

March 25, 2024

Christina Moroney-Ebarb
Massachusetts Department of Energy Resources
christina.moroney-ebarb@mass.gov

Re: IRA Home Energy Rebates

Renew Home would like to thank the Massachusetts Department of Energy Resources for inviting comments on their implementation of the Inflation Reduction Act Home Energy Rebates.

INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

In March 2024, the Massachusetts Department of Energy Resources (DOER) requested written comments to inform the DOER's application to the US Department of Energy for the Home Efficiency Rebate (HER) and the Home Electrification and Appliance Rebate (HEAR) programs. DOER is seeking information on what program design options will most effectively serve Massachusetts households to lower consumer energy costs and improve the health and safety of homes, as well as increase the presence of clean energy equipment in underserved and underrepresented communities.

Renew Home strongly believes affordable smart thermostats paired with heat pumps should be part of Massachusetts's strategy, as this combination provides customers with decarbonization, weatherization and electrification benefits. The DOE confirmed in their program guidelines that grid-enabled equipment such as smart thermostats are eligible under the HEAR heat pump rebate. Smart thermostats also meet the standard for inclusion in the HER program. Renew Home's comments expand further on how Massachusetts can incorporate smart thermostats in an effort to meet their goals:

1. **Massachusetts should require pairing ENERGY STAR® certified smart thermostats with every heat pump deployed, given their powerful capabilities to save energy and manage peak demand.** Smart thermostats are an eligible technology for both pathways in the HER program as well as the HEAR program. Installing smart thermostats alongside new loads like heat pumps lowers the cost of electrification to the grid and helps mitigate future peak demand spikes. Leveraging the ENERGY STAR® standard ensures that the thermostats have been independently certified, based on actual field data, to deliver energy savings.
2. **Massachusetts should coordinate with utilities to offer pre-enrollment into demand response ("DR") programs with every smart thermostat installed where possible.** Demand response programs in particular provide potential for residential customers to

provide load management support during extreme weather events or during peak loads. Utilities in neighboring states have shown expertise in running these types of programs and all efforts should be made to leverage new channels for customer engagement, such as online marketplaces and enrollment portals, where appropriate.

FULL COMMENTS OF RENEW HOME

Renew Home appreciates Massachusetts' focus on heat pump deployment, and recommends that Massachusetts' HER and HEAR funding should also include investing in ways to manage newly added load from electrification. Smart thermostats are a simple and proven way to achieve widespread energy reduction and save customers money. Smart thermostats are an affordable product that can be installed in all homes with central heating and cooling, including an estimated 85% of homes in the United States. Once installed, ENERGY STAR® certified smart thermostats like the Nest Learning Thermostat have been shown to save 10% to 12% on heating costs and 15% on cooling costs.¹

Unfortunately, most thermostats sold today are not smart and do not achieve the level of savings mentioned above. Market estimates suggest that smart thermostats made up around 1/3 of all sales in 2021. The other 2/3 of sales were for manual and programmable thermostats. This trend will continue unless we take specific policy actions and program designs.

1. Massachusetts should require pairing ENERGY STAR® smart thermostats with heat pumps given their powerful capabilities to save energy and manage peak demand.

Electrification, without load control, will increase the need for more generating resources and risks unintentionally adding to the energy burden of a customer. It is critical that as we install new equipment, we have some way to manage the newly created demand. Heat pumps need to be installed with smart thermostats attached to offer customers a way to control their energy usage and further drive toward energy and cost savings. A recent report by S&P Global Market Intelligence that evaluated smart thermostat growth through 2026 noted that “if smart thermostats were installed in every home with an HVAC system by the end of the forecast...they could cut annual space heating and cooling energy consumption by 9%, or 45.4 TWh a year.”²

Smart thermostats are an eligible technology for both HER and HEAR programs. In the HER modeled pathway, smart thermostats are an approved and included measure in the BPI2400 standard (including the recently proposed Annex E addition) because they provide the required functionality. In the HEAR program, the DOE guidance from July

¹ For more information, see the FAQ page on ENERGY STAR®'s website for Smart Thermostats: [https://www.energystar.gov/products/heating_cooling/smart_thermostats/smart_thermostat_faq#:~:text=How%20much%20will%20the%20average,%2Fcooling%20\(HVAC\)%20equipment](https://www.energystar.gov/products/heating_cooling/smart_thermostats/smart_thermostat_faq#:~:text=How%20much%20will%20the%20average,%2Fcooling%20(HVAC)%20equipment)

² For more information, visit: <https://www.utilitydive.com/news/smart-thermostats-us-slow-adoption-misses-energy-savings/630901/>

2023 specifically allows the HEAR heat pump rebate to include costs for smart thermostats.

Additionally, it is critical that electrification does not cause a significant energy bill increase for any homeowner, especially in disadvantaged communities or households that are fuel switching. As customers install new equipment, they should also have some way to manage energy consumption - for example, by pairing smart thermostats with every heat pump installed. Renew Home suggests that DOER provide education on managing newly electrified loads, especially targeted education for disadvantaged communities and fuel-switching households. DOER can also consider outreach campaigns on electrification via partnering with community organizations.

Renew Home also recommends that DOER provide as much education as possible on the benefits of electrification and how to maximize energy savings, such as through smart thermostats. Customers should also be aware of utility and/or state programs that provide additional energy savings, such as demand response programs.

2. Massachusetts should coordinate with utilities to offer pre-enrollment into demand response (“DR”) programs with every smart thermostat installed where possible.

Adding smart thermostats to weatherization and electrification programs can support energy providers to maximize energy and demand reduction capabilities in the near-term, and strategically set the stage for future grid benefits in the long-term. From a customer perspective, DR pre-enrollment often lowers the upfront cost of the devices by allowing the utility to stack EE and DR incentives into a single discount, thus increasing the rate of adoption. DR pre-enrollment also lowers the barrier to enrollment and ensures that the full DR value of thermostats are realized at the point of sale. Pre-enrollment has been proven to increase demand response enrollment numbers - in New York, Orange and Rockland recently reported that since offering instant enrollment, their Bring Your Own Thermostat DR program realized a 53% increase year-over-year and record growth since this functionality was introduced.³

Pre-enrollment into DR programs also primes the grid for residential Virtual Power Plants (VPPs). According to the DOE, the U.S. will need to support over 200 GW of peak demand between 2023 and 2030.⁴ The DOE published a report that found large-scale deployment of VPPs (80 - 160 GW) could address this demand increase and rising peaks at lower cost than conventional resources and reduce energy costs for Americans.⁵

³ For more information, visit:

<https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={30298E8B-0000-C541-AA6D-C9512B760A7C}v>

⁴ For more information visit: <https://www.brattle.com/insights-events/publications/real-reliability-the-value-of-virtual-power/>

⁵ For more information visit: <https://liftoff.energy.gov/vpp/>

Residential VPPs that include heat pumps and smart thermostats provide a cost-effective alternative to manage peak electricity demand at scale. A recent Brattle group study found that a VPP enabled by technologies such as smart thermostats can provide many of the same benefits as generation resources by reducing or shifting load. Brattle modeled a 400 MW VPP with residential thermostats and found it could perform as reliably as a gas peaker plant at 40% of the net cost.⁶

CONCLUSION

We thank DOER for its attention to developing HER and HEAR program design principles that meet its decarbonization, equity, and affordability goals.

Respectfully submitted,

Will Baker

Director of Market Innovation

⁶ For more information, visit: <https://www.brattle.com/insights-events/publications/real-reliability-the-value-of-virtual-power/>

VIA ELECTRONIC MAIL

March 25, 2024
Elizabeth Mahony
Commissioner
Department of Energy Resources
Massachusetts State House
24 Beacon Street, Room 280
Boston, Massachusetts 02133

CC: Christina Moroney-Ebarb

RE: Energy Rebates

Dear Commissioner Mahony,

We write to you today as organizations working in Massachusetts to build access to safe, comfortable, and equitable housing for all, powered by reliable, affordable, clean energy.

As Massachusetts develops its program proposal for administering Home Efficiency Rebates (HER) and Home Electrification Appliance Rebates (HEAR), we are pleased to give feedback on this extraordinary opportunity to provide healthier, more efficient, and lower-cost homes for Bay Staters.

The undersigned organizations applaud the straw proposal's dedication to maximizing program dollars and increasing access to building decarbonization in Municipal Light Plant communities and low and moderate-income and environmental justice communities. In preparing your final application, we urge you to:

- Set numerical targets for customers served, including by desired demographics, and combine these metrics into existing Mass Save metrics where appropriate to ensure accountability.
- Make rebates accessible by utilizing categorical eligibility and self attestation with independent verification for income (per [DOE guidance](#))
- Prevent the use of rebates to subsidize new or perpetuate the use of fossil fuel appliances;

- Strengthen tenant protections beyond two years and increase consumer protection transparency;

We view the funding provided by IRA Home Energy Rebates as a critical opportunity to improve and expand programs to fund whole-home retrofits in the longer term. We ask that you approach program design in a way that sets Massachusetts up for future success, especially for programs that benefit historically disadvantaged communities. We also ask that you increase access to whole-home retrofits, including health and safety repairs, weatherization, and electrification.

Thank you for your time.

Sincerely,

Janet Cason, President
350 Central Mass

Ted Dever, Program manager
AACA

Kyle Murray, Director, State Program Implementation
Acadia Center

Nathaniel May, CEO
AURORA Architects + Builders Co.

Jane Winn, Executive Director
Berkshire Environmental Action Team

Scott Houseman, City Councilor, Ward 4, City of Beverly

Sallye Bleiberg, Chair
Brookhaven Residents' Climate Change Committee

Jennifer Wexler , President
Canton Residents for a Sustainable Equitable Future

Paola Ferreira Miani, Executive Director
Climate XChange
Gail Latimore, Executive Director
Codman Square NDC

Roger Luckmann, Co-chair Legislative Team
Elders Climate Action Mass

Bubotu, Community engagement coordinator
Energy Allies

Kate O'Connor, Coordinator
Extinction Rebellion Western Massachusetts

Adam Steiner, City Councilor, Framingham City Council

John Walkey, Director of Climate Justice
GreenRoots

Erica Schwarz, Executive Director
Housing Corporation of Arlington

Susan Twomey, Director of Construction & Sustainability
Homeowners Rehab Inc

Rebecca Plaut Mautner, Vice President of Real Estate & Assets
Jamaica Plain Neighborhood Development Corp

Carl Nagy-Koechlin, Executive Director
Just A Start

Emily Jones, Senior Program Officer
LISC Boston

Yun-Ju Choi, Coalition for a Better Acre, Lowell

Emily Haber, CEO

Massachusetts Association of Community Development Corporations

Rev. Cynthia Davidson, Executive Director
Massachusetts Interfaith Power & Light, Inc.

Kim Stevenson, CEO
New Ecology

Rosemary Wessel, Program Director
No Fracked Gas in Mass

Mark Dubos, Director of Sustainability
Peabody Properties

Cathy Kristofferson,
Pipe Line Awareness Network for the Northeast (PLAN)

Keegan Dougherty, Solar Account Manager
Resonant Energy

Vick Mohanka, Chapter Director
Sierra Club Massachusetts

Donna Brown, Executive Director
South Boston NDC

Jonathan Abe, CEO
Sunwealth

Katherine Faulkner, Principal
West Work



March 25, 2024

Commissioner Elizabeth Mahony
Department of Energy Resources
100 Cambridge Street
9th Floor
Boston, MA 02114

Subject: Dandelion Energy Comments on the straw proposal for HER and HEAR Federal IRA Home Rebates

Thank you for the opportunity to provide comments to inform the Commonwealth's approach to implementing the new Home Efficiency Rebates (HER) and Home Electrification Appliance Rebates (HEAR). Dandelion is the nation's leading installer of geothermal heating and cooling in existing homes and we work actively with developers building entire neighborhoods with geothermal, commercial building owners, and developers of thermal energy networks. We are a vertically integrated company, with crews in the field everyday installing geothermal ground loops and heat pumps for our customers in New York, Connecticut, and Massachusetts.

We are writing to express our **strong support for DOER's straw proposal** for implementing the HER and HEAR programs. Given the small size of the available funding for HER and HEAR relative to the overall MassSave program budget, targeting the HER and HEAR programs to fill gaps in existing programs is a wise investment of public funds. In particular, we are strongly supportive of the focus on Municipal Light Plants, Affordable Housing Decarbonization, and Moderate Income Program Enhancement. We are also encouraged that DOER plans to begin these programs in fall 2024.

Our comments focus on ways in which the **HER and HEAR programs can best leverage the benefits of geothermal heating and cooling with Ground Source Heat Pumps (GSHP).**

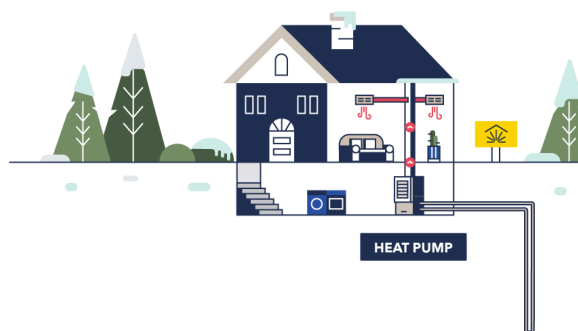
Background on geothermal (ground source) heat pumps:

Geothermal (ground source) heat pumps use a closed loop of fluid-filled plastic piping buried underground in order to move heat from the ground into a building during the winter, and move heat from the building into the ground in the summer to provide air conditioning.

Ground Source heat pumps provide key benefits in cost, efficiency, comfort, and climate impacts:

Geothermal saves money on energy bills and dramatically reduces energy use and greenhouse gas emissions

- **75-80% decrease in energy usage** for heating and cooling in a typical home
- **Lowest utility bills for customer** of any type of heating and cooling system
- Low maintenance: 25 year lifetime of heat pump, 75 year lifetime on groundloop



Geothermal works in all geologies and climate zones. Meet the full heating needs of buildings, even in the coldest climates; so there is no need for dual fuel systems. The ground loop is designed to provide all of the thermal energy needed, no matter how cold the outside air.

Geothermal is quiet and provides even, comfortable heat and cool air in the home. No outdoor units makes for quiet neighborhoods and there is much less refrigerant risk than with ductless mini-split designs. Geothermal is a tested technology, with over 50 years of successful implementations across the United States.

Geothermal doesn't overwhelm the grid and **will save money on future grid build-out for all Massachusetts rate-payers.**

- 2x lower annual kWh than ASHP
- 4x lower peak demand than alternatives

For example, for a retrofit using a central heat pump for a typical home in Bedford, MA:

- Ground source requires 8,000 kWh/year compared to 18,000 kWh/year for air source
- Ground source has a peak load of 3.7 kW compared to 12.7 kW for air source

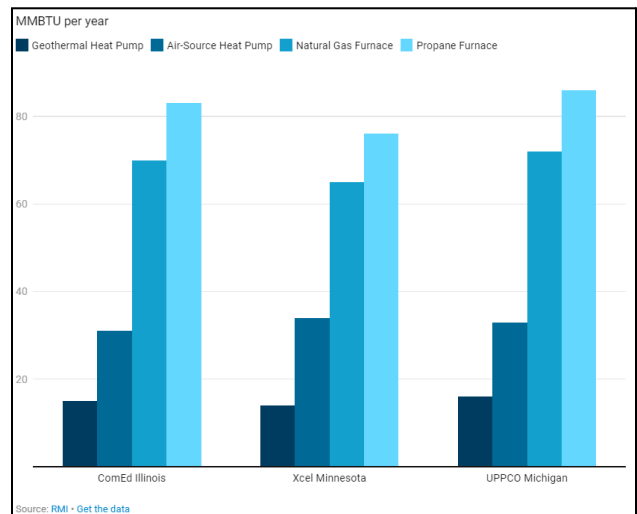
In other words, **for every 1,000 homes that have ground source instead of air source heat pumps, that's a 9MW of peak load savings.**

Table 1: Heat Pump Load Comparisons, Bedford MA, 2,500 sq ft				
	GSHP	High Efficiency Central ASHP	GSHP % of ASHP	GSHP Savings
Peak electric demand	3.69 kW	12.65 Kw	29%	8.96 kW
Annual electricity use	8,262 kWh	18,345 kWh	45%	10,082 kWh
Annual operating cost	\$2,313	\$5,136	45%	\$2,823

Because they increase electric demand without meaningfully increasing peaks or requiring new electric grid infrastructure, **ground source heat pumps allow utilities to spread costs and**

reduce electricity rates for all rate-payers. In New York, these grid benefits have been assessed at \$7,000 that accrues to all other rate-payers from each residential system that is installed.¹

These grid benefits have been analyzed and reported by respected independent experts. For example, RMI released a report earlier this year that found that “geothermal heat pumps use about 80 percent less energy annually than industry-standard fossil fuel furnaces to heat homes in the Midwest. They use four times less electricity on the most extreme cold days than air-source heat pumps and can support limiting peak demand on the utility system during cold snaps or heat waves.”² (Figure at right is from RMI report).



In December, 2023, the U.S. DOE released a study³ indicating the tremendous savings in grid build-out and generation capacity that can be avoided if a large percentage of buildings in the country are electrified with GSHP rather than ASHP. Findings included \$1Trillion in grid services cost savings, a 12% decrease in the wholesale cost of electricity, and the authors highlighted: “Because GHPs reduce the cost of power on the grid, as well as the marginal system cost of electricity, which, combined with reduced fuel consumption, reduces consumer energy payments, GHPs are valuable for potentially achieving economic and environmental justice in underserved communities. Because less grid infrastructure investment is required with the large-scale deployment of GHPs, they could reduce the cost of power for all grid consumers—even those who do not have the technology installed.”(ibid)

MA HER and HEAR Rebate recommendations:

1. Ensure that Geothermal (Ground Source) Heat Pumps (GSHP) are included in HER and HEAR. The IRA legislation intent was to include GSHP and that DOE’s guidance indicates that GSHP are encompassed in the heat pumps that would be eligible for these rebate programs.

¹ *New Efficiency: New York, Analysis of Residential Heat Pump Potential and Economics*, NYSERDA, January 2019, p., S-3,
<https://www.nyserdera.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/NYSERDA/18-44-HeatPump.pdf>

² *Clean Energy 101: Geothermal Heat Pumps*, RMI, March 29, 2023, accessed August 10, 2023,
<https://rmi.org/clean-energy-101-geothermal-heat-pumps/>

³ <https://info.ornl.gov/sites/publications/Files/Pub196793.pdf>

Given the benefits of GSHP outlined above, we strongly recommend that DOER ensure that both HER and HEAR support installations of ground source heat pumps as well as air source heat pumps.

2. Consider establishing pre-approved categories of rebates under the HER program for certain measures based on generic modeled energy savings.

- GSHPs are one of a few select measures that will achieve well over 35% energy savings in virtually every scenario, regardless of specific housing characteristics.
 - A GSHP replacing fuel oil heating will typically achieve energy savings of over 80%.
 - A GSHP replacing a natural gas system will typically achieve energy savings of 70%.
 - A GSHP replacing an air source heat pump will typically achieve energy savings of 50%.

DOER should establish categories of pre-approved measures (or allow States to do so) that meet these modeled energy savings requirements, including GSHPs for \$4,000/\$8,000 rebates.

- Pre-approved measures can leverage DOE energy use models to comply with BPI 2400 modeling requirements, using simple inputs to account for climate zones, typical home size, and age
- These select pre-approved measures will provide certainty on rebate values for homeowners/building owners and contractors, simplify the rebate application process, and reduce duplicative calculation of energy savings for every single home.

3. Focus rebates on work required to enable whole home electrification in older building stock that is not incentivized through MassSave rebates, including:

- Ductwork modifications
- Electrical wiring
- Main Panel Upgrades
- Boiler/furnace removal
- Oil tank removal

For example, we are very encouraged to see that slide 10 of the MA straw proposal⁴ indicates and intention to leverage HEAR funding to support moderate income electrical wiring and MPU upgrades to supplement available MassSave rebates for heat pumps and HPWH. We think this could be an extremely helpful use of HEAR funding.

We encourage DOER to explore other options for funding to support the needs for ductwork modification, boiler/furnace removal, and oil tank removal costs that will be required for many homes to switch to any type of heat pump, air source heat pump or ground source heat pump.

4. Minimize administrative burden and costs for program participation:

- Allow electronic submission of rebates, including electronic signatures, rather than requiring hard copy submissions with wet signatures on documents;

⁴ <https://www.mass.gov/doc/her-and-hear-straw-proposal-for-public-input/download>

- Leverage online portals to provide transparency on rebate status for consumers and contractors; and
- Utilize electronic payments to streamline rebate delivery and only use paper checks when electronic payment is not feasible.
- Allow customers to assign a rebate to a contractor, so that contractors can show the rebate as a discount on the contract, allowing the customer to finance a smaller amount for the project.

Thank you for the opportunity to provide comments on the Commonwealth's implementation of HER and HEAR. As stated above, we are **strongly supportive of the DOER's straw proposal**, targeting the HER and HEAR programs to fill gaps in existing programs with the focus on enhancing rebates available for Municipal Light Plant customers, Affordable Housing Decarbonization, and Moderate Income Program Enhancement. We hope our comments above are helpful for ensuring that the MA **HER and HEAR programs will effectively leverage the benefits of geothermal heating and cooling with Ground Source Heat Pumps (GSHP)** for all MA rate-payers and residents. We look forward to working with the Commonwealth and its partners on the implementation of these rebate programs.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'H. Deese', is positioned above the printed name and title.

Heather E. Deese
Senior Director, Policy and Regulatory Affairs
Dandelion Energy



March 25, 2024

Commissioner Elizabeth Mahoney
Massachusetts Department of Energy Resources (DOER)

Re: Ceres' Response to DOER's Inflation Reduction Act Home Energy Rebates Straw Proposal

Dear Commissioner Mahoney;

On behalf of our businesses and investors, we write to you today to express our commitment to the accelerated deployment of job-creating, energy- and cost-saving technologies through the Inflation Reduction Act (IRA) appliance rebate programs and offer the following recommendations to the Department of Energy Resources (DOER) as you build out your HER and HEAR rebate programs.

Ceres is a sustainability advocacy organization collaborating with hundreds of leading investors and companies in our networks to advance climate solutions, protect water resources, accelerate sustainable capital markets, build a just and inclusive economy, and advocate for smart public policy. Through the Business for Innovative Climate and Energy Policy ([BICEP](#)) Network's [Energy Optimization Working Group](#), major employers, energy users, service providers, manufacturers, and retailers work to ensure state and federal energy programs reduce utility costs, create jobs, strengthen the economy, and build healthier communities. Members of this network include AO Smith, Daikin, Eaton, Franklin Energy, Home Depot Lowe's, Samsung, Sealed, Trane Technologies, and others. These companies know that energy efficiency, demand response, building electrification, and other clean technologies are key drivers of energy reliability and affordability. As industry experts, our member companies offer the following recommendations for your consideration and look forward to engaging with you on these topics in greater detail.

Industry Knowledge, Consumer Education, and Program Timeline Transparency for the Retail and Manufacturing Community Will Help to Maximize Program Success.

Ceres and our member companies are eager to see states maximize the environmental, economic, and equity benefits offered by this landmark funding opportunity. As industry experts, our companies understand the complex nature of the appliances eligible for participation in these rebate programs and wish to share our expertise with the relevant state agencies tasked with designing the programs. For example, manufacturers understand how to provide an effective consumer journey and industry stands ready on the variety of product categories covered by rebates, ranging from electric cooking products, heat pump dryers, heat pumps, heat pump water heaters, and more. We understand that this process will be time-consuming and involve many different stakeholders.

To ensure that our manufacturing, distribution, and workforce teams are ready to engage with the Commonwealth as efficiently as possible, we encourage DOER to be transparent and forthcoming with expected timelines and opportunities for public comment. We are eager to



bring our technologies and job opportunities to your state, and transparency in your process is crucial to ensuring that we are prepared to meet the Commonwealth's needs. Moreover, industry needs to ensure products are available in Massachusetts as they are already factoring in supply chain considerations and building readiness. To avoid unforeseen barriers in program design we offer our support and willingness to provide educational material related to the technologies available, market readiness, workforce development and any other topic DOER may wish to hear industry insight on.

Interstate Collaboration, Communication, and Consistency are Vital to Program Success.

Most of our member companies have footprints in multiple states, and while eager to see these programs implemented across the country are concerned about interstate collaboration and communication. While the Department of Energy (DOE) has given states leeway to tailor their programs to state's individual needs, the business community urges all states to be transparent in the program design and foster open lines of communication across state boundaries. Designing programs with some cohesion across state lines will allow for efficiency in technology access, installation, and overall program implementation. It will also result in less consumer confusion by ensuring consistency across regions.

Ceres and our company members also wish to raise concerns with DOER's proposal lack of point-of-sale opportunities for the rebate programs. The industry strongly believes that including retailers in these programs through in-store and online shopping experiences, specifically through a point-of-sale rebate offering, is critical for program success. Providing constituents, contractors, program administrators, and consultants with the optionality and flexibility to make purchases at retail outlets will maximize the efficacy of state programs. Without a retail in-store and online component in program design, customer and industry confusion is likely to result, creating unnecessary barriers to program participation. Programs lacking point-of-sale components may be drastically different from programs offered in neighboring states, thus making it more difficult for retailers, manufacturers, and installers to easily participate in programs across multiple states, or whole regions.

Consistency across state lines will be vital for the industry to fully participate in these programs, and thus for the Commonwealth to maximize potential savings for its residents. We encourage DOER to offer all eligible product categories under the HEAR program. Offering a limited list may lead to unforeseen barriers to product installation or lack of rebate maximization for residents. Many home upgrades include multiple components, some unknown until the upgrade is underway. By including all eligible product categories, DOER will ensure that any resident seeking home energy upgrades through the HEAR program will not reach a roadblock preventing them from completing their home retrofitting process.

The Commonwealth should incorporate both Measured and Modeled Approaches into the HER Program.

Our companies support a flexible approach that allows **both** pathways to encourage the maximum energy savings for consumers. The modeled approach will facilitate integration with existing programs familiar to program administrators and contractors. The measured approach will help evolve the market for energy efficiency, and help states to maximize the potential

impact the HER program can have by verifying savings helping to transform the energy efficiency market. Offering both approaches will allow for states to efficiently release rebate dollars through program design already familiar to all stakeholders, while paving the way for more innovative and effective information to be used in home decarbonization.

In support of the “both” pathways, we encourage DOER to ensure that the “both” approach is clearly defined for participating contractors, aggregators and consumers alike so that the rebate experience is seamless under either approach. In the current straw proposal, DOER indicates that it will only be using the modeled approach, while we understand offering the measured approach is more complicated, we recommend the commonwealth incorporate a **measured** savings pilot program into the DOER’s application to ensure maximum benefits from these programs are explored. This would make the program more consistent with meeting the Commonwealth’s goals laid out in the Clean Energy and Climate Plan for 2050.

Data Access for Consumers, Third-Party Participants, and Cross Agency Collaboration

At its heart, the HER and HEAR programs are designed to encourage advancement in home energy efficiency, reduce the residential building stock’s carbon emissions, and to save American residents money on their utility bills. To do this, we want to stress the importance of access to energy usage data for successful implementation of both rebate programs.

Understanding a home’s energy usage is crucial to both program implementation and consumer education and behavioral changes. DOER should work closely with the MA Dept. Of Public Utilities and utility companies, the MA Dept. of Housing and Community Development, and the MA Executive Office of Labor and Workforce Development to ensure that all overlapping programs requirements are made obvious, and opportunities for collaboration are discussed.

For these rebate programs to succeed, it is critical that pathways to data access for all program participants are established. We recommend that the Commonwealth explore the creation of an online portal where aggregators, installers, and consumers can access their data to determine rebate (and other program) eligibility and easily track usage to inform future appliance usage changes. Moreover, energy management systems can help reduce the stress on the grid at peak times by load-shifting and states should incorporate these benefits through HER implementation.

Finally, we encourage DOER to offer a simple and speedy verification process. The industry would like to emphasize the need for mobile phone support for both programs. Many low-moderate income individuals may not have access to a computer, and therefore will require a program that is mobile browser friendly. Secondly, customers should have the opportunity to learn about the program in real time while shopping for appliances in retail stores. Creating a simple online verification process for point-of-sale rebates will ensure that customers under duress looking to replace broken appliances will still be able to access rebates and will still be able to prioritize efficiency over the “quickest fix”.



CONCLUSION

As mentioned above, the ultimate goals of these programs are to improve home energy efficiency and reduce our overall carbon emissions. The Commonwealth has set ambitious climate goals, which will be nearly impossible to meet without increasing the rate of home energy retrofitting and overall building stock energy efficiency. If an individual's water heater or HVAC fails, they are going to be less concerned about efficiency, and more concerned with cost and keeping their home warm in the winter or cool in the summer. When these emergencies occur it is vital for consumers that these programs are easy to understand, easy to access, and that there is a short turnaround time for customers between applying for a rebate and receiving the funds.

We appreciate DOER's consideration of our comments and look forward to continuing to offer your office support through this process.

Sincerely,
Alli Gold Roberts
Senior Director, State Policy

Jeff Mauk
Director, State Policy, Eastern Region

Raagan Wilhelm
Manager, Energy Optimization Policy



March 25, 2024

Christina Moroney-Ebarb
Department of Energy Resources
100 Cambridge Street, 9th Floor
Boston, MA 02114

By Electronic Submission to christina.moroney-ebarb@mass.gov

Ms. Moroney-Ebarb,

Thank you for the opportunity to provide feedback on the Department of Energy Resources' (DOER) straw proposal for deploying the Commonwealth's HER and HEAR federal funding. We appreciate that the proposal's focus on income restricted multi-family units (HER) and moderate income households (HEAR) will support residents that often face barriers to weatherization and electrification and are underserved by the Mass Save program.

Rather than directing all of the HER/HEAR money into state programs, like Mass Save, we encourage DOER to utilize the funds to also support municipal programs that deliver meaningful services and protection to low-income tenants, including by engaging landlords. DOER should also remove known barriers to participation, such as income verification and up-front payments for costs covered by rebates. These recommendations, which build on comments we submitted to DOER in February 2023, are discussed further below.

Recommendations regarding HER Funding

Tenants, particularly low-income tenants, historically have had less access to meaningful energy efficiency or electrification work, including under Mass Save. This dynamic is driven in part by the need to engage landlords, whose participation/consent is required for the most impactful weatherization work and many decarbonization measures. We support using HER funds to help address these gaps, including by making funds available to naturally occurring affordable housing as well as deed-restricted units. Where incomes are used to assess funding eligibility, DOER should explore alternatives to income verification, such as self-attestation paired with spot audits. (Income verification is an issue being addressed in other contexts as well, such as Mass Save and DPU docket 24-15 regarding energy affordability.)

DOER should make HER funding available to municipal programs targeted at reaching landlords of deed-restricted and naturally occurring affordable housing.

As of 2021, Boston had approximately 56,695 income restricted units, in addition to approximately 20,000 tenant-based vouchers for affordable housing. Over three-quarters of these income-restricted units are privately owned. Boston has several programs that could provide a pipeline to these buildings. For example, Boston's Healthy and Green Retrofit Pilot Program gives owner-occupants of two- to four-unit homes \$50,000 per unit to electrify and decarbonize their buildings. The City's Equitable Emissions Investment Fund, managed pursuant to the Building Emissions Reduction and Disclosure Ordinance, is another tool that can be used to channel funds to landlords of low-income buildings.¹

DOER should set aside a portion of HER funds, beyond those reserved for communities with Municipal Light Plants, for allocation to municipal programs that would in turn identify and engage landlords and tenants in eligible affordable housing.

Increased participation by landlords needs to be paired with protection for low-income tenants to avoid unintended consequences such as higher rents and passed on costs.

There can be a tension between engaging landlords and protecting tenants. For example, if incentives to participate are paired with a limitation on rent increases, some landlords may be deterred from participating, particularly if they do not pay for utility bills. However, there are strategies for addressing this dynamic that should be further explored. DOER should use this opportunity to test some of these strategies, either directly or by supporting municipal programs. For example:

- Require landlords of low-income units that receive HER funding to limit or forego rent increases for a specified period of time. Such requirements should be structured so as to minimize disincentives to landlord participation. For example, consider financing work through forgivable loans to landlords for which forgiveness is based on maintaining rents at specific levels. The healthy and green retrofit pilot recently launched by the City may provide useful data as the new program is implemented.
- To the extent financial incentives to landlords are conditioned on limiting rent increases, do not focus on absolute changes to rents. Instead, tie limitations to whether rents qualify for specific standards, e.g., rent deemed affordable for an individual or household with 60% area median income. This will allow rents to track any increases approved by

¹ Money in the Equitable Emissions Investment Fund supports local building emission abatement projects that prioritize benefits to Environmental Justice Populations and populations disproportionately affected by air pollution.

government agencies.

- Develop mechanisms to track and enforce compliance with any rent control conditions. Currently, the burden of assessing whether a landlord complies with any rent conditions is on the tenant; requiring tenants to report their landlords may detract from the protection that rental control provisions were designed to address in the first place.

Using HER funds to develop and test mechanisms to address the tenant/landlord divide in building weatherization and electrification work could have outsize effects by informing additional programs.

Recommendations regarding HEAR Funding

Allowing households to “stack” funding sources is often necessary for low and moderate income households to proceed with energy efficiency or electrification projects; combining HEAR and Mass Save funding can help close existing financing gaps. Because Mass Save has historically had difficulties meeting its targets for serving medium income households, we encourage DOER to distribute a portion of the HEAR funds to municipal programs that serve moderate-income residents, particularly in small multifamily buildings.

To the extent rebates rather than direct payments are utilized, DOER should establish processes to support participation by moderate-income households with limited out-of-pocket expenses. A rebate program, while a useful incentive, can skew benefits away from individuals or households most in need of financial assistance, particularly when there is a lag between a financial outlay and a rebate. For example, with respect to homeowners, DOER could “hold” a portion of the HEAR funds to pay the rebatable portion of work in eligible homes and place a lien on the property that will be removed when the rebate is issued and paid to DOER.

Recommendations regarding both HER and HEAR Funding

Both HER and HEAR funds should be used in a way that awards early actors and integrates technologies that support the smart use of electricity going forward.

- Accounting issues: To the extent that baselines are used to calculate emission reductions attributable to the use of HER or HEAR funds, the baseline should be measured by existing conditions rather than by regulatory requirements. This will support proactive and innovative municipal action and protect against attribution “discounts” that (i) limit reductions credited to projects subject to more stringent municipal building codes or building performance standards and (ii) steer funds away from older building stock, which is a common building type for lower-income households.

- Integrate smart technologies: To the extent allowed by the federal program rules, projects funded by HER or HEAR should include available “smart” technologies that allow participation in demand response programs and other initiatives that can help shave peak electric demand. Energy efficiency and strategic electricity use are building blocks that will help reduce the amount of new grid infrastructure required to support a decarbonized economy. We need to build out the backbone for these smart systems now.

* * *

Thank you for your attention to these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Aladdine Joroff', with a stylized flourish at the end.

Aladdine Joroff
Director of Climate Policy

Enervee Comments

Via email to: Christina Moroney-Ebarb, Federal Program Coordinator, Massachusetts Department of Energy Resources

From: Anne Arquit Niederberger, Enervee

Date: March 25, 2024

Subject: Massachusetts IRA HEAR Straw Proposal

Enervee is a climate technology company operating across the country, in partnership with State agencies and utility companies. In response to the MA DOER call for public input on the federal Inflation Reduction Act Home Energy Rebate programs Straw Proposal, we would like to provide thoughts on the following aspects of the Home Electrification & Appliance Rebates (HEAR) component.

1) DOER's plan not to focus on direct point-of-sale rebates should be reconsidered. The HEAR program requires point-of-sale (POS) rebates, the vast majority of qualified appliances (electric cooking appliances, clothes dryers) are purchased at retail by individuals and over half of major domestic appliances are meanwhile purchased online¹, with an increasing trend. To overcome financial barriers faced by disadvantaged consumers, instant retail rebates, combined with instant financing, are essential.

A recent study undertaken by Opinion Dynamics to assist program planners and third-party implementers in developing more effective residential offerings for customers made a number of pertinent recommendations, including:

- Capture customer attention when they're in the market for equipment replacement.
- Prioritize investments in search engine marketing to reach customers in the market for new equipment.
- Address the cost barrier with incentives and/or financing. The study also pointed out that program awareness is relatively high in the residential market, but participation is low – partly because incentives are not high enough for customers to afford equipment or the equipment customers need is not covered by programs. Hence, the need for financing.
- Address the “hassle factor”.

¹ [statista.com/outlook/cmo/household-appliances/major-appliances/united-states#analyst-opinion](https://www.statista.com/outlook/cmo/household-appliances/major-appliances/united-states#analyst-opinion)

The study² also emphasized that the types of customers not participating in existing programs are often renters, hard-to-reach, located in disadvantaged communities, or low-to-moderate income – exactly the consumer segments being targeted by HEAR. These key takeaways underscore the importance of, and opportunity to leverage the online retail channel for the HEAR program.

We also know that effectively overcoming financial barriers at the retail point-of-sale has proven effective, as demonstrated by the New York Marketplace Innovative Market Strategies program³.

2) Importance of a statewide point-of-sale strategy to drive market transformation and lasting impact. Enervee's marketplace platform serves as a digital hub to engage various market actors to break down barriers, transform markets and drive equity outcomes. The availability of HEAR funding will be a catalyst to expand existing partnerships with private lenders, retailers, manufacturers, and contractors – in MA and across the country – setting a MA Marketplace up for increased impact. Perhaps even more importantly, however, the program will maintain its effectiveness after the HEAR rebate program ends, not the least because of the continued availability and impact of the [Enervee Score](#), [Eco Financing](#) and industry partnerships. As elaborated on below, Enervee's solution for online do-it-yourself appliance purchases with instant HEAR rebates and financing will enable all manufacturers and retailers to offer an integrated shopping experience on their own websites and stores. This, in turn, will incentivize these partners to promote the rebate program and drive engagement and sales.

3) Importance of augmenting HEAR incentives with affordable financing to eliminate financial barriers. Lack of access to capital is an important barrier, so making affordable financing available instantly at the point of sale is a critical complement to HEAR point-of-sale rebates. Even if the retail price of an eligible device were to be halved, many consumers would still struggle to cover the remainder of the up-front purchase price, particularly in an emergency replacement context common for LMI consumers. Enervee is demonstrating great success via the NY Marketplace with our online retail Eco Financing loan product empowering traditionally underserved consumer segments to buy highly efficient products on their own with affordable monthly payments. In our work with NYSEDA, we are finding that financing is critical for many income-constrained consumers to make energy-efficient purchases that cut energy bills over the lifetime of the product, even when instant POS rebates are available (refer to report referenced in footnote 3). The availability of Eco Financing might also allow DOER to optimize HEAR rebate levels to achieve its goals.

4) Opportunity to ensure efficient delivery of HEAR with respect to income verification, outreach and customer experience by leveraging the online retail channel. Enervee is in regular contact with the Department of Energy (DOE) to work out technical and

² [Enervee online marketplaces fill gaps identified by California energy efficiency study](#)

³ See Final Report here: <https://www.enervee.com/resources/ny-marketplace-project>

administrative details related to HEAR verification and data reporting requirements that would allow us to support real-time point-of-sale rebates for DIY purchases (similar to the instant rebates we already do for utility programs). We envision being able to: 1) instantly verify consumers making online retail purchases, 2) submit eligibility verification to DOE on behalf of the consumer, 3) apply the rebate coupon at checkout, and then 4) submit the redeemed coupon to the State's third party backend for reimbursement.

States will need to demonstrate to DOE that their proposed approaches for income verification will address all types of households and not create undue burden for claimants. We therefore strongly urge DOER to take advantage of self-attestation of income eligibility. HEAR is a point-of-sale rebate program. It is therefore critical that verification of eligibility can be conducted in real-time, at the point of sale. This is particularly important for the target audience, namely low- and moderate-income consumers, who often make such major purchases only when equipment breaks or otherwise needs to be replaced in a hurry. When using self-attestation, the DOE requires States to verify income eligibility for at least 50% of applications, which can be done post-purchase and does not need to be done in real time.

Based on the above considerations and our experience implementing statewide marketplaces and partnering with the broader manufacturer and retailer ecosystem across the country, Enervee recommends that DOER consider how to best leverage retail channels to: 1) tap into natural replacement cycles; 2) eliminate barriers to energy-efficient one-off appliance purchases made at retail by both homeowners and renters, across all housing types; and 3) drive participation in the HEAR point-of-sale rebates, consistent with DOE guidance. In our view, the critical decision would be to authorize entities like Enervee to conduct real-time verification of eligibility, and we would be happy to provide further details. This approach offers the following benefits, in addition to the points discussed above:

- **Opportunity for a quick start.** A full-featured online retail channel can be launched in less than two months, with Enervee's proven technology, to deliver HEAR incentives at the online point-of-sale, while meeting DOE requirements.
- **Efficiency for All.** While the HEAR incentives are for income-qualified households only, a retail channel can offer benefits for all Bay Staters. This includes the zero to 100 [Enervee Score](#) on every product model, which has been proven to help shoppers choose the most energy efficient products that meet their needs⁴. It also includes the ability to instantly identify products that qualify for Federal tax credits, so shoppers who pay taxes can take that information into account when making buying decisions. And those who don't qualify for HEAR can still take advantage of other incentives and Eco Financing to make efficient purchases affordable. Thus a retail POS channel can benefit all Bay Staters and have a greater impact than a program limited to HEAR alone.

⁴ [Empowered Consumers. Claimable Savings.](#)

- **Demonstrated high DAC/minority/LMI/renter participation.** The equity outcomes from existing deployments are compelling. NY Marketplace program data show that people located in disadvantaged communities (DACs), racial/ethnic minorities, people with fair to poor credit scores, and lower income New Yorkers were over-proportionately served by Eco Financing. For example, over half of loans went to people located in disadvantaged communities, exceeding the state's market share of 35%, even without targeted marketing (see report cited in footnote 3). This online retail channel can successfully serve tenants in multi-family buildings in low-income communities. Despite the commonly held belief that tenants generally don't purchase large appliances that cost hundreds to thousands of dollars themselves, we have found that the share of Eco Financing loans going to renters is identical to the aggregate share of appliances in the installed base in rental properties⁵.
- **Impact beyond HEAR rebates.** The HEAR program offers product rebates on four categories (electric cooking appliances and heat pump clothes dryers, water heaters and HVAC equipment), while Enervee's marketplace platform features dozens of energy saving consumer product categories, as well as solar, storage and EV charger installation concierge services. Offering consumers a comprehensive buying experience will reduce friction and drive conversions. It also substantially increases access to in market online shoppers, because nearly all consumers begin their shopping research online. Enervee's retail purchase platform can also support point-of-sale enrollment of flexible load devices in demand response and managed charging programs, contributing to the growth of virtual power plants.
- **Existing program integrations.** A retail channel for HEAR rebates can be readily integrated with relevant existing programs designed to drive LMI/DAC participation, such as the Income Eligible Program. In NY, for example, the NY Marketplace is integrated with the EmPower+ no-cost direct-install program, which allows participants to shop on a dedicated marketplace to select the appliance of their choice and schedule delivery and installation services with our retail partners. An online marketplace with Eco Financing – with a focus on empowering consumers to make better 1-off appliance purchases when something needs to be replaced in a hurry – is a perfect complement to the Income Eligible Program and can also cross-promote it due to the high levels of marketplace engagement.
The platform is also designed to stack all available incentives, be they from utility energy efficiency or demand response programs, state electrification programs or our manufacturer and retail partners. In addition, the platform contains an integrated rooftop solar, storage and EV charger purchase and installation concierge service, creating a 1-stop online marketplace experience for clean energy purchases and financing.

⁵ [Renter \(Mis\)perceptions](#)

- **Complement existing Mass Save Marketplace.** A central statewide retail channel for HEAR rebates that also offers financing on a wide range of product categories (beyond the DIY HEAR categories) could productively coexist with the existing Mass Save Marketplace, as many of the categories do not overlap, and the Mass Save Marketplace offers can be fed into the Enervee platform alongside other retail offers, expanding consumer choice.

We therefore strongly recommend that the State of Massachusetts consider the benefits of leveraging a stand-alone, direct point-of-sale rebate approach to be stood up by retail market partners, compliant with DOE guidance, particularly for the DIY appliance categories that do not require installation by a licensed contractor. There is very little that DOER would need to do to enable this channel, other than authorizing real-time verification of eligibility, based on procedures compliant with DOE workflows and guidance.

From a strategic perspective, this would tee up synergy with the Greenhouse Gas Reduction Fund, should the Massachusetts Community Climate Bank choose to use funds anticipated to be available via the National Clean Investment Fund and Solar for All to support statewide Eco Financing to ensure the most favorable terms and inclusive Eco Financing lending program available.

Thank you for the opportunity to share our thoughts. Enervee looks forward to working with the State of Massachusetts and our retail sector partners to rapidly advance an equitable clean energy transition.

March 25, 2024
Elizabeth Mahony
Commissioner
Department of Energy Resources
Massachusetts State House
24 Beacon Street, Room 280
Boston, Massachusetts 02133

RE: DOER HER/HEAR straw proposal on energy rebates

Dear Commissioner Mahony,

We are ratepayers in the 50+ communities that are served by 41 municipal light plants (MLPs). We are concerned and object to the current proposal for how HER/HEAR rebates using Inflation Reduction Act funds will be administered in MLP towns. The signatures also include ratepayers of investor-owned utilities who support this letter.

We also represent grass-roots local advocacy groups that work together as part of the Municipal Light Plant campaign of the Mass Climate Action Network. We have all worked to meet the extraordinary need for local, EJ/LMI equitable climate advocacy in our towns, as our municipal utilities are still exempt from the state's climate goals until 2030.

We ask DOER to:

1. Swap the HER and HEAR programs. Make the full portfolio of federally funded HEAR rebates available to MLP ratepayers, who are currently severely under-resourced by local energy efficiency incentives. Use the HER program for MassSave communities, which have the infrastructure and resources to manage it.
2. Or offer both HER and HEAR programs to all residents in the state.
3. Remove the matching fund or opt-in requirement for MLPs.
4. Contract with a neutral organization to administer the funds directly to residents, e.g., Energy Federated Inc.(EFI), the Mass Clean Energy Center or the Center for Sustainable Energy (CSE), which administers MOR-EV, a program MLP customers can access now without going through their local utility.

The energy-efficiency programs offered by most MLPs are a fraction of what MassSave offers. For example, a rebate of 50% of insulation cost, with a cap of \$1,000, is typical, compared with MassSave's 75% cost with no cap; and \$500-\$2,000 for a heat pump system, compared with up to \$10,000 or more from MassSave. **Low-/moderate-income households in MLP towns cannot close the gap of many thousands of dollars needed to undertake whole-house weatherization or electrification.** The rebates serve mostly as sweeteners for higher-income households.

We are shocked that the HEAR (formerly HEEHRA) program that has been widely publicized since the IRA was passed in 2022 will not be available in our towns. MLP towns are the very places that need it the most. The fact that HEAR rebates can be added to the already substantial MassSave rebates adds insult to injury. MLP customers and towns will only fall further behind, both in equity and carbon reduction goals. This **MUST** be changed in your proposal.

The DOER proposal is vague about how the HER funding will “support MLPs” and will be administered. Our concern is this: If the MLPs must first opt in and/or provide matching funds in order for their customers to access federal IRA funding, we believe: **Many MLPs simply will not do so, unless they are required to.** We cannot accept this plan.

Based on our experiences of advocating to move these utilities inch-by-inch toward climate goals, we do not trust that the funding will reach the environmental-justice neighborhoods and low-/moderate-income households for which it was intended. Many of us have advocated in the past for our MLP towns to opt in to, say, the Renewable Energy Trust Fund and have been told an emphatic no. Only seven have opted in. **An opt-in approach is short-sighted climate policy.**

The HER program is onerous for residents to access, requiring proof of energy use history and proposed savings from retrofits. As we read the federal legislation, the HER program’s smaller tiered income rebates, with no cap, seemed most suitable for households above 150% of the median income, who do not qualify for HEAR rebates. But in the Massachusetts straw proposal, the 15% of the state’s citizens who reside in MLP towns will not qualify for HEAR either. The EJ and low-/moderate-income residents in those cities/towns will be the least able to navigate those hurdles.

During the public input session DOER’s Ian Finlayson stated that MLP customers’ electricity rates are lower, and their utilities could opt to pay into MassSave if they want better incentives. The fact that investor-owned utility customers pay into the MassSave program is irrelevant. We all pay federal taxes. The federal IRA incentives should be distributed in a way that provides equitable access to the benefits across all of the state’s communities.

Lower electricity rates mean little to the many MLP households whose principal energy cost is heating. Customers in MLP communities who haven’t yet been able to afford to replace their oil or propane heat with natural gas certainly need more help to transition to a heat pump system. Burning oil is currently the most carbon-intensive way to heat a home. The state should be focusing on those homes first, regardless of where their electricity comes from.

By offering MLP customers only major whole-house retrofit incentives through the HER program, DOER is restricting the ability of low-income households in MLP communities to undertake other, more affordable steps toward energy efficiency. HEAR program rebates would

enable MLP customers to pursue less costly or phased insulation projects, electrical system upgrades, induction stoves, heat pump appliances such as hot water heaters and dryers.

The state's IRA incentive proposal must not be used to balance the perceived inequities between IOU and MLP utilities. Most of the differential in electric rates is due to profits demanded by investors and salaries demanded by IOU executives. The state could regulate the inequity from those causes. The state could also do more to require MLPs to align with state climate and efficiency goals (MCAN advocated for legislation aimed at that goal this session). The state could make it easier for municipalities to transition to less expensive public power. But denying federal incentives to individual households in MLP communities—**many of them EJ and LMI households**—is NOT the place to achieve that goal.

Please consider these facts:

- Twenty-two of the 41 MLP cities/towns have environmental justice census blocks.
- In eight of those, a substantial percentage of the population live in EJ blocks: Braintree (81%), Holyoke (78%), Chicopee (77%), Shrewsbury (72%), Norwood (52%), Taunton (51%), Peabody (38%), and Westfield (37%), representing more than 200,000 state residents.
- Ten MLP cities/towns have median incomes below the 2021 state median income of \$89,026 (the first four are roughly half that): Holyoke, Russell, Chester, Chicopee, Taunton, Westfield, Middleborough, South Hadley, Peabody, and Merrimac.
- Throughout all of our towns there are many low-/moderate-income households who meet the federal income eligibility criteria for HEAR of 80% and 150% of the median income.
- Four municipal utilities supply both gas and electric, which means no one in town is eligible for MassSave incentives. All four have EJ blocks.
- Some MLP towns have no access to a natural gas pipeline, meaning nearly everyone heats with oil, the most carbon-emitting heat source, and no one is eligible for MassSave.
- All of these state residents are desperate for effective energy-efficiency incentives and should be a state priority for meeting the state's climate goals.

The IRA incentives have two primary goals: environmental justice and rapid decarbonization. We support both wholeheartedly. As presented, DOER's straw proposal fails at both when it comes to MLP communities.

We would welcome another opportunity to speak to you to address our concerns as MLP ratepayers and citizens and supporters.

Kimberly French, Middleborough, Middleborough MLP, Sustainable Middleborough
Phil Thayer, Concord, Concord Light, ConcordCAN, MCAN board member
Marty Bitner, Belmont, Belmont Light, Energy Committee
Charlotte Weigel, Groton, Groton Electric Light Department,
Mark Wagner, Belmont, Belmont Light,
John Kolterman, Belmont, Belmont Light, Energy Committee
Jane Dye, Holden, Holden Muni Light Dept, Citizens for Holden's Energy Future (CHEF)
John Howard, S Hadley, S Hadley MLP, S Hadley Sustainability and Energy Comm,
Susan Smoller, Peabody, Peabody Municipal Light Plant, Breathe Clean North Shore
Arnold Epstein, Stow, Hudson Light & Power, Elders Climate Action
Paul Griffin, Belmont, Belmont Light
Thomas Boettcher, Wakefield, Wakefield Municipal Gas & Light, WMGLD Commissioner
Laura Burns, Hingham, Hingham Municipal Lighting Plant
Jacob Vaillancourt, Hull, Hull Municipal Light Plant
Mary Jane Else, S Hadley, S Hadley Elec Light, S Hadley Sustainability and Energy Comm
Rosemary Wessel, Pittsfield MA, No Fracked Gas in Mass
Jane Winn, Pittsfield, Berkshire Environmental Action Team
Bruce Edgren, Hull, Hull Municipal Light Plant
Lucinda Wykle-Rosenberg, Hull, Hull MLP
Stephanie Bartelt, Groveland, Groveland Light, MCAN
Kathleen Wolf, Hull, Hull MLP, CECAC
Mindy Markowitz, Hull, Hull Light
Dean Hickman, Belmont, Belmont Light, Sustainable Belmont
Adam Smith, Marblehead, MMLD, MMLD Light Commissioner
Deane Coady, Brookline Mothers out front
Becky Sarah, Cambridge MA Elders Climate Action
Gretchen Schultz-Ellison, Shrewsbury, MA, SELCO, Tipping Point 01545
Dawn Edell, Brookline Elder Climate Action
Richard Rys, Princeton, PMLD
Tina Grosowsky, Hudson, Hudson Light and Power, Elders Climate Action Mass
Tim Brainerd, Framingham Energize Framingham
Michael Sales, Newburyport Elders Climate Action Mass
Fran Ludwig, Lexington Boston Catholic Climate Movement
Susan Evans, Boxborough, Littleton Electric Light, Brook Village Condo Assoc
Sandy Rubchinuk, Middleton, Middleton Electric Light Department
Marjorie Lee, Wayland. NA
Betty Krikorian, Belmont, Belmont Light, Elders Climate Action - MA
Bram Moreinis, Greenfield,
Gretchen Thompson, Williamstown,

Ginger Vollmar,Groton,Groton Electric Light Department
Richard Lent,Stow,Hudson Light and Power
Joshua Vollmar,Groton,Groton Electric Light Department
Bonnie Gorman RN,Quincy,natl grid
Matthew Karas,Shrewsbury,Selco
Keith Olcott,Maynard,NA
Laura,Reiner,Hudson,Hudson Light and Power
Joel Kershner,Brookline,NA
Dorothy Weitzman,Newton,NA
Rachael Missall,Shrewsbury,SELCO
Marie-Laure,Boston,NA
Phil Francisco,Groton,Groton Electric Light Department
Jeanette Millard,Hudson,Hudson Light & Power Department
Alan Melchior,Middleborough,Middleborough Gas & Electric
Janet Cason,Northborough, on behalf of 350 Central Mass
Charles Flammer,Lexington,NA
Irene R Fairley,Belmont,Belmont Light.
Alex Rose,Wellesley,Wellesley MLP
Per Gyllstrom,Hudson,Hudson Light & Power
Kathleen McGillicuddy,Stow,Hudson Light & Power
Susan Burnham,Stow,Hudson municipal light
Seana Parker-Dalton,Shrewsbury,SELCO
Richard Garrison,Boxborough,LELWD
Bryan DiPersia,Rowley,Rowley Municipal Lighting Plant
Jane Dougan,Belmont,Belmont Light
Janice E Habermehl,HUDSON,Hudson Light and Power
Tony Rogers,Pelham,NA
Andy Puchrik,Concord,Concord Municipal Light Plant
Mark L. Kohn,Hull,Hull Municipal Light Plant
Sharon L Brownfield,Stow,Hudson Light and Power
Nancy Maynes,Amesbury,NA
J Kristin Hedges,South Hadley,SHELD
Gregory Opp,Hudson,Hudson Light and Power
Edward Woll,Somerville,.
Judith Norsigian,Newton,
Leslie A. Taylor,Hull,Hull Municipal Light
David Douglas,Boston,NA
Anthony Jagodnik,Bolton,NA
Anne Paulsen,Belmont,Belmont Light

Frederick Paulsen,Belmont,Belmont Light
Denis Mahoney,Holden,Holden MLP
Christine Uljua,East Falmouth,Falmouth Municipal Light Authority
Martin Meyer,Stow,Hudson Light & Power
Michael Duclos,Stow,Hudson Light and Power
Francie Nolde,Boxborough,Littleton Electric Light Dept.
David Schreiber,Brookline,NA
Nancy J Hughes,Shrewsbury,SELCO
Norah Dooley,Royalston,NA
David Weber,Stow,Hudson Light & Power
Karen McDonald,Waltham,NA
Lee Cooprider, Stow, Hudson Light and Power, Sustainable Stow
Barbara Salzman,Boxborough,Littleton Electric Light Department
Richard Chase,Princeton,Princeton Municipal Light Dept,PMLD Commissioner
Claus Becker,Belmont,Belmont Light,Energy Committee
Scott Wahlstrom,Holden,Holden Muni Light Dept,CHEF(Cit. for Holden's Energy Future)
Glen Ayers,GreenfieldElders Climate Action
Johanna Choo,Boxborough,Littleton Electric
Lee Long Quek,Boxborough,Littleton Electric
Sally Owen,Newbury,NA
Lawrence Fine,Hudson,Hudson Light & Power,Green Hudson
Susan Sommer,Watertown,Watertown Electricity Choice,Mothers Out Front
Steven Wenner,Cohasset,NA,on behalf of 350 Mass South Shore Node
Richard Halpern,Franklin,NA,MCAN board member
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Eleanor Kubinciak,Boxborough,NA,Littleton Electric Light Dept
Stephen Weaver,Boxborough,Littleton Electric Light Dept
Robin Fielding,Lakeville,Middleborough Gas and Electric
Michael Fielding,Lakeville,Middleborough Gas and Electric
Michael Johnson,Ipswich,Ipswich Electric Light Dept,Ipswich Climate Resiliency Comm
Steven Andrada,Peabody,PMLP
Ken Swenson,Ipswich,Ipswich MLP,Ipswich Climate Resiliency Comm member
Lois Aldrich,Middleboro MA,Middleboro Gas and Electric
Sandra Smiley,Middleborough,Middleborough G&E,Sustainable Middleborough
Cory Alperstein,Newton.NA
Larissa Hallgren,Middleboro,Middleborough G&E,Commissioner
Susan Purser,Pittsfield,N/A,350ma-Berkshires
Carolyn Sellars,Ashburnham,Ashburnham Municipal Light
Tony Fountain,Middleborough,Middleborough G&E

Lori Goldner,Amherst,NA,Local Energy Advocates
John Borger,Hingham,**Hingham Municipal Lighting Plant**,Hingham Net Zero,
Mark Adams,Marblehead,Marblehead Municipal Light Dept,Sustainable Marblehead
Hale Smith,Milton,NA
Petra Langer,Marblehead,Marblehead Municipal Light Dept,Sustainable Marblehead
Edward Nilsson,Marblehead,Marblehead MLP,Nilsson + Siden Assoc, Arch & Planners
Andrea Zeren,Marblehead,Marblehead Municipal Light Plant
Tom Green,Hudson,Hudson Light and Power,Green Hudson
Bill Howe,Middleborough,MG&E
Marybelle Hollister,Marblehead,Marblehead MLP,Sustainable Marblehead
Michael Rozyne,Middleborough,Middleborough Gas & Electric
Gary Rucinski,Newton,,Massachusetts Citizens' Climate Lobby
Frank Kashner,Marblehead,Marblehead Municipal,Multiple
David R Selden,Marblehead,Marblehead,Sustainable Marblehead
Fred Bunger,WELLESLEY,Wellesley MLP,citizen struggling to get off fossil fuel,
Mary Gard,Wellesley Hills,Wellesley MLP,on behalf of Sustainable Wellesley
James Daniel Kaplan,Hull,Hull MLP,CECAC, 100% Clean Energy & Climate Action Comm
Renee Nolan,Middleboro,Middleboro gas and electric
Jim Syiek,Boxborough MA,Littleton Electric Light,Harvard Ridge Condominium Trust
Geraldine Herlihy,Holden,Holden Municipal Light Dept,Board of Selectmen
Lynn Nadeau,Marblehead,MMLD,sustainable marblehead
Roger Luckmann,Natick,NA,On behalf of Elders Climate Action Mass
Jerry Halberstadt,Peabody,Peabody MLP,Clean Power Coala., Breathe Clean NS, MCAN
Nancy Powell,Marblehead,Marblehead Municipal Light Dept,Sustainable Marblehead
Palma Bickford,Marblehead,Marblehead Municipal Light
Tom Curran,Holden,Holden Municipal Light Department,Board of Selectmen,,
Susan Rosenkranz,Somerville,N/A,Biodiversity for a Livable Climate, Elder Climate
Action of MA
Louise Yarmoff,Marblehead,Marblehead Municipal Light Dept,Sustainable Marblehead
Phyllis Theermann,Wellesley,Wellesley MLP, President Sustainable Wellesley



479 Jessie Street
San Francisco, CA 94103
Standard Euler, Inc. (dba Flair)

Mar 20, 2024

Christina Moroney-Ebarb
Federal Program Coordinator
Massachusetts Department of Energy Resources

Dear Christina,

Thanks for the opportunity to provide input and suggestions to DOER to help inform and guide HEAR and HOME implementation in Massachusetts. Flair is a leading provider of heatpump controls as well as controls that span legacy heating and heat pumps to promote equitable, attractive, cost effective, and rapid electrification across the residential sector. Our solutions are used to help electrify homes by homeowners and contractors who vary from incredibly enthusiastic to skeptical or concerned when it comes to electrification.

Given that, and with enthusiasm for supporting rapid electrification across the commonwealth, Flair urges DOER to consider a number of inclusions and requirements to promote a holistic, equitable, and effective utilization of IRA related funding.

Hybridization as a Critical and Thoughtful Path to Electrification

Massachusetts pioneered heating hybridization through its Integrated Controls program under MassSave. It's no secret that a major reason for heatpump adoption in Massachusetts, particularly Ductless Heat pumps (DHPs) is the desire for energy efficient air conditioning. As such, many homeowners that buy heat pumps, without any sort of tie-in to their legacy heating systems do not utilize their heat pumps during the heating season thus no real electrification has taken place. The advent of Integrated Controls has provided a simple technology solution for ensuring that heatpump rebates designed for electrification are not merely subsidizing air conditioning systems but instead, are ensuring heating season heat pump utilization and displacing fossil fuel consumption. This has the effect of utilizing the inherent demand for heat pumps (as ACs) from consumers while accomplishing the state's electrification goals. While many New England states are touting their heatpump deployment numbers, it's critical that heat pump deployment



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numbers aren't naively being used to represent reductions in fossil fuel consumption for home heating.

Further, it's important to recognize that even those who do intend to adopt DHPs for heating may face a variety of challenges. In some instances, architectural issues common to the state's housing stock (smaller more broken up spaces) may make full load DHP installations prohibitively complex and costly while equity issues exist where non-hybrid heatpump systems may add undue energy cost burden as gas, oil and electricity costs vary considerably across seasons and market conditions. Homeowners also will also continue to see value in having a backup heating system in instances for resiliency, comfort and safety which is reasonable but again, without coordinated control, may lead to heatpump deployments that are underutilized during the heating season.

Lastly, there are many contractors, tradespeople, fuel delivery companies and associated employees who are transitioning their workforces, employees skills, and business models as a part of the energy transition. Hybridization helps provide an onramp to electrification for these businesses and even allows them to become electrification enablers and promoters rather than detractors. Homeowners place tremendous trust in their contractors and service providers and it's critical that we ensure they are partners in electrification rather than creating marketplace resistance to electrification. Cultural aversion to electrification has already become widespread in conversations about EVs and gas stoves, but well controlled hybridization strategies solve for carbon, comfort, cost, equity, employment, ultimately resulting in rapid electrification.

Any MassSave and/or IRA related program implementation must make hybridization pathways for electrification an included and attractive option for homeowners.

Electrical Panel Upgrades / Smart Load Centers - Include Virtual Load Center Solutions

The core intention of electrical panel upgrade funding inclusion in the IRA is to facilitate the adoption of electrical appliances and EV loads while avoiding the slow and expensive utility service upgrades that might derail even the most motivated 'electrifier'. Concretely, a major challenge is the electrification of homes that have 100 Amps or less of service. One approach to this problem is the replacement of an electrical panel with a "Smart



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Panel” or “Smart Load Center”. While naively this approach might make some sense, practically, managing loads via flipping breakers is equipment and user hostile, voiding equipment warranties, providing a bad user experience, and leading to equipment failures or other issues (for instance, non-proper cooldown of equipment or depressurization of condensers, etc.). The result is that even smart load centers that replace existing panels then rely on software integrations to accomplish their load management. Given the low cost of commodity CT clamps and the necessity of software control for major loads in the home, it follows that electrical panel upgrades and/or replacements represent a potential area of wasteful incentive spend with limited impact in enabling electrification.

Alternatively, “Virtual Smart Load Centers” that represent a minimal set of hardware and wiring changes with a layer of coordinating software can solve the core issue just as reliably but at a far lower cost. Beyond cost, there is a major labor shortage in the trades and to avoid being bottlenecked by labor availability, minimizing the amount of work to unlock electrification from a labor standpoint is paramount to scalability.

Flair urges DOER to include in its “Electrical Panel Upgrade” provisions an inclusion for ‘Virtual Load Centers’ or a broad enough definition of “Electrical Panel Upgrade” to include solutions that may not look precisely like an electrical panel replacement but that fundamentally accomplish the goal of enabling electrification without requiring utility service upgrades or major wiring changes.

Consider Holistic Approaches to Electrification across IRA programs and MassSave

It's been widely recognized that Virtual Power Plants (VPPs) and Distributed Energy Resources/Management are a key to supporting electrification and ensuring utilization of renewable yet intermittent energy sources like wind and solar. However, most equipment incentive programs do not have requirements around equipment readiness when it comes to grid integration nor do manufacturers of equipment at large often have robust enough software platforms to support grid integration. Further, contractors are often uninterested in ‘rolling a truck’ to install controls for systems retroactively as the opportunity cost for them is too high. “Bring Your Own Device” programs can help this some but often only really work for more tech forward customers that are actively seeking out equipment and capable of doing a self install, leading to inequitable access to



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TOU, DR and other types of programs that can lower energy costs and promote usage of cleaner energy.

In order for the state of Massachusetts to ensure that it is equitably solving electrification both onsite and at the systems level, it is critical that heatpump systems/deployments through MassSave and IRA related programs are capable of grid integration at the same time as the heat pumps themselves are installed. Relying on post-equipment installation recruitment for load flexibility programs is incredibly expensive and ineffective when compared to that equipment going in “grid ready” at the time of initial installation. Further, as the EPA’s EnergyStar program lacks any real categories for ductless controls (or communicating equipment more broadly), it’s important that Energystar is not used as the only criteria to qualify ‘grid ready’ controls. Instead, consider requirements like OpenADR certification as California and other states have required to ensure that open standards can be utilized to make equipment grid interactive. DOER should think of Heatpump incentives as the system cost, including accessories like smart controls that enable grid integration rather than stand alone equipment which may inadvertently just move fossil fuel usage offsite rather than truly reducing fossil fuel dependency.

Flair urges DOER to include smart thermostats that are OpenADR compliant (or similar) in heatpump incentives to address decarbonization holistically. Without such inclusion, electrification programs are moving onsite combustion to offsite combustion and setting ratepayers up for much more expensive load flexibility procurement that is entirely avoidable.

Thanks again for the opportunity and consideration,

A handwritten signature in black ink that reads 'Daniel Myers'.

Daniel Myers
CEO
dan@flair.co

Moroney-Ebarb, Christina (ENE)

From: Alan Fincke <a.fincke@comcast.net>
Sent: Tuesday, February 20, 2024 2:41 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: HER Rebates for Heat Pumps

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello Christina,

I am writing about the federal rebates for low to moderate income households that installed a heat pump. My partner and I owner-occupy a three-family dwelling in Cambridge at 93 Belmont St. In November of 2023 we had installed a new heat pump system for our top floor tenant to replace the aging gas furnace HVAC system at a cost of \$21,000 which strained our budget, but we wanted to do the right thing for the planet. We are hoping to get the IRA rebate of up to \$8000 to help recoup some of the money so that we can convert the second floor system to heat pump this year.

I hope as this program is set up, it will be easy for the consumer to apply for, and that the funds will be dispersed in a timely manner, unlike how the MassSave rebate program is being run.

Thank you,

Alan Fincke
Judith Olson
617-851-9000

Moroney-Ebarb, Christina (ENE)

From: Carla Portelli <ckportelli@icloud.com>
Sent: Friday, March 1, 2024 6:51 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebate

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Great information, question I would like to convert from gas to heat pumps. The energy audit said I wouldn't reduce my heating bills but moving would obviously better for the environment. Would current gas users be part of the plan? And do we need to 100% disconnect from old boilers..would be nice as a backup just in case.

Many thanks .

Moroney-Ebarb, Christina (ENE)

From: Charlie Cary <crcary@woodenergyrecyclers.com>
Sent: Thursday, February 22, 2024 4:46 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebate

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I live in the Town of Princeton and we have a municipal utility. Why are the rebates from public utilities so much greater than the rebates from a municipal utility for the same measure?. I know the answer is 'buying power" of the larger public utilities who spread the cost out over more ratepayers. But municipal customers deserve the same rebates as the public utilities offer. So I hope you will use some of this money to equalize the rebates across municipal and public utilities.

Thanks

Charlie Cary
978-697-8223

Moroney-Ebarb, Christina (ENE)

From: Drew Vernalia <DVernalia@commteam.org>
Sent: Wednesday, March 20, 2024 7:13 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: DOER straw proposal feedback

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello Christina,

The DOER straw proposal for use of the federal ITC funds is a great start. Here are some comments from myself, a long-time manager of small and large multifamily affordable housing, and from other colleagues with expertise in affordable multifamily.

1. We are supportive of the allocating of funds to expand DOER's Grant Program to decarbonize existing affordable housing.
2. Since regional MassSave energy conservation program partners retrofit single family and 1 to 4 unit multifamily, it would be most practical for them to administer/distribute the rebates programmatically. This could include doing this for Municipal Light Plant communities. The approved vendors with MassSave cost considerably less on retrofits, and the program partners have these connections and expertise to advise these small owners.
3. The cap for affordable multifamily should be raised from \$400K to \$500K or \$600K. (I am currently designing a larger multifamily electrification project, and this increase is needed to fill a funding gap.) The cap might be lifted entirely as long as certain other sources (MassSave DER and DOER grant and/or HUD GRRP grant) are utilized.
4. Emphasis throughout all program administration should be placed on both Subsidized and Naturally Occurring Affordable Housing specifically for Gateway Cities and Environmental Justice Communities

Thank you.

Kind regards,

Drew

Drew Vernalia, CPM
Asset Manager
Common Ground Development Corp.
155 Merrimack Street, 2nd Floor
Lowell, MA 01852
978 654 5678 (Office)
978 202 2421 (Mobile)

Moroney-Ebarb, Christina (ENE)

From: Jan Aceti <jaceti@concordma.gov>
Sent: Wednesday, March 20, 2024 2:31 PM
To: Moroney-Ebarb, Christina (ENE)
Cc: Laura Scott
Subject: Energy Rebates

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Christina,

One of our staff attended the HER and HEAR Federal IRA Home Rebates Overview for Public Input on March 1st and found it very helpful.

We have two questions and a comment:

1. The Concord Municipal Light Plant currently provides the same heat pump rebates to all oil/propane/electric heating households as Mass Save provides to gas heating standard income households. We do not provide higher income-based heat pump rebates, as Mass Save does. In order to participate in HER and HEAR, would CMLP be required to provide the same income-based rebates for low and moderate income oil/propane/electric heating households as Mass Save provides to low and moderate income households?
2. Will an MLP be required to pay into the Renewable Energy Trust in order to participate in HER and HEAR?
3. If the IRA and DOER can support a low interest to 0% financing product, we think that would be very helpful to Concord's low and moderate income households.

Jan Aceti
Energy Efficiency & Electrification Coordinator



jaceti@concordma.gov

978-318-3151

Moroney-Ebarb, Christina (ENE)

From: Craig <cmsmith051@gmail.com>
Sent: Tuesday, March 19, 2024 10:31 AM
To: Moroney-Ebarb, Christina (ENE)
Subject: HER & HEAR implementation proposal comments

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Good morning,

First off, I appreciate that the state is paying attention to municipal light plant customers. We have been locked out of MassSave, unable to access the sizable rebates and HEAT loans, for too long. Addressing that disparity was high on my list of priorities and I appreciate the consideration. Please consider implementing the "\$25k 0% interest for 7 years" structure of HEAT loans for MLP customers. Access to this financing will make upgrading our homes much more accessible.

Equity and inclusion aspects of the proposal are excellent, but I would request that you reconsider the tiers of the Area Median Income guidelines. Even at 150% of AMI, many homeowners will still struggle with the cost of these upgrades. When the federal government made this program available, they didn't make an AMI structure to go with it. Many of us have held off on upgrades until the Commonwealth implemented it and the AMI guidelines you're suggesting cut the expected rebates in half for most homeowners. Perhaps make the cutoff 150% AMI for the full amounts and 150-250% for the half amounts? The AMI of many areas reflect renters that don't own and cannot avail themselves of these upgrades except through landlords.

As someone somewhat over the AMI of my town, I can tell you that it'll be a struggle to pay for any of the upgrades the rebates are tied to. Additionally, these rebates will massively increase the costs of the services as contractors roll them into the cost completely. An electrical panel upgrade is already expensive and it's going to be \$2000-\$4000 more expensive once these rebates roll in.

Thank you for your time,

Craig Smith
148 New Salem St
Wakefield

Moroney-Ebarb, Christina (ENE)

From: David Greenberg <david.greenberg3@gmail.com>
Sent: Friday, February 23, 2024 4:00 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates

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Hi Ian,

Please include rebates for hybrid electric water heaters. They are fairly expensive, so rebates would be very welcome.
Thanks.

David

Moroney-Ebarb, Christina (ENE)

From: Fred Bunger <febunger@gmail.com>
Sent: Sunday, March 24, 2024 8:20 PM
To: Moroney-Ebarb, Christina (ENE)
Cc: Mary Gard; Marybeth Martello; Janet Mosley
Subject: Energy Rebates, Comment on DOER "Straw Proposal" for HER and HEAR- electrical service upgrades

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To Commissioner Elizabeth Mahony

I am a citizen of Wellesley Massachusetts and I am in strong support of providing incentives for electric panel upgrades. The incentive should include the installation of "smart" panels and load management devices. The use of "smart" panels and load control devices would allow many existing electric services to handle installation of heat pumps and EV chargers without upgrading

There is a barrier that the DOER could help clear: the MA electrical code does not permit "smart" panels or load control devices in residential service.

I intended to eliminate use of fossil fuels in my home. I have a gas furnace, gas hot water heater, gas clothes dryer and gas cooktop. I can replace my two gas-fired HVAC units with heat pumps, but cannot go beyond that because my electrical panel and electrical service wiring are limited by a 100 AMP panel and service wiring. New service wiring would require digging up the street, a very expensive project which no program would cover. I asked the building department about replacing my existing 100 AMP panel with a "smart" panel but was told the electrical code does not allow it.

With a "smart" panel, I could manage electrical loads between EV charging, clothes drying, hot water heating, electric oven and induction cooktop. Over time, 120 volt models for hot water heating, clothes drying and induction cooktop could become available and I could proceed with eliminating fossil fuels. A better solution would be to allow me to install a "smart" panel to effectively manage loads. I could complete my plan decarbonization sooner.

Thank you for the opportunity to make public comment.

Regards,
Fred Bunger
1 Curve St. Wellesley, MA

Moroney-Ebarb, Christina (ENE)

From: Ginger Vollmar <ginger.vollmar@gmail.com>
Sent: Wednesday, March 20, 2024 10:52 AM
To: Moroney-Ebarb, Christina (ENE)
Subject: Comments on HER and HEAR Straw Proposal

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I have reviewed the straw proposal put out by DOER and also attended the Zoom presentation on 3/18/24 on the straw proposal. I have some comments that I would like considered. Overall, I think you have made the plan way too complex -- it seems to me there should be a much simpler way to implement a system for residents to access the IRA rebates.

I want to specifically address the plans laid out to help MLP communities.

First, folks with access to Mass Save are already eligible for very large rebates for energy efficiency upgrades -- all they have to do is fill out a form and attach the receipt from their contractor (and perhaps a 1040), submit it to the Mass Save office and they get a rebate in the amount they are allowed based on their income.

I do not understand then why under the HEAR program, only folks with Mass Save are eligible -- this doesn't make sense given that they already have so much money available to them. The HEAR program should also apply to MLP communities.

Those of us who live in an MLP community cannot get the kind of relief that Mass Save folks can and yet your proposal says we can only get some relief through the HER program. The fact that the straw proposal only allocates \$73M to the HER program and, out of that, only 15% will go to MLP communities does not seem equitable. Right now, in my town of Groton, MA, I can get a rebate of ONLY \$500 to install a heat pump system (as opposed to Mass Save folks who would get a \$10,000 rebate). Your program must do more to help those of us who live in MLP communities.

The HER program proposal seems to be set up right now to give money to MLPs (or matching funds) so that they have the money to give out higher rebates to their customers. This does not seem like the correct way to set up this program. If MLPs have to come up with matching funds, many of them will most likely opt not to be in the program. Residents of MLP communities are as deserving as anyone else of the large rebates outlined in the 2022 IRA legislation!

DOER is making the process too complicated and too hard to access for those of us living in MLP communities and also your straw proposal does not meet the spirit of the IRA which states that "any individual in the U.S. can receive a rebate for doing an energy efficiency rebate". DOER is standing in the way of that happening, in my opinion.

I qualify as low income using the AMI in my area and I live in an MLP community. What I would like to see DOER do is implement a rebate system where I would fill out a form on your website to apply for a rebate, attach my receipt from my contractor showing the energy efficiency upgrade and the cost of it, attach my 1040 so you can verify that I am low income and then I would submit all of this to the DOER. That is all the information you should need to then send me a rebate check based on my income and the guidelines in the IRA. This is the only fair way to get IRA rebates to residents living in MLP communities. Please consider a system like this.

Also, whatever system is put in place should be retroactive to any upgrades done in the calendar year 2024 since many of us have been waiting over 1.5 years for the DOER to implement a system and may have done work in the early part of 2024 expecting a rebate system to be in place.

Speed is of the essence as stated at Monday's zoom. I am sure you all are aware that if Trump gets elected in November, ALL of the IRA funds could be gone in 2025 and beyond. The year 2024 may be the only year for us to be using these funds granted by the 2022 IRA. Please get a system in place ASAP.

Thank you for considering my input.

Ginger Vollmar
Groton, MA

Moroney-Ebarb, Christina (ENE)

From: Claire Chang <claire@solargreenfield.com>
Sent: Friday, March 8, 2024 4:55 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: energy rebates

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Please accept these comments for the record.

The Commonwealth needs to support low income and moderate income households to decarbonize and offset with 100% renewable energy.

The Commonwealth needs to provide 100% solar loan support to low income homeowners with suitable roofs or ground locations to install solar PV systems and whole house ASHP. Have a loan product which bundles the solar loan program with Heat loan for low income households. Then the solar PV will offset their ASHP demand.

Moderate income households need 30% loan support as they usually don't have tax liability to take advantage of the federal 30% tax credit. And bundle with heat loans for them to install both solar PV and ASHP.

let me know how these programs will be implemented.

thank you

Claire Chang

Greenfield Solar
2 Fiske Avenue
Greenfield, MA 01301

413 772 3122

claire@solargreenfield.com

Moroney-Ebarb, Christina (ENE)

From: Claire Chang <claire@solargreenfield.com>
Sent: Monday, March 25, 2024 1:17 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: energy rebates DOER HER and HEAR

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Please accept these comments on the HER and HEAR programs.

NO funding for ANY NEW FOSSIL Fuel appliances. no new gas or propane or oil or biomass heating or cooking appliances funded with either program.

NO Funding for Hybrid heating systems which depend on any fossil fuel appliances. No undersizing of Heat pumps to depend on fossil fuel heating system. correctly size heat pumps to meet current or historic temps.

100% funding/rebates for <80% AMI households to completely replace fossil fuel heating or cooking appliance. need flexible cap. need greater than \$14k. could easily go to \$20k. maybe tie to # in household? 4 to 6 \$20k, 6 or more \$25k?

need cap greater than \$14k if that includes ASHP and HW heat pumps and induction and electrical upgrades. that could easily go above \$14k. as each measure gets added, the cap goes up by appropriate rebate amount.

so \$14k applies to ASHPs and each added measure gets add to the cap.

Low income homes should be 100% rebates for ASHP and other measures. we want to get these houses completely fossil fuel free 100% electrification all in one shot, one application. use the EDC low income discount rate to locate each account. contact each fuel assistance recipient. habitually run out of funding for low income measures in Greenfield area each year. Community action probably has a wait list. how is funding being divided geographically? need higher % going to LMI and EJ communities.

need to train ambassadors for each isolated non english speaking community.

thank you

Claire Chang

Greenfield Solar
2 Fiske Avenue
Greenfield, MA 01301

413 772 3122

claire@solargreenfield.com

Moroney-Ebarb, Christina (ENE)

From: Mary Gard <mgard62@gmail.com>
Sent: Monday, March 25, 2024 3:42 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear DOER:

As a volunteer Energy Coach in my MLP community (Wellesley), I have been closely following the implementation of the Inflation Reduction Act, and have been looking forward to the roll-out of the new federal rebate programs in Massachusetts.

Like most MLP communities, ours does not pay into the Renewable Energy Trust Fund. As an Energy Coach, I have met many homeowners who reluctantly continue to heat their under-insulated homes with delivered fuels, unable to pay for needed weatherization or efficiency improvements. All of them would love to be MassSave customers to receive those incentives, but cannot afford to switch to a new gas boiler or furnace (which is not what we want anyway!)

Obviously, switching to electric heat pumps is even more out of reach financially, and so these residents are stuck. They cannot get efficiency rebates and they cannot take full advantage of the lower MLP electricity rates by switching to heat pumps.

This is why I had hoped that the DOER would do what the IRA had intended, and allow ALL low and moderate income homeowners access to the HEAR program no matter where they lived in the state.

HER, which generally seems to pay out less than HEAR, is more appropriate for higher income households. It requires homeowners to:

- (1) get a Home Energy Score using 3rd party energy modeling (an upfront cost and an extra hassle, unless you are already remodeling) and
- (2) prove that the installation will reduce home energy use by 20 to 35% (an uncertainty for a lower-income homeowner who may only be able to afford small improvements at a time, like to replacing an aging water boiler for example, rather than splurging on a whole house retrofit all at once).

While these HER requirements may not be onerous for the well-off, they are barriers for the energy-burdened homeowner.

On the other hand, the way that the HER program is structured, it encourages a homeowner who can afford to "do more" to go ahead and *try* to hit those targets of 20-35%, rather than hang back and simply make piecemeal improvements.

I also believe that allowing some HER funds to be spent by higher income families in bigger homes (and not just those in MLP community multifamily homes) will give the state a bigger emissions reduction boost.

I know that you are hoping to hand out rebates using existing agencies, such as Mass Save and MLP offices. But residents in my town complain that Mass Save has been difficult to deal with, with regulations not posted online, phone calls not answered and rebates slow to come. I know that the EEAC has been working to improve this agency, but wonder if handing them the added responsibility of rebates would be a mistake. Certainly, the small staff at most MLP offices are already overwhelmed with the clean energy transition, so I hope that technical advice and support is planned for them if they are expected to handle rebates too. I wonder if another agency, such as [EFI](#), would be more appropriate for delivering rebates.

I do applaud your suggested use of the IRA's Greenhouse Gas Reduction Fund for green financing in MLP communities similar to the Heat Loan, since obtaining financing is another block for delivered fuel customers, and our MLP feels it does not have the staff or bandwidth to pursue on-bill financing at this time.

One more concern might just be typographical. Page 10 of the Straw Proposal shows a chart on the HEAR program which omits the insulation rebate provided by Section 50122. Does that mean it will not be available, or is that just a mistake?

Finally, I want to express my thanks for making this "straw proposal" process so transparent and open to comment. Hopefully, you will learn from those of us who are serving "on the ground" to make the clean energy transition happen. Please feel free to contact me if you need any further information or clarification.

Sincerely,

Mary Gard
Energy Coach
HeatSmart Alliance
617-697-9563

Moroney-Ebarb, Christina (ENE)

From: Joshua Vollmar <joshua.vollmar99@gmail.com>
Sent: Thursday, March 21, 2024 1:56 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates Input

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

I would like to submit feedback regarding the DOER's straw proposal for home energy rebates from the Inflation Reduction Act (IRA).

I feel that the straw proposal could be significantly improved to achieve a more equitable distribution of IRA funds; simplify the process of distributing the funds; and embrace the spirit of the act.

The key piece of the proposal that is problematic is the decision to work through MassSave and municipal light plants (MLPs) to distribute IRA funds, rather than offering direct rebates to homeowners who install qualifying improvements. Adding this extra layer overcomplicates the distribution of the funds, but more importantly, makes the distribution less equitable, with residents of MLP communities being disadvantaged. The straw proposal only calls for providing matching funds to MLPs, whose communities -- including residents who qualify as low income -- are currently underserved with minimal rebates. Because the primary goal of MLPs is to keep rates low, most will not opt-in to a program requiring matching funds, leaving residents of MLP communities out of luck yet again for home energy rebates and making the distribution of IRA funds inequitable.

The spirit of the IRA is that all Americans, when they complete home energy improvements, should be eligible for rebates based on their income. No distinction is made based on what utility provides them energy; what town or state they live in; or what other elements exist in their home. By distributing the funds only through MassSave and matching funds to MLPs, the straw proposal brings in these three factors as qualifications for receiving funding, and therefore does not fulfill the spirit of the act.

There is one clear way for the DOER to address these shortcomings and ensure that IRA funds are distributed equitably in Massachusetts: remove the middleman in the distribution -- whether that be MassSave or an MLP -- and instead distribute the funding directly from the state government to the homeowners who install qualifying home energy improvements.

This direct distribution can and should be straightforward. There should be a form on DOER's webpage, allowing homeowners to submit documentation on their property and the qualifying improvement they have installed (i.e., a contractor's invoice, town permit, etc.) as well as documentation on their income (i.e., form 1040). With that, the income can be compared to the area median income to determine the amount of rebate the homeowner qualifies for. Then, the rebate should be distributed directly from the state to the homeowner, in whatever fashion is most convenient.

It is also important to note that the rebates should be retroactive, at least to the beginning of 2024, considering the time it has taken to implement the program, to ensure an equitable distribution of funds.

If the DOER undertakes a direct rebate program, in conjunction with distributing funds to environmental justice communities, and makes the rebates retroactive, it will fulfill the spirit of the IRA and achieve an equitable distribution of the funds, providing a major boost to the state's progress in achieving its climate goals and building a better future.

Thank you for considering this feedback.

Joshua Vollmar

Groton, MA

Moroney-Ebarb, Christina (ENE)

From: lindsay tourijigian <ltourijigian@gmail.com>
Sent: Tuesday, February 13, 2024 4:11 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Mass Save Replacement?

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello,

Is this program a replacement for Mass Save? I think uncoupling the utility companies from Mass Save is a great idea. I have just installed a new heat pump system and have opinions on what the consumer should consider before moving into this technology.

Thank You,

Lindsay Tourijigian

Sent from my iPhone

Moroney-Ebarb, Christina (ENE)

From: Mary Jane Else <mjelse@gmail.com>
Sent: Sunday, March 10, 2024 12:47 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates

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Re: HER and HEER proposal

As a resident of one of Massachusetts' MLP communities, I am concerned that the program proposed will not provide support to residents in many muni towns. The \$22 million earmarked for muni communities is welcome. However, it appears that this funding is available only in communities where the light board chooses to provide matching funds. Historically, only a few munis have chosen to use ratepayer monies to support efficiency. This is true of mine, and it is not likely to change. I would like to point out that munis have lagged behind IOUs in providing efficiency incentives to ratepayers specifically because of state legislation that created the Mass Save program in the IOUs and exempted munis.

I make less than 80% of median income in my community, and I am the homeowner that Congress was choosing to serve with the HEER rebates. I would like to get a heat pump. The straw proposal DOER has crafted does not appear to be designed to use IRA/HEER funds to help me. That's disappointing. I urge not to leave residents like me behind.

Mary Jane Else
51 Lyman Street
South Hadley MA 01075

Moroney-Ebarb, Christina (ENE)

From: Michael Johnson <mike.capeann@gmail.com>
Sent: Sunday, March 24, 2024 2:19 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates

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Dear Ms. Moroney-Ebarb,

I am submitting comments on DOER's straw proposal for the HER/HERS program under the IRA. I am the Chair of the Ipswich Climate Resiliency Committee, although I am providing these comments as a citizen of Ipswich and not for the committee as a whole.

While I applaud DOER's early submission to Dept. of Energy for the HER/HERS program this spring, I believe it was drafted without full consideration of the impact on a large proportion of Massachusetts- specifically municipal light department (MLP) communities. The IRA incentives have two primary goals: environmental justice and rapid decarbonization. As presented, DOER's straw proposal fails at both when it comes to MLP communities. I urge the DOER to reevaluate the equitability of how the funds in the straw proposal are currently being allocated.

There are over 50 communities that are served by 41 MLPs, and 22 of the 41 MLP cities/towns have environmental justice census blocks (in 8 of those, a substantial percentage of the population live in EJ blocks).

As proposed, MLP communities will only be eligible for HER rebates and the DOER proposal is vague about how the HER funding will "support MLPs" and will be administered. In a webinar hosted by DOER, they referenced "matching" funds for MLPs existing rebate program which is generally much lower than existing MassSave rebates. For example, in my town the MLP offers a \$1,000 rebate for a qualifying heat pump per year. A matching HER rebate of \$1,000 or so is not going to move a homeowner to install a whole-home heat pump that can easily exceed \$20,000, especially compared to a MassSave customer who is eligible for up to \$10,000 or more in rebates. Furthermore, a low-income, MassSav customer would be eligible for up to \$8,000 in HER rebates on top of the \$10,000 MassSave rebate, while a MLP customer may only be eligible for \$2,000.

Another concern is, as proposed the MLPs must first opt in and/or provide matching funds in order for their customers to access federal IRA funding. It's highly likely that many MLPs simply will not do so, unless they are required to. MLPs have, in general, been far behind MassSave Communities in incentive programs and consequently rates of home electrification. Unless there are requirements to do so, this pattern is unlikely to change.

Furthermore, the HEAR program will not be available in our towns according to the straw proposal. MLP towns are the very places that need it the most. The fact that HEAR rebates can be added to the already substantial MassSave rebates adds insult to injury. MLP customers and towns will only fall further behind, both in equity and carbon reduction goals.

I urge you to either make the full portfolio of federally funded HEAR rebates available to MLP ratepayers and use the HER program for MassSave communities, which have the infrastructure and resources to manage it. Or alternatively, offer both HER and HEAR programs to all residents in the state and remove the matching fund or opt-in requirement for MLPs.

Thank you for considering my comments,

Regards,

Mike

--

Mike Johnson

All things are connected. Whatever befalls the earth befalls the children of the earth.

—Chief Seattle of the Suquamish Native American people, c. 1855

Moroney-Ebarb, Christina (ENE)

From: Mike Sarcione <mgsarcione@gmail.com>
Sent: Friday, February 23, 2024 7:20 AM
To: Moroney-Ebarb, Christina (ENE)
Cc: Julian Cyr
Subject: Energy Rebates

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Two concerns of the rebate program is the bias against rural MA residents who live in areas of frequent power outages, and those who've already invested in renewable energy via solar and energy storage to minimize their emissions footprint.

The rebates are biased against both of these groups as they are significantly reduced for those chose to retain fossil fuel hearing for emergency use only.

After a major storm, an all electric house becomes a shelter in place survival risk without a backup source of heat or power. There is no evacuation solution after a major storm for shelter or transportation if everyone has an all electric residence. Fossil fuel emergency heat requires considerably less power to keep one's home inhabitable and thus should not be disconnected to qualify for the best rebates. I understand the need to push for all electric homes, however the proposed rules need to be revised to allow emergency usage of fossil fuels, a way to ensure that's only when they are used and without bias. Additionally, you are penalizing folks who've already invested in a backup generator which will now be undersized when transitioning to all electric, thus requiring them to invest in an even larger generator. The same can be said for residents

who've already made the investment in solar plus energy storage (battery) and are able to use their fossil fuel backup to survive in a major grid outage. Please reconsider how fossil fuels may play an emergency only role without significant rebate penalty for rural residents who will be vulnerable in all electric homes after a major winter storm.

Another concern is what happens to the existing natural gas infrastructure when we get most residences transitioned to all electric. What motivation does the gas company have to continue to maintain it and supply it if the revenue won't support a profit? Thus once again residents and municipalities will need to transition to propane tanks to retain the emergency capabilities?

I recognize that these are difficult questions, and the need to transition us off of fossil fuels is urgent, but the risks are real for survival in a major winter storm where emergency crews aren't able to rescue folks, and municipalities don't have the shelter resources to house the entire population. There's got to be a way for folks to safely shelter in place, and currently and unfortunately, fossil fuels play an important role in that, and folks shouldn't be economically penalized for using them in those situations.

Mike Sarcione
Eastham

Moroney-Ebarb, Christina (ENE)

From: Angie Gregory <agregory@mtholyoke.edu>
Sent: Monday, March 4, 2024 6:11 PM
To: Moroney-Ebarb, Christina (ENE)
Cc: Lindsay.Sabadosa@mahouse.gov; Jo.Comerford@masenate.gov; Seth Gregory
Subject: "Energy Rebates"

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Hello,

I am a National Grid rate payer and have applied for multiple energy rebates and incentives provided through the MassSave program.

Experiencing the program first-hand, I have a few comments I would like to submit to your office for public input on future program design, as requested by DOER.

1. All rate payers pay into the fund, yet access to the incentives is not equitable. Those who can afford the upfront investment or who have access to credit end up being able to take advantage of these programs, yet everyone pays into the funds regardless of if they are able to receive the benefit. This seems like a critical design flaw and is an environmental justice issue, as those who would like to have more efficiency and reduced electric bills are likely those who may not be able or willing to access the capital necessary to complete a project. When a household has to apply for a loan to complete a larger project like an air source heat pump or window replacement, any anticipated rebates are deducted from the loan amount given which necessitates the homeowner to have access to the anticipated rebate funds upfront in order to complete the project. This could be hundreds or thousands of dollars. Sometimes a project cost might not fit the bounds of the program and so the 0% loan may not be an option but the rebate still applies, making the ratepayer have to access the necessary capital by their own means and be at the mercy of a

successful and expedient rebate process. For low-income households this alone could be a deal breaker. In addition, each time a resident has to apply for a loan there is a mark on their credit, which can dissuade households from applying at all.

2. Rebate processing time takes much longer than what is claimed. 4-6 weeks has become 7 months for one application we still have in process with MassSave. This is challenging for anyone who has a tight budget. Delayed rebate processing times can impact repayment on loans originated for those projects. The current application portal process has proven to be technically inadequate and the response time of the MassSave customer service is spotty at best (I would be more than happy to supply my own correspondence records). I replaced windows in August of 2023, promptly submitted rebate paperwork into the portal, received automated notices that there was missing information and to go back to the portal to submit. The portal login reset did not work, and continues to not work for me so I have to rely on direct customer support each time I get an automated message. I believe that this program does not have adequate customer service support for the volume of requests it processes. There are many emails that go unresponded to. Calling customer service during business hours is not always possible due to my own work schedule. I have yet to receive my rebate for the window replacement done nearly 7 months ago.
3. The topic of equity in access to program attributes is important to explore as it relates to renters. What can be done in a multi-family house or a rental property to ensure that the tenants within those bounds who are paying into the fund and would like efficiency upgrades access these programs without the barrier of landlord buy-in?
4. I believe it to be a conflict of interest to have the utility companies manage and disperse the funds to operate this program. I would like to see a not for profit entity manage the funds, dispersal, and rate payer outreach and technical assistance. I believe it's in the best

interest of the ratepayer and would benefit the program's effectiveness as well to have it managed by a third party.

I'm cc'ing my state rep and senator because I believe that they have likely heard similar stories from constituents and also as one of their constituents I would like for them to know my thoughts on this issue as well.

Thank you for taking public input.

best,
Angie Gregory
595 Haydenville Rd
Leeds MA 01053

--

Angie Gregory (she/her) M.S.
LEED Green Associate
[Sustainability](#) Program Manager
Miller Worley Center for the Environment
413-538-3247



Working to support the [SDGs](#) through the [IDGs](#)

[Mount Holyoke College](#) is located in Western Massachusetts on the ancestral land of the [Nonotuck people](#) who continue to be connected to this land. We recognize the existence of settler colonialism as an ongoing process that has historical and contemporary consequences for Indigenous people of the area who experienced violence, racism and oppression.

Moroney-Ebarb, Christina (ENE)

From: Bill Rennie <brennie@retailersma.org>
Sent: Monday, March 25, 2024 4:22 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates

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Christina Moroney-Ebarb
Federal Program Coordinator
Mass. DOER

Dear Coordinator Moroney-Ebarb:

The Retailers Association of Massachusetts (RAM), established in 1918, is a statewide trade association of approximately 4,000 member companies. Our membership ranges from independent, owner-operated stores to larger, national chains operating in the general retail, restaurant, and service sectors of the retail industry. The Commonwealth's retail industry is the backbone of our local Main Streets, supporting over 1.2 million jobs and operating in more than 88,000 brick-and-mortar establishments. Within that broader RAM membership, we have most of the national chain retailers and over forty independent retailers in the appliance selling space.

On behalf of our members, I appreciate the opportunity to submit comments following up on the **MA DOER's Home Energy Rebates Public Input Session**, held on March 18, 2024, regarding the implementation of the Inflation Reduction Act's (IRA) Home Efficiency Rebates (HER) and Home Electrification and Appliance Rebates (HEAR) programs. I participated in the session to learn more about the DOER's proposed approach to the HEAR program and to learn how RAM's retail member appliance sellers could partner with the state to offer a successful program to the Commonwealth's consumers.

RAM is primarily concerned that the initial outline of the program does NOT envision any retailer participation component, or direct point-of-sale rebate process. A question asked in the chat of the webinar highlighted the DOER response:

Prerna Tomar: Retailers can help build excitement around the HEAR rebate programs. For example, consumers being able to see the benefits of induction cooking and heat pump dryers and learn about them firsthand can help advance interest and attention. Does DOER plan to include retailers for the HEAR program?

Staff: We are not considering using retailers for the HER and HEAR program. The reason being we feel is that point-of-sale style rebates could add a lot of administrative burdens for customers and the program. But we are open to hearing more of your thoughts on this

RAM and our members collaborated closely with the DOER 14 years ago on the MAGAX Rebate program and we hope to do so again on the HEAR program. It is my understanding that MA is the only state currently planning to exclude retail from this process, which concerns us given the crucial role retailers play in not only selling the covered products, but in advertising and creating consumer awareness of these programs. Retailers are on the front line of appliance selling. The success of the program and the path to achieving the program's goals depends heavily on consumer awareness, marketing, consumer education and consumer engagement – all areas in which retailers are experts and can be invaluable partners to the state. Broad retailer engagement, participation, and promotion is the best way to maximize consumer awareness and support the state's rebate program goals and ensure success.

In utilizing retailers, the state can ensure that access to the HEAR program extends to every resident in the Commonwealth, regardless of whether they live in a utility service area or in a Municipal Light Plant (MLP) community. Also, a retail focused program ensures that all customers, including low-income customers, will be able to access rebates more easily on single device purchases. A consumer looking to make a single device purchase is more likely to simply go to a store, where the retailer can educate them on available rebates. Lastly, the Commonwealth may be at risk of creating consumer confusion if most states offer point-of-sale rebates, widely advertised in national or regional retail advertising campaigns, which are then not available at the point-of-sale in Massachusetts. This consumer confusion is a particular concern for locally based appliance sellers, which already struggle with important consumer dollars leaving the state in search of no sales tax and other cost saving promotions. The Healey/Driscoll Administration should focus on competitive efforts to keep important consumer spending in the Massachusetts economy, rather than over the border with out of state sellers. This can be done by actively supporting and promoting local stores and local employers through the HEAR program.

A key component of the MAGAX program, pulled from the "Massachusetts Straw Proposal - ARRA State Energy Efficient Appliance Rebate Program (SEEARP)," was the inclusion of all retailers in the state, both chains and independents. Promotional requirements included "a vigorous media campaign promoting the event" and "significant in-store signage identifying the appropriate products." That proposal noted further, "Municipal light district customers must be allowed to redeem the rebates."

We strongly urge the DOER to revisit the issue of retailer inclusion in the HEAR Program and stand ready to facilitate further conversations with our interested members to achieve the program's goals.

Thank you.

Sincerely,

Bill Rennie
Vice President
Retailers Association of Massachusetts
18 Tremont Street, Suite 810
Boston, MA 02108
o: (617) 523-1900 ext. 110
brennie@retailersma.org
www.retailersma.org

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Moroney-Ebarb, Christina (ENE)

From: ROY HARVEY <royharvey@comcast.net>
Sent: Friday, March 1, 2024 9:10 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Fwd: HER and HEAR Straw Proposal - questions on income eligibility

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Dear Ms. Moroney-Ebarb,

I read the presentation linked below and have questions on how to determine income eligibility.

- Where can I find my AMI?
- Is the income in the year of the purchase used to determine eligibility, or income in the previous or other year?
- How is household income defined? Does it include income of unrelated roommates?

Thank you.
Best regards,

Roy Harvey

----- Original Message -----

From: Massachusetts Department of Energy Resources <doer.energy@mass.gov>
Date: 03/01/2024 6:29 PM EST
Subject: HER and HEAR Straw Proposal - Home Energy Rebates Public Input Session



HER and HEAR Straw Proposal for Home Energy Rebates Public Input Session

Dear Stakeholder,

The Straw Proposal for public input has been posted to DOER's [website](#). The Straw Proposal can be viewed [here](#).

As a reminder, the Department of Energy Resources (DOER) has scheduled a public input session for the Home Efficiency and Electrification Rebate Programs through the Inflation Reduction Act (IRA). This law included funding opportunities for states to implement two energy efficiency rebate programs: [Home Efficiency Rebates](#) (Sections 50121) and [Home Electrification and Appliance Rebates](#) (Section 50122). The funding for these programs will be awarded through the State Energy Offices, such as DOER.

DOER plans to submit an application for both programs this spring. DOER anticipates receiving \$73,233,910 and \$72,809,130 for each program, respectively. DOER aims to deploy HER and HEAR in such a way as to enhance equitable outcomes while building upon the Commonwealth's existing efforts in building energy efficiency and electrification. In anticipation of our application, DOER will hold a public input session to present a straw proposal for program design and solicit community input on its proposed deployment plans.

Energy Rebates Public Input Session
Monday, March 18 at 1-2 pm
Zoom

Please register for the Public Input Session [here](#). The Public Input Session will be recorded and available on our [website](#) after the 18th. The agenda for the Input Session will include an overview of the straw proposal and time for verbal public comment.

In addition to verbal comments during the meeting, DOER appreciates the submission of written comments no later than **Monday March 25, 2024** to:

Christina Moroney-Ebarb at christina.moroney-ebarb@mass.gov. Please include "Energy Rebates" in the subject line of your email. All comments will be posted publicly.

The input from this public session and the written public comments will inform the design of DOER's rebate program application. In addition, to solicit input on the program design, DOER anticipates there will be future opportunities for engagement and community feedback throughout the duration of the DOER rebate program.

Regards,
Ian Finlayson
Deputy Director, Energy Efficiency Division

[Massachusetts Department of Energy Resources](#)
100 Cambridge St. 9th Floor
Boston, MA 02114

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Moroney-Ebarb, Christina (ENE)

From: Patrick Collins <pcollins@shrewsburyma.gov>
Sent: Monday, March 18, 2024 1:20 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Fwd: A Role Model Utility - SELCO

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Feedback for Energy Rebates plan.

----- Forwarded message -----

From: Patrick Collins <pcollins@shrewsburyma.gov>
Date: Wed, Mar 6, 2024 at 1:46 PM
Subject: A Role Model Utility - SELCO
To: <ian.finlayson@mass.gov>
Cc: Christopher Roy <croy@shrewsburyma.gov>

Hi Ian,

Thank you for your presentation yesterday about the DOER's proposed plan to utilize IRA funding. As discussed in the meeting, municipal utility programs vary from town to town so we wanted to share our approach, which we feel is a good model for maximum participation, decarbonization and efficient use of funds. Our suite of programs can be found here: <https://nextzero.org/shrewsbury/>

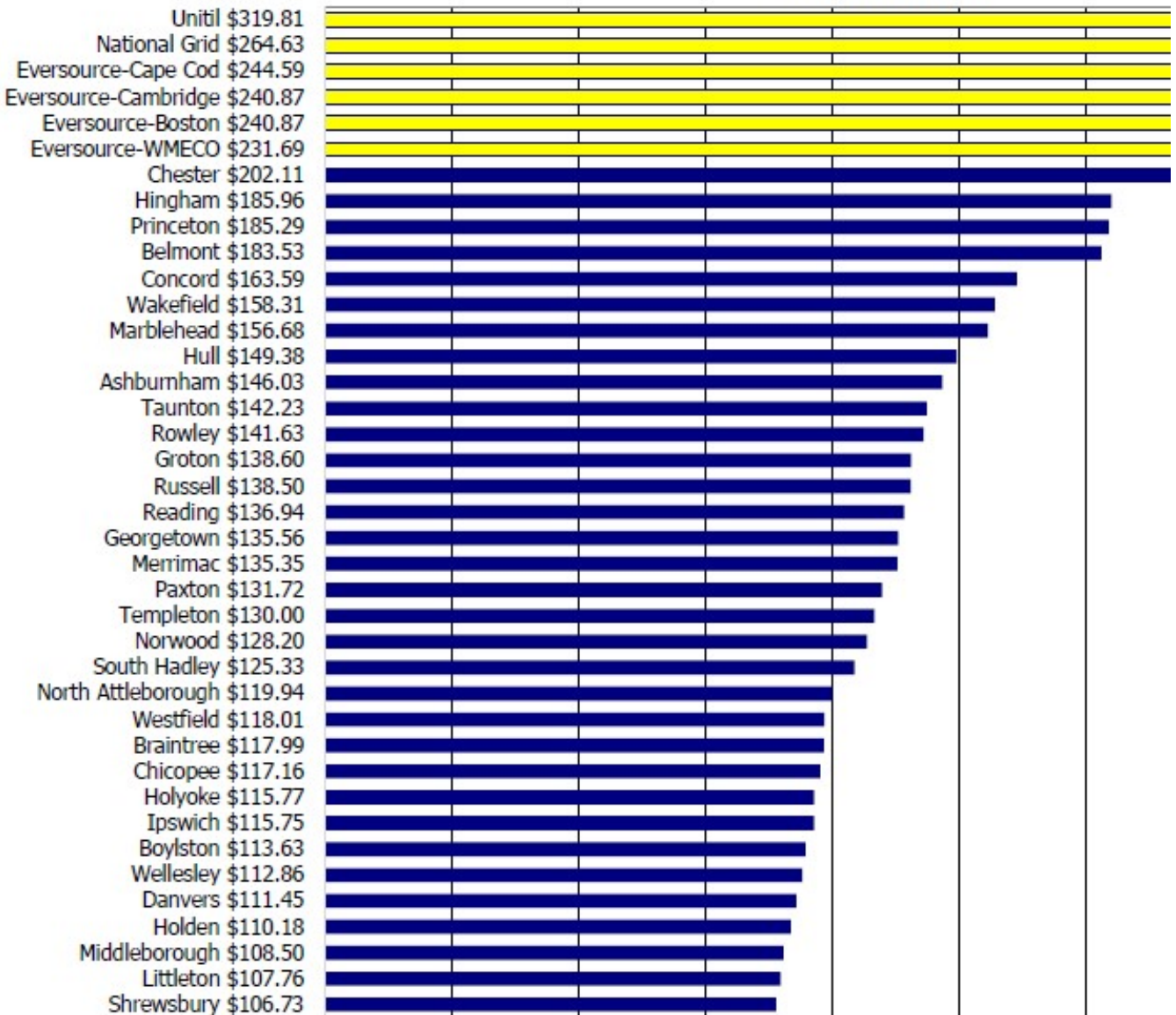
Our goal is strategic electrification by focusing generous incentive funding on three key areas: heat pumps, EVs and demand response. Utility ROI naturally aligns with these focus areas, so it is a win-win-win for the customer, the utility, and the climate.

Our annual energy program budget for 2024 is ~\$1MM, which includes incentives and administration costs. Our service territory is ~16,000 meters. Our program is much more efficient in terms of \$/meter compared to Mass Save. It is concerning that nearly \$4 billion has been allocated to Mass Save territories because a lot of that funding will undoubtedly be wastefully spent by the mismanaged, inefficient large private business model that values profit margins for shareholders rather than customer experience. Our rates are a fraction of the IOU's and the average **public power regular residential rate is about 33% lower than National Grid's low income rate**. Below is a rate comparison chart. All of this translates to significantly more economic support for all residents and businesses as well as a very attractive environment for electrification.

We have income-qualified rebate adders for some programs and an income-qualified term extension for our 0% int loan program, which can be combined with our rebate programs. Some customers can completely cover the cost of a whole home heat pump system between our rebate up to \$10,000 and the loan up to \$10,000.

Our participation is outstanding. For example, the Shrewsbury zip code has seen the most number of MOR-EV rebates issued in the state since our EV rebate program began in 2021. 164 homes converted to heat pumps in 2023. I think our programs can serve as an example for other utilities to follow, or for your consideration when designing programs. Happy to provide further details/info if needed.

Residential Rate Comparisons 750 kWh December 2023



Patrick Collins - Integrated Resources Analyst
 Shrewsbury Electric and Cable Operations (SELCO)
 C: 508 769 4642
 O: 508 841 8313

Moroney-Ebarb, Christina (ENE)

From: Steve Marantz <s.marantz@comcast.net>
Sent: Tuesday, February 27, 2024 4:42 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: energy rebates

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I am having trouble understanding why the rebate program would require cutting off a gas “back-up” heat supply in order to qualify for the whole house heat pump rebate.

This is New England and it can still get mighty cold come winter. I realize heat pumps are becoming better and more efficient in cold weather, but requiring one’s safety net be disconnected seems extreme. While one may have an electric “back-up” feature, such systems may require an electrical upgrade that simply is not feasible. I would hope the department would reconsider its position and return to the previous requirements for back up heat under severe circumstances. If the goal is to get more heat pumps installed in Massachusetts, barriers to installation such become easier, not harder.

Steven Marantz
163 Red Barn Rd.
Dalton Ma 01226

Moroney-Ebarb, Christina (ENE)

From: Dody AP <adkinsperry@gmail.com>
Sent: Sunday, March 3, 2024 4:28 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: HER/HEAT 3/18 session: MLPs

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Hi Ms. Moroney,

On the DOER email forwarded to me, there's a map of the state's MLPs. Some are colored pink, some hatched in gray. For instance, Middleboro Gas & Electric which serves Middleboro and Lakeville is in hatched gray. Taunton Municipal Light Plant is pink. Can you explain the difference?
Thank you.

Sincerely,
Dody Adkins-Perry
Sustainable Middleborough

Moroney-Ebarb, Christina (ENE)

From: John Howard <jhoward@mtholyoke.edu>
Sent: Wednesday, March 20, 2024 11:06 AM
To: Moroney-Ebarb, Christina (ENE)
Subject: Opinion on use of IRA money in Mass

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I understand why MLPs do not get money from Masssave. The people from investor owned utilities are paying for it. The IRA funds however come from the federal government and my taxes so MLP towns should be treated the same as the IOU towns.

John Howard
Sustainable Sustainability and Energy Commission of South Hadley
15 The Knolls Rd.
South Hadley, MA 01075
413-536-5973.
<https://johnhowardsolar.org/>

Moroney-Ebarb, Christina (ENE)

From: TM <borntothesea@yahoo.com>
Sent: Sunday, February 25, 2024 1:04 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: INPUT: Fw: Home Energy Rebates Public Input Session on March 18 - Update

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Hello. My name is Tara Murray and I live in Jefferson, MA. I have three points for this session. One is that the rebate must go to the homeowner and not the contractor. When these rebates typically come up, contractors raise their rates to absorb the rebate for themselves. You must find a way to stop this. Perhaps limit what a contractor can charge for installation and equipment profit and/or allow rebates for DIY equipment. Second, many of us are not part of National Grid and have municipal energy so we need extra help. My town has HMLD, Holden Municipal Light Department, and therefore get little to nothing in town incentives to change to greener tech. Third, rebates must be offered to **DIY alternatives** such as Mr. Cool minisplits. This frees us from contractors' high costs and saves us from towns who don't offer enough and don't offer at all for DIY homeowners.

Here is an example: My town offers \$500 to add insulation to an attic but only if a contractor installs it. I asked a contractor what it would cost and was told \$500. There was no rebate if I rolled out the insulation myself. A contractor is not needed to roll out insulation. Anyone can do that. So where would that rebate go to? To the contractor ONLY. NOTHING for the homeowner. See the problem?

I very much want minisplits in my home. Each contractor who has come to my 1000sf home wants over \$15,000. That is insane. I work at QCC next to the maintenance department. They have shown me that the minisplit equipment for my home would be around \$5,000 and take a day to install. That means the contractors who have come to my home want TEN THOUSAND DOLLARS FOR A DAY'S WORK!!!! That is when I found DIY options like Mr. Cool. Mr. Cool's equipment would be about \$5,000 but I install it myself saving me \$10,000! With a state rebate, this would make this option AFFORDABLE!!!!.

You want us to go green? Then the rebates need to come to the homeowner in order to pay for it and for affordable options such as Mr. Cool or other DIY tech.

Than you for your time.

Kind regards,

Tara Murray

----- Forwarded Message -----

From: Massachusetts Department of Energy Resources <doer.energy@mass.gov>

To: "borntothesea@yahoo.com" <borntothesea@yahoo.com>

Sent: Thursday, February 22, 2024 at 04:13:41 PM EST

Subject: Home Energy Rebates Public Input Session on March 18 - Update



Save the Date: Home Energy Rebates Public Input Session - Update

Dear Stakeholder,

The Department of Energy Resources (DOER) has scheduled a public input session for the Home Efficiency and Electrification Rebate Programs through the Inflation Reduction Act (IRA). This law included funding opportunities for states to implement two energy efficiency rebate programs: [Home Efficiency Rebates](#) (Sections 50121) and [Home Electrification and Appliance Rebates](#) (Section 50122). The funding for these programs will be awarded through the State Energy Offices, such as DOER.

DOER plans to submit an application for both programs this spring. DOER anticipates receiving \$73,233,910 and \$72,809,130 for each program, respectively. DOER aims to deploy HER and HEAR in such a way as to enhance equitable outcomes while building upon the Commonwealth's existing efforts in building energy efficiency and electrification. In anticipation of our application, DOER will hold a public input session to present a straw proposal for program design and solicit community input on its proposed deployment plans.

Energy Rebates Public Input Session
Monday, March 18 at 1-2 pm
Zoom

Please register for the Public Input Session [here](#). The Public Input Session will be recorded and available on our [website](#) after the 18th. The agenda for the Input Session will include an overview of the straw proposal and time for verbal public comment. The straw proposal will be posted on our [website](#) and circulated to this distribution list before the Public Input Session for review.

In addition to verbal comments during the meeting, DOER appreciates the submission of written comments no later than **Monday March 25, 2024** to:

Christina Moroney-Ebarb at christina.moroney-ebarb@mass.gov. Please include "Energy Rebates" in the subject line of your email. All comments will be posted publicly.

The input from this public session and the written public comment will inform the design of DOER's rebate program application. In addition, to solicit input on the program design, DOER anticipates there will be future opportunities for engagement and community feedback throughout the duration of the DOER rebate program.

Regards,
Ian Finlayson
Deputy Director, Energy Efficiency Division

[Massachusetts Department of Energy Resources](#)
100 Cambridge St. 9th Floor
Boston, MA 02114

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Boston, MA | 02114 United States

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Moroney-Ebarb, Christina (ENE)

From: Todd Logan <todd.c.logan@gmail.com>
Sent: Friday, February 23, 2024 10:37 AM
To: Moroney-Ebarb, Christina (ENE)
Subject: Energy Rebates

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Dear Christina,

After my wife and I purchased a home in Dalton, MA three years ago, we began the process of electrification, insulation, and other decarbonization efforts in our home. What we encountered in the MassSave program and other state incentives were **programs that reward contractors, retailers, and utilities much more than homeowners**. Here are some examples of the problems we encountered, and how we would like to see DOER and other state programs improve both financial and energy-saving/decarbonizing outcomes for homeowners:

1. All installers we received quotes from for mini-splits openly admitted to increasing installation prices to cover any MassSave paperwork they were required to file. As one contractor said: "You might as well just skip the rebate, since we have to charge more to meet the MassSave requirements and file all the paperwork." Often, those extra charges were higher than the rebates, creating a "disincentive." And yes, these were qualified installers.
2. We then explored installing mini-splits ourselves, which we have done in a previous home in another state, and were disappointed to discover that Massachusetts would not provide any rebates to us if we did this.
3. In the same way, when we had a MassSave approved contractor evaluate our home's envelope, we were more shocked by that process. First, they did not use thermal cameras to evaluate insulation requirements, but instead just poked holes in the walls -- which missed most of the biggest heat loss areas that required the most attention. Second, they indicated that windows and doors were not part of the MassSave incentive program, despite the fact that these were some of the largest problems with our home's envelope. And lastly, the contractor insisted we sign a commitment to their insulation proposal without delay, stating "we won't get credit from MassSave unless you sign the contract ASAP." When we didn't sign, we were notified by DocuSign that our contract had been signed by us, and we were sent a copy, which we of course disputed. From this experience we learned that MassSave's exclusive reliance on contractors encourages unethical behavior and poorer outcomes in terms of proposed improvements.
4. We have purchased electric lawn equipment and submitted rebate requests to MassSave, but never received them. We also purchased an electric riding mower for which, inexplicably, no rebate was even offered. We made all of these purchases locally to support local business.
5. When we began looking at installing a solar PV array, all of these same problems came up again -- but worse. Despite the prices on solar panels and inverters dropping some 50-80% over the past 10 years, the quotes we were receiving were routinely 1.5X higher than what a similar system would cost anywhere else in the U.S. today. If we installed the PV system ourselves, we would also not receive the \$1,000 state rebate (we also installed our own permitted and inspected PV system in our last home...it's really not that hard). Adding insult to injury, qualified installers also often could not produce a workers compensation COI (certificate of insurance) -- they only carried liability, putting homeowners on the hook for any worker injuries.
6. All contractors for all systems (heat pumps, PV, etc.) required a 30 to 50% deposit at contract signing, even if the installation were months away. They also refused to provide a performance bond in these situations. This is an

unusual and, frankly, unethical expectation of homeowners, and is not "industry standard" in any of the five other U.S. states we have lived.

Proposed solutions for Massachusetts:

1. Provide and staff state agency oversight and coordination for any and all incentive programs, rather than relying on contractors or utilities.
2. Allow homeowners to receive rebates for anything they install themselves that qualifies (PV arrays, heat pumps, etc.), just as they already do from the federal government.
3. Add much more generous incentives for double- or triple-glazed insulated doors and windows that would improve efficiency -- and again supply those rebates to homeowners who install these themselves.
4. Do not allow contractors to inflate what they charge just to cover rebates, and somehow hold contractors accountable who overcharge. The "free market" in Massachusetts is not working to keep prices competitive...at all.
5. Do not allow energy contractors to charge overly large up-front deposits, but instead a more reasonable one (say \$1,000) followed by an appropriate payment schedule (for example, the cost of equipment paid upon delivery of that equipment to the home, etc.)
6. Require all solar contractors to carry workers compensation insurance and provide a COI along with every quote.

One last thing I would comment upon is the overemphasis on heat-pumps as a holy grail for decarbonization and heating/cooling efficiency in Massachusetts -- Massachusetts electrical utilities have in fact been misrepresenting the benefits of heat pumps through aggressive advertising over the past couple of years. First of all, many heat-pumps installed by MA contractors do not work all that efficiently or effectively below 20 degrees F. Even those systems that are more efficient still cycle into "defrost mode" on really cold winter days, making living spaces much less comfortable with blasts of cold air. Massachusetts electricity prices are also some of the highest in the U.S. -- which is why utilities advertisements claiming heat pumps are "cost saving" for homeowners are very misleading. The result is that anyone who abandons their fossil fuel heat as DOER has been encouraging folks to do (through DOER building stretch code updates and Green Community programs, for example) can expect both much higher electrical bills during the winter -- often far in excess of the cost of comparative natural gas heating -- and ineffective or uncomfortable heating from their new heat pump replacement systems. I'm not promoting fossil fuels as a primary source of home heat, but I think the state should do a much better job of encouraging folks to keep their fossil fuel heat systems (and not discourage their installation in new homes) as a backup for those below-20 degree days.

Thank you for your attention,
Todd Logan, Dalton, MA

Moroney-Ebarb, Christina (ENE)

From: t p <olur54@hotmail.com>
Sent: Thursday, February 22, 2024 5:04 PM
To: Moroney-Ebarb, Christina (ENE)
Subject: Heat pump rebates

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon...I'm writing to you in regard the MassSave rebate program...I just recently installed a partial house mini split system and I'm awaiting my rebate...I'm pleased with the process to date...however, my wife and I would have considered a total house heat pump system **if** we weren't required to disconnect our current baseboard hot water system...as a resident of the Berkshires, a backup heating system provides peace of mind...unfortunately, our partial house upgrade wasn't as great a financial incentive- but this factor was overridden in light of maintaining our current heating system...our acquaintances are of similar mind, and will only proceed with partial home heat pump heating systems accordingly...please reconsider this new requirement-it may be counterproductive in meeting our Commonwealth's goals of net zero emissions in the years to come...thank you, Tony Pagliarulo

Sent from my iPad

Comments on HER / HEAR Webinar of 3/18/2024

Michael Duclos

Thank you for the opportunity to provide comment.

1. To facilitate the submission of written public comments, consider providing a slide with the email address to which the comments are to be submitted.
2. To facilitate the submission of written public comments, consider providing page numbers on all slides.
3. On the slide titled HER Summary: Home Efficiency \$73.2 Million, there are incentives ranging from \$2000 to \$8000 which are contingent upon a TBD utility bill calibrated home energy assessment demonstrating the required savings. Someone will need to be compensated for the creation of this model, and presumably there must be some sort of Quality Assurance mechanism to discourage fraud. It seems the cost of the model could be a substantial fraction of the rebate, has that been quantified, because if it is too large of a percentage this may not be practical, especially for homes meeting only the 20% criteria. Additionally, it appears that this model would need to be constructed at the financial risk of the applicant. If the applicant needs to spend \$500 to \$1000 to determine if they might qualify for a \$2000 to \$4000 rebate and the model does not show them eligible for the incentive, that money is lost to the applicant. Faced with such an investment decision, many, if not most applicants may choose not to take that risk.
4. External to this HER / HEAR program, the critical need for a Clearinghouse such as was envisioned by the Commission on Clean Heat should be recognized, because a piecemeal approach to the enormous challenge of retrofitting and electrifying enough buildings to meet the Climate Act of 2021 targets for 2030 is very likely doomed to fail. Perhaps there should be a focus on creating that Clearinghouse mechanism, after which more effective use can be made of HER / HEAR funding. I perceive too much overhead in adding 'yet another program' to the overly large mix of potential funding mechanisms about which essentially no homeowners and few contractors will become sufficiently knowledgeable to use effectively. Adding more complexity to a situation which is already overly complex is simply adding to the problem.

Thank you for the opportunity to provide comment, please contact me if I can be of any assistance.

Best Regards, Michael Duclos

Stow, MA

978-793-3189

mduclos1@icloud.com

March 25, 2024
Elizabeth Mahony
Commissioner
Department of Energy Resources
Massachusetts State House
24 Beacon Street, Room 280
Boston, Massachusetts 02133

RE: DOER HER/HEAR straw proposal on energy rebates

Dear Commissioner Mahony,

We are ratepayers in the 50+ communities that are served by 41 municipal light plants (MLPs). We are concerned and object to the current proposal for how HER/HEAR rebates using Inflation Reduction Act funds will be administered in MLP towns. The signatures also include ratepayers of investor-owned utilities who support this letter.

We also represent grass-roots local advocacy groups that work together as part of the Municipal Light Plant campaign of the Mass Climate Action Network. We have all worked to meet the extraordinary need for local, EJ/LMI equitable climate advocacy in our towns, as our municipal utilities are still exempt from the state's climate goals until 2030.

We ask DOER to:

1. Swap the HER and HEAR programs. Make the full portfolio of federally funded HEAR rebates available to MLP ratepayers, who are currently severely under-resourced by local energy efficiency incentives. Use the HER program for MassSave communities, which have the infrastructure and resources to manage it.
2. Or offer both HER and HEAR programs to all residents in the state.
3. Remove the matching fund or opt-in requirement for MLPs.
4. Contract with a neutral organization to administer the funds directly to residents, e.g., Energy Federated Inc.(EFI), the Mass Clean Energy Center or the Center for Sustainable Energy (CSE), which administers MOR-EV, a program MLP customers can access now without going through their local utility.

The energy-efficiency programs offered by most MLPs are a fraction of what MassSave offers. For example, a rebate of 50% of insulation cost, with a cap of \$1,000, is typical, compared with MassSave's 75% cost with no cap; and \$500-\$2,000 for a heat pump system, compared with up to \$10,000 or more from MassSave. **Low-/moderate-income households in MLP towns cannot close the gap of many thousands of dollars needed to undertake whole-house weatherization or electrification.** The rebates serve mostly as sweeteners for higher-income households.

We are shocked that the HEAR (formerly HEEHRA) program that has been widely publicized since the IRA was passed in 2022 will not be available in our towns. MLP towns are the very places that need it the most. The fact that HEAR rebates can be added to the already substantial MassSave rebates adds insult to injury. MLP customers and towns will only fall further behind, both in equity and carbon reduction goals. This **MUST** be changed in your proposal.

The DOER proposal is vague about how the HER funding will “support MLPs” and will be administered. Our concern is this: If the MLPs must first opt in and/or provide matching funds in order for their customers to access federal IRA funding, we believe: **Many MLPs simply will not do so, unless they are required to.** We cannot accept this plan.

Based on our experiences of advocating to move these utilities inch-by-inch toward climate goals, we do not trust that the funding will reach the environmental-justice neighborhoods and low-/moderate-income households for which it was intended. Many of us have advocated in the past for our MLP towns to opt in to, say, the Renewable Energy Trust Fund and have been told an emphatic no. Only seven have opted in. **An opt-in approach is short-sighted climate policy.**

The HER program is onerous for residents to access, requiring proof of energy use history and proposed savings from retrofits. As we read the federal legislation, the HER program’s smaller tiered income rebates, with no cap, seemed most suitable for households above 150% of the median income, who do not qualify for HEAR rebates. But in the Massachusetts straw proposal, the 15% of the state’s citizens who reside in MLP towns will not qualify for HEAR either. The EJ and low-/moderate-income residents in those cities/towns will be the least able to navigate those hurdles.

During the public input session DOER’s Ian Finlayson stated that MLP customers’ electricity rates are lower, and their utilities could opt to pay into MassSave if they want better incentives. The fact that investor-owned utility customers pay into the MassSave program is irrelevant. We all pay federal taxes. The federal IRA incentives should be distributed in a way that provides equitable access to the benefits across all of the state’s communities.

Lower electricity rates mean little to the many MLP households whose principal energy cost is heating. Customers in MLP communities who haven’t yet been able to afford to replace their oil or propane heat with natural gas certainly need more help to transition to a heat pump system. Burning oil is currently the most carbon-intensive way to heat a home. The state should be focusing on those homes first, regardless of where their electricity comes from.

By offering MLP customers only major whole-house retrofit incentives through the HER program, DOER is restricting the ability of low-income households in MLP communities to undertake other, more affordable steps toward energy efficiency. HEAR program rebates would enable MLP customers to pursue less costly or phased insulation projects, electrical system upgrades, induction stoves, heat pump appliances such as hot water heaters and dryers.

The state’s IRA incentive proposal must not be used to balance the perceived inequities between IOU and MLP utilities. Most of the differential in electric rates is due to profits demanded by investors and salaries demanded by IOU executives. The state could regulate the inequity from those causes. The state could also do more to require MLPs to align with state climate and efficiency goals (MCAN advocated for legislation aimed at that goal this session). The state could make it easier for municipalities to transition to less expensive public power. But denying federal incentives to individual households in MLP communities—**many of them EJ and LMI households**—is NOT the place to achieve that goal.

Please consider these facts:

- Twenty-two of the 41 MLP cities/towns have environmental justice census blocks.

- In eight of those, a substantial percentage of the population live in EJ blocks: Braintree (81%), Holyoke (78%), Chicopee (77%), Shrewsbury (72%), Norwood (52%), Taunton (51%), Peabody (38%), and Westfield (37%), representing more than 200,000 state residents.
- Ten MLP cities/towns have median incomes below the 2021 state median income of \$89,026 (the first four are roughly half that): Holyoke, Russell, Chester, Chicopee, Taunton, Westfield, Middleborough, South Hadley, Peabody, and Merrimac.
- Throughout all of our towns there are many low-/moderate-income households who meet the federal income eligibility criteria for HEAR of 80% and 150% of the median income.
- Four municipal utilities supply both gas and electric, which means no one in town is eligible for MassSave incentives. All four have EJ blocks.
- Some MLP towns have no access to a natural gas pipeline, meaning nearly everyone heats with oil, the most carbon-emitting heat source, and no one is eligible for MassSave.
- All of these state residents are desperate for effective energy-efficiency incentives and should be a state priority for meeting the state's climate goals.

The IRA incentives have two primary goals: environmental justice and rapid decarbonization. We support both wholeheartedly. As presented, DOER's straw proposal fails at both when it comes to MLP communities.

We would welcome another opportunity to speak to you to address our concerns as MLP ratepayers and citizens and supporters.

Kimberly French, Middleborough, Middleborough MLP, Sustainable Middleborough
 Phil Thayer, Concord, Concord Light, ConcordCAN, MCAN board member
 Marty Bitner, Belmont, Belmont Light, Energy Committee
 Charlotte Weigel, Groton, Groton Electric Light Department,
 Mark Wagner, Belmont, Belmont Light,
 John Kolterman, Belmont, Belmont Light, Energy Committee
 Jane Dye, Holden, Holden Muni Light Dept, Citizens for Holden's Energy Future (CHEF)
 John Howard, S Hadley, S Hadley MLP, S Hadley Sustainability and Energy Comm,
 Susan Smoller, Peabody, Peabody Municipal Light Plant, Breathe Clean North Shore
 Arnold Epstein, Stow, Hudson Light & Power, Elders Climate Action
 Paul Griffin, Belmont, Belmont Light
 Thomas Boettcher, Wakefield, Wakefield Municipal Gas & Light, WMGLD Commissioner
 Laura Burns, Hingham, Hingham Municipal Lighting Plant
 Jacob Vaillancourt, Hull, Hull Municipal Light Plant
 Mary Jane Else, S Hadley, S Hadley Elec Light, S Hadley Sustainability and Energy Comm
 Rosemary Wessel, Pittsfield MA, No Fracked Gas in Mass
 Jane Winn, Pittsfield, Berkshire Environmental Action Team
 Bruce Edgren, Hull, Hull Municipal Light Plant
 Lucinda Wykle-Rosenberg, Hull, Hull MLP
 Stephanie Bartelt, Groveland, Groveland Light, MCAN
 Kathleen Wolf, Hull, Hull MLP, CECAC

Mindy Markowitz,Hull,Hull Light
Dean Hickman,Belmont,Belmont Light,Sustainable Belmont
Adam Smith,Marblehead,MMLD,MMLD Light Commissioner
Deane Coady,BrooklineMothers out front
Becky Sarah,Cambridge MAElders Climate Action
Gretchen Schultz-Ellison,Shrewsbury, MA,SELCO,Tipping Point 01545
Dawn Edell,BrooklineElder Climate Action
Richard Rys,Princeton,PMLD
Tina Grosowsky,Hudson,Hudson Light and Power,Elders Climate Action Mass
Tim Brainerd,FraminghamEnergize Framingham
Michael Sales,NewburyportElders Climate Action Mass
Fran Ludwig,LexingtonBoston Catholic Climate Movement
Susan Evans,Boxborough,Littleton Electric Light,Brook Village Condo Assoc
Sandy Rubchinuk,Middleton,Middleton Electric Light Department
Marjorie Lee,Wayland
Betty Krikorian,Belmont,Belmont Light,Elders Climate Action - MA
Bram Moreinis,Greenfield,
Gretchen Thompson,Williamstown,
Ginger Vollmar,Groton,Groton Electric Light Department
Richard Lent,Stow,Hudson Light and Power
Joshua Vollmar,Groton,Groton Electric Light Department
Bonnie Gorman RN,Quincy,natl grid
Matthew Karas,Shrewsbury,Selco
Keith,Maynard,
Laura,Reiner,Hudson,Hudson Light and Power
Joel Kershner,Brookline,
Dorothy Weitzman,Newton,
Rachael Missall,Shrewsbury,SELCO
Marie-Laure,Boston,
Phil Francisco,Groton,Groton Electric Light Department
Jeanette Millard,Hudson,Hudson Light & Power Department
Alan Melchior,Middleborough,Middleborough Gas & Electric
Janet Cason,Northborough, on behalf of 350 Central Mass
Charles Flammer,Lexington,
Irene R Fairley,Belmont,Belmont Light.
Alex Rose,Wellesley,Wellesley MLP
Per Gyllstrom,Hudson,Hudson Light & Power
Kathleen McGillicuddy,Stow,Hudson Light & Power
Susan Burnham,Stow,Hudson municipal light
Seana Parker-Dalton,Shrewsbury,SELCO
Richard Garrison,Boxborough,LELWD
Bryan DiPersia,Rowley,Rowley Municipal Lighting Plant
Jane Dougan,Belmont,Belmont Light
Janice E Habermehl,HUDSON,Hudson Light and Power
Tony Rogers,Pelham,
Andy Puchrik,Concord,Concord Municipal Light Plant

Mark L. Kohn,Hull,Hull Municipal Light Plant
Sharon L Brownfield,Stow,Hudson Light and Power
Nancy Maynes,Amesbury,
J Kristin Hedges,South Hadley,SHELD
Gregory Opp,Hudson,Hudson Light and Power
Edward Woll,Somerville,.
Judith Norsigian,Newton,
Leslie A. Taylor,Hull,Hull Municipal Light
David Douglas,Boston,
Anthony Jagodnik,Bolton,NA
Anne Paulsen,Belmont,Belmont Light
Frederick Paulsen,Belmont,Belmont Light
Denis Mahoney,Holden,Holden MLP
Christine Uljua,East Falmouth,Falmouth Municipal Light Authority
Martin Meyer,Stow,Hudson Light & Power
Michael Duclos,Stow,Hudson Light and Power
Francie Nolde,Boxborough,Littleton Electric Light Dept.
David Schreiber,Brookline,NA
Nancy J Hughes,Shrewsbury,SELCO
Norah Dooley,Royalston,
David Weber,Stow,Hudson Light & Power
Karen McDonald,Waltham,
Lee Coopridner, Stow, Hudson Light and Power, Sustainable Stow
Barbara Salzman,Boxborough,Littleton Electric Light Department
Richard Chase,Princeton,Princeton Municipal Light Dept,PMLD Commissioner
Claus Becker,Belmont,Belmont Light,Energy Committee
Scott Wahlstrom,Holden,Holden Muni Light Dept,CHEF(Cit. for Holden's Energy Future)
Glen Ayers,GreenfieldElders Climate Action
Johanna Choo,Boxborough,Littleton Electric
Lee Long Quek,Boxborough,Littleton Electric
Sally Owen,Newbury,NA
Lawrence Fine,Hudson,Hudson Light & Power,Green Hudson
Susan Sommer,Watertown,Watertown Electricity Choice,Mothers Out Front
Steven Wenner,Cohasset,NA,on behalf of 350 Mass South Shore Node
Richard Halpern,Franklin,,MCAN board member
Dan Hotchkiss,Middleboro,Middleboro Gas & Electric Dept
Eleanor Kubinciak,Boxborough,,Littleton Electric Light Dept
Stephen Weaver,Boxborough,Littleton Electric Light Dept
Robin Fielding,Lakeville,Middleborough Gas and Electric
Michael Fielding,Lakeville,Middleborough Gas and Electric
Michael Johnson,Ipswich,Ipswich Electric Light Dept,Ipswich Climate Resiliency Comm
Steven Andrada,Peabody,PMLP,
Ken Swenson,Ipswich,Ipswich Elec Light Dept,Ipswich Climate Resiliency Comm
member
Lois Aldrich,Middleboro MA,Middleboro Gas and Electric

Sandra Smiley,Middleborough,Middleborough G&E,Sustainable Middleborough
Cory Alperstein,Newton.NA
Larissa Hallgren,Middleboro,Middleborough G&E,Commissioner
Susan Purser,Pittsfield,N/A,350ma-Berkshires
Carolyn Sellars,Ashburnham,Ashburnham Municipal Light
Tony Fountain,Middleborough,Middleborough G&E
Lori Goldner,Amherst,NA,Local Energy Advocates
John Borger,Hingham,**Hingham Municipal Lighting Plant**,Hingham Net Zero,
Mark Adams,Marblehead,Marblehead Municipal Light Dept,Sustainable Marblehead
Hale Smith,Milton
Petra Langer,Marblehead,Marblehead Municipal Light Dept,Sustainable Marblehead
Edward Nilsson,Marblehead,Marblehead Municipal Light Dept,Nilsson + Siden Assoc.,
Architects & Planners
Andrea Zeren,Marblehead,Marblehead Municipal Light Plant
Tom Green,Hudson,Hudson Light and Power,Green Hudson
Bill Howe,Middleborough,MG&E
Marybelle Hollister,Marblehead,Marblehead MLP,Sustainable Marblehead
Michael Rozyne,Middleborough,Middleborough Gas & Electric
Gary Rucinski,Newton,,Massachusetts Citizens' Climate Lobby
Frank Kashner,Marblehead,Marblehead Municipal,Multiple
David R Selden,Marblehead,Marblehead,Sustainable Marblehead
Fred Bunger,WELLESLEY,Wellesley MLP,citizen struggling to get off fossil fuel,
Mary Gard,Wellesley Hills,Wellesley MLP,on behalf of Sustainable Wellesley
James Daniel Kaplan,Hull,Hull MLP,CECAC, 100% Clean Energy & Climate Action Comm
Renee Nolan,Middleboro,Middleboro gas and electric
Jim Syiek,Boxborough MA,Littleton Electric Light,Harvard Ridge Condominium Trust
Geraldine Herlihy,Holden,Holden Municipal Light Dept,Board of Selectmen
Lynn Nadeau,Marblehead,MMLD,sustainable marblehead



March 26, 2024

Christina Moroney-Ebarb
Deputy Commissioner
Department of Energy Resources
100 Cambridge St., 9th floor
Boston, Massachusetts 02114

RE: DOER HER/HEAR straw proposal on energy rebates

Dear Ms. Moroney-Ebarb,

Massachusetts Municipal Wholesale Electric Company (MMWEC), a not-for-profit, public corporation and political subdivision, is the Commonwealth's designated joint action agency for municipal utilities. MMWEC has learned that DOER has recently received a letter from residents commenting on the DOER HER/HEAR straw proposal for energy rebates.

MMWEC has been pleased to provide input to DOER through the entire process of the development of this program to ensure optimal rebate opportunities for customers of Member municipal light plants (MLPs). We are happy to respond to some of the comments made in the letter from residents.

As I'm sure you are aware, DOER chose to provide MLPs with HER funding because the program requires a specific compatible audit software, which MMWEC uses. The investor-owned utilities/Mass Save do not use this software. It is expected that MLP customers will become eligible for HEAR funding after the first year, once software compatibility is established.

The letter requests that MLPs not be allowed to "opt-in" to the program. MLPs are locally controlled, so the decision on whether to participate is made at each MLP's board level. Otherwise, mandating participation and matching funds amounts to mandatory rate making. The state does not and cannot regulate MLP rates. While the decision to participate is optional, the standard of MLP matching funds was specifically chosen at levels based on what MLPs are already providing.

The letter states that MLP ratepayers are severely under-resourced by their MLP local energy efficiency initiatives. Rebates and incentives offered by investor-owned utilities are paid for through rates. MLPs have significantly lower rates, and each ratepayer benefits from these cost savings. As a result, MLP customers have lower energy burdens. MLP customers can choose to use their savings in ways that they choose, including to invest in decarbonization and electrification.

The letter states "Lower electricity rates mean little to the many MLP households whose principal energy cost is heating. Customers in MLP communities who haven't yet been able to afford to replace their oil or propane heat with natural gas certainly need more help to transition to a heat pump system. Burning oil is currently the most carbon-intensive way to heat a home. The state should be focusing on those homes first, regardless of where their electricity comes from." That is exactly what the HER funding is doing.

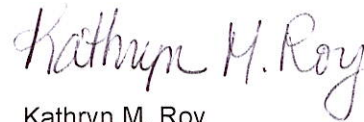
Concerns that rebates do not close the gap for the high project costs for low-income residents is being directly addressed with 0% financing options as well as inclusive utility investment (IUI) financing structures in some MLP communities. Additional needed measures for energy efficiency improvements related to the installation of heat pumps would be funded under programs currently under development.

It is suggested that the application process will be onerous. While it will be more than a simple point of sale rebate that just gives out money, DOER and the MLPs have already identified partners which will act as consultative service providers and auditors for applicants throughout their process. MLPs have already

begun identifying and discussing application processing plans with the resources already housed by MLPs and their joint-action agencies.

MMWEC appreciates the opportunity to continue to work with DOER to develop a program to help MLP customers swiftly, and cost-effectively, electrify their homes, as we collectively seek to meet the Commonwealth's 2050 emissions targets.

Sincerely,

A handwritten signature in dark ink that reads "Kathryn M. Roy". The signature is written in a cursive, flowing style.

Kathryn M. Roy
Director of Communications & External Affairs

Monday, March 25, 2024

Christina Moroney-Ebarb
Federal Program Coordinator
Massachusetts Department of Energy Resources
100 Cambridge St #1020
Boston, MA 02114

Dear Christina Moroney-Ebarb:

Impulse Labs, Gradient, and Channing St. Copper Co. are grateful for the opportunity to provide public comment on the Massachusetts Department of Energy Resources (“DOER”) Federal Inflation Reduction Act (“IRA”) Home Rebates straw proposal.

The signatories are a coalition of early-stage manufacturers¹ that are making all-electric technologies that will help Massachusetts reach the ambitious decarbonization goals set in the Massachusetts Clean Energy and Climate Plan.² The signatories include manufacturers of next-generation induction cooktops, heat pumps, and energy storage systems that allow Massachusetts residents to experience the comfort of electric technologies while also reducing energy burdens.

Massachusetts’ straw proposal aptly allocates rebate funds to initiatives that largely serve residents in an equitable and effective manner. The signatories of this letter commend DOER on the proposal, and provide the following comments to help DOER ensure that the combination of state and federal rebates create the best potential impact for Massachusetts residents:

- I. **DOER should ensure that the available state rebates for each technology class included in the IRA are equal to the amount allotted by the IRA.**
- II. **DOER should consider plug-in appliances a means of supporting electrification enablement goals and provide appropriate incentives to encourage adoption of these technologies.**
- III. **DOER should make rebates available for construction of new housing that serves low-to-moderate income households.**
- IV. **DOER should play an active role in educating consumers about the benefits of next-generation electric technologies.**
- V. **DOER should prioritize instant rebates and take steps to ensure that they do not unfairly disadvantage next-generation technology manufacturers.**

These comments are expanded upon in detail below.

¹ For more information, please visit the websites of [Impulse](#), [Gradient](#), and [Harvest Thermal](#).

² [Massachusetts Clean Energy and Climate Plan for 2025 and 2030 | Mass.gov](#)

I. DOER should ensure that the available state rebates for each technology class included in the IRA are equal to the amount allotted by the IRA.

In the Federal IRA Home Rebate Overview for Public Input, DOER outlines a plan to deploy HER and HEAR as targeted interventions to supplement the existing Mass Save program for moderate income families.³ In doing so, DOER plans to offer consumers either HEAR or Mass Save rebates, with the majority of federal funds used to focus on panel and wiring upgrades to expand electrification potential.

Under this program design, the rebates available for certain appliances will be under the levels specified in the IRA for two technologies in particular: heat pump water heaters and electric stoves. The signatories of this letter encourage Massachusetts to use a share of the HEAR funding to increase existing Mass Save rebate amounts to the maximum levels specified in the IRA. We base our recommendation on the following reasons:

- Cost to electrify: Existing Mass Save rebates are not necessarily large enough to close the gap between low-carbon and fossil gas-powered appliances. For example, since induction stoves are a more nascent technology category, the \$840 cap for stoves specified in the IRA is not enough to pay for a new induction stove, or even make the technology cost competitive with gas ranges.⁴ Nonetheless, installing induction stoves in homes should be a priority for DOER given the associated efficiency, health, and decarbonization benefits. Ensuring that this gap is closed is especially important as Massachusetts seeks to support low-to-moderate income households and support energy equity.
- Consumer trust: Even though DOER has made clear that program design is underway, some residents of Massachusetts may rely on the full funding amount in the IRA to pursue appliance upgrades. Some consumers may have delayed electrification projects as they have held out for rebate dollars to become available. Removing the opportunity to help households access the funding that consumers and contractors have come to expect due to press coverage risks alienating residents and hurting Massachusetts' electrification goals.⁵
- Minimal impact to overall funding: Using federal dollars to close the gap between existing Mass Save incentives for heat pump hot water heaters and induction stoves and the maximum amounts specified in the IRA will have very little impact on the overall share of funding that is available to pursue

³ [HER and HEAR Straw Proposal](#).

⁴ [What's the true cost of an induction stove? | Grist](#)

⁵ See Mass Live for news coverage ([Kamala Harris touts programs to lower home energy bills at Boston event - masslive.com](#)) and MassCEC for state resource ([Induction Cooking - Massachusetts Clean Energy Center](#)).

Massachusetts' other electrification goals, such as ensuring residents can install panels. With 200-amp electrical panel installation costs averaging between \$1300 and \$2000, several households could take advantage of the additional induction or heat pump water heater incentives for each individual household pursuing a panel upgrade.⁶

II. DOER should consider plug-in appliances a means of supporting electrification enablement goals and provide appropriate incentives to encourage adoption of these technologies.

Across Massachusetts, electrification enablement is a clear goal. The home energy rebate straw proposal names this target; furthermore, electrification enablement is a key theme that utilities defined in their Electric Sector Modernization Plans, filed in response to regulatory requirements in January 2024.⁷ The HEAR program proposal suggests that panel and wiring upgrades are a major driver of expanding electrification potential; while this is of course true, it does not tell the full picture.

A new class of technologies is emerging that provides easy electrification enablement without expensive panel, wiring, and utility service upgrades. For example, Impulse offers a 30-inch, four-burner cooktop powered by a built-in 3 kWh lithium iron phosphate battery that can be plugged in easily to a 120v outlet installation. The battery allows for residents to access low-carbon, low-pollution cooking technologies without a panel upgrade. Channing St. Copper Co. offers a battery-integrated full-sized induction range that includes a 5 kWh battery, complete with a 30-inch, four-burner cooktop, and an oven. This built-in battery facilitates the use of high-performance induction cooking without the need for costly electrical upgrades, enabling a 120v plug-in, and a simplified installation process which supports the transition to electrification. Gradient offers similar benefits: the heat pump HVAC unit requires no electrical upgrades or contractors to install into a 120v outlet, and reduces residential carbon emissions and energy costs even in states with cold climates like Massachusetts. In addition to providing households with the benefits of all-electric cooking, heating, and cooling, some of these technologies are also enabled by software to participate in energy programs like demand response, virtual power plants, and more without requiring integrations with other technologies like smart thermostats.

These solutions will not be suitable for every single household, and DOER is forward-looking in using HEAR funds to support electrical panel and wiring upgrades. However, households should not be penalized for opting for these alternative approaches to electrification. To encourage consumers to opt for

⁶ [Cost to Upgrade Electrical Panel \[2024 Data\] | Angi](#)

⁷ See [National Grid Future Grid Plan](#) and [Eversource Electric Sector Modernization Plan](#).

next-generation technologies that provide consumers with options to make the electrification decision which makes the most sense for their home, DOER should consider providing additional incentives, within the amounts allotted by the Department of Energy, to these technologies.

III. DOER should make rebates available for construction of new housing that serves low-to-moderate income households.

In the webinar on March 18, DOER noted that the department does not intend for the rebates to be made available for new construction. The stated rationale is that Mass Save provides significant savings for developers already.

The signatories to this letter recommend that DOER create a pathway for developers to access appliance rebates included in HEAR, particularly in cases where rebates would enable access to next-generation technologies. Our experience suggests that developers of below market-rate housing operate on thin margins that require searching for savings in any place possible, including when purchasing appliances. Even with a number of whole-home incentives available for developers of all-electric construction via Mass Save and the federal government, without robust appliance-specific incentives, developers may opt for electric technologies that do not provide the most robust benefits to Massachusetts households. A lack of available incentives have so far made developers slow to adopt all-electric building designs, particularly in areas outside of major metro regions that do not have building performance standards.

Massachusetts should make HEAR funding available across all appliance categories for developers who work to increase the housing stock available for low-to-moderate income households (i.e., below 150% AMI). By providing these incentives to developers of units for moderate income families, DOER has the opportunity to ensure that all-electric, future-proof construction becomes the default choice as soon as possible.

IV. DOER should play an active role in educating consumers about the benefits of next-generation electric technologies.

DOER should build on its work in administering the Mass Save program and continue to play an active role in educating households in Massachusetts on the benefits of electric technologies. As next-generation technologies that promote positive outcomes for residents of Massachusetts become commercially available, DOER can provide more detailed context to inform consumer choices.

DOER should build a webpage that describes the varying classes of technologies available for each rebate-eligible appliance, and include examples of products in each class. For example, the Department's section on stoves can discuss traditional electric resistance stoves, induction stoves, and battery-integrated induction stoves, comparing the metrics on energy costs, indoor air pollution, and performance for each. In particular, DOER should aim to educate consumers on a variety of benefits that next generation technologies can provide. Where appropriate, DOER can reference:

- Grid flexibility: With the introduction of Advanced Metering Infrastructure in Massachusetts and the impending introduction of residential time-varying rates, DOER should help consumers understand technologies that promote grid flexibility. DOER can provide definitions of and links to resources that help explain demand flexibility programs, such as time-varying rates and demand response. DOER can also demonstrate how products, enabled by software, can be set to automatically charge during low-cost, off-peak times (for customers with time-varying rates) and then discharged at times when energy costs and emissions intensity are highest. The department should provide calculators or other tools to demonstrate how residents can save on their energy bills when participating in these programs.
- Easy installation: DOER can highlight which HEAR-eligible technologies can be installed without the need for an electrician. Battery-integrated appliances such as the Impulse stove and Gradient's window heat pump are two examples of this class of technology. By educating consumers on this topic, DOER can save Massachusetts residents time and money, and also help extend the number of households that the rebates can support.
- Resilience: DOER can highlight resilience benefits that certain next-generation technologies offer to Massachusetts households. A major barrier to electrification is the perception that appliances will be totally unusable in the event of an outage; however, certain appliances such as battery-integrated stoves or heat pumps backed up with an energy storage system can be put to use even in the event of an outage.

The coalition of signatories to this letter recommends that DOER consult leading electrification nonprofits for additional information on the benefits of next-generation technologies, such as the [Building Decarbonization Coalition](#) and [Rewiring America](#).

V. DOER should prioritize instant rebates and take steps to ensure that they do not unfairly disadvantage next-generation technology manufacturers.

Point of sale rebates should be designed with the goal of allowing Massachusetts residents to use the rebates quickly and flexibly. Massachusetts is already a leader in this practice, with a rebate processing framework that allows purchasers to easily submit proof of purchase of an eligible technology to access rebates. However, with the wave of residents that will apply for rebates, a business-as-usual approach risks creating a backlog of rebate applications that the State cannot fulfill promptly.

DOER should endeavor to allow consumers to access rebates instantly at the point of sale to create a consumer experience that is simple and inspires trust in the department. To facilitate this, DOER should leverage tools being built in a collaboration between Pacific Northwest National Laboratory (“PNNL”) and DOE to allow vendors and installers to initiate coupons redeemable from DOER.⁸

It is important that Massachusetts allow this process to be open to original equipment manufacturers of next-generation technologies that do not sell through major retailers. A direct-to-consumer model allows manufacturers to offer the products at a lower price to consumers than they would if the products were to be sold through channel partners. DOER should ensure that any organization registered to do business in the state of Massachusetts can apply as a vendor and provide instant rebates for eligible technologies to Massachusetts households.

Conclusion

The signatories to this letter believe that Massachusetts faces a once-in-a-generation opportunity to electrify homes while also providing benefits to equity, performance, and comfort. Effective implementation of the federal home energy rebates is paramount to delivering on these goals. We thank DOER for the opportunity to comment and look forward to supporting Massachusetts in the future.

Sam D’Amico
CEO, Impulse Labs

Jason Wexler
SVP Policy and Technology
Gradient

Dr. Sam Calisch
CEO, Channing St. Copper Co.

⁸ [Home Energy Rebate Tools | PNNL](#).



March 22, 2024

Commissioner Elizabeth Mahoney
Massachusetts Department of Energy Resources (DOER)

**Re: Sealed Response to DOER's Inflation Reduction Act Home Energy Rebates
Straw Proposal**

Dear Commissioner Mahoney:

Thank you for the opportunity to provide comments on Massachusetts' Inflation Reduction Act (IRA) Home Energy Rebate Programs.

These comments are provided by Sealed, a climate tech company on a mission to stop home energy waste. Sealed has over 10 years of experience with measured savings, and we believe the measured pathway of the Home Efficiency Rebates (HOMES) Program has the potential to transform the energy efficiency market—turning every home that participates in the program into a Virtual Power Plant (VPP) and improving grid reliability. We are excited about the opportunity to participate as an aggregator in the HOMES and Home Electrification & Appliance (HEAR) Rebate Programs.

Our core recommendations as outlined below are:

- Add a statewide measured savings pilot program to DOER's straw proposal, which would make it fully consistent with Massachusetts' Clean Energy and Climate Plan for 2050.
- Increase access to energy usage data while also allowing for flexibility to obtain energy usage data.
- Standardize implementation data specifications and APIs.

Our comments are included below. Thank you again for the opportunity, and we look forward to working with you to successfully implement these important programs.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Kolata".

David Kolata
Vice President of Policy
Sealed Inc.

Include both the measured and modeled pathways of the Home Efficiency Rebates Program

Sealed recommends that Massachusetts modify its straw proposal to include both the measured and modeled pathways of the Home Efficiency Rebates Program. Deploying both the measured and modeled pathways is the best [no-regrets strategy](#) to assure equity, affordability, accessibility, and impact when it comes to the HOMES Program.

In the measured pathway, contractors and households will not have to wait during the measurement period to receive their rebates. [Aggregators](#), such as Sealed, will provide the rebate to contractors upfront and immediately based on the expected energy savings. Aggregators then take on the performance-risk of the project achieving those expected savings and are paid back by the program based on the actual energy savings.

The measured pathway can ensure households receive the most benefits of energy efficiency measures. By shifting performance risk from households to aggregators and enabling a guarantee of energy savings, the measured pathway has significant consumer benefits, especially for LMI households.

Including the measured savings pathway:

- **Ensures equitable program outcomes** by almost always providing higher rebates than the modeled pathway, especially for low-income households pursuing weatherization and electrification retrofits. In Massachusetts, we estimate that the measured pathway will provide average rebates of approximately \$14,000 for LMI homes with the highest energy usage (such as poorly insulated, leaky homes with average energy usage above 130% of the state's average), whereas the modeled approach will provide rebates up to \$8,000.¹ Including the measured pathway is an essential strategy for improving LMI affordability, particularly for combined weatherization and electrification projects.
- **Protects consumers and taxpayers** from waste, fraud, and abuse because the state will only be providing rebates based on actual, measured savings that can be verified. Many studies have demonstrated that deemed and modeled approaches do not typically realize the estimated energy savings, particularly

¹ Data from Sealed's [HOMES incentive model](#) which uses methodology that is in line with the DOE's [HOMES Measured Path Incentive Payment Calculator](#). However, DOE's calculator may result in slightly different incentive estimates.

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for LMI households.² The measured pathway, on the other hand, is much more likely to significantly reduce energy burdens given the accountability for work quality taken on by aggregators.

- **Assists with grid reliability issues** as grid operators such as ISO New England require that both demand-side and supply-side resources be measured and verified. The measured pathway can thus be a downpayment on the robust participation of residential energy efficiency in VPPs. Maximizing the value of VPPs, in turn, is a critical component of Massachusetts maintaining and improving both grid reliability and affordability going forward.

Massachusetts has appropriately ambitious climate goals, as outlined in the state's Clean Energy and Climate Plan for 2050 ("2050 Plan"). The 2050 Plan states that the "Commonwealth will continue to prioritize greater deployment of energy efficiency and load flexibility measures to minimize necessary distribution system expansion" and that the state "will consider sponsoring or supporting pilot projects that test innovative, under-researched demand flexibility program options."³

Adding a statewide measured savings pilot program into DOER's straw proposal would be a great opportunity to "test out" a performance-based approach that would provide demand flexibility and grid reliability benefits—which are benefits that only the measured pathway can provide.

Deploying both the measured and modeled pathways of the Home Efficiency Rebates Program will also help Massachusetts reach the most households and offer options and flexibility to the market. Both approaches can be deployed simultaneously—which was reinforced by the U.S. Department of Energy's (DOE) program guidance.

The experience will be similar for households under either option, and contractors will have the ability to choose which program option to use. The administrative costs associated with deploying both the measured and modeled programs will also be minimal, since the IRA requires that energy data be shared across program

² Previous NYSERDA research shows that in houses with natural gas, realization rates of model-based savings range from 33% to 51%. See Table 12. *NYSERDA Residential Retrofit Impact Evaluation*, August 2022. <https://www.nyserdanv.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/Matter-No1602180NYSERDA-Retrofit-Impact-CEF-Report-FinalOctober2022.pdf> Other studies of the [California Advanced Home Upgrade Program \(AHUP\)](#), [Michigan Weatherization Assistance Program \(WAP\)](#), and [Illinois Home Weatherization Assistance Program](#) found similar results.

³ [Massachusetts Clean Energy and Climate Plan](#) for 2050, page 99.

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pathways. In fact, nearly [80%](#) of the required DOE workflows are the same for each pathway, and of the 31 required tasks for implementation, there is overlap between 24 of them.

As an example of a successful measured savings program, Sealed recommends that Massachusetts look at the [Tri-County Regional Energy Network](#) (3C-REN) residential single-family program in California. The program delivers rebates based on measured savings to contractors and households for energy efficiency and electrification upgrades. Sealed is an aggregator in the 3C-REN program. In that program, Sealed provides fast, upfront rebates to contractors based on projected energy savings of the projects they install. Sealed then takes on the performance risk of those projects achieving the energy savings over the measurement period and is paid back by the program based on the actual, measured energy savings achieved.

Massachusetts should ensure program rules allow contractors and aggregators sufficient flexibility in managing and retaining a portion of the incentive to cover the [full range of program costs](#), including competitive incentives for households, contractor incentives, hiring, administrative costs, and value-add services for households (e.g. lower financing costs). This incentive model has been field-tested in existing measured savings programs in California and is shown to create tangible incentives for contractors to initially join and remain as participants in programs for the long term, enabling successful [market transformation and building a qualified, experienced contractor workforce](#).

Empower aggregators to unleash market transformation

Sealed is excited about the opportunity to participate as an aggregator in Massachusetts' Home Energy Rebate Programs if it includes the measured pathway of the Home Efficiency Rebates Program. The DOE's guidance on the programs broadly defines an aggregator as: "An entity that engages with multiple single-family homes and/or multifamily buildings for the purpose of combining or streamlining projects as allowed by the State."

Sealed recommends that Massachusetts further define an aggregator as any commercial, government, or non-profit entity that receives rebates from the HOMES and/or HEAR programs within a given state or territory, but does not receive administrative funds from the HOMES or HEAR programs from that same state or territory.

Program implementers should provide an open "Request for Qualification" process that enables any qualified entity to register and serve as an aggregator in their state

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or territory. This will ensure the development of a competitive and open aggregator market, where aggregators are responsible for:

- Providing upfront and immediate rebates
- Marketing to customers and/or contractors
- Collecting customer energy data (both before and after energy upgrades)
- Predicting energy reductions
- Submitting project information to government programs and market administrators
- Taking project performance risk in the measured pathway

Aggregators will also be responsible for much of the administrative work currently placed on energy efficiency contractors, empowering contractors to do what they do best: installing great projects.

In addition, aggregators can operate as [Virtual Power Plant \(VPP\)](#) developers by taking on peak demand and grid optimization management across a portfolio of homes. VPPs are crucial to maintaining reliability and affordability as Massachusetts continues to electrify by moving to a more decentralized energy system powered by distributed energy resources.

Standardize APIs

Sealed encourages Massachusetts to allow aggregators to leverage the Pacific Northwest National Laboratory's rebate API. This will ensure that there is standardization for aggregators who may be working across several states and it will reduce costs for program implementation as implementers will not have to design their own API. Aggregators do not need to directly send the data to the DOE, but allowing aggregators to leverage the same data infrastructure for data collection and sharing will help streamline the program.

Value savings based on time, location, and/or greenhouse gas emissions

According to the DOE's guidance on the HOMES Program, states can value savings based on time, location, and/or greenhouse gas emissions. Sealed recommends that Massachusetts value savings based on one or multiple of these factors. For example, in addition to the \$200 installation incentive available to aggregators and contractors for verified projects in disadvantaged communities (per program guidance), Massachusetts should consider providing additional rebates for projects located in disadvantaged communities as defined by the DOE Climate and Economic Justice

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Screening Tool. This will help direct additional funds to areas with higher energy burdens.

Allow data flexibility

A core tenet of the HOMES Program is that household energy savings are driven by analysis of [energy data](#), regardless of whether savings—and rebates for energy upgrades—are provided via the modeled or measured program option.

In addition, a foundational piece of providing households with the potential utility bill cost impacts of their home energy upgrades is ensuring that contractors and aggregators have a simple and secure way of accessing a customer's utility data. Without this data, contractors and/or aggregators cannot estimate the utility bill impacts of their proposed upgrades, which limits the ability of consumers to participate in the Home Energy Rebate Programs—including both the modeled and measured pathway of the Home Efficiency Rebates Program.

Massachusetts should allow aggregators, contractors, and other stakeholders to leverage multiple pathways for gathering energy data across all households. Sealed, for example, captures household energy data in numerous ways, including from utility companies via Electronic Data Interchange (“EDI”) that includes monthly energy usage data provided by utilities in certain states; third-party data providers via data-management tools; energy bills, including records for delivered fuels, provided by customers; and wireless sensors, which transmit energy data from homes.

Open-source advanced measurement and verification

Open source software such as [OpenEEmeter](#) can provide open source AM&V and can also provide savings valuation based on time, location, and greenhouse gas emissions. Sealed believes that all third party software should be compatible with HPXML and also provide aggregators with APIs that have input/output functionality (i.e. other software tools can send data and receive outputs without having to use a specific user interface).

Home Energy Rebate Resources

The [Flex Coalition](#) created a “[Program in a Box](#)” to provide a model for implementing the Home Efficiency Rebates measured savings approach.

Sealed's [Policy Hub](#) has many resources on the IRA rebates and measured savings.

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Sealed, Pearl Certification, and Recurve prepared a [sample application](#) for implementing the Home Efficiency Rebates measured and modeled approaches together. This sample application builds on the application provided by the DOE.



Massachusetts Public Comment Opportunity

Federal IRA Home Rebates Overview for Public Input

March 25, 2024

Pearl Certification
Ben Bunker, Director Public Private Partnerships
413-658-5300
401 E. Water St. Suite 2
Charlottesville, VA 22902



Introduction

Thank you for the opportunity to respond to the DOER's Overview for Public Comment, for its Inflation Reduction Act's (IRA's) Home Efficiency Rebates (HER) and Home Electrification and Appliance Rebates (HEAR) programs.

Pearl Certification is a third-party certification services provider focused on transforming the market for energy-efficient, high-performing homes at a scale that will make a real difference in the increasingly urgent efforts to mitigate the climate crisis. With a track record of certifying over 192,000 homes in 49 states, including over 2,900 in Massachusetts, our expertise lies in bridging the gap between energy efficiency and real estate.

The leadership team at Pearl brings a cumulative 200 years of experience in energy efficiency and renewable energy, having played key roles in developing federal programs and managing leading home performance initiatives across the U.S. We are a proud partner of the DOE's Home Energy Score and the only national sponsor of Home Performance with ENERGY STAR. Pearl catalyzes market transformation by 1) Making the energy efficiency features of the home visible at the time of sale through certification of the home's overall efficiency and specific high-performance assets and 2) Providing homeowners with tools to make efficiency improvements throughout their homeownership.

We support DOER's proposal to direct IRA funding toward those most in need, improve existing programs to reach new communities, and further your leadership objectives for electrification and market transformation. We too are driven by a mission to achieve market transformation in home performance upgrades. As such, we are partnering with states and their stakeholders to design robust certification structures that are easy to use and cost-effective.

Pearl is prepared to help DOER meet the third-party certification requirement of the HER program and serve as a cornerstone of the state's Market Transformation Plans for both the HER and HEAR programs. Outlined below are our suggestions for how our services contribute to DOER's goals and help drive robust, scalable, and sustainable demand for energy-efficient, high-performing homes in Massachusetts.

We appreciate the opportunity to comment and look forward to a continued dialog with the DOER as you further refine your programs.

Ben Bunker, Director, Public-Private Partnerships

Ben.Bunker@pearlcertification.com

413-658-5300



PEARL PROUDLY WORKS IN PARTNERSHIP WITH:





Third-Party Certification as a Market-Based Solution

A disconnect between the real estate and energy efficiency industries has long limited the potential market impact of residential efficiency and electrification programs. Certification can help eliminate this disconnect and other long-standing market barriers by making the upgrades visible, practically and financially. If you ask an energy efficiency expert whether energy-efficient homes should be more valuable than comparable non-efficient homes, they almost invariably say they should be. And yet, if you talk to almost anyone who has made their home more efficient and sold it, or to the average real estate agent, they will tell you that, no, efficient homes don't sell for more. Addressing this disconnect within your program design is critical for accelerating market adoption and establishing sustained financial and market investment.

Consumer sentiment suggests efficient homes should come with a higher price tag. Studies, both national and regional, carried out by a range of reputable firms, including the National Association of Realtors ([NAR, 2023](#)) and the National Association of Home Builders ([NAHB, 2021](#)), consistently show that homeowners value efficient homes and efficient home features. Many respondents say that they would pay more for efficient homes; however, the energy efficiency features are rarely factored into the value of a home. This is partly because real estate agents lack the tools to market high-performing homes' benefits to their clients. Appraisers also lack the data they need in the appropriate format to assign value to a home's efficient features.

To begin to bridge this gap, we've found that a certification report must effectively communicate a home's energy-efficient features in a way that resonates with homeowners, aids real estate agents in marketing, and enables appraisers and lenders to assign value.

The Pearl Certification Report is a comprehensive, straightforward solution detailing retrofit specifics, rebate-supported installations, projected energy outcomes, and supporting accurate valuation. Thousands of consumer interactions and extensive research over many years have produced a format that homeowners and real estate agents like and use because they helped develop it. It is fully deployed, market-tested, and efficiently meets DOER's statutory requirements.

The fundamental idea behind third-party certification as a critical component towards market transformation is straightforward: a quality certification makes the energy-efficient and other high-performing features in a home visible and exciting to homeowners and home buyers. This data, if and when it is connected to real estate and appraisal practices, translates into tangible additional home value. Each time a Pearl Certified home appraises for more, it validates the performance-improving investments the owners made.

This is a critical market signal for other homeowners: when efficiency translates into home equity and market competitiveness, they have a powerful new motivation to improve efficiency. This equity creates options for homeowners in several directions, accessing the added equity through a home equity loan, and/or, in the event of a sale, through increased appraisal value and potentially increased sale prices. Third-Party Certification enables potential buyers to quickly identify and compete to purchase these homes, informed and confident that real energy savings and non-energy benefits are included in the price they pay. Pearl has published a [white paper](#) to help detail how third-party certification drives market transformation.



Capturing the Market Transformation Opportunity

Pearl Certification is prepared to serve as a cornerstone of Massachusetts' Market Transformation Plans for both the HER and HEAR programs. State Energy Offices (SEOs) must submit Market Transformation Plans within a year from acceptance of their IRA program plan. DOE-approved Market Transformation Plans are required to unlock the third tranche of funding and serve as a milestone, beyond which sits 45% of a state's total funds. Therefore, over \$65M of MA's \$146M allocation depends upon a well-crafted, feasible plan for market transformation.

We believe the significance of these plans goes beyond the requirement. These plans will speak to how states will use these funds to set in place programs that are not isolated, but instead, integral to the housing market for the long term. There is no question that Mass Save, with or without the HER and HEAR rebate programs, is transforming your state's market for residential energy efficiency investments.

We are interested in exploring with DOER the possibility that more can be done to maximize the impact of every dollar invested, through every program by leveraging the power of third-party certification that connects to real estate mechanisms and appraisal value. This is an opportune moment to explore how the progress Pearl and its partners have made toward making home performance upgrades visible and more valuable to homeowners, can contribute to DOER achieving and exceeding goals. This is also an opportunity to learn from the past.

Pearl's founders played leadership roles in developing public policy and managing programs while implementing the 2009 American Recovery and Relief Act (ARRA). The ARRA programs were intended to stimulate long-term consumer demand for energy upgrades but ultimately did not. When the programs ended, consumer demand for efficiency improvements dried up, and contractors shelved their blower doors and returned to previous business practices. Sadly, none of those investments were documented in a way that contributed to home equity.

The experience of ARRA program implementation did generate a wealth of information about program design, homeowner perspectives on efficiency, and the way information about efficient homes was used, but it was not being received and used by the real estate industry. This does not need to be the case today. The billions of dollars committed, whether IRA or Mass Saves dollars, can be reflected in increased home equity, deeper data insights, and measurable long-term savings.

From this experience, we know that while rebates can lower consumer costs, ultimately, **the market will be transformed when homeowners, appraisers, lenders, and real estate agents value the features and benefits of high-performing homes.** Homeowners can then factor added equity value into their home investment decisions. We have published a detailed [Market Transformation Playbook](#) to help states navigate the complexity of creating market transformation plans.



Building Wealth in Under-Served Communities

DOER's priority to reach those households most in need aligns with Pearl's mission to make our global community a better place by giving homeowners tools to improve the health, comfort, efficiency, resilience, and value of their homes. Increased comfort, health, and affordability in under-invested communities are but one part of the responsibility and imperatives toward social and environmental justice. We are committed to working with stakeholders to help remove the technical and practical barriers to efficiency and performance for every housing type, in every community.

The ability to translate home performance upgrades into home equity is particularly important for a low-income household, where even a modest increase in home equity has more significance than an upper-income household. For lower-wealth homeowners, an increase in home equity directly contributes to building individual generational wealth. This form of increased value is preferable in contrast to that which is driven by speculative outside capital, a root cause of gentrification.

What community residents in under-served neighborhoods want is access to capital themselves so that they can improve their communities and stay in place – and enjoy modest wealth building. The transformational effect of driving more demand for high-performing homes also translates to more low-income homeowners having access to high-performing homes and enjoying their benefits, including lower monthly operating costs and lower monthly payments (when lenders actually consider high-performing features). A certification that integrates with the real estate market, helps increase wealth for low-income households and keeps that wealth in their communities.

The Importance of National Standards - coordinating with contractors, and making it easy for them to participate

In our partnerships with contractors across the country, it is clear they are concerned about the potential for increased complexity and broad needs for training, at a time when new skills and new contractors are needed, in every state. Expanding work into under-invested communities will require new tools to increase accessibility and promote flexibility for contractors in the field. As the sole national sponsor for the [DOE Home Performance with ENERGY STAR](#) (HPwES) program, Pearl commends DOER's adoption of the QA/QC framework of HPwES, for Mass Save. It is a robust model for program quality assurance and workforce standards and includes a pathway to quality that also helps contractors build their businesses. The program holds contractors accountable for quality work through clear and understandable standards, promoting positive customer experiences.

Aligning QA/QC requirements with existing DOE-approved frameworks avoids redundancy and ensures contractors adhere to recognized industry standards. With alignment and DOER's goals to reach new communities in mind, Pearl recommends DOER consider adding DOE's "Option 2", Virtual QA, in accordance with HPwES standards. Our experience implementing Virtual QA with our contractor network has shown us how Virtual QA reduces barriers to contractor participation, increases the speed at which work and rebates can be completed and issued, as well as prevents overburdensome in-person visits to a participant's home. Additionally, the program supports contractors taking a 'high value' instead of a 'lowest cost' approach with their business. This approach



encourages businesses to invest in their workers and systems for long-term sustainability and positive outcomes for employees and customers.

As a Home Energy Score (HES) Partner and a DOE-approved HES QA Provider and Assessor, we offer customization of our Home Certification Reports to include HES or similar energy performance scores where applicable. We recommend that DOER's Home MPG score be offered within a certification that facilitates the valuation of the home at the time of sale. A third-party certification like Pearl is the ideal packaging that allows home energy scoring labels to be properly incorporated into the marketing and sale of the home.

Additionally, to enhance market engagement and support an accurate valuation of energy-efficient homes, we recommend DOER utilize certifications that are included in the [Real Estate Standards Organization](#)'s (RESO) Data Dictionary. RESO's Data Dictionary 2.0 provides a consistent framework and language for real estate agents, empowering them with tools to navigate the sale process effectively. The Data Dictionary ensures uniform inputs across local Multiple Listing Services (MLS), fostering consistency and accuracy in presenting energy-efficient homes to local markets. Pearl Certification is recognized within the Data Dictionary, a critical ingredient for market transformation, as this recognition is the only way for the certification and its attributes to be visible on the national platforms people use to find and buy homes, like Zillow and Redfin.

Finally, we know that appraisers are critical to market transformation in Massachusetts, as they assign the value of energy efficiency improvements, helping incentivize homeowners to pursue energy-efficient investments that contribute to the state's decarbonization effort. Appraisers need clear and accurate data presented in an industry-accepted format. Each Pearl Home Certification Report includes a completed [Appraisal Institute Green and Energy Efficient Addendum](#) with information about the home's energy efficiency assets to support the appraiser's opinion of value. It's of utmost importance for all improvements to be included in this standardized addendum so that value is properly and equitably assigned to current or prospective homeowners.

Conclusion

Thank you again for the opportunity to share our perspective in support of the goals shared in the Overview. We feel strongly that DOER has a clear opportunity to set in place powerful new measures, as part of your nation-leading programs, that capture the value of every investment and create a lasting demand for, and access to, high-performing homes for every resident in Massachusetts.

We offer our continued support of DOER's goals to maximize the reach and results of every efficiency and electrification investment in Massachusetts, for every homeowner, across all of your programs. We look forward to discussing these recommendations at any time if that would be helpful to your effort.

Please feel free to contact Ben Bunker at 413-658-5300 or Ben.Bunker@pearlcertification.com.

Massachusetts Department of Energy Resources

March 25, 2024

Re: Request for Public Comments on Massachusetts Home Energy Rebates proposal

On behalf of National Housing Trust and Planning Office for Urban Affairs, Archdiocese of Boston

1. Integration of the Home Efficiency Rebate (HER) Program and Home Electrification and Appliance Rebate (HEAR) Program with existing energy efficiency and low- and moderate-income programs.

Massachusetts Department of Energy Resources (DOER) has outlined in the Home Energy Rebates straw proposal that HEAR and HER funds will be braided into and leverage existing state energy efficiency programs, including Mass Save, the Affordable Housing Decarbonization grant, and the Municipal Light Plant (MLP) program. Funding from these state programs can and should be used to cover the remaining cost of appliances, equipment, and system upgrades or installations that are not offset by Home Energy rebates. Considering rebate funding will only support a small portion of state energy efficiency programming when compared to Mass Save's budget, it is important that DOER take advantage of this funding opportunity and dedicate funding to households that experience the greatest barrier to energy efficiency and decarbonization measures and may not be served as much as possible by existing programs, including includes low-income households and Naturally Occurring Affordable Housing (NOAH) properties.

2. Program design for multifamily buildings in low-income communities.

DOER should work with DHCD and MassHousing to not only ensure rebates can seamlessly be incorporated into project financing but because DHCD and MassHousing have existing relationships with multifamily developers and owners and can support outreach and engagement efforts with these communities. DHCD can serve as a strategic entry point for DOER to identify a pipeline of projects slated for recapitalization and rehabilitation and would benefit from additional upgrade/retrofit incentives.

DOE recently released guidance for coordinating rebates with Low Income Housing Tax Credit (LIHTC) projects. LIHTC properties face unique financial constraints, including an inability to incorporate grants such as rebates. DOE has also clarified that Home Efficiency Rebates (HER) cannot be loaned as funds by the State Energy Offices or their subgrantees to avoid reducing the LIHTC eligible basis. However, DOE guidance does allow flexibility in how the HER recipient "elects to invest equivalent funds from other available sources in the LIHTC structure (e.g., a member of the partnership receives the rebate and then loans the amount to the partnership)." Since LIHTC is responsible for financing most affordable

housing in Massachusetts, it is important to reduce barriers to using rebates in these properties. DOER should consult with the Massachusetts Department of Housing and Community Development (DHCD) and MassHousing in developing an approach to ensure that rebates can be used by LIHTC housing providers.

DOER can also ensure the rebates are designed to best integrate with existing multifamily financing processes by allowing multi-year rebate reservation periods and providing incentive installment payments to address cashflow constraints. As stated by DOE, “A multifamily rehabilitation can take upward of 3 years when accounting for predevelopment through construction. To factor rebates into housing finance, developers/owners will need some guarantee that rebates will be reserved over this time for their project (i.e., options beyond point-of-sale). In addition, the Department of Energy encourages states to include staged incentive payments to ensure affordable multifamily housing owners can make timely payments to subcontractors throughout the retrofit process.” Since rebate reservations provide a degree of certainty that HER rebate funds will be received once upgrades are complete for a modeled pathway project, the reservation process should be considered when underwriting construction loans. This is also an important program design element for landlords of NOAH properties. NOAH landlords are not likely to have the cashflow or reserves to purchase or complete DOE rebate-eligible appliances and measures up-front, especially when taking into consideration the current length of time developers and homeowners must wait to receive their Mass Save rebates. By offering staged payments, it ensures these building owners and residents will have a greater chance of benefiting from the Home Energy Rebates.

DOER should include funding for technical assistance to help facilitate the use of rebate funds in multifamily buildings and for onsite property management and maintenance staff. DOER should consider allocating a portion of their state funding to supporting technical assistance to multifamily building owners and onsite property management maintenance staff. Affordable multifamily owners need more staff capacity and resources to plan and implement energy efficiency measures. The technical assistance should include conducting energy assessments, supporting owners in determining the final scope of work, identifying potential contractors, ensuring energy efficiency measures are installed properly, and providing maintenance and operational support. Existing programs, like the Massachusetts’ Solar Technical Assistance Retrofit (STAR) Program, while structured to support onsite solar/renewable energy potential, offers project management and technical assistance to affordable housing developers. The STAR program also offers staff grants to address capacity constraints consistent among affordable housing owners and onboarding webinars to help developers understand state incentives and programs. Massachusetts should also consider developing peer-learning opportunities for affordable

multifamily owners to come together and share lessons learned and best practices from their own experience in energy efficiency and electrification upgrades.

DOER should also take advantage of DOE guidance allowing states to apply rebates to common area and whole-building energy upgrades so long as the work benefits individual dwelling units, including energy savings, cost savings, pollution reduction, or other health and safety benefits. For the HEAR program, DOE is explicit that per dwelling rebate amounts can be aggregated to pay for central system upgrades, e.g., replacing a central boiler with a central heat pump system. This allows for a more holistic approach to maximize energy savings, health and safety benefits, and emissions reductions that benefit all residents.

3. Ensuring efficient delivery of these programs with respect to outreach, education, and income verification.

There should be flexible income documentation requirements to alleviate administrative burdens for affordable multifamily owners. The range of documents that could be submitted can include income covenant documents for entire buildings, proof that households participate in public assistance programs such as SNAP or Medicaid and Signed Resident Income Certification forms. For NOAH properties where landlords do not verify resident income, DOER must consider alternative methods to income-verify properties.

DOER should also use the list of multifamily buildings deemed income-eligible provided by DHCD and MassHousing based on income information already verified by the agencies. This is consistent with DOE's recognition that affordable housing programs, including LIHTC and project-based Section 8, qualify for categorical eligibility.

In addition to the current Community Engagement Plan elements included in DOER's straw proposal, Massachusetts should design educational resources that can be shared with housing owners. Educational resources should specify what energy efficiency upgrades and appliances can be supported or purchased with the rebates and what appliances and upgrades work best for different building/housing types. These resources can be shared through webinars, mailed to homes, materials distributed through community-based organizations, and posted around communities. Educational resources should also be developed for multifamily residents that explain the benefits of these upgrades (i.e., health impact, utility savings, environmental impact, etc.). DOER should also consider establishing office hours with dedicated staff who are knowledgeable of the Mass Save, MLP, HER and HEAR programs, and Affordable Housing Decarbonization grant to support building/homeowners making these decisions.

4. Additional Considerations for Equitable Funding and Implementation

DOER should also consider extending the minimum affordability requirements once a property receives the rebates. DOE's minimum guidance requires two years of affordability based on the total rebate amount awarded. This is a process developers are already familiar with in Massachusetts— for-profit developers participating in the state's Low-Income Energy Affordability Network (LEAN) Low Income Multifamily Program are required to sign an affordability agreement. Several other state's energy efficiency and weatherization programs require a minimum of between 5 and 10 years of affordability. This extension is especially important if a building is nearing the end of its extended-use period or is a NOAH property.

For additional questions, please contact Madeleine McCullough at mmccullough@nhtinc.org.

Monday, March 25, 2024

Christina Moroney-Ebarb
Federal Program Coordinator
Massachusetts Department of Energy Resources
100 Cambridge St #1020
Boston, MA 02114

Dear Christina Moroney-Ebarb,

Span, Inc. (“SPAN”) appreciates the opportunity to provide input on Massachusetts’ proposal for implementation of the Home Energy Rebate Program. We commend the Department of Energy Resources (“DOER”) for taking action to bring these federal dollars into the state and seeking public input to ensure efficient and effective program implementation. In particular, SPAN applauds the Commonwealth’s proposal to allocate Home Electrification and Appliance Rebate (“HEAR”) funds primarily to electrical panel upgrades, which complement the extensive rebates for other appliances included under Mass Save.

In submitting comments, SPAN leverages our extensive experience designing next-generation smart panels and energy management solutions, partnering with contractors and installers, and integrating with electric appliances and technologies.¹ Our recommendations, which are expanded upon below, are as follows:

1. DOER should maintain its proposal structure that allocates HEAR funding towards panel upgrades and wiring while leveraging existing Mass Save incentives.
2. DOER should ensure that the market is educated on the role smart panels can play in accelerating affordable and equitable electrification projects.
3. DOER should ensure residents can access smart panels through Inflation Reduction Act (“IRA”) Home Energy Rebates, and should consider offering additional rebates for smart panels when a service upgrade would otherwise be needed.
4. DOER should ensure that contractors can access and provide income-qualified Home Energy Rebates as Verified 3rd Party Designees, as is the case with Mass Save, to ensure quick and effective implementation of the rebates.

Background and Benefits of Smart Panels

Smart panel technologies have several benefits over traditional panels to contractors, homeowners, ratepayers, and utilities, all in line with affordable, equitable, and efficient home electrification. These benefits include:

¹ Additional information regarding SPAN can be found on page five.

- **Affordable and equitable electrification:** Electrification requires significant infrastructural costs, including upgrades to utility service lines, transformers, and substations. In Massachusetts, service upgrades can cost a homeowner between \$2,500 and \$4,500 and can be even more expensive for certain homes.² These upgrades are not only immediately borne by the homeowner, but they also ultimately increase rates for all customers as utilities expend resources to build out the upstream distribution system. Some smart panels, such as the one offered by SPAN, **avoid the need for these costly service upgrades** by offering the ability to intelligently throttle loads according to user preference to avoid exceeding the existing service capacity at a given address. Deploying smart panels instead of traditional panels therefore directly enhances equitable outcomes in the Commonwealth while working towards the building energy efficiency, electrification, and affordability goals of Massachusetts.
- **Enable future participation in grid flexibility:** Smart panels enable and optimize customer participation in a variety of grid flexibility use cases – including flexible load management, home battery and solar enablement, virtual power plants, time-varying rate adoption and off-peak charging, and managed EV charging – that will be introduced in Massachusetts in the coming years with the rollout of Advanced Metering Infrastructure (AMI). In addition, smart panels can support the future non-wire alternative projects proposed by electricity providers such as Eversource and National in their separate Electric Sector Modernization Plans (“ESMPs”).³ SPAN offers the ability to provide whole-home load flexibility through individual circuit control across all 32 circuits in the panel. Smart panel-focused rebates can help deploy this technology and prime the grid for the future demand flexibility needs forecasted in the ESMPs, reaching climate targets while also lowering energy costs for residents of the Commonwealth.
- **Resilience:** Smart panels can enable battery integration to power homes in the wake of extreme weather events. Load control functionality extends the life of batteries (up to 40% using SPAN technology), affording residents more assurance that they will have power, even as the frequency of extreme weather events increases.

Comments to Massachusetts on Home Energy Rebate Implementation

1. **DOER should maintain its proposal structure that allocates HEAR funding towards panel upgrades and wiring while leveraging existing Mass Save incentives.**

SPAN is very supportive of the DOER proposal to leverage existing Mass Save incentives for certain electrification technologies, and to allocate HEAR funding towards panel upgrades and wiring, which are not currently incentivized. A 2022 report from Building Decarbonization Coalition found that while panel upgrades will be necessary for many homes pursuing

² See [Massachusetts Clean Energy Center Electrical Service Upgrade](#) webpage.

³ See January 2024 plans from [Eversource](#) and [National Grid](#).

electrification projects, homeowners pursuing these projects frequently do not consider that upgrading their service panel might be necessary and could add costs to the project.⁴ We are concerned that without financial support for the whole scope of the electrification project, which would include the panel upgrade and wiring, homeowners will balk at the additional costs and choose not to undertake the project. Ensuring that Massachusetts residents have the funding to upgrade electrical panels in preparation for or in tandem with appliance upgrades subsidized through Mass Save is essential to effectively and efficiently promoting decarbonization in Massachusetts. In addition, the installation of a panel upgrade will futureproof the homes for further electrification.

2. DOER should ensure that the market is educated on the role smart panels can play in accelerating affordable and equitable electrification projects.

SPAN encourages DOER to provide education to contractors and homeowners on the process of electrifying homes and the technologies that can lower project costs, including smart panels. As discussed in our comments above, homeowners are often surprised that appliance upgrades require a corresponding panel upgrade. Not only are these projects costly and time-consuming, but also they can ultimately trigger even more expensive upstream upgrades to the distribution system. Homeowners should be aware that smart panels are a more cost effective and expedient option than a traditional panel upgrade.

SPAN encourages DOER to leverage reports published by experienced nonprofit organizations such as [Rewiring America](#) and the Building Decarbonization Coalition report linked above for information on these technologies. DOER can provide accessible summaries of this information to Massachusetts residents on a centralized webpage.

3. DOER should ensure residents can access smart panels through IRA Home Energy Rebates, and should consider offering additional rebates for smart panels when a service upgrade would otherwise be needed.

SPAN commends Massachusetts' proposal to use HEAR funds to supplement the existing Mass Save rebate program, and to use Home Efficiency Rebate ("HER") funds to support delivered fuel customers in Municipal Light Plant ("MLP") communities and affordable housing deep energy retrofits.

SPAN's smart panel is eligible for \$6,500 in rebates under the DOE's Home Energy Rebate guidance for HEAR, both for funds related to "electric wiring" (\$2,500) and "electric load service center" (\$4,000). We encourage the Department to extend this combined amount to smart panels and proactively inform the market that smart panels are eligible equipment to receive the rebate.

⁴ See the [Building Decarbonization Coalition Panel Upgrade Report](#).

Additionally, SPAN's smart panel is eligible for coverage under DOE's Home Energy Rebate guidance for HER.⁵ Smart panels can be a key enabler of Massachusetts' plans to use HER funding to support sustainable home electrification with a focus on heat pumps for delivered fuel customers in MLP communities. Many delivered fuel households, which tend to reside in older homes, may face barriers to electrification due to expensive and time-consuming service upgrades. By ensuring that smart panels are eligible for HER funding or are, at minimum, eligible for DOER-funded financing packages that are paired with HER funding, DOER has the opportunity to drive electrification in communities that cannot access Mass Save rebates.

Finally, we recognize that DOER also has the opportunity to request additional HER funds for certain projects, particularly those serving LMI customers.⁶ Due to the benefits that smart panels can provide in terms of reducing costs to the customer and general ratepayers of avoiding a service upgrade, and in preparing the home for participation in further demand reduction through demand flexibility programs, we encourage the Department to consider offering further rebate dollars in the case that a smart panel is installed.

4. DOER should ensure that contractors can access and provide income-qualified Home Energy Rebates as Verified 3rd Party Designees, as is the case with Mass Save, to ensure quick and effective implementation of the rebates.

In SPAN's experience, offering point of sale rebates is an essential component of successful rebate program design. SPAN encourages the Department to allow for contractors to claim rebates for both HER and HEAR in order for them to provide rebates to their own customers. Contractors must have confidence that they can receive the rebates quickly and with ease.

Today in Massachusetts, eligible HVAC contractors have the ability to become Mass Save Verified 3rd Party Designees, allowing customers to assign rebate reimbursements directly to contractors.⁷ The Commonwealth has a strong platform to allow contractors to access rebates; DOER should ensure that contractors have the tools needed to verify incomes for customers who seek to take advantage of the IRA's income-qualified rebates as efficiently as possible.

SPAN encourages the Department to adopt simple income verification requirements such as self-attestation and quick approval via cross-referencing participation in state or federal aid programs. DOER should ensure that contractors can retain their status as a Verified 3rd Party Designee while still meeting the income qualification requirements outlined in the IRA. Creating cumbersome additional steps for contractors to provide these rebates at point of sale risks

⁵ See page 12 of the [DOE's Inflation Reduction Act Home Energy Rebates Program Requirements and Application Instructions](#) ("IRA Program Requirements").

⁶ See page 14 the [IRA Program Requirements](#): "IRA Section 50121 provides larger rebates for single-family homes occupied by low-income households (below 80% AMI) and allows States to request authority to provide even larger rebates – up to 100% of project costs – to allow meaningful retrofits of low-income homes."

⁷ See Mass Save webpage for [Verified 3rd Party Designees](#).

alienating them in the implementation of the Home Energy Rebates; a straightforward integration of income verification tools should be a priority for DOER.

Background on SPAN

[SPAN](#) is a manufacturer of smart panels for single- and multifamily homes. Smart panels, such as the one developed by SPAN, serve as a one-for-one replacement of the traditional residential electrical breaker box and offer significant benefits to homeowners, contractors, and the utility. SPAN's smart panel features dynamic load-management called PowerUp™, a UL-916 Energy Management System, that eliminates the need to run an increased utility service to a home or development. PowerUp™ automatically spreads and/or sheds load at the circuit-level based on homeowner preferences, ensuring the level of current never exceeds the panel's maximum service rating. This intelligent hardware enables whole-home electrification, including the installation of rooftop solar, backup battery, heat pump HVAC, hot water heaters, induction cooking, and EV charging, without the need for service and upstream distribution upgrades, saving significant cost and time.

Each of the SPAN Smart Panel's circuits are fully connected to the SPAN app, providing the homeowner with detailed home energy management and actionable, hardware based energy saving insights. The homeowner has the ability to adjust and prioritize loads in real time through a user-friendly app – a key differentiator to the user experience over the hardwired critical load sub panels that don't allow choice and flexibility.

SPAN smart panels have enabled electrification projects in all 50 states, plus Puerto Rico and D.C., through our network of over 2,000 electricians across the US. A core component of our product development involves working closely with electricians to ensure that the installation of the panel itself can occur seamlessly and in the same timeline as a traditional panel without the need for specialized training or additional certifications. Installers complete an online training course to become SPAN "Authorized" and be able to access our Installer App, which allows them to commission SPAN products and activate the homeowner's account.⁸

Conclusion

SPAN appreciates the opportunity to comment to inform the Commonwealth's Home Energy Rebate program design and looks forward to supporting the development of programs to accelerate building decarbonization for Massachusetts residents.

/s/ Alex Pratt

Alex Pratt

VP of Business Development, SPAN

alex.pratt@span.io

⁸ Our Tech Portal (<https://techportal.span.io/s/>) includes all relevant technical documents and training materials, and instructions on how to access the SPAN Installer App.



**POOL &
HOT TUB**
ALLIANCE

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March 25, 2024

Christina Moroney-Ebarb
Massachusetts Department of Energy Resources
100 Cambridge Street
Boston, Massachusetts 02114

Dear Ms. Moroney-Ebarb,

We urge the Massachusetts Department of Energy Resources (DOER) to prioritize the inclusion of pool pumps, pool heaters, and smart pool controllers with timers in the upcoming Home Efficiency Rebate Program (HER) under the Inflation Reduction Act (IRA).

We understand Massachusetts plans to put emphasis on low-and-moderate income (LMI) residents in its implementation of the Home Efficiency Rebate Program and because of that, may not think of pool equipment as reasonable for inclusion within the program. There is a common misconception around swimming pool ownership, and that is that everyone with a pool must be well-to-do, but that is not the case. There are 5.4 million inground residential pools in the United States, along with another 3.5 million aboveground residential pools. In terms of homeowners' income, over 25% of inground pool owners and 67% of aboveground pool owners earn less than \$100,000 in household income and 1/3 of aboveground pool owners earn less than \$50,000 (Source: [PK Data](#)).

The rebates offered in the IRA's Section 50121 provide a unique opportunity for Massachusetts residents to make energy-efficient upgrades when aiming to achieve their 20% reduction in overall energy consumption. Given there are over 129,000 inground residential pools and over 62,000 aboveground residential pools in Massachusetts, it is crucial to recognize the potential energy savings from pool equipment.

Residential pool equipment, often the second-largest energy consumer after HVAC systems, has seen significant technological advancements. The Department of Energy acknowledges this with energy conservation standards for pool pumps, many of which are Energy Star certified. By transitioning from a single-speed to a variable-speed pool pump, homeowners can achieve a 73% reduction in energy consumption, translating to an impressive average savings of over \$2,300/year. Massachusetts also recognizes this benefit and already includes pool pumps within the Mass Save [Incentives and Rebates](#). PHTA believes that by either expanding the Mass Save incentive to include pool heaters and smart pool controllers with timers, or generally allowing such equipment to be eligible for rebates in any of the HER categories, would greatly benefit residents.

As with any program, just as with an LMI-focused program, the consumer must qualify for the rebate. We ask DOER to consider giving qualifying Massachusetts residents as many paths to energy conservation, bill savings, and rebate options as possible, and allow those residents who have the potential to greatly benefit from pool equipment upgrades the ability to do so.

The Pool and Hot Tub Alliance (PHTA) is confident that updating pool equipment will reduce greenhouse gas emissions and offer substantial savings for Massachusetts residents. To this end, we urge the Massachusetts Department of Energy Resources to include swimming pool equipment as qualifying products in their forthcoming implementation of the Home Efficiency and Electrification Rebate Program under section 50121. We are keen to collaborate with the Department of Energy Resources to maximize the benefits of the IRA's Home Efficiency Rebates and serve as a valuable resource.

Thank you for considering our proposal.

Warm regards,

Tyler D. Jones
Director of Government Relations
Pool and Hot Tub Alliance

TJones@phta.org

About Us

The Pool & Hot Tub Alliance was formed in 2019, combining the Association of Pool & Spa Professionals (APSP) and the National Swimming Pool Foundation (NSPF). With the mission to “Celebrate the Water,” PHTA facilitates the expansion of swimming, water safety, and related research and outreach activities aimed at introducing more people to swimming, making swimming environments safer, and keeping pools open to serve communities.

APSP, now the PHTA, is the world’s oldest and largest association representing swimming pool, hot tub, and spa manufacturers, distributors, manufacturers’ agents, designers, builders, installers, suppliers, retailers, and service professionals. Dedicated to the growth and development of its members’ businesses and to promoting the enjoyment and safety of pools and spas, PHTA offers a range of services, from professional development to advancing key legislation and regulation at the federal and local levels, to consumer outreach and public safety. PHTA is the only industry organization recognized by the American National Standards Institute to develop and promote national standards for pools, hot tubs, and spas. For more information, visit PHTA.org.



Elizabeth Mahony
Commissioner
Massachusetts Department of Energy Resources
100 Cambridge St., 9th Floor
Boston, MA 02114

RE: HER and HEAR Federal IRA Home Rebates Overview for Public Input

Commissioner Mahony:

On behalf of Preservation of Affordable Housing, Inc. (POAH), thank you for the opportunity to comment on the Department of Energy Resources (DOER) “straw proposal” for deployment of funds from the US Department of Energy (DOE) Home Efficiency Rebates (HER) and Home Electrification Appliance Rebates (HEAR) rebate programs. These new programs offer significant opportunities to help the Commonwealth reduce its carbon emissions, and we appreciate DOER’s thoughtful and collaborative approach to program design and implementation.

Preservation of Affordable Housing (POAH) is a Boston-based nonprofit affordable housing developer, owner and operator dedicated to the preservation and stewardship of existing, at-risk affordable housing. POAH provides affordable rental homes for more than 20,000 low-income Americans across 11 states and D.C., including seniors, families with children, and persons with disabilities. POAH has more than 30 properties consisting of over 3700 rental apartments across the Commonwealth.

POAH has long been committed to reducing energy consumption across our portfolio, because it supports affordability for our low-income residents, improves our properties’ financial viability, and reduces our buildings’ carbon footprints. Our design and building performance department works closely with utilities, engineers, and renewable energy contractors to advance our energy efficiency goals. To date, we have implemented nearly 500 discrete energy or water projects across our portfolio, generating more than \$2.6M in annual savings – including 200 projects in Massachusetts generating more than \$1.2M in annual savings.

Additionally, this issue is of great importance to our residents, as low-income households spend a higher portion of their income on home energy costs. According to the DOE’s Low-Income Energy Affordability Data (LEAD) Tool, low-income households spend an average of 8.6% of their income on energy, 3 times higher than non low-income households¹ While rental households use less energy compared to homeowner households, rentals account for greater energy use per square foot than owner-occupied homes². With the average age of rental stock being 44 years old³, energy rebates and retrofits are needed to ensure residents receive the benefits that those in new, more efficient homes take for granted.

¹ [The Strategic and Interagency Initiatives Fact Sheet \(energy.gov\)](#)

² [America's Rental Housing 2024 \(harvard.edu\)](#)

³ [America's Rental Housing 2024 \(harvard.edu\)](#)



HER:

POAH supports the expansion of the current DOER Affordable Housing Deep Energy Retrofit Grant Program through this HER funding. Our team has experience with the multifamily LEAN program and Low and Moderate-Income Housing Decarbonization grant program, which informs our recommendations.

POAH strongly supports DOER's proposal to allocate \$50M of HER funding towards affordable housing decarbonization. By allocating almost 70% of total HER funding for affordable housing, DOER helps ensure that low-income residents will benefit from retrofits that often have not been attainable through other current/past efficiency programs.

POAH supports DOER's intent to partner with MassHousing in the implementation of this program, and would also strongly encourage close collaboration with Executive Office of Housing and Livable Communities (EOHLC), another primary funding source for affordable housing renovation projects. Coordination among funding agencies can help streamline project timelines, ensure alignment on design and reporting requirements, avoid duplication of subsidy, and bring other benefits.

POAH also encourages DOER to ensure that HER resources can be accessed for targeted project upgrades and retrofits at projects that may not be able to access a comprehensive renovation/retrofit project. In such cases, it will be critical for targeted mechanical upgrades projects, such as switching from gas to heat pumps, to be fully funded by HER and meet savings targets without having to rely on outside funding or a larger project scope.

As DOER proceeds with implementation, POAH hopes DOER can clarify how the HER requirements and the Deep Energy Retrofit Pathway requirements will integrate. As the current Low and Moderate-Income Housing Decarbonization grant program has three different funding streams, some with restrictions based on location or utility type, it is unclear to POAH at present whether this HER funding will be subject to similar restrictions or become a fourth funding pool with separate requirements.

Given the scale of funding available through HER/HEAR, WAP, and other federal programs, we hope that DOER will reserve a substantial share of grant resources to support increased grant administration staff capacity to handle the anticipated flow of applications, along with creating a more robust application portal, allowing applicants to track the process of project status. We are aware that DOER staff are already managing very significant project workloads and would be concerned that, without increased capacity, adding HER/HEAR multifamily projects would over-burden DOER staff and result in significant delays in processing eligible projects.

In past proposal discussions, DOER has indicated that it would use modelled savings over measured savings, and POAH supports that approach. The modelled-savings approach is more consistent with projects/sponsors needing to determine a predictable rebate level during the design/predevelopment period as project financing is assembled, whereas the measured-savings approach would leave substantial uncertainty until post-completion, rendering a project's overall financing model (and need for other funding sources) relatively uncertain.

Finally, POAH supports DOER's proposed allocation of HER funds for Municipal Light Plants, but hopes DOER will take steps to ensure that a substantial portion of HER funds in MLP jurisdictions are also allocated to affordable



multifamily projects in those areas. We anticipate that in addition to programmatic requirements to that effect, it may be necessary for DOER to provide technical support to assist some MLPs to pursue multifamily energy retrofit projects – or even to provide capacity for program/project management in some cases, where an MLP may not have that capacity internally.

HEAR:

POAH strongly encourages DOER to define higher targets for the share of HEAR program funding to be allocated for Low-Income households (less than 80% Area Median Income), including households in rent restricted multifamily buildings.

Targeting Low-Income households in restricted multifamily buildings will allow funding to be used more strategically and have a deeper impact, especially toward reaching Justice 40 requirements. By statute, the HEAR program Requires at least 10% of its rebate funding serve low-income multifamily buildings, and POAH hopes that DOER can go above and beyond that amount as it has with the HER proposals.

Thank you for the opportunity to share POAH's perspective as DOER works to define the path for this important undertaking. Please don't hesitate to contact me aspofford@poah.org or (617) 449-1016 if you have questions or would like to discuss POAH's comments.

Sincerely,

Andrew Spofford
Chief of Staff / Senior Vice President
Preservation of Affordable Housing, Inc.



March 25, 2024

Christina Moroney-Ebarb
Federal Program Coordinator
Massachusetts Department of Energy Resources
100 Cambridge St #1020
Boston, MA 02114

Re: Energy Rebates

Dear Ms. Moroney-Ebarb:

Samsung Electronics America, Inc. (“Samsung”) respectfully submits the following comments on the state of Massachusetts’ Request for Public Input on the Inflation Reduction Act (IRA) home energy rebate programs.

Samsung Electronics America is one of the leading home appliance brands in the U.S. and we are committed to providing energy efficient product options to U.S. consumers. Samsung has won the ENERGY STAR Partner of the Year Award for Sustained Excellence ten times, including in 2023, and in 2021 we won the ENERGY STAR Corporate Commitment Award – a rare and distinguished recognition. Samsung has also won several ENERGY STAR Emerging Technology Awards, including for induction cooking tops, advanced adaptive compressors, innovative refrigerant systems, and advanced clothes dryers.

Massachusetts has set important goals for net zero greenhouse gas emissions by 2050. The Inflation Reduction Act home energy rebate programs can help drive Massachusetts toward success to achieve the state’s climate goals. In support of Massachusetts’ strategic plans on implementation, we would like to emphasize the following points:

A. Strategic Planning

Key Aspects of Implementation

- **The Home Electrification and Appliance Rebate (HEAR) program requires point of sale rebates. Point of sale rebates are crucial for low-income households as they free consumers from having to pay the full price of an eligible product up front, thereby making products more affordable. A retailer would discount the price at point of sale, which would result in significantly helping low income consumers.** Retailers are equipped to help advance the consumer experience and journey to help make the HEAR program a success. When a consumer is able to experience a product in person, this advances their understanding of the benefits. Retailers are preparing to spread education within their stores about these rebate programs. **Without the inclusion of retailers, the HEAR rebate program may fail to garner widespread attention and awareness, which could dramatically jeopardize the future success of these programs.**

- **We believe Massachusetts should deploy the HEAR rebates for all eligible income levels under the law simultaneously.** It is important to drive momentum behind the rebate programs and deploying to both low and moderate income communities will be key for awareness building and widespread attention.
- Massachusetts should consider providing sufficient lead time for communities to digest details through thorough communications on income verification and various aspects of the IRA home energy rebate programs. Advance notice will provide disadvantaged and low-income communities more time to prepare and remove the risk of overwhelming burdened households at launch given the complexity of the programs. There is tremendous opportunity for state energy offices to communicate to residents such as through websites and active calendar updates for state specific availability (i.e. when will a specific state go live with rebates to consumers).
- That effort would help retailers, which may well consider targeted advertisements for retail locations in low and moderate-income areas. Given that smartphone penetration is high across all income levels, utilizing websites and sharing tools such as benefit calculators would be helpful. Moreover, Massachusetts' energy office can consider mailers for marketing and communications in a way that serves their goals.
- Categorical eligibility is a critical aspect to reach certain covered households. There is opportunity for the state of Massachusetts to tap into participants of SNAP, LIHEAP, Weatherization Assistance Program and Medicaid for automatic prequalification and targeted education.
- Based on Samsung's analysis, a more granular definition of Area Median Income (AMI) (i.e. zip code vs county level AMI) will be more beneficial to a larger number of households in any given region. States should use an AMI threshold that benefits the largest amount of households in their state.

Importance of Advancing Consumer Education through ENERGY STAR

- The EPA ENERGY STAR program has 90% brand awareness and exercises great influence over consumers. **Massachusetts should consider requiring ENERGY STAR appliances for the HOMES rebate program and ENERGY STAR is already a requirement for HEAR if applicable.** Electric cooking products present a great opportunity for low and moderate income communities to benefit and ENERGY STAR has developed the first specification for this category. **Massachusetts should work to ensure that only ENERGY STAR certified electric cooking products receive rebates from consumers.** For example, how fast an induction cooking product can boil water – twice as fast – is very helpful for overly burdened households. Putting less stress on the home HVAC system is another critical aspect, which is important given Massachusetts' diverse weather conditions. Improved efficiency compared to non-induction are among the many benefits.
- ENERGY STAR appliances present an opportunity under HOMES to achieve greater energy savings. For example, the BPI 2400 reference in the IRA HOMES program is important to note. This standard references RESNET HERS standards, which highlight appliances. Massachusetts should include ENERGY STAR and/or Most Efficient appliances such as washers and refrigerators for HOMES rebates.



- **Samsung wants to underscore the importance of allowing ENERGY STAR combo washer heat pump dryers to receive IRA home energy rebates.** The HEAR rebate program requires ENERGY STAR products where applicable while allowing for heat pump dryer rebates. Consumers of all economic means can benefit from combo washer heat pump dryers as they are a growing and sustainability-enhancing segment of the market. Once all-in-one washer dryers are considered ENERGY STAR heat pump dryers, they should be provided rebates under the IRA home energy rebate programs by state energy offices.

Critical Statutory Interpretation of HEEHRA

- **We ask Massachusetts to support and implement our interpretation that the IRA clearly states that electric cooking products, heat pump dryers, and heat pump HVAC products, among others, are included in a “Qualified Electrification Project” and they must be ENERGY STAR if applicable.** Samsung encourages state energy offices to follow the requirements of the law for a “Qualified Electrification Project” and therefore, states should include all of the different requirements of the law and provide rebates for all allowed categories. This will provide consumers with greater choice about which products to use rebates for and follow legislative intent. This will also help manufacturers and retailers market more consistently to consumers. We believe states should interpret the IRA home energy rebate provisions as they are written and for HEAR, and in our view, there is no opportunity for expansion or narrowing of what a “Qualified Electrification Project” is.
- Moreover, we ask Massachusetts to provide maximum rebates for eligible products to offer consumers choice about the purchases they wish to make. This will help advance the interest of low income communities in particular.

Benefits of Assessing Time, Location and Greenhouse Emissions

- States are allowed to address location, time and greenhouse emissions in their plans to DOE. We wanted to ensure Massachusetts is aware of the ENERGY STAR Smart Home Energy Management System (SHEMS) as a way to increase energy savings from participating homes under the measured approach because such systems add thermostat and other device controls that can create operational and behavioral savings, along with savings from equipment and envelope upgrades. SHEMS provides an opportunity for demand response measures to be combined with the energy efficiency focus of HOMES. This will help put less stress on the grid at peak and will allow further recognition of the energy efficiency benefits of all energy using and connected devices in the home.
- In addition, such systems can be the way to implement the section of the HOMES legislation that allows states to value savings for time, location and or GHG emissions.
- Samsung SmartThings Energy, which obtained the first mass-market qualification for SHEMS ENERGY STAR, is compatible with over 300 other companies’ products.



- SHEMs and IOT platforms with energy use data integration, and marketing can educate, enroll, and execute rebates. Platforms can increase engagement across a variety of energy saving methods over time as users engage with these platforms more often than utility marketing assets.
- Utilities should formalize best practice for data integrations so platforms can invest in this space to help educate the customer.

Offering Choices for Energy Efficient Options for Consumers

- Massachusetts should not limit rebates to US manufactured goods as this would significantly limit the available options for consumer choices and would be counterproductive to the environmental goals of a successful rebate program. There is no statutory basis in the IRA home energy rebate programs for counterproductive Buy American restrictions, domestic content requirements, or reducing incentives for imported goods.
- Manufacturers are prepared to address demand increase as it occurs. Industry addressed a rapid increase in demand for home appliances during the COVID-19 pandemic and will continue to do so successfully.

Samsung would like to serve as a resource to Massachusetts as the state implements IRA home energy rebates. Samsung has committed to net zero carbon emissions (Scope 1 and 2) for our consumer-facing business by 2030 and by 2050 across global operations. Moreover, we are among the top ranked companies in the US Environmental Protection Agency's Green Power Partnership 100% Green Powers Users list. Energy efficiency is a key part of our sustainability strategy and we aim to continue raising the bar higher in efficiency in key product categories.

Samsung appreciates the opportunity to comment on Massachusetts' Request for Public Input for IRA home energy rebates. We would gladly welcome the opportunity to discuss these matters further.

Respectfully submitted,

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March 25, 2024

Elizabeth Mahony, Commissioner
Department of Energy Resources
Massachusetts State House
24 Beacon Street, Room 280
Boston, Massachusetts 02133

Re: DOER straw proposal on IRA funding application

Dear Commissioner Mahony,

Sustainable Middleborough has signed the letter from MLP communities and supports the requests in that letter:

1. Swap the HER and HEAR programs, making the full portfolio of federally funded HEAR rebates available to MLP ratepayers, or offer both HER and HEAR programs to all residents in the state.
2. Remove the matching fund or opt-in requirement for MLPs to participate in HER.
3. Contract with a neutral organization to administer the funds directly to residents, allowing residents to access both sets of rebates without regard to their local utility program.

Our support for these recommendations is based on our experience in Middleborough. Our town is served by a municipal utility that provides both gas and electric (no MassSave rebates), has an environmental justice census block, and has a median income below the state median. While our local utility provides some support for energy improvements, resources for residents for energy improvements are a fraction of municipalities served by MassSave.

Since 2022 our advocacy group has been leading a "Weatherize Now" campaign focused on our EJ and low/moderate-income households with the goal of educating and guiding residents in how to improve the efficiency of their homes.

We have hosted public workshops, spoken to local groups, sent post cards to our EJ block, partnered with low-income service providers, twice co-hosted an energy fair with the high school environmental club, developed an online Weatherization Guide (sustainablemiddleborough.org), and distributed targeted print materials at community events. We are in the process of hiring a Weatherization Navigator.

We have successfully advocated with the town and Middleborough Gas and Electric to increase the energy efficiency rebates for low-income ratepayers, create a 0% financing program for energy improvements, and adopt the Property Assessed Clean Energy (PACE) program for multifamily and commercial properties, among other policies.

Central to our message is that more help is on the way from the federal Inflation Reduction Act rebates, based on the promises in that legislation. The income-qualified rebates in the HEAR program

would be a game changer in our town, providing a critical resource for low/moderate-income households. While the HER funds are valuable for the few residents ready to implement whole-house improvements, the HEAR rebates are essential for families who can afford only incremental improvements (weatherization, electrical system upgrades, hot water heaters, etc.) and for renters (heat pump space heaters, dryers, and induction stoves).

Sustainable Middleborough has been working to raise awareness of the energy-saving improvements in the IRA legislation. **To have the door shut on the wide array of income-qualified federal HEAR rebates crushes the momentum we have built up and severely limits the ability of low/ moderate-income families in MLP towns to benefit from the federal resources.**

We urge you above all to make the HEAR rebates available to MLP towns like ours. Structure the federal-taxpayer-funded HER and HEAR programs in Massachusetts so that all low/moderate-income households have a fair chance to access them, regardless of which utility serves them.

Sincerely yours,

Sustainable Middleborough Board and Leadership Team

Kimberly French

Alan Melchior

Dody Adkins-Perry

Jeff Stevens

William Howe

Sandra Smiley

Patty Simon

DATE: March 22, 2024

TO: Christina Moroney-Ebarb at.christina.moroney-ebarb@mass.gov

FROM: Lindsay Tourijigian, Heat Pump User since Dec 2023

I participated in the Zoom call on March 18th. I would like to suggest that the HER/HEAR programs include a portion of its fund to “coaching” participants in understanding the change that takes place when you leave behind legacy heating solutions. To understand the additional (hidden) cost to installing into an older home. I think one of the commentators calls this type of initiative Administrative cost.

The **environmental changes** to your home are significant. I have a single family, two story plus basement home in JP. My heating solution was an oil fired, hot water system - old but reliable. The heat in my home was consistent due to the number of radiators in each room and space. With a Heat Pump system I now have air swirling around and sections of my house with inconsistent heat. I’m doing all the adjusting to this new system NOT my HVAC Contractor.

Hidden Cost: Upgrading the level of insulation in an older home and the need to upgrade the electrical panel - 100 AMP to 200 AMP. Mass Save does assist with some of the cost, insulation, and you can borrow funding to cover a maximum of \$5K for electrical panel update.

Rebates: One of the participants in the Monday conference talked about how long it is taking to obtain his rebate. I was extremely fortunate to get my \$10K rebate before NEEECO installed my insulation. While I put the rebate back into the cost of my loan I should have held on to the \$\$ to cover the mind blowing cost of heating a home with electricity. When I asked about the cost of running heat pumps, especially during the heating season no one offered data. Most of my neighbors installed the heat pump during the summer so it didn’t matter much since they were melting in their homes.

Finally, **I would like to see this group offer more transparency** in the details associated with heat pump installs. The agencies and contractors I spoke with, prior to conversion, sugar coated the wonders and value of heat pumps and the great \$10K rebate you would receive. Due to the time of the year National Grid refused to install a gas meter AND not wanting to put more money into replacing oil heating equipment I was stuck. If I could go back in time I’d have stayed with Oil. 😞