To: Massachusetts Program Administrators and Energy Efficiency Advisory Council Consultants

CC: David Basak and Allison Cross – Guidehouse

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Re: Winter Energy Price Mitigation Efforts (MA23R63-B-WPME) Quick Hit Study Findings

1. Introduction

The Massachusetts Program Administrators (PAs) launched a series of initiatives to mitigate the impacts of energy price increases in the Winter 2022-2023 after direct guidance from the Massachusetts' Department of Public Utilities (DPU). The directive asked the PAs to mitigate the financial effects by "taking reasonable actions, including increasing education of energy efficiency programs."[1]

The PAs enacted a plan to accelerate some of the planned initiatives that had already been approved by the DPU under the 2022-2024 Three-Year Energy Efficiency Plan (the "Plan") and to enhance efforts to support customers. The primary task, which was later extended through May 2023, was to target recruitment to moderate-income customers with the goal of expanding access to weatherization measures. To reach more moderate-income customers (who receive 100% weatherization incentives through the moderate-income program), the PAs removed income verification steps for select census block groups.[2] The PAs also instructed home performance contractors (HPCs) and lead vendors (LVs) to expand marketing efforts, including door-to-door canvassing and social media engagement, within the same census block groups. The implementation structure of the initiative was slightly different across PAs. In some PA service territories, LVs ran the initiative from start-to-finish, including the planning, recruiting, and updates to PAs. In other PA service territories, LVs oversaw HPCs who targeted their outreach to specific census blocks and reported progress to LVs. The PAs provided LVs a list of

[1] Joint Letter on Behalf of the Program Administrators, DPU 21-120 through DPU 21-129, 2022-2024 Three Year Energy Efficiency Plan, Winter Energy Price Mitigation Efforts, https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/15393234.

[2] "To identify these groups, the PAs utilized 2020 Census data to select census blocks using the following criteria: (i) At least 60% of the population within the block group must fall within a moderate-income bracket, defined in national census data as households earning $40,000-$100,000 annually; 2 (ii) Less than 20% of the population within the block group must fall within a low-income group, defined by national census data as households earning less than $40,000 annually; 3 (iii) To ensure there are significant opportunities to deliver proposed measures within selected areas, a) A cumulative participation rate since 2013 that is less than 30% (the statewide average) for gas and 43% (the statewide average) for electric customers; and b) At least 50% of the population residing in 1-4 unit buildings; and (iv) Located within a HTR community." - Joint Letter on Behalf of the Program Administrators, DPU 21-120 through DPU 21-129, 2022-2024 Three Year Energy Efficiency Plan, Winter Energy Price Mitigation Efforts, Page 4, https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/15393234.

addresses in the designated census blocks where residents would be eligible for 100% weatherization incentives, without income verification. Additionally, the PAs mailed the eligible addresses a letter noting that "winter energy costs are expected to be higher than normal" and informed them about their eligibility for 100% weatherization incentives in addition to other program offerings. LVs then either coordinated with HPCs or started to conduct their own outreach, primarily through canvassing. Both HPCs and LVs completed home energy assessments and weatherization measures for homes in the designated census blocks. The elimination of income verification for select census blocks was originally set to end on January 31, 2023, but was later extended to May 1, 2023.

When carrying out the winter energy price mitigation initiative, HPCs and LVs noted that they encountered barriers to reaching customers. The PAs asked Guidehouse to explore opportunities, based on LV and HPC feedback, on how to increase participation if such initiatives are considered in the future. At the same time, the Massachusetts Data Management contractor, DNV, conducted an analysis of Home Energy Assessment (HEA) participation rates and weatherization conversion rates achieved during the winter energy price mitigation initiative[3]. Overall, DNV found that the targeted census blocks had a slightly higher conversion rate to HEAs (3.3% vs. 2.4%) and weatherization upgrades (37.4% vs. 34.2%) than what was historically observed in neighboring jurisdictions. The nature of the analysis could not account for which HEAs and weatherization installations were attributable to the winter energy price mitigation efforts (see Appendix for more detailed findings).

During this study, Guidehouse conducted interviews with LVs and HPCs who recruited participants for HEAs and home weatherization programs offered to census blocks with higher levels of moderate-income customers as a part of the PA-led winter energy price mitigation efforts.[4]

This memo discusses successes, lessons learned, and future considerations for areas of improvement. Guidehouse interviewed two LVs and three HPCs (with the highest rate of participation, as recommended by the PAs and LVs) as listed in Table 1.

Table 1. Interviewed HPCs/LVs

HPC/LV	# of HEAs Completed*	HPC or LV?
Abode	N/A**	LV
RISE	~25	LV
Revise	16	HPC
HomeWorks	81	HPC
Neeeco	18	HPC

*HEAs completed in designated census blocks during the winter energy price mitigation initiative time period (September 2022 – May 2023)

**Abode does not directly complete HEAs

Source: Guidehouse evaluation team analysis

[3] "Winter Energy Price Mitigation Efforts – Participation Analysis", DNV, https://ma-eeac.org/wp-content/uploads/Winter-Price-Mitigation-Study-Analysis-20240201.pdf.

[4] Note, although winter energy price mitigation activities extended across sectors, this effort focused on Residential participation.

2. Key Findings

The interviewed HPCs and LVs identified a variety of successes, lessons learned, and future considerations from their efforts and the winter energy price mitigation initiative's design. Table 2 highlights the main takeaways from the interviews.

Table 2. Key Findings

Category	Findings
Successes	• The offer of an enhanced incentive was a powerful message and made participation more appealing for customers. • One of the three interviewed HPCs indicated they leveraged digital geofencing of addresses for an enhanced online campaign to target customers. • The extension of the initiative by four weeks allowed one HPC to broaden the territory it previously served. • LVs and HPCs (particularly the larger HPCs) were willing to participate and get off the ground quickly. • HPCs were satisfied with the level of communication from PAs and LVs. • The initial mailed letter was helpful in recruiting customers, as some were then familiar with the program when contacted by an HPC.

Category	Findings
Lessons Learned and Future Considerations	• All HPCs and LVs indicated that more detailed customer data would have been helpful for outreach. Suggested tracking metrics included: denoting income-eligible versus market-rate customers, listing building type, and indicating whether a customer had participated in other energy efficiency programs. • One HPC noted that some areas (specifically communities on the Cape) were primarily occupied by seasonal renters, such as Airbnb, Vrbo, which presented challenges for reaching the appropriate decision maker. • Some HPCs and LVs experienced challenges with a limited customer list and suggested that future initiatives should consider extending the offering to a larger census-designated territory. Eligibility on the address level prevented LVs and HPCs from advertising on a community level. • A few HPCs stated they had to redirect income-eligible customers to community action agencies for HEAs and weatherization participation. However, one HPC noted that since the winter energy price mitigation efforts, they have received permission to serve income-eligible customers. • One of the three HPCs indicated they encountered language barriers in one of the canvassed communities. • HPCs observed that many households were unoccupied during the work hours, and the teams were unable to canvass late into the evening due to local canvassing legislation.

Source: Guidehouse evaluation team analysis

3. Successes

Although PAs expressed that the level of participation in HEAs and weatherization measures was more limited than initially expected, the interviewed HPCs and LVs reported several successes during the initiative period. All interviewed HPCs and LVs agreed that the timeline extension for the initiative was beneficial. The extension allowed for more canvassing time and for the opportunity for contractors to include census blocks that had not already been served.

HPCs and LVs agreed that the structure and cadence of the marketing tools provided by the PAs were very effective, and one HPC used geofencing of addresses for an online campaign to further disseminate information. HPCs and LVs indicated that the central idea of everyone in a census block that meets eligibility requirements getting “100% for free” HEA and weatherization assistance is a powerful message and could see the initiative being more successful when carried out through a larger census-designated territory.

One HPC stood out as having notably more positive reviews of the winter energy price mitigation initiative and saw PA efforts as an overall success. This HPC expressed those communications among the PAs, LVs, HPC, and HPC canvassing teams remained strong throughout the winter energy price mitigation initiative duration. Unlike the other HPCs, this HPC

indicated that the census blocks chosen provided an adequate number of potential customers to engage.

4. Lessons Learned

This section of the memo addresses opportunities for improvement if this initiative is replicated in the future.

A common challenge across interviews was that the canvassing teams encountered language barriers, particularly in communities with higher instances of limited English proficiency. HPCs indicated that additional marketing data (provided by the PAs) would help the canvassing planning efforts. HPCs and LVs received lists of addresses associated with the census blocks and no further contact or community information. One HPC highlighted this lesson learned when they indicated that the company had translators available for canvassing efforts, but a lack of demographic information provided by the PAs meant that the translator was not always available when the canvassing team visited communities with more instances of limited English proficiency. Other HPCs agreed that more marketing information would help contractors better identify market-rate or income-eligible targets before beginning canvassing for future efforts, allowing for more direct canvassing and program engagement.

Though participants who exceeded the moderate-income bracket were included in this effort, income-eligible households were rerouted through the income-eligible program. This approach affected the achievable impact for HPCs and LVs in the communities that were the focus of the initiative.

Many of the people canvassed were renters. As seen in other programs, it can be more challenging to connect with the building decision maker in these instances. However, on the Cape, HPCs ran into a significant number of residents who were short-term, seasonal renters. This group is particularly challenging as their connection to the homeowner is further distanced and there is limited incentive to communicate program information to the homeowners. It was added that in many neighborhoods, homeowners were gone during the day, and the canvassing teams were constrained by permits (oftentimes not allowing them to work after sunset) that severely affected their ability to have face-to-face conversations with residents.

Last, often the folks canvassed were unaware of the initiative offered by the PAs, which created an added barrier in recruiting participation. Ensuring that information reaches the customers with decision-making abilities will be critical to future price mitigation efforts.

5. Future Considerations

This final section focuses on the considerations that should be made for future price mitigation efforts launched by the PAs.

As noted earlier, a common theme across all the contractors interviewed was that the program was launched over too short of a period. Although it was acknowledged that the timeline extension was helpful, the extension was announced near the deadline and affected the ability of contractors to plan for canvassing and home visits. As HPCs lead their own marketing and outreach, and it takes time to mobilize large-scale campaigns, the program duration did not incentivize HPCs to use all of the marketing tools at their disposal. HPCs noted that general installation efforts are usually scheduled a month or two in advance, so having insight into a 6-month calendar is appreciated.

Additionally, several contractors mentioned that canvassing in winter is more difficult due to bad weather and limited daylight. The canvassing times allowed by community permits is often linked to sunlight hours, and many HPCs and LVs naturally reduce the size of their canvassing teams for the season. Future price mitigation efforts should communicate to HPCs and LVs earlier in the year that a program is likely to be launched to allow contractors enough time to ramp up capacity. Program durations should also be lengthened to avoid contractor scheduling and logistics concerns as well as to allow for natural delays caused by winter weather.

Almost all of the HPCs and LVs (4 of 5) requested that future efforts expand either the targeted census tracts or program eligibility requirements within those tracts. Contractors and vendors agreed that removing certain qualification criteria would be a good first step to reaching a broader group of moderate-income communities. Several contractors reported that once income-eligible households were removed from consideration in these blocks, there were far fewer households eligible for program assistance than anticipated.

This issue was further compounded by program rules that stated HPCs and LVs that provided services for households that were later deemed ineligible for the winter energy price mitigation program had to absorb the costs for those services. This scenario created a disincentive to contractors to ramp up broader marketing strategies in their census blocks. The listed addresses and clear program guidelines provided by the PAs assuaged some of those worries. However, overall, contractors saw limited economic incentive to participate, and some explained that their main driver for participation was to be a good corporate citizen. By expanding the census blocks or the criteria of eligibility within the census blocks, the number of eligible properties would increase and improve incentives for contractors to pursue HEA and weatherization projects more aggressively. One LV added more detail to this point by highlighting that many people take years to decide whether to take advantage of a “100% free” opportunity—for example, they stated that during COVID multiple programs provided HEAs and weatherization for free, but only about 50% of those who expressed interest followed through.

As noted in the previous section, a few HPCs stated they had to redirect income-eligible customers to community action agencies for HEAs and weatherization participation. However, one HPC noted that since the winter energy price mitigation efforts, they have received permission to serve income-eligible customers. This newly granted permission could prove particularly successful for future efforts because those interviewed stated that canvassing efforts attracted many income-eligible families that did not qualify for the moderate-income programs pursued by the PAs during that period. Now that contractors can perform HEAs and weatherization for both income-eligible and moderate-income programs, future efforts will likely see a greater push on the part of contractors to enroll households in programs.

Finally, if this initiative is implemented again in the future, more data should be provided to HPCs on census blocks. Interviewed contractors repeated that lack of property information meant that they arrived at building types that their company did not service, they canvassed without a translator in communities where English was not widely spoken, and online engagement was hindered by lack of email addresses. Some HPCs took the address information and researched building type and demographic information of the census blocks for marketing purposes, but this practice was not seen across all the contractors. As these HPCs and LVs range in size and capacity, it would be beneficial to PA efforts to provide more census block data to help these contractors better target communities and contact property owners with decision-making power.

6. Appendix

DNV completed an analysis of the energy audit records of the four lead implementation vendors of the MA Residential Coordinated Delivery program (Abode, CLEAResult, RISE, and CET).[5] The team used historical tracking data from program years 2020 and 2021 to create the "neighbor baseline" counts. The following disclaimer was listed in the summary, "it should be noted that this kind of aggregated analysis cannot discern what level of participation in target census block groups is attributable to the particular efforts and measures associated with the winter energy price mitigation initiative versus what would have otherwise occurred in the absence of the initiative."[6]

Table 3. Summary of Audits and Wx Installations September 2022 – April 2023

	Total Count of Locations	Audit Locations (Sep 22 - Apr 23)	Wx Installation Locations (Sep 22 - Apr 23)	Audit Rate	Wx Conversion Rate
Target	4,173	139	52	3.3%	37.4%
Neighbor Baseline	27,859	664	227	2.4%	34.2%

Source: DNV, Winter Energy Price Mitigation Efforts – Participation Analysis

Table 4. Summary of Audits and Wx Installations September 2022 – April 2023 by Primary Electric PA

	Total Active Electric Accounts	Audit Customers (Sep 22 - Apr 23)	Wx Installations (Sep 22 - Apr 23)	Audit Rate	Wx Conversion Rate
CLC	**9,191**	**163**	**44**	**1.8%**	**27.0%**
Target	1,135	26	4	2.3%	15.4%
Neighbor Baseline	8,056	137	40	1.7%	29.2%
EVERSOURCE	**14,739**	**92**	**23**	**0.6%**	**25.0%**
Target	1,585	16	6	1.0%	37.5%
Neighbor Baseline	13,154	76	17	0.6%	22.4%
NGRID	**20,837**	**137**	**33**	**0.7%**	**24.1%**
Target	2,299	13	4	0.6%	30.8%
Neighbor Baseline	18,538	124	29	0.7%	23.4%
UNITIL	**1,946**	**16**	**12**	**0.8%**	**75.0%**
Target	336	7	6	2.1%	85.7%
Neighbor Baseline	1,610	9	6	0.6%	66.7%

Source: DNV, Winter Energy Price Mitigation Efforts – Participation Analysis

[5] "Winter Energy Price Mitigation Efforts – Participation Analysis", DNV, https://ma-eeac.org/wp-content/uploads/Winter-Price-Mitigation-Study-Analysis-20240201.pdf.

Table 5. Summary of Audits and Wx Installations September 2022 – April 2023 by Primary Gas PA

	Total Gas Accounts	Audit Customers (Sep 22 – Apr 23)	Wx Installations (Sep 22 – Apr 23)	Audit Rate	Wx Conversion Rate
BERKSHIRE	**2,266**	**41**	**14**	**1.8%**	**34.1%**
Target	189	7	2	3.7%	28.6%
Neighbor Baseline	2,077	34	12	1.6%	35.3%
EGMA	**8,508**	**149**	**90**	**1.8%**	**60.4%**
Target	835	15	11	1.8%	73.3%
Neighbor Baseline	7,673	134	79	1.7%	59.0%
EVERSOURCE	**1,280**	**21**	**7**	**1.6%**	**33.3%**
Target	240	14	5	5.8%	35.7%
Neighbor Baseline	1,040	7	2	0.7%	28.6%
LIBERTY	**4,795**	**56**	**18**	**1.2%**	**32.1%**
Target	817	21	8	2.6%	38.1%
Neighbor Baseline	3,978	35	10	0.9%	28.6%
NGRID	**13,759**	**208**	**51**	**1.5%**	**24.5%**
Target	1697	26	6	1.5%	23.1%
Neighbor Baseline	12,062	182	45	1.5%	24.7%
UNITIL	**1,059**	**20**	**8**	**1.9%**	**40.0%**
Target	146	9	5	6.2%	55.6%
Neighbor Baseline	913	11	3	1.2%	27.3%

Source: DNV, Winter Energy Price Mitigation Efforts – Participation Analysis