



CITY OF SOMERVILLE, MASSACHUSETTS
OFFICE OF SUSTAINABILITY AND ENVIRONMENT
JOSEPH A. CURTATONE
MAYOR

MEMORANDUM

TO: Mass Save Program Administrators
FROM: Oliver Sellers-Garcia, Director, Office of Sustainability and Environment City of Somerville
DATE: June 14, 2021
RE: Comments on the 2022-2024 Three Year Plan April Draft

Dear Mass Save Program Administrators,

Thank you for the opportunity to provide comment on the April Draft of the Three Year Plan (“the Plan”). The City of Somerville (“the City”) has a history of promoting the Mass Save program. This is the first three-year plan we will be commenting on since the release of “Somerville Climate Forward,” the City’s first climate action plan. Somerville Climate Forward focuses on equitable, realistic, short-term goals to help reach carbon neutrality. Addressing energy usage and efficiency of Somerville’s building stock is important because it is the city’s largest source of emissions.

As the Office of Sustainability and Environment and other relevant departments read the Plan, we are looking at it from the perspective of achieving the principles and goals set forth in Somerville Climate Forward, our community’s climate action plan. We are looking for Mass Save to meaningfully serve Somerville’s most vulnerable residents as we prepare for, and mitigate the impacts of, climate change. Among these priorities are

- improving equity;
- addressing the split incentive between landlords and renters;
- reducing Somerville’s contribution to climate change by improving efficiency and fuel-switching;
- preparing for flooding and extreme heat risks;
- constructing new and renovated buildings poised to be net-zero; and
- developing electric vehicle (“EV”) charging infrastructure.

First, we would like to recognize the success of the Mass Save program. Massachusetts is consistently top-ranked in the nation for energy efficiency. Utility programs alone account for 40 percent of the score.¹ We also support the Program Administrators’ (“PAs”) efforts to better align Mass Save programmatic goals with the Commonwealth’s greenhouse gas (“GHG”) emissions laws.

We commend the PAs for prioritizing equity, and recognizing “any plan to mitigate GHG emissions must include a

¹ Colin A. Young, [Most Energy-Efficient State Goes To California, As Mass. Slips Out Of ACEEE Rankings' Top Spot](#), WBUR.org, December 16, 2020.



pathway for decarbonizing space and water heating”² and the role that Mass Save can play in the transition. The Plan purports to make significant strides towards a healthier, more equitable and sustainable future for Somerville residents and beyond. We are excited about the ideals and vision laid out in the Plan. We are also interested in learning more about the PAs’ strategies towards achieving this vision over the next three years. We offer the comments below for your consideration.

Access to evaluative analysis and data. It is important for the PAs to provide the public with accessible and understandable information to compare how this Plan differs from past plans. This will allow the public to better understand the current state of the Mass Save program, its successes and areas for improvement. Without this information, many planned tools and tactics described in the Plan appear to be a continuation of existing practices. In order to understand their potential effectiveness, it would be helpful to visualize monitoring and evaluation of past practices, as well as a description of how past performance is justification for continuing current practices.

Recent studies that informed the Plan, such as the *Residential Nonparticipant Customer Profile Study* and the *Residential Nonparticipant Market Characterization and Barriers Study*, provide important insights that suggest Mass Save is not adequately serving Somerville customers.³ Yet these reports still do not provide evaluative comparisons between three-year plans. Additionally, the Plan (not including appendices, models, or tables) and those two residential reports alone total 498 pages. These studies demonstrate that there needs to be additional attention and support for low-income households, renters, households that do not primarily speak English, as well as aging homes and small multi-family homes. They explore barriers and offer suggestions on how to overcome these barriers. The Plan should explain concrete steps the PAs will take to address these needs.

The next iteration of the Plan should explain processes, outcomes, and impacts of the goals set in the 2019-2021 Plan, and how they compare to the 2022-2024 Plan. The Plan should also clearly identify what is new compared to past plans. The presence of more substantive information would help foster accountability and an opportunity for more impactful comments. Evaluative information and details we would like to see included in the next draft are listed in Appendix A. This is not an exhaustive list, but we hope it serves to communicate a larger need for the Plan as a whole.

Communication between municipalities and PAs. The City continues to call for increased communication between the PAs and municipal staff. Large, residential, new construction and commercial and industrial (“C&I”) projects often require zoning approval and/or sustainability review. City staff can help connect development teams with Mass Save programs. Specifically, local planning departments and sustainability offices can help generate leads if provided appropriate contact information for PAs for referrals. Additionally, educational workshops for environmental justice communities should be culturally relevant and co-created with community representatives. Any information provided through schools should include translated materials for parents with clear follow-up instructions. These educational materials should also include low and no-cost things to do to reduce energy usage.⁴

We commend the PAs for piloting new tools overlaying Census, environmental justice, and utility data. We are hopeful this data will be available to all communities between 2022-2024. In addition, the following data would be useful to Somerville: a. annual data for assessments scheduled, completed; b. Insulation recommended/scheduled, installed; c. appliances (e.g. heating systems, window A/C units, central air, ASHP, etc.) recommended, installed by type and type of fuel replaced or supplemented; d. energy usage (MMBTU, KWH, GHGe); e. Energy Use Index reduction projects; and f.

² [Massachusetts Joint Statewide Electric and Gas Energy-Efficiency Plan 2022-2024](#), ma-eeac.org, April 30, 2021 at pp. 8, 12.

³ [Final Report: Residential Nonparticipant Customer Profile Study](#), MA19X06-B-RESNONPART, February 6, 2020, ma-eeac.org at pp. 30, 96.

⁴ Examples of information about low- and no-cost solutions for energy efficiency and co-benefits of energy upgrades can be found on the [City of Somerville Road to Net Zero webpage](#).

demographic data, by Census block/zip code and by recipient (owner-occupied, rented unit, residential, commercial, income-qualifying), delivered no later than April 1 of the following year. This would also increase accountability and transparency in an effort to evaluate progress towards priorities.

The City is interested in working more closely with income eligible programs, including the Low-Income Energy Affordability Network, Community Action Network/ABCD, and Heating System Repair & Replacement Program/Low Income Home Energy Assistance Program/Fuel Assistance/CAPIC. The shift from Menotomy to CAPIC as Somerville's Weatherization Assistance Program servicer was not proactively communicated to Somerville. It has been more difficult to connect residents to these resources during the pandemic. With the PAs working more closely with municipalities and/or community organizations, it will be easier to target harder to reach householders.⁵

We support improving customer interfaces, especially while working remotely. The websites for income-eligible resources are not always user friendly; there is not a clear contact to direct people to, hold times can be long, and to our knowledge there have not been virtual offerings, like office hours, to offer assistance. There is a dizzying array of programs which is confusing for customers and staff. It would be great to streamline services so that customers and staff can see a full menu of options; if not maintained by the PAs, then linked to on the Mass Save website. For example, PAs could include low- and moderate-income program information on Mass Save marketing materials. This includes translated materials and translators/interpreters to help service clients.

Somerville supports the following initiatives.

- Streamlining the income verification process.
- Expanding access to the no-interest HEAT loan to residents with limited or poor credit history.
- Improving translation services, customer experience, and pathways to employment for those who do not use English as their primary language.
- Continuing the Main Streets program for small businesses. This was successful in Somerville because of the dedicated in-person outreach of the PA.
- Continuing and expanding of incentives provided by the PAs to support the adoption of Electric Vehicles ("EVs") and enabling technologies. The transportation sector is the second largest contributor of GHG emissions in Somerville.⁶ Adopters face barriers to install, including the costs of upgrading their electric panel, purchasing and installing the charger, WiFi, permitting, and finding an electrician. We commend the PAs for promoting adoption through programs like the Eversource EV Home Charger Demand Response program and support the expansion of incentives to reduce barriers and facilitate the installation of enabling technologies.
- The continuation of PassiveHouse technical support and incentives. Somerville supports increasing equity and electrification in new construction builds.
- Expanding hours and availability of virtual assessments to evenings and weekends, as well as increasing the availability of virtual tools for customers.

Home energy scorecards. The Plan discusses improving the Home Energy Report provided at the conclusion of a Home Energy Assessment, but a home energy scorecard is not explicitly mentioned in the Plan. The Residential Conservation Services ("RCS") guidelines call for a home energy scorecard for each unit.⁷ New research shows "(h)ome buyers valued efficiency most when it was presented as an image depicting the home's efficiency score along a (linear,

⁵ *Final Report: Residential Nonparticipant Customer Profile Study*, MA19X06-B-RESNONPART, February 6, 2020, ma-eeac.org at pp. 70.

⁶ *Greenhouse Gas Emissions in Somerville: Monitoring Our Collective Progress*, Office of Sustainability, City of Somerville, somervillema.gov at pp. 1 (last accessed 06/02/2021).

⁷ *Guideline Interpreting 225 CMR 4.00*, Residential Conservation Services, Department of Energy Resources Energy Efficiency Division, mass.gov, February 20, 2020 at pp. 3.

numerical) scale from inefficient to efficient.”⁸ A Massachusetts pilot study in 2018 found 25 percent more households completed installations and saw a 25 percent increase in savings compared to business as usual Mass Save scenarios.⁹ As stated in Somerville’s comments on RCS in 2018, home energy scorecards can help standardize the quality of home energy assessments and enhance their value to residents. Somerville would like to see plans for a home energy scorecard detailed in the next version of the Plan.

Creating healthy, safe, electric-ready residential buildings. Aging housing stock and multi-family homes can face more barriers to participating in statewide goals for electrification and efficiency.¹⁰ About 80 percent of Somerville’s buildings were constructed before building codes were enacted, about 90 percent of properties are multi-unit dwellings, and most Somerville residential buildings are heated with gas. These factors, along with retrofit difficulty and operating costs, influence the type of heating system installed. We support expanding efforts to make homes healthier, safer, and more efficient through increasing incentives available to remediate barriers like upgrading electrical panels, removing knob and tube wiring, vermiculite and asbestos, and installing air sealing and insulation. Somerville encourages the PAs to provide more persuasive incentives for the more challenging projects described on page 57 of the Plan.

The City of Somerville commends the decision to expand product offerings to offer other types of insulation as well as the extension of the 100% covered approved costs to rental properties and income-qualifying households. This will help tie weatherization to affordability. Addressing these baseline structural issues form the foundation of success for high-efficiency heating and cooling systems. To expand incentives for Air Source Heat Pumps (“ASHPs”) without expanding these incentives is to ignore a critical step in the process to reaching carbon neutrality, as well as miss an opportunity to create meaningful gains in energy efficiency and health and safety in the housing stock. Somerville encourages the PAs to extend enhanced incentives for barrier mitigation, weatherization, and electrification to up to 120 percent area median income households. Alternatively, stepped incentives up to 120 percent would be a welcomed improvement.

One main piece of the Plan is the transition from providing no-cost lighting alternatives and reallocating the funding towards ASHPs. We commend this decision and support continuing and expanding incentives to all properties. The goal for incentivizing landlords and homeowners to install ASHPs should be to not only make the technology cost comparative with traditional fossil fueled systems, but to improve equity in the housing stock. ASHPs can provide cooling to some of the Commonwealth’s most vulnerable residents during extreme weather events.

Air conditioning is becoming more and more critical in Massachusetts. The Sanitary Code has deemed heating necessary and lists explicit heating standards, the same is not true for cooling.¹¹ The number-one barrier Somerville residents have to staying safe during heat waves is the cost of purchasing and operating air conditioning equipment. Window air conditioning units themselves can pose risk for injury. Inefficient units can exacerbate peak demand in summer months. The situation is especially dangerous for vulnerable residents such as seniors, infants, and renters. It is critical that the Plan makes inroads on this problem as more customers search for efficient, affordable cooling solutions. To that end, Somerville also supports cooling upgrades from income-eligible programs like the Weatherization Assistance Program.

As noted on page 14 of the Plan, other policies contribute to the success of electrification efforts. For example, the economics of installing ASHP and replacing any system except an electric resistance system are not competitive under the

⁸ Reuven Sussman, Christine Kormos, Celine Park, and Emma Cooper, [Energy Efficiency in Real Estate Listings: A Controlled Experiment](#), American Council for an Energy Efficient Economy, ACEEE.org, August 6, 2020 at pp. iv-9, 22-25, 30-31.

⁹ Alex Pollard, [Home Energy Scorecards in Massachusetts](#), Department of Energy Resources, naseo.org, September 24, 2018 at pp. 9.

¹⁰ [Final Report: Residential Nonparticipant Customer Profile Study](#), MA19X06-B-RESNONPART, February 6, 2020, ma-eeac.org at pp. 30-35, 41, 50, 55. Higher cost of whole-home ASHP installs in existing buildings has been observed. Meg Howard, [September Whole-Home Heat Pump Pilot Update: Still Time to Apply!](#), Massachusetts Clean Energy Center, masscec.com, September 29, 2020.

¹¹ CMR 410.201.

current Alternative Energy Credit incentive program.¹² Due to current fuel pricing, it is also more expensive to operate an ASHP than a gas (and oil) systems.¹³ The structural and systemic changes that the PAs are proposing have the potential to significantly improve the competitiveness of ASHPs. Between 2022-2024, Somerville encourages the PAs to

- consider setting incentives for existing buildings at levels that reflect the value of a property owner making the initial shift away from fossil fuels and setting a precedent for the future.
- consider collaborating with municipalities to more effectively implement local and state standards for existing buildings that mitigate GHG emissions.

The next iteration of the Plan should include more information about training for home energy advisors and technical assistance providers regarding ASHPs. It would be great if they could explain to customers how ASHPs and other statewide incentives work.

In the next version, we would like to see:

- higher incentives, especially for harder to reach homes;
- more focus on and incentives for cooling metrics and technologies;
- a centralized, streamlined system to navigate available incentives across agencies and income levels; and
- more details on how the PAs will enable ASHPs to meaningfully penetrate all sectors.

Energy upgrades in rental units. Recent studies show

- property owners are typically the sole decision makers for property improvements;
- landlords are largely concerned about return on investment; and
- it is comparatively more difficult and expensive to reach renters.¹⁴

Communities with high proportions of renters and non-English speakers have some of the lowest participation rates in Mass Save.¹⁵ Renters may be afraid to approach their landlords for fear of retaliation or rent increases in exchange for improvements.

Assuming the goal of renter engagement is to improve the energy efficiency of rental units, the PAs must consider if the current model of engagement and incentives for rental properties is sufficient and if not, consider potential improvements. For example, more funds could be dedicated to engaging landlords. Another idea is to help make renters and landlords feel more comfortable about improvements by educating about tenant rights laws, including the Sanitary Code. PAs could work with local and statewide organizations to supplement educational resources.

Nevertheless, it is critical to gain both landlord and renter buy-in for energy upgrades. To participate in the Mass Save program requires renters to provide their utility account number. Renters can be reluctant to provide this information, especially if they fear rent increases may follow upgrades. It is important that renters understand what information is required, how to provide it, and who will have access to it. One suggestion is to develop an easier way for tenants to provide utility account numbers directly to the PA through the Mass Save website.

Many Somerville landlords operate on a small scale; at least some operate on fixed incomes. Sufficiently reducing the up-front cost of installing any energy upgrade could discourage landlords from increasing rental rates as a direct result. The incentives should also be easy to understand and access. It is important to engage landlords on ASHPs because they are the

¹² [Alternative Energy Portfolio Standard Review](#), Daymark Energy Advisors, Department of Energy Resources, pp. 15, October 30, 2020. Internal citations omitted.

¹³ [Household Heating Costs](#), Policy Planning & Analysis Division, Department of Energy Resources, mass.gov.

¹⁴ [Residential Nonparticipant Market Characterization and Barriers Study: Final Summary of Findings](#), MA19R04-B-NP, February 27, 2020, at pp. 23, 26-27.

¹⁵ Ryan Kath and Jim Haddadin, [Some Mass. Communities Left Behind By Energy Efficiency Program, Study Finds](#), nbcoston.com, September 25, 2020.

sole decision-makers and may not typically opt for an early replacement if a system is operational. In addition to setting an appropriate level of incentives, it is important that they have a certain level of understanding of available technologies and incentives so that when the time comes to replace a system, they may be persuaded to fuel-switch.

The PAs and affiliates should not promote their programs to landlords by encouraging them to increase rents. This can disincentivize participation in both renters who want to keep a roof over their heads and landlords who want to keep their units occupied. Instead, the PAs should update messaging to communicate co-benefits. For example, marketing materials could showcase the value of improving a rental property; avoiding maintenance and marketing costs, improving property value and tenant retention, are all potential benefits for landlords. In turn, renters could enjoy lower utility costs and increased comfort.¹⁶ Of course, we all benefit from reduced GHG emissions. The co-benefits of retrofitting rental properties needs to be communicated, and realized, by both parties.

Thank you for the opportunity, your time and consideration. We look forward to reviewing the next version of the Plan and collaborating on our shared goals.

Sincerely,

A handwritten signature in black ink, appearing to read "O. Sellers-Garcia".

Oliver Sellers-Garcia
Director, Office of Sustainability and Environment
City of Somerville

¹⁶ See www.somervillema.gov/r2nz/#tab1.

APPENDIX A

Evaluative information we would like to see included in the next draft are listed below. This is not an exhaustive list, but we hope it serves to communicate a larger need for the Plan as a whole.

1. More context for tables of allocation of funds, including historical data, to better understand whether the Plan more adequately addresses accessibility and equity concerns, as well as aligns with the Commonwealth's GHG emissions reduction objectives.
2. A table of the assessments and evaluations that have been completed on the 2019-2021 plan and the results.
3. What were the outcomes and impacts of technical assistance for large retrofits, renter programs, and income-eligible air conditioning swap out and other programs aimed at efficient summer cooling? How and why? For example, the Plan states: "Nonparticipants are more likely to be renters and reside in smaller multi-unit buildings. The PAs continue to identify methods to streamline delivery for small multi-unit buildings and will explore additional tactics in the 2022-2024 term." What are the additional tactics? Why have these been chosen, what support can municipalities provide, and what is the intended outcome?
4. How much, and what is the rate of adoption, for Passive House and net zero energy standards in new construction buildings?
5. What is the strategy for introducing more equity and electrification efforts into new construction?
6. For outreach to Commercial and Industrial ("C&I") and residential buildings, if different results are desired, such as targeting rental properties, what are the different approaches that will be used?
7. How many new C&I projects have utilized Mass Save incentives? What is the breakdown by building type? Are there types that are not being served by these programs?
8. For the C&I section, there is a disproportionate amount of detail on raising awareness and not enough details on how the programs will be designed and what goals will be set to improve and advance these priorities. More program details should be included in the next iteration of the plan explaining how the program design will meet new and continuing equity and electrification priorities.

In addition to evaluation of past efforts, including more substantive information on proposed changes would help foster accountability and an opportunity for more impactful comments. Information we would like to see addressed in the next draft include but are not limited to the following.

1. How will the PAs expand access to the no-interest HEAT loan to residents with limited or poor credit history?
2. How will PAs partner with technical high schools as part of equitable workforce development?
3. How will programs be designed, and what goals will be set, to improve and advance equity in the C&I sector?
4. Please clarify the below statement from page 42 of the Plan by explaining which services will and will not be translated and what will be offered instead:

Creating comprehensive and effective end-to-end language support is challenging. While the PAs have invested in translating key points of customer communications...the scope and complexity of offerings combined with the number of contractors the PAs work with pose critical challenges to ensuring an end-to-end in-language experience. While maintaining the translation of some of these key customer touchpoints, the PAs will focus on ensuring a limited number of critical customer journeys. This more focused approach will allow the PAs to provide seamless experiences, learn from vendors and customers, and apply feedback to the next participation pathway.

5. We would like to see an example of how the "pay for savings" approach to residential incentives would compare to current incentives.
 - a. Will the incentive amount be known until after a project is installed?
 - b. Will this new process require any additional training or support for install contractors?
 - c. How realistic will it be for a home to reach 5 percent energy savings per unit compared to a new construction home?

