiatives – Illustrative Home Savings

MANUFACTURED (MOBILE) HOME INITIATIVE FINANCIAL EXAMPLE

Save \$1,251 a Year with Heat Pumps

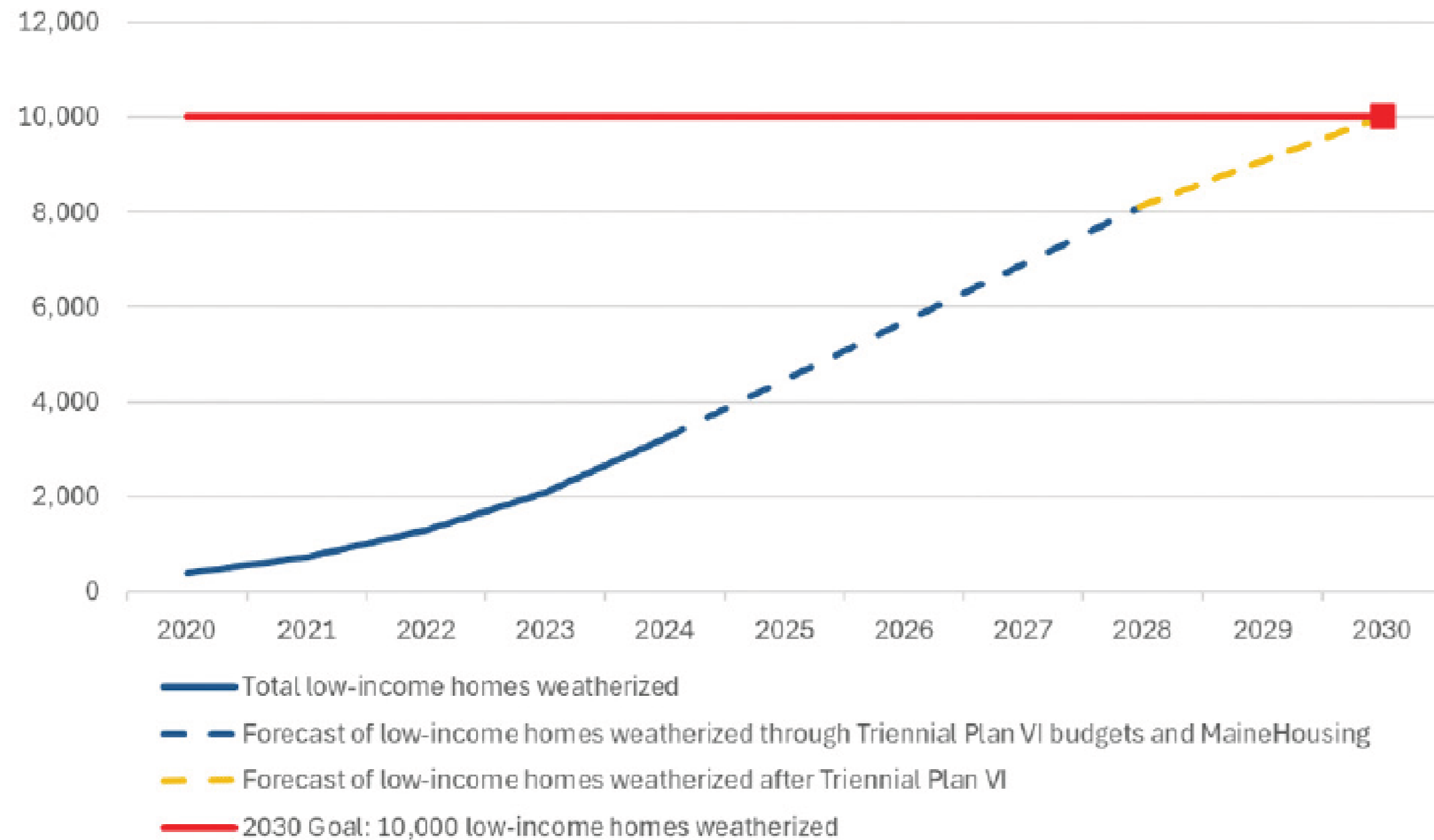
This example shows how converting a home from propane heat to heat pumps will reduce propane cost more than it will increase electric cost.



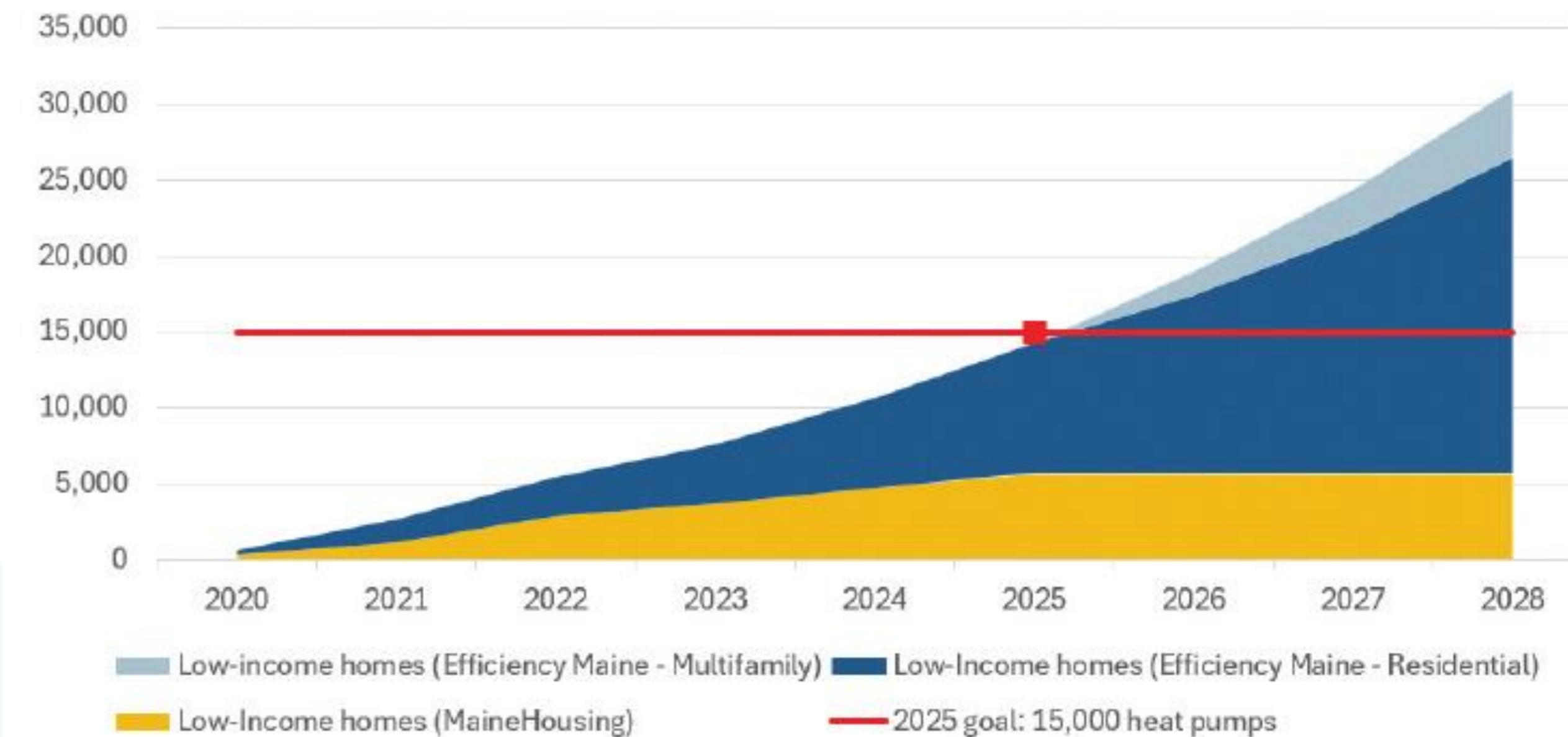
**Your results may differ. Sources: Efficiency Maine Compare Home Heating Costs as of 11/27/2024 and Maine Residential Baseline Study completed 8/16/2024. Propane at \$3.16 per gallon, delivered at 78.7% heating efficiency. Electricity at \$0.22 / kWh. Heat pump COP is 2.4.*

Maine's Climate Action Plan – Targets for Low-Income Households

CUMULATIVE LOW-INCOME HOMES WEATHERIZED IN MAINE SINCE 2020



NEW HEAT PUMPS IN LOW-INCOME HOMES SINCE 2020



Current Program Offerings for Low Income Households

- **80% up to \$8,000** for qualifying heat pump systems;
- **80% up to \$8,000** for qualifying weatherization projects;
- **\$12,900** toward the \$14,900 cost of a new ducted heat pump system in manufactured (mobile) homes;
- **up to \$8,000 per dwelling** for energy-efficient HVAC systems in new construction affordable multifamily housing;
- a significant incentive to offset the cost of energy-efficient **affordable multifamily housing HVAC retrofits** (launching spring of 2025);
- **0% APR loans** for whole-home heat pump systems for manufactured (mobile) homes with **\$50 monthly payments**;
- **\$950 instant discount on heat pump water heaters** to reduce price at the store (no waiting for rebate);
- **free, personalized energy usage reports** and energy-saving recommendations for Arrearage Management Program participants; and
- **enhanced electric vehicle rebates** for low- and moderate-income Mainers.

Efficiency Maine Green Bank

- **Approx. \$45 million under management**
- **Residential Home Energy Loans**
 - Operational since 2012, capitalized with \$20 million federal grant and RGGI and GGRF
 - More than \$50 million loaned out
 - Less than 1% default rate
- **Small Business Energy Loans**
 - About \$1 million available capital
- **Commercial PACE Loan Program**
 - Rule is drafted, under review by Trust Board
 - Soliciting municipalities and lenders to participate
- **Pilot – Low-Income**
 - Lease-to-own for whole-home heat pump systems
 - In conjunction with enhanced rebates from EMT
- **Municipal & School Project Finance**
 - Facilitating financing with local banks

Demand Management

- **Demand response**
 - Enrolled 15 MW of curtailable load last year
- **Distributed energy resources**
 - Managed EV charging & smart chargers for homes
 - Small batteries for residential and small business
 - Enrolled 230 participants last year
- **Large commercial batteries**
 - 2 projects approved to date, > 1 MW each

Strategic Initiatives

- **Public Information and Outreach**

- www.energymaine.com -- 99% of the information about EMT program incentives, plans, reports and customer engagement is available at the website

- **Innovation**

- Pilots to demonstrate new types of energy efficiency, conservation, or alternative energy measures, and new strategies for promoting such measures

- **Evaluation, Measurement & Verification (EM&V)**

- Project database management, periodic program evaluations, customer surveys, FCM M&V Compliance Review, Technical Reference Manual (TRM) updates, Triennial Plan opportunity studies

Takeaways

- **EMT has established a proven approach**
 - Impartial, expert information and administration
 - Emphasis on complementing trade allies, market-based solutions
 - Technical assistance
 - Quality assurance
 - Management of financial incentives
 - Measurement and verification
- **EMT programs reduce market barriers & promote market transformation for energy efficiency and clean energy**
 - Reduces energy bills
 - Lowers environmental impacts
 - Jump starts new technology, new markets
 - Helps to build jobs and a strong, growing industry that provides goods and services related to energy efficiency

For more information

Please refer constituents to Efficiency Maine's toll-free call center for basic questions about program offerings or the status of a rebate.

866-ES-MAINE (866-376-2463)

Calling that number is the fastest, most efficient way to get help!

Also, please visit www.energymaine.com for case studies, educational materials, online tools to help you compare heating system costs or find a contractor, as well as information about what equipment is eligible for incentives from Efficiency Maine and how to access those incentives.