Patrick Woodcock, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

June 23, 2021

Comments submitted by email to: ma-eeac@mass.gov

Dear Commissioner Woodcock and Members of the Massachusetts Energy Efficiency Advisory Council:

On behalf of the Center for EcoTechnology, I offer comments and suggestions to the EEAC regarding the Three-Year Energy Efficiency Plan 2022-2024 (the Plan) released on April 30, 2021. CET is an environmental non-profit that has served the Mass Save program since its inception. We helped write the Mass Save Installation Standards and provide lead vendor services for several utilities across the state. We are proud and honored to be part of the collective efforts of many partnering utility companies, installation contractors, suppliers, lead vendors and others who have achieved nation leading results over many years, and who are continually working to enhance program efforts and impact.

The new priorities of electrification, equity, and workforce development are laudable and well aligned with the Commonwealth's new climate policy (*An Act Creating a Next Generation Roadmap for Climate Policy*) committing the state to 50% carbon emissions reductions by 2030 and carbon neutrality by 2050, and with the EEA's interim *Clean Energy and Climate Plan* (CECP). There are some elements of the Plan that fall short of what is needed to meet the state's emissions reduction goals at the pace and timeline required, and so we offer the following comments in the hopes of helping to further improve the Plan.

Residential & Commercial Incentives

- For older building stock in the state, **electrical panel upgrades** (from 100 amp to 200 amp service) will often be necessary for whole-home electrification. Assessing the readiness of electric panels for additional electric loads (heating, EV, appliances) should become a part of all energy assessments, and an incentive should be offered. Without an incentive, the high cost of the upgrade is likely to be a barrier to whole-home electrification. Incentives can be justified the same way they are for other roadblock removal, such as knob and tube wiring, in that it will unlock carbon savings that otherwise would not have happened.

- In keeping with the goal of fully electrifying buildings, incentives should be added for **radiant electric and induction stoves** for residential and commercial settings. Replacing gas stoves with electric not only yields energy efficiency and fossil fuel avoidance benefits, but also mitigates indoor air pollution that is highly correlated with pediatric asthma.
    - Induction and radiant electric stoves would be good candidates for the Residential Retail Program; we suggest adding them to the online marketplace. Could stoves also be moved into the Midstream Delivery Model, using the same tactics planned for HPWHs (p 69)?
    - Similarly, we encourage making electric yard equipment incentives available from the outset of the Plan.

- We recommend an immediate **phase out of the incentive for central air conditioners** that are not heat pumps, as opposed to waiting until Year 3 of the Plan. The technology already exists and is more efficient than traditional central air conditioning.

- Incentives for **residential non-condensing and efficient condensing oil furnaces are at odds with state climate legislation** and emissions reduction strategies described in the CECP, and with the ideals largely

upheld by this Plan. The rationale for continuing to incentivize these is weak given the cost effectiveness of heat pumps compared to oil. We'd suggest eliminating those incentives from the outset of the Plan.

- Given the Plan's emphasis on electrification, we recommend that all customers, regardless of existing heating fuel, should have access to **incentives for ASHP conversions** from the outset of the Plan. The risk of free ridership (p 13, paragraph 3 and p 134, paragraph 5) seems an insufficient reason to delay incentives for some fuel types given that lifetime cost trends are shifting.
- We **applaud the incentives being made available to middle-income customers for roadblock remediation**, such as knob and tube wiring and vermiculite remediation. Given the prevalence of these roadblocks across building stock in MA, and the impact on weatherization uptake, we encourage extending the incentives to any households in census blocks with historically low participation rates in Mass Save, and we encourage an **explicit carve-out for C&I customers**.
- **Raise the profile and investment in weatherization**. This measure in particular is key to reaching GHG and electrification goals. We also know this is an undersubscribed measure in commercial retrofits across all size customers, as recognized by PA potential studies. During the current Plan, costs of weatherization materials have been increasing and fewer jobs are completed due to the high cost per therm saved. We suggest increasing PA budgets for weatherization and their willingness to invest on a dollar per therm basis.
- We applaud the recognition of "micro-businesses" as a customer segment and acknowledgement that it can be a costlier and harder-to-reach customer segment. To reach aggressive savings and equity goals, dedicating **specific focus and budget toward serving micro-businesses will be critical**. Micro-businesses represent high potential for electrification and weatherization. We also believe the cost per unit of energy saved will be higher than other C&I customers, however, the equity and other non-energy benefits achieved by serving these customers will be a valuable investment.

Miscellaneous

- We suggest revising the statement, "new technology may make a fully all-electric home more achievable" (p 69, paragraph 3) to "*new technologies are continuing to make all-electric homes more affordable"* as a more accurate reflection of the all-electric buildings that already exist.
- "The RCD Initiative promotes and helps to support customers' efforts to complete comprehensive home energy efficiency solutions, with a primary focus on identifying and installing weatherization and identifying opportunities for high-efficiency HVAC systems," (p 83, Design and Delivery). Language should be updated to reflect electrification goals.

Thank you for taking the time to read these suggestions for improving the 2022-2024 Mass Save Plan. This is a pivotal moment for addressing climate change and we are proud to be a part of such a robust and forward-looking energy efficiency program as exists in Massachusetts.

Sincerely,

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