



December 12, 2023

Efficiency Maine Trust
168 Capitol Street, Suite 1
Augusta, Maine 04330-6856

Re: Efficiency Maine Trust Triennial Plan VI Initial Comments

Thank you for the opportunity to submit initial comments regarding Efficiency Maine Trust's triennial plan for fiscal years 2026 through 2028. ReVision Energy appreciates Efficiency Maine Trust's proactive work to solicit comments to ensure its programs are thoughtfully and effectively benefitting Mainers, and its consideration of improving and enhancing programs and policies. ReVision Energy also wishes to thank Efficiency Maine Trust for its many programs and contributions to date working to enable our state's necessary clean energy transition.

ReVision Energy submits these comments as an employee owned, certified B Corporation clean energy construction company with over 460 employees across our five branches in New England, with over 225 co-owners in Maine between our Montville and South Portland locations. In 2022 alone, we installed 10,000 kilowatts of residential solar and nearly 24 megawatts of commercial solar across New England. As a member of Maine's growing clean energy industry, we appreciate the programs Efficiency Maine Trust has built and managed in direct alignment with ReVision's mission to build a just and equitable electric future.

We submit the following feedback in response to the questions asked relevant to our areas of participation and/or expertise:

3.1 Triennial Plan VI Program Overview

Overall, ReVision Energy (ReVision) agrees with the continuation of Efficiency Maine Trust's (EMT) portfolio of programs with the recommendation to place an expanded focus on beneficial electrification as well as demand response, the latter of which we believe could be expanded into a broader load flexibility program.

Regarding financing, ReVision recommends EMT evaluates and considers current and anticipated financing infrastructure and adjusts its programmatic scope accordingly to ensure best use of resources and an additive versus duplicative role. For example, there was a time in which the expectation was that federal clean energy funding from Build Back Better would flow through state green banks, however recent guidance from the Environmental Protection Agency suggests that climate accelerator money will be distributed to national non-profits such as the National Community Investment Fund for direct distribution instead. With this example in mind, ReVision recommends EMT conduct a brief landscape analysis to determine its best role in the project finance business.

Finally, ReVision recommends EMT evolves its cost effectiveness tests utilized for determining whether program benefits exceed program costs. Specifically, the cost effectiveness of individual interventions should be considered in the context of an overall successful transition to electrification versus current state baseline. For example, given the outsized costs of meeting heating loads which coincide with peak winter electric loads in a fully electrified system, it may be likely that certain energy retrofits, such as building insulation, may be cost effective whereas

the same may not be true when applying marginal fuel cost alone.¹ Essentially, cost effectiveness tests may yield different results under beneficial electrification and the test should be evolved to be more forward looking for use in programmatic design.

3.2 Questions

1. Triennial Plan V Approach

The current structure for organizing programs is effective, but it is important to note that beneficial electrification and demand response intersect with nearly all programs. While it may make sense to separate such initiatives from an administrative and/or budgeting perspective, ReVision encourages EMT to consider programmatic engagement from the end-user lens, as a typical residential customer does not likely think about home energy savings programs, EV initiatives, or demand management, for example, separately. We recommend programmatic design that aligns with actual user journey and experience.

2. Innovation

ReVision recommends the consideration of the development of two new potential innovation programs. First: technology and project delivery for whole home heating electrification. EMT has traditionally been focused on mini split heat pumps typically utilized for supplemental heat for the majority of the home heating electrification program to date. As EMT transitions to a whole home heating focused program, ReVision recommends the consideration of support for commercialization of whole home ducted heat pumps and hydronic (air to water) heat pumps. Air to water heat pumps, in particular those using advanced refrigerants like R290 and R744, have advanced rapidly in Europe over the last few years and are anticipated to land shortly in the North American market. EMT innovation funding could help both bring the technology to market and identify the best way to deliver such technologies to typical, existing Maine homes. Such a program could consider combining boiler replacement with weatherization, combining boiler replacement with mini splits for supplemental heat, or expansion of existing radiation to allow for lowering supply water temperature—three such options to make air to water heat pumps a viable boiler replacement in Maine.

Second, ReVision recommends consideration of a bidirectional EV charging program (also called Vehicle to Home (V2H) or Vehicle to Grid (V2G) initiatives), including investigation into the use of bidirectional residential charging to reduce the use of fossil fuel back-up generators. Such a program could certainly be included under the demand response program, but if not, we recommend its consideration for inclusion in innovation.

3. Workforce

ReVision recommends EMT consider collaboration and partnership with the career and technical education providers (CTEs) in Maine and their HVAC programs to develop a greater pipeline of heat pump installers, and importantly, heat pump service technicians. This could include developing and customizing training based on EMT's existing professional training, and offering it through active outreach to vocational schools for integration into their curriculum. Such collaboration could help ensure CTE students are more competitive in the job market and thus attract more Maine students to efficiency

¹ <https://iopscience.iop.org/article/10.1088/1748-9326/ad114d>

jobs. Additionally, active involvement in the development of such professionals could include helping to network these programs with approved vendors in the geographic region, which would be a win-win for EMT's workforce goals and an added bonus of a potential hiring pipeline for EMT's approved vendors.

Additionally, EMT should consider collaboration with adult education programs that work with new Mainers to aid in skills transition to the energy efficiency sector. Given energy efficiency trades have lower credentialing thresholds than other professions, workforce training in this regard creates a great pathway for those coming to Maine with rich technical experience, for example in IT or in engineering. Such a strategy is also thoughtfully reflective of the realities of Maine's population growth and designs a program in that regard. Establishing a streamlined pathway through adult education programs will help new Mainers utilize their skills to contribute to both our state's economy and climate goals.

Finally, it is worth pointing out that there are a considerable number of organizations and agencies involved in energy efficiency workforce development in our state, including the Department of Labor, the Governor's Energy Office, educational institutions, labor organizations, and private businesses. In that regard, we recommend EMT assess the most additive and/or supportive role it can play based on need and expertise.

4. Equity

In March 2023, the Maine Climate Council Subcommittee on Equity issued its recommendations² to the broader Maine Climate Council to ensure that as we confront climate change and its effects in our state, we simultaneously ensure that all such efforts to combat this crisis benefit and center all people in Maine. ReVision encourages EMT to review these thoughtful, thorough recommendations and the report in full, specifically Strategy A (Transportation), B (Modernize Maine's Buildings), H (Engage with Maine People and Communities), and the sections regarding procedural equity, and incorporate such recommendations in all programmatic design across its upcoming Triennial Plan.

5. Demand Management

As noted in ReVision's initial comments, we believe this program should be broadened to consider (and potentially be renamed) load flexibility instead of demand management. Such a name change would reflect the work already occurring under the demand management program and encourage thinking regarding future program design and opportunities. We applaud the work regarding batteries (both residential and commercial) and managed charging (residential, commercial, and fleet) given the clear immediate opportunity, and we encourage EMT to engage in the regulatory environment to maximize the effectiveness of such programs. This should include consideration of engagement on topics including interconnection and metering. For example, if behind the meter battery programs or vehicle to grid programs are limited by policy in a manner that the maximum benefit they can achieve is to solely zero out a single customer's load at the time of grid peak, then there is considerable value being left on the table. For example, a single residential battery can provide 5 to 10 kW of capacity, but a household load may only require 1 to 2 kW at the time of system peak. EMT, therefore, should

² https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Climate%20Council_Equity%20Subcommittee%20Final%20Report_March%202023.pdf

engage in the regulatory arena to rethink metering and export limitations to unlock such additional value.

6. Electric Vehicle Initiatives

Regarding electric vehicle initiatives, ReVision has multiple recommendations for programmatic refinement and expansion:

- a. As noted previously, ReVision recommends innovation with vehicle to grid programs for both residential and commercial fleet applications.
- b. ReVision supports the continued work on addressing, reducing, and/or eliminating demand charges for both direct current fast charging (DCFC) infrastructure and Level 2 charging infrastructure. Engagement in the regulatory arena will likely be key to successful deployment of charging infrastructure and thoughtful policy design to ensure effective business models to operate such infrastructure in the long term.
- c. ReVision also recommends the commencement of planning for heavy duty truck charging along highways as well as engagement with utilities to begin working on such infrastructure, given the much higher charge rate will likely require grid upgrades in some locations.
- d. ReVision recommends EMT continue to consider and deploy increased flexibility regarding charging technology for rural public locations to allow judicious placement of higher and costlier charging when necessary. Rural communities need adequate charging but should not be required to over-invest in the highest speed charging infrastructure when utilization rates may be years away and other parts of the state may need more robust electric vehicle supply equipment (EVSE). This work should also consider preference in siting charging locations close to town centers to aid in rural economic development.
- e. Another area for consideration of support is in the assistance of municipalities in helping them draft workable EVSE codes for new parking areas, which could be done through the development and education of a model code. This work should encompass monitoring municipal property taxation of EVSE as well, which is not currently a barrier but requires monitoring to consider potential future impact.
- f. EMT should also consider engagement in the regulatory arena regarding working with utilities regarding make ready incentives given services needed. Due to the high costs, many other jurisdictions have given this ability to utilities, and it is worth considering as a strategy in Maine.
- g. Lastly, ReVision recommends the consideration of workplace charging program incentives given future forecasting of high renewable energy and electric vehicle penetration where the encouragement of mid-day charging would align with peak renewable energy production, which in turn minimizes late-day load ramp and corresponding infrastructure costs. In this regard, ReVision also recommends evaluating opportunities for on-street Level 1 charging for residents of apartments without access to off street parking.

7. Efficiency Maine Green Bank

As noted in our initial comments, ReVision recommends EMT identifies key additive functions and roles it can play in the current and anticipated financing landscape as there may be an opportunity to better serve Mainers outside of operating a consumer facing lending program, such as providing credit support or loss reserves for lenders. While ReVision does not have a specific recommendation at this time, we encourage



EMT to conduct a landscape analysis to ensure the wisest and best use of resources and the avoidance of duplicative efforts or programs.

8. Beneficial Electrification

Again, as noted in our initial comments, we recommend EMT considers beneficial electrification across all program areas. Heat pumps, heat pump hot water heaters, and EV incentives are already beneficial electrification, as to some degree storage and load flexibility is, too, in so far as both lower peak electrical costs and thus enable fuel switching. ReVision supports a focus on beneficial electrification alongside investments in renewable energy generation as this represents the most cost effective and feasible path to decarbonization.

ReVision thanks EMT for its consideration of our perspective and work to develop these programmatic opportunities in its triennial planning process. We look forward to continued engagement in the process in 2024, and we are always available to answer any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Bourgoine", with a long, sweeping horizontal line extending to the right.

Lindsay L. Bourgoine
Director, Policy & Government Affairs
ReVision Energy