

April 9, 2021

Michelle Turner, Administrative Secretary

Efficiency Maine Trust

Via Email: comments@efficiencymaine.com

Recommendations to Efficiency Maine Trust

Pursuant to the Request for Information on Efficiency Maine Trust Triennial Plan V (Fiscal years 2023 – 2025) https://www.efficiencymaine.com/docs/Triennial_Plan_V_Request_for_Information.pdf

Respectfully submitted by the Greater Portland Board of Realtors

The Efficiency Maine Trust (the Trust) has made impactful and thoughtful financial and educational contributions to improve the energy efficiency of buildings, transportation and industrial processes. In the area of *Weatherization* of the existing building stock, which is a critical need for most residential and commercial buildings in the state, the Trust now incentivizes energy audits, air sealing, and insulation. In the area of *Electrification*, the Trust incentivizes air source and geothermal heat pumps, heat pump water heaters, and LED lightbulbs. In the area of *Renewable energy*, the Trust does not have any incentives, however the Federal government does offer a 26% tax deduction for certain of those investments.

The Greater Portland Board of Realtors (GPBR), a chapter of the Maine Association of Realtors and the National Association of Realtors, sees Weatherization, Electrification, and Renewable Energy in the Buildings sector to be critical to our meeting our climate goals as a state and nation. We hope these programs continue for as long as feasible and are expanded to the extent possible to accelerate the pace, because we believe we will not reach our climate targets at this rate.

In addition, the GPBR, with input from its Sustainability Advisory Group, has identified some unmet opportunities in the categories of Weatherization and Electrification we wish to bring to the attention of the Trust for their consideration as enhancements to the programs already up and running.

1. Radon air testing. According to the Maine Center for Disease Control and Prevention, “at least 25% of the homes tested in any part of the state have radon problems”. <https://www.maine.gov/dhhs/mecdc/environmental-health/rad/radon/radonfaq.htm> “When you breathe in radon, it gets into the lining of your lungs and gives off radiation. Over a long time, that can damage the cells there and lead to lung cancer. Radon is the second biggest cause of lung cancer after cigarette smoking.” Source: <https://www.webmd.com/lung-cancer/radon-health-effects> Radon air testing costs about \$250, less if a homeowner does it themselves, and radon air mitigation systems are about \$1500. Most frequently, the test is done by the inspector hired by the buyer at the time of sale at their expense and, if indicated, a mitigation system is paid for most frequently by the seller if a system needs to be installed. That testing and remediation, if any, is disclosed to subsequent buyers. In the event of an energy efficiency retrofit, a radon air test is also needed because the reduction in air changes per hour could intensify the radon level.

The GPBR strongly recommends an incentive for the testing for radon at the point of energy retrofit, not at the time of sale, and suggests a \$85 rebate for the test and \$500 for the mitigation system if recommended by the test result being at or over 4 pC/L, with a greater incentive for low-income households.

2. Mechanical Ventilation. Higher building energy codes soon to be in effect in Maine call for a blower door test result of 3 ACH50 or lower in new construction. Deep energy retrofits can also bring an older building's air changes per hour below 5 ACH50. Mechanical ventilation is recommended in a balanced system (exhaust and intake) for buildings in either of those circumstances. Not installing them can cause serious back-drafting of combustion appliances as well as in other ways endangering the health and degrading the functioning of occupants. This is according to many sources, including the National Association of Home Builders https://www.iccsafe.org/wp-content/uploads/proclamations/TN01-Whole-House-Ventilation_pdf.pdf

Energy Recovery Ventilation is the best in our climate zone, as it recovers heat and moisture. Retrofitting these ducted systems in existing structures may be undesirable or unaffordable, so bathroom ceiling fans with an output satisfying ASHRAE 62.2 and a pressure activated vent can also be employed. The costs for these options vary greatly between \$500 and \$5000+ installed.

The GPBR strongly recommends a 35% rebate on any ventilation systems installed and a greater incentive for low-income households.

3. Building Energy Labels. Unlike certifications such as LEED and EnergyStar, which are appropriate for new construction but are exceedingly difficult to achieve in the built environment, building energy labels allow consumers to compare properties based on energy cost, a major component of operating costs. Building labels contribute to the monetization of investments made in building energy efficiency upgrades that are otherwise not visible after completion, i.e., nearly all the steps of weatherization. These steps including energy audits, air sealing, insulation, window and/or door replacement with Low-E or insulated features, and LED lights. There are over 3 million homes with HERS ratings in the US, including over 51,000 in 2020 (RESNET.US). Maine has next to none. There are more than 1 million homes with an Energy Star for homes label. (EnergyStar.gov) Maine has next to none.

The Trust has an opportunity to encourage building owners to want to make energy efficiency upgrades for many reasons, including financial, health, and climate consciousness, however the route with the least friction is financial benefit. Homes with higher efficiency have two financial benefits to the owner: one, a lower fuel bill for heating, cooling and hot water; and two, a higher resale value. We advocate for the HERS rating for new construction, as it can offer a performance path to energy code compliance. Since a blower door test is required on new construction going forward, the added cost is effectively subsidized.

For existing construction with an energy efficiency retrofit, another rating system has come to our attention through our colleagues in Portland, Oregon, and from the Department of Energy, the Home Energy Score. It is a simpler 1-10 scale and costs less than \$400 to administer usually

by the same energy auditor that does HERS ratings. It still requires a site visit, but not a blower door test. A HES rating can be used to qualify an FHA borrower for a larger loan if it scores well because that is an indicator of a lower utility bill (<https://nahbnow.com/2019/10/hers-or-hes-a-breakdown-of-different-energy-rating-scales/>).

Just as one would factor in the MPG estimate on a potential vehicle purchase, a home, which is typically one's greatest investment, ought to have the same consumer label. It is incumbent upon other entities to nudge the consumer to heed the energy usage of a building in the purchase and selection process. How the efficiency of the building can be improved is included in a HES report. Consulting the Green Building Registry, 26,443 homes in Portland, OR have HES, HERS or other ratings; of those, 23,124 have a HES score. Try the registry here:

<https://us.greenbuildingregistry.com/green-homes>

Berkeley, CA and Austin, TX also have had widespread success with HES. Like Portland, Oregon, in Berkeley <https://www.bayren.org/hes> and in Austin <https://austinenergy.com/ae/energy-efficiency/ecad-ordinance/energy-conservation-audit-and-disclosure-ordinance> it is mandatory for a seller of a building to provide a HES score. According to the DOE, 150,000 homes now have HES ratings as of January 2021. In addition, Fannie Mae and Freddie Mac can use HES scores in underwriting as they scale up their green mortgage products.

Finally, a new tool has recently emerged on the east coast and is rapidly gaining traction in Vermont and Massachusetts, the Energy Estimator <https://neep.org/home-energy-labeling-information-exchange-helix-and-residential-labeling/energy-estimator-powered>. The tool can be administered either by a remote auditor or by a homeowner themselves. With built-in queries to tax cards, opt-in listing of the label in the Northeast Energy Efficiency Partnership database HELIX, and a custom list of next steps to encourage the homeowner to improve the score, it's a low-cost, entry-level way to let the buyer understand the operating cost and energy saving opportunities still available in a building. There is pending legislation resulting from extensive work with stakeholders including Realtors and Appraisers for the Energy Estimator to be mandatory at the point of sale in at least one city in Vermont and several in Massachusetts.

The GPBR strongly recommends incentivizing all three consumer labels as follow: the Energy Estimator for existing homes with a \$50 rebate and a training program for building inspectors to create the label as an add-on service; the HES rating for existing homes with a \$150 rebate; and the HERS rating for new construction with a \$600 rebate, and a greater incentive for low-income households.

An EnergyStar for homes certification, while different from a rating, is a good match for the new building energy code, and the sister certification, Net Zero Ready, is a good fit for the new stretch code. The National Association of Home Builders also has a certification called the National Green Building Standard that, like HERS, is ANSI sanctioned. Pick one (on further study) and support it with a meaningful incentive for new construction.

The GPBR recommends studying the certifications mentioned – EnergyStar, Net Zero Ready, NGBS – for evaluation to incentivize one or more of these voluntary certifications as a complement to the energy rating incentive.

4. One goal of the Maine Climate Council Transportation Group is to expand ambitiously the Electric Vehicle Fleet over the next 10 years. There are incentives in place for purchasing a new vehicle, but the cost of a Level 2 home charger can run \$2500. As we become more sophisticated about our electricity use, time of day incentives can be expected by the utilities to encourage off-peak usage. A Level 2 charger will be key to recharging a vehicle between 10 pm and 6 am since that could be an insufficient amount of time for a Level 1 charger to complete charging.

The GPBR strongly recommends a \$750 rebate for a Level 2 charger installed at a private residence, and a higher incentive for low-income households. For renters, condo dwellers, and others unable to install a charger on their premises, a voucher system could be established to partially offset the cost of using a public Level 2 charger, perhaps by buying bulk electrons at a discount.

In summary, the Greater Portland Board of Realtors encourages the Efficiency Maine Trust to continue and to expand its programs with weatherization and electrification. In addition, it recommends new programs for testing and treating radon in buildings, installing mechanical ventilation, supporting energy labels at three complementary levels, and installing Level 2 car chargers.

Respectfully submitted,



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