HeatSmart Alliance Survey of Local Energy Coaching Programs Report on survey conducted in July 2023

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Preface and Motivation

The HeatSmart Alliance (Alliance) has over 4 years of experience coaching Massachusetts residential households (clients) through the process of switching to heat pumps. In addition, we have supported municipalities and community-based organizations that provide coaching services, including heat-pump coaching and broader energy coaching. Our collective experience is that:

- Decarbonizing one's home is a daunting process for most residents. Understanding what to do, technology options, choosing installers, evaluating quotes, and understanding incentives takes time
- Residents value having a coach (or energy advocate) with no financial stake in their decisions assist them with this process and find it effective at helping them complete impactful decarbonization measures
- Demand for coaching is increasing rapidly throughout Massachusetts, and many organizations including the Alliance are trying to respond



Goal of the Survey

Learn from MA communities that run energy coaching programs for residents, focusing on residential decarbonization

- 16 communities surveyed
- 12 operating programs responded
- 4 communities are starting or planning programs





Our survey sought information on various aspects of each coaching program

- Program Formation:
 - how/when program began, municipal role, program scope
- Operational Practices:
 - coach recruitment & training, budget, request management
- Program Impact:
 - number of requests, active cases, installations, etc.
- Lessons Learned:
 - success factors, challenges, pitfalls to avoid



Survey: Program Formation Questions

- Please list the organization(s) that established the program, and other important contributing factors.
- How does the program coordinate with the municipality?
- When did coaching begin (first clients accepted)? If it has not begun, when do you anticipate it will begin?
- What is the scope of coaching? Check all that apply:
 - Air-source & Ground source heat pumps
 - ▶ Solar PV, Batteries, EVs,
 - ▶ Weatherization, guidance on Mass Save



Survey Operational Practice Questions

- ► How are coaching volunteers recruited?
- How were/are volunteer coaches trained?
- Does your coaching program have an annual budget? If so, what is the funding source, the approximate amount, and how are the funds used?
- How are liability concerns addressed?
- What are the sources of coaching requests? (e.g. website, flyers, posts to social networks, mailings, etc.)
- How are requests captured (e.g. email address, website form, voice) and managed (tracking, coach assignment. etc.)
- How do coaches respond when clients seek recommendations of installers or Mass Save contractors?



Survey: Program Impact Questions

- ▶ No. of requests received, assigned, completed, installations, etc.
- Do you see an overall trend in requests?
- Does your program attempt to track or measure its effectiveness, successful installations, or other longer-term outcomes? If so, how? If not, how might this be done?



Survey: Lessons Learned Questions

- What are the biggest challenges your program is facing?
- What parts of the program work well and your sense of why?
- What pitfalls might other programs try to avoid in their scope, organization, training or other aspects?



And now... on to a summary of the results.



High-Level Survey Stats

- 26 contacts in 16 communities were surveyed
- ▶ 15 responses received, representing 14 communities
 - 12 communities have operating coaching programs (some recently started)
 - > 2 communities are considering coaching programs
- Since the survey was conducted, we learned of...
 - 2 additional communities with coaching programs (Beverly and Cambridge)
 - 2+ communities that plan to start coaching programs (Salem, Wellesley)
- ~20 MA communities will have coaching programs by early 2024

Note: At least 8 more communities without formal programs are served by Alliance coaches



General Observations: Program Formation & Structure

- Types of program sponsors:
 - Municipality
 - Municipal Light Plant (MLP)
 - Local Grassroots Organization
- Sources of training and support:
 - Abode Energy Management (Abode)
 - HeatSmart Alliance
 - Both, or neither, of the above
- Some well-established municipal climate/sustainability committees participated in MassCEC HeatSmart and set up their own programs
- Program scope varies from just heat pumps to also guide residents on weatherization, solar, EVs, storage batteries, etc.



Program Formation & Structure Data

Program Sponsor	Municipality	Engaged Abode	Supported by HeatSmart Alliance
Municipality	Acton Arlington Cambridge Lexington Lincoln Melrose Newton Sherborn	Yes Yes Yes	Yes Yes Yes
Municipal Light Plant	Concord	Yes	Yes
Grassroots Organization	Beverly Cape Ann Harvard Hingham Wayland		Yes Yes
In Formation	Andover Winchester		Yes Yes

Note: Beverly and Cambridge were not surveyed

General Observations: Operation

Multiple approaches to receiving and managing coaching requests

- Landing page either hosted by Abode, a municipal or MLP website, or a community organization.
- Most programs rely on a case coordinator for request triage and routing; coaches then update status and other info in a shared spreadsheet.
- Liability is handled in a variety of ways. Most programs have an agreement signed/acknowledge by the client. Some use or adapt the HeatSmart Alliance's liability waiver.
- Public outreach is critical and done across multiple channels including a municipal-sponsored site or page, newsletters, community bulletin board posts, events, lawn signs, mailings, press releases, etc.



General Observations: Funding

- Program funding & budget varies. 3 programs received grants*, some are funded by their municipality, over half have no budget.
- ▶ The mean funding level for 5 municipalities with a budget is \$30K.
- MLP communities (Concord, Hingham) pay for Abode services from MLP funds. Concord pays local coaches working under Abode supervision.

*Grants: Lexington (\$5K from community endowment), Concord MLP (American Public Power Association, Newton (last MassCEC HeatSmart)



Program Impact For the first 6 months of 2023

Town	2023 Requests	Cases Assigned	Cases Completed	Heat Pumps Installed
Acton	79	Not Sure	Not tracked	Not tracked
Arlington	123	71	56	7
Cape Ann	21	21	3	2
Concord	221	221	165	50
Harvard	25	23	13	7
Hingham	5	5	Not tracked	Not tracked
Lexington	93	93	13	14
Lincoln	handful	handful	Not tracked	Not tracked
Melrose	30	6	5	Not tracked
Newton	130	130	125	26
Sherborn	20	20	28	10
Wayland	23	23	5	7
Local Totals	770	613	413	123
HSA Coaches	140	87	Not tracked	Not tracked
Grand Totals	910	700	>413	>123



General Observations: What's Working

Residents and clients benefit from and appreciate coaching

- Residents understand next steps after an initial coaching session
- Clients express very high level of appreciation and satisfaction
- Clients find the help from the coaches extremely valuable. About 12% of clients returned a post coaching survey; almost 90% of them would recommend the service to others or already have

Local support

- Clients appreciate neighbor-to-neighbor contact, classes & resources available
- We have a great group who help answer questions, lots of committed volunteers

Professional support from Abode

- It's very helpful that coaches have access to expert staff at Abode when needed
- Access to well-trained coaches to help with projects, which can be complicated.

Better outcomes

Often able to flag mis-quoted or mis-matched systems, and guide clients in other decarbonization efforts such as heat pump water heaters, or solar arrays.



Lessons Learned: Challenges

- Sustained local outreach efforts needed to drive demand
 - ▶ 6 of 12 reported increasing number of requests*
 - ▶ 6 of 12 reported "more or less the same" or "low-level" of requests*
 - "initially we were overwhelmed with requests but now they have leveled off at a lower rate." Acton
 - "Consistently has been very low volume attributed to lack of publicity." Hingham
- Installer referrals
 - Municipal programs cannot create a "preferred" installer list (liability)
 - Difficult to know which contractors to recommend, a common request.
- Measuring impact
 - 7 of 12 report some type of record keeping and/or post-coaching survey
 - ▶ 5 of 12 reported number of HP installations by coaching clients

*Note: numbers above reflect fully operational programs only



Lessons Learned: Challenges (cont'd)

- Coach availability & expertise quantity and quality
 - A common challenge; not just about numbers, also experience & efficacy
 - Coaching is a detailed and lengthy task often spanning months. Every home is unique; sufficient knowledge is required to properly guide clients.
 - Effective training is critical, but even after training there is a learning period before coaches become comfortable working on their own.
 - Programs starting up and those employing effective outreach may receive more requests than coaches can handle, leading to larger caseloads for the most proficient coaches and burnout.
- Case Management delegating and tracking requests
 - During initial phase there will be many requests, it's hard to work out an effective process for assigning cases and capturing necessary information from clients along the way to support and measure success.
 - The case coordinator needs to know which coaches are available and match them with client's needs. This takes time to work out.



Lessons Learned: Key Take-Aways

- Program start up is challenging. Starting small helps work out kinks before casting a wider net. Levels of coaching expertise become clearer and further training and learning can happen.
- A central internal repository used by the team for key information on installers, incentives & Mass Save, waivers, FAQs, requests & case management, feedback, etc.
- Have regular ongoing meetings to exchange news, ideas and feedback. Quote reviews help people learn and provide advice.
- Having a friction-free request, case assignment and tracking system, starting with an easily accessible public portal, rapid case routing & follow-up.
- Coaches must be responsive and set expectations for when they are available, initial client meeting/visit is critical.
- Proper heat pump system sizing (capacity) is critical to meet space heating & cooling requirements efficiently. Experienced coaches can help clients evaluate proposed systems and whether they are reasonably sized.



Lessons Learned: Key Take-Aways (cont'd)

- Requests for installers recommendations are very common. Having some ability to respond is VERY helpful.
- Reaching and engaging LMI communities is hard. Cost is a major factor for clients, coach fluency on available incentives is key, as well as helping navigate Mass Save for insulation & weatherization work.
- Coaching expertise will improve over time, but solid communication skills and motivation are core elements. Energy coaching is not for everyone, it requires time to learn and interest in energy & sustainability.







Extra Content



Lessons Learned: Biggest Challenges

- "volunteer availability, inconsistent level of effort"
- "Not having enough insight into the best contractors to recommend. Our vetted contractor list from Abode is too large." Lexington
- Not being able to recommend specific contractors, more demand than availability of coaches Arlington
- Tracking cases and outcomes Wayland
- Some coaches take on more work than others and get jammed. Initially we did not know how best to handle the number and different kinds of requests, we had to figure this out amongst the coaches & other volunteers. Once we'd been working together for a while things fell into place but initially it was difficult. – Acton
- Underutilization [of coaches] Hingham
- Figuring out how to initiate a program Winchester
- Mass Save delays in Assessments, Installers booked out 3-4 months, poor quotes due to installers only doing mini-splits and/or overdesigning/overquoting systems. – Cape Ann
- Increasing cost proposals and variable quotes. Melrose
- Finding the time to market the service on the scale we need to, and especially finding the time and having the tools to identify good heat pump adoption candidates and to do targeted marketing to them. We also need a 0% interest loan program for CMLP customers. – Concord
- "Getting the word out to people who are not tuned in to environmental concerns" Newton
- "LMI outreach; still a la k of awareness we are working on; people not wanting to engage with more involver coaching" – Cape Ann
- Ensuring coaching is consistent across all coaches, who bring different experience to their role Newton

Lessons Learned: Pitfalls

- Our coaches were recently discussing whether the Abode training was completely necessary. It was more in depth than they needed. Lexington
- It is important if a person wants to switch from gas to heat pumps that they know their energy bills will increase. – Lincoln
- biting off more than you can chew or overpromising -- things tend to move slowly, volunteers coaches are volunteers and life happens. don't give people too much information such that it overwhelms them. – Arlington
- Our residents find it VERY HELPFUL to have a specific installation partner recommendations. It is probably the most common question. – Newton
- Coaching must be paired with outreach. Newton
- Be prepared for an initial deluge of requests when starting up. Try to keep coaches/cases from getting bogged down, manage workloads, keep coaches motivated and avoid burnout – Acton
- Our program has been very informal, an attempt to fill a gaping void. We really have had just 2-3 HNZ members involved as coaches. The lack of structure and data maintenance reflects the low volume and informal basis of the program. – Hingham
- Be good to have a rock solid set of training videos or slide shows [or reading material] for coach training that continue into more advanced topics (heat load block calcs and such)
- 2 programs said "not sure yet"

