



Interim Beneficial Electrification Plan (FY 2025)

Presentation for the Efficiency Maine Trust Board

February 2024

Recent updates on Beneficial Electrification Policy Act implementation

- August Board meeting: High-level overview of LD 1724 in legislative update
- October Board meeting: Brief update on planned rulemaking to amend Chapter 3 of the Trust's rules
- November Board meeting: Update on the Chapter 3 rulemaking; draft amendments to Chapter 3 included in the Board packet
- December Board meeting: Update and discussion on measures proposed for further analysis in the Interim Beneficial Electrification Plan (Interim Plan)
- January 16, 2024: Public hearing on the Chapter 3 rulemaking
- January Board meeting: Discuss preliminary staff analysis for the Interim Plan

Highlights of the Interim Beneficial Electrification Plan (Interim Plan)

- The Interim Plan identifies an investment of \$49.5 million in beneficial electrification for FY 2025.
- After accounting for offsetting funds, this investment would increase the electric procurement budget for FY 2025 by an estimated \$23 million.
- This investment is estimated to deliver total benefit of \$225 million (after accounting for new electricity use) to customers over the life of the measures. Additionally, this investment is estimated to suppress electricity transmission and distribution (T&D) rates by \$89 million over that same period.

Table 1 – Determination of Measure Cost Effectiveness and Reliable Reduction of Rates

Measure	Reliably Reduces Rates?	Benefit-Cost Ratio	Included in MACE Budget?
Whole-home Heat Pump (Any-income)	Yes	1.31	Yes
Whole-home Heat Pump (Moderate-income)	Yes	1.28	Yes
Whole-home Heat Pump (Low-income)	Yes	1.26	Yes
Whole-home Heat Pump (Manufactured Home Pilot)	No	1.46	No
Supplemental Heat Pump (Low-income)	No	1.56	No
Rooftop Unit Heat Pump	Yes	1.20	Yes
Multifamily Whole-building/Zone Heat Pump	Yes	1.92	Yes
Heat Pump Water Heater (Direct Install)*	No	1.75	No
Electric Bicycle	No	0.77	No
Variable Refrigerant Flow (VRF) (Commercial)	No	1.47	No
Commercial Whole-Zone/Building Heat Pump	Yes	2.34	Yes
Battery Electric Vehicle (Any-income)	Yes	2.52	Yes
Plug-in Hybrid Electric Vehicle (Any-income)	Yes	2.55	Yes
Battery Electric Vehicle (Moderate-income)	No	2.52	No
Battery Electric Vehicle (Low-income)	No	2.52	No
Plug-in Hybrid Electric Vehicle (Moderate-income)	No	2.52	No
Plug-in Hybrid Electric Vehicle (Low-income)	No	2.55	No
Battery Electric Vehicle (Commercial)	No	1.67	No
Plug-in Hybrid Electric Vehicle (Commercial)	No	2.43	No

* Where the heat pump water heater retrofit is replacing a fossil fuel system.

Determination of MACE Beneficial Electrification Opportunity for FY 2025: Best-fit Budgets

	Measure	Best-fit Budget
1.	Whole-home Heat Pump (Any-income)	\$13,605,080
2.	Whole-home Heat Pump (Low-income)	\$11,394,928
3.	Whole-home Heat Pump (Moderate-income)	\$18,351,376
4.	C&I Prescriptive Beneficial Electrification Measures	\$1,372,560
5.	Battery Electric Vehicle (Any-income)	\$3,600,000
6.	Plug-in Hybrid Electric Vehicle (Any-income)	\$1,200,000
7.	Total Budget for New Beneficial Electrification Procurement	\$49,523,944

Estimated Offsetting Sources of Revenue

	Source	Estimated Budget
1.	Lost Opportunity Heat Pump Measures: FY 2025	\$8,089,464
2.	Low-income Direct Install (LIDI): FY 2025*	\$1,494,523
3.	Expected Electric Vehicle Rebate Carryforward: FY 2024	\$2,000,000
4.	Regional Greenhouse Gas Initiative (RGGI): FY 2025	\$10,000,000
5.	Forward Capacity Market (FCM): FY 2025	\$5,825,500
6.	New England Clean Energy Connect Settlement Funds: FY 2025	\$2,000,000
7.	Electric Efficiency Procurement Carryforward from FY 24	TBD
8.	Other Carryforward	TBD

*Excludes \$1.2 million retained for electric efficiency

Resulting budgets for FY 2025

	Budget	Amount
1.	Proposed Beneficial Electrification Program Budget Subtotal	\$49,523,944
2.	Proposed Electric Efficiency Program Budget Subtotal*	\$35,744,350
3.	Proposed Electric Program Budget Subtotal	\$85,268,294
4.	Offsetting Funds (From non-electric procurement sources)	(\$19,825,500)
5.	Proposed Electric Program Budget Subtotal (Accounting for offsetting funds)	\$65,442,794
6.	Proportional Funds (e.g., Admin, Innovation, EM&V, etc.) included in electric procurement	\$8,507,563
7.	Proposed Total FY 2025 Electric Efficiency Procurement Budget	\$73,950,358
8.	Approved FY 2025 Electric Efficiency Procurement Budget	\$50,774,338
9.	Carryforward of Electric Procurement and other funding from FY 2024	TBD
10.	Incremental Electric Efficiency Procurement to Support MACE Beneficial Electrification Opportunity	\$23,176,020

*Excludes funds repurposed for beneficial electrification



Next steps

- March 1: Annual Update filing
- May 1: Request for Procurement filing
- Triennial Plan VI: Update and expand the Beneficial Electrification Plan

Questions?

Archived materials

Beneficial Electrification Plan required under LD 1724

2. Plan for promoting beneficial electrification for end uses of energy. The trust shall develop a 3-year beneficial electrification plan for end uses of energy as part of the trust's triennial plan in accordance with section 10104, subsection 4 and provide annual updates to the plan in accordance with section 10104, subsection 6. In developing its beneficial electrification plan for end uses, the trust shall consult with relevant departments and agencies.

LD 1724: Definition of beneficial electrification

Sec. 2. 35-A MRSA §10102, sub-§3-A, is amended to read:

3-A. Beneficial electrification. "Beneficial electrification" means electrification of a technology **or process** that results in reduction in the use of a fossil fuel, including electrification of a technology **or process** that would otherwise require energy from a fossil fuel, and that provides a benefit to a utility, a ratepayer or the environment, without causing harm to utilities, ratepayers or the environment, by improving the efficiency of the electricity grid or reducing consumer costs or emissions, including carbon emissions.

LD 1724: Determination of maximum achievable cost-effective (MACE) resources

Sec. 8. 35-A MRSA §10110, sub §4-A: Procurement of cost-effective energy efficiency and conservation resources.

[...]

D. Include all beneficial electrification measures that are cost-effective and reliably reduce electricity rates over the life of the measures. In determining whether a measure is cost-effective, the commission shall account for all net energy costs, including savings from avoided heating, transportation or industrial process fuels displaced by the measure.

Beneficial electrification measures included in MACE

"Reliably reduce electricity rates over the life of the measures"

Compare the net present value of only those revenues and costs collected through transmission and distribution rates:

- a) Changes in utility revenue from incremental electricity sales attributable to the measure;
- b) Changes in utility costs from the marginal impact on transmission and distribution system costs;
- c) Costs of the financial incentive offered by the Trust in promoting adoption of the measure and costs of the Trust to run the incentive program.