Opinion Dynamics

Boston | Headquarters

617 492 1400 tel
617 497 7944 fax
800 966 1254 toll free

1000 Winter St
Waltham, MA 02451

Memorandum

HVAC Initiative Participant Survey and Trade Ally Survey Process Results

To: Fernando Morales, Ameren Illinois; Jennifer Morris, Illinois Commerce Commission
From: Opinion Dynamics Evaluation Team
Date: September 21, 2020
Re: HVAC Initiative Participant Survey and Trade Ally Survey Process Results

1.1 Introduction and Background

This memo presents the results of the process evaluation of the 2019 Ameren Illinois Company (AIC) Heating and Cooling (HVAC) Initiative. It presents a description of the initiative, a summary of 2019 participation, and a section detailing customer and trade ally awareness of heat pump water heater technology to inform future initiative years.

Since June 2009, AIC has offered HVAC incentives to its customers to encourage the purchase of higher-efficiency heating and cooling equipment. During the 2019 initiative year, the HVAC Initiative offered incentives for advanced thermostats, air source heat pumps (ASHPs), ductless heat pumps (DMSHP), central air conditioners (CACs), high efficiency Brushless Permanent Magnet (BPM) blower motors,[1] and heat pump water heaters (HPWHs).

AIC provides incentives to customers through registered trade allies as direct discounts on the equipment and installation costs. The incentive appears as a line item deduction on the contractors' installation invoices. The initiative offers standard incentives for replacing failed equipment (replace-on-burnout [RB]) with new equipment of SEER[2] 16.0 or higher (ASHPs must also be rated a minimum of 9.0 HSPF) and offers a higher incentive to customers for CAC and ASHP measures when the customer replaces working, but inefficient older equipment. To be considered an early replacement (ER) project, the replaced unit has to be verifiably operable with a SEER rating of 10.0 or less.

The overall goal of this initiative is to persuade customers to purchase higher-efficiency equipment than they might otherwise purchase. AIC implementation staff work directly with contractors and distributors to educate them about the incentives available, as well as to train them on promoting the Initiative.

The HVAC initiative made the following changes to its offerings and delivery in 2019:

[1] This measure is also known as Electronically Commutated Motor (ECM) fans.
[2] SEER stands for seasonal energy efficiency ratio and is the ratio of cooling output of an air conditioner over a typical cooling season divided by the energy it consumes in watt hours.

- Reduced the advanced thermostat incentive from $269 to $100 in April 2019 due to budgetary considerations
- Removed programmable thermostat and high efficiency pool pumps from initiative offerings
- Implemented an online portal for initiative allies to submit applications at the end of 2019
- Developed case studies of AIC HVAC initiative participants and promoted these case studies on the AIC website

Initiative staff reported and initiative data revealed a low uptake of HPWHs resulting in the Initiative not meeting its HPWH installation goals.[3] Initiative staff attributed this to lack of customer awareness of HPWH technology as well as a limited number of trained initiative allies who can perform HPWH installations. Due to the low uptake of HPWHs, we added a battery of questions to both surveys to explore why HPWH installations are so rare in AIC territory.

1.2 Evaluation Overview

The 2019 evaluation of the HVAC initiative had two overarching objectives: 1) Assess energy saving impacts and 2) assess initiative processes. This memo covers the process objectives while another document addresses the impact objectives. [4]

We address these process-related objectives in this memo.:

- Participating Customer Experience and Satisfaction
  - How did customers hear about the HVAC Initiative? What motivated customers to participate?
  - How satisfied are customers with the initiative overall and initiative components (e.g. application process, incentive level, interactions with the participating trade ally)?
  - What is the awareness of HPWHs among customers and what drives their interest and adoption of HPWHs?
- Trade Ally Experience and Satisfaction
  - How satisfied are trade allies with their experience in the Initiative? How satisfied are they with the level of training provided?
  - What barriers, if any, do trade allies face related to participating in the Initiative? How can these barriers be overcome?
  - What effects, if any, has the HVAC initiative had on trade ally practices?
  - How aware are trade allies of heat pump water heaters (HPWH), what are the barriers to selling HPWHs, and what is their forecast for sales of HPWHs.

[3] The Initiative anticipated installing 50 HPWHs in 2019 and incented 2 units in 2019 and 6 in 2018.
[4] See AIC 2019 HVAC Initiative Impact Evaluation Report.

We relied on results of a survey of initiative participants and trade allies to address the process evaluation objectives. The remainder of this memo describes the data collection activities and summarizes the results from both surveys.

1.3 Evaluation Activities

1.3.1 Participant Survey

We fielded an online survey with 460 participating customers (Table 1) in Q1 2020. The survey explored key aspects of the participation process, the key drivers of purchase decisions, the role of the initiative in those purchases, and overall satisfaction with the Initiative. Our sample frame of 3,428 records included all customers who installed at least one HVAC initiative measure in 2019. We recruited respondents with an initial email sent to the entire sample frame and sent two reminders to non-respondents spacing the emails three to four days apart.

Table 1. Participant Survey Disposition Summary

Disposition	Count
Complete	460
Incomplete (started but did not finish survey)	72
Ineligible	41
Bad emails	193
Non-respondents	2,662
Total	3,428

1.3.2 Active and Inactive Trade Ally Survey

We conducted a survey with active registered and non-active registered contractors about initiative requirements, processes, and design in Q2 2020. Active trade allies completed a project in 2019 and non-active trade allies did not complete a project in 2019. We identified 218 active contractors and 102 on-active contractors and completed surveys with 54 and 12 respectively (Table 2). We recruited respondents with an initial email and sent two reminders to non-respondents spacing the emails three to four days apart from one another.

Table 2. Trade Ally Survey Disposition Summary

Disposition	Active Trade Allies (AR)	Non-Active Trade Allies (NAR)
Complete	54	12
Incomplete (started but did not finish survey)	5	3
Ineligible	4	0
Bad emails	6	0
Non-respondents	149	87
Total	218	102

1.4 Initiative Process Results

The following sections provide a summary of results by the two data sources, starting with the participants and concluding with the trade allies.

1.4.1 Participants

Participants reported about how they became aware of the Initiative, their satisfaction with the Initiative, and about possible barriers that could have kept them from participating. Additionally, they provided some demographic information about their households and we start this section with a brief overview of those demographic characteristics.

Overview of Participants

Respondents were generally homeowners, living in single family detached home. Most had education beyond high school and about half earned more than $100,000 per year (Table 3).

Table 3. Participant Respondent Demographics

Characteristic	Percent (n=460)
Age	
26 to 44	19%
45 to 64	41%
65 or older	37%
Education	
High school or less	10%
Trade school or some college	31%
Bachelors degree	32%
Graduate or professional degree	27%
Prefer not to answer	1%
Income	
Less than $50,000	17%
$50,000 to $100,000	33%
$100,000 to $150,000	18%
More than $150,000	11%
Prefer not to answer	21%
Race/Ethnicity	
White or Caucasian	86%
Black or African American	2%
Asian	2%
Prefer not to answer	10%

Initiative Awareness

- **Contractors drive participant awareness of the HVAC Initiative.** Most respondents (73%) reported hearing about the HVAC initiative through their contractors. Nineteen percent of respondents heard of the initiative through marketing efforts such as the AIC website, emails, newsletters, bill inserts, and door hangers. Referrals from friends and family were the least commonly cited source of awareness (Table 4).

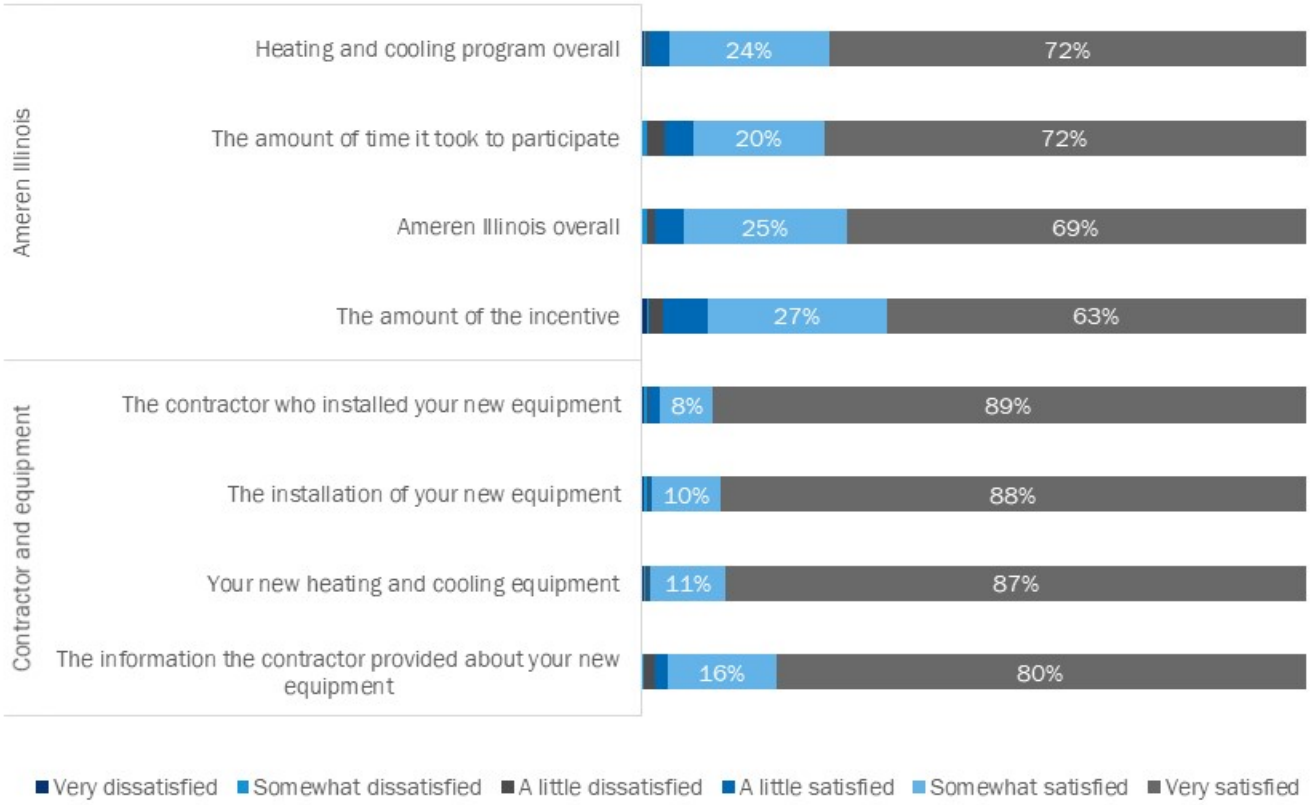
Table 4. How Participants First Heard about the HVAC Initiative

First Heard About the HVAC Initiative	Percent of Participants (n=460)
A contractor	**73%**
Any advertising or marketing effort	**19%**
Ameren Illinois' website	6%
An email, newsletter, bill, door hanger	6%
An advertisement from the internet	3%
Ameren Illinois Home Energy Reports	2%
An Ameren Illinois representative	1%
An internet search on Google, Yahoo, or Bing	1%
A family member, friend, and or colleague	**5%**

Initiative Satisfaction and Possible Barriers to Participation

- **Participants report high satisfaction across most initiative components.** More than 80% of respondents noted being very satisfied with all aspects of their participation with their contractor and the equipment they received. About two-thirds to three-quarters of respondents reported being very satisfied with AIC and the initiative (Figure 1).

Figure 1. Participant Satisfaction with AIC, the HVAC Initiative, and Initiative Components



- **Few respondents report dissatisfaction with the initiative.** Twelve of the 66 respondents report some dissatisfaction with the overall initiative or AIC in general. Ten of those twelve provided additional details.
  - Five reported their dissatisfaction stemmed from generally high energy bills with one of the five specifying that their new equipment was not providing bill savings like they expected.
  - Five other respondents reported dissatisfaction with the process of participating in the initiative and four offered greater detail. Three expressed frustration trying to get information about the initiative, and one stated the initiative information did not provide them with accurate information about the size of the incentive they would receive..

1.4.2 Trade Allies

The trade ally survey asked active trade allies about their satisfaction with the initiative and the effect of the initiative on their business practices. Additionally, active trade allies and inactive trade allies reported possible barriers to participating in the initiative and about their awareness and possible sales of heat pump water heaters. The sections below summarize results, beginning with a brief overview of respondent firmographics.

Overview of Respondents

Respondents tended to represent local firms, with 15 employees or less, that had been in business for 25 or more years, with at least $500,000 in annual revenue (Table 5).

Table 5. Overview of Trade Ally Respondents

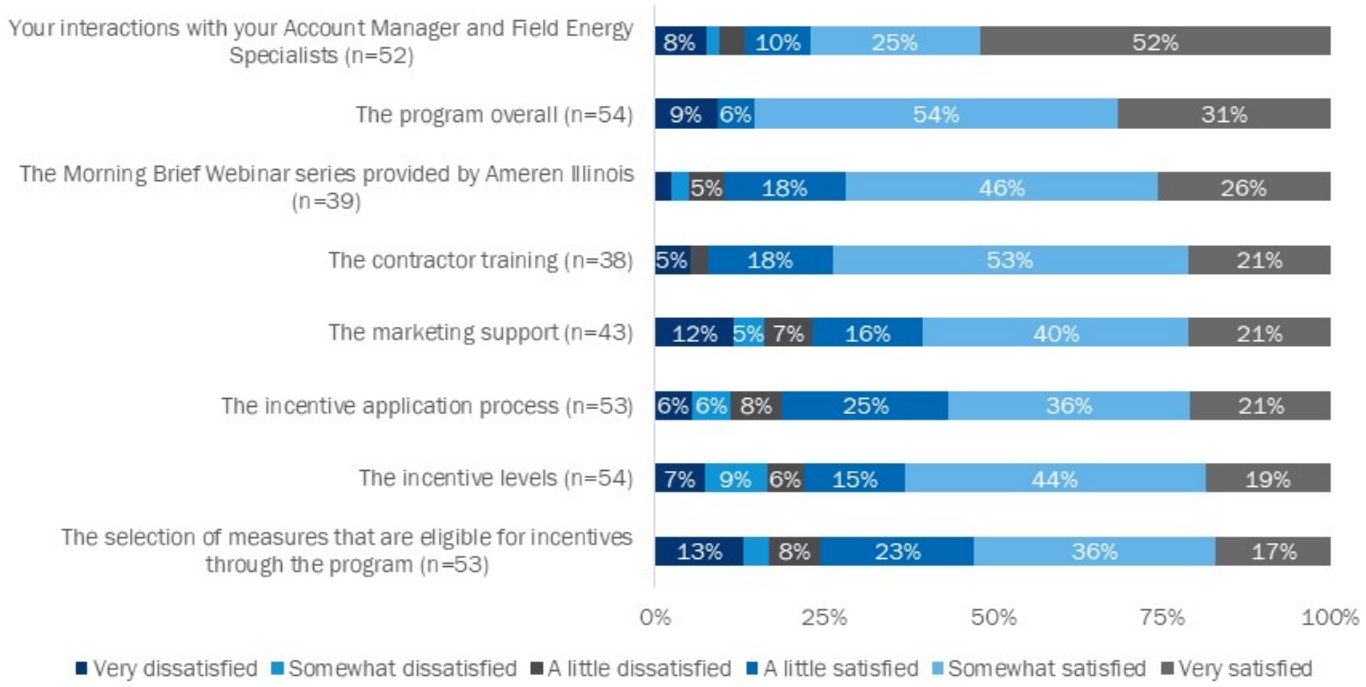
	Inactive (n=12)		Active (n=54)	
	Count	Percent	Count	Percent
Gross Annual Revenue				
Less than $100,000	0	0%	0	0%
$100,000 to less than $250,000	4	33%	4	7%
$250,000 to less than $500,000	0	0%	2	4%
$500,000 to less than $1 million	0	0%	8	15%
$1 million or more	7	58%	25	46%
Prefer not to answer	1	8%	15	28%
Number of Employees				
1 to 5 Employees	4	33%	13	25%
6 to 10 Employees	6	50%	18	34%
11 to 15 Employees	1	8%	14	26%
More than 15 Employees	1	8%	8	15%
Range of Company				
Local	10	83%	44	81%
Regional	2	17%	9	17%
National	0	0%	1	2%
International	0	0%	0	0%
Years in Business				
1 to 25 years	7	58%	22	43%
26 to 50 years	5	42%	18	35%
51 to 75 years	0	0%	9	18%
More than 75 years	0	0%	2	4%
Key Areas of Expertise				
HVAC	11	92%	54	100%
Boilers, hot water, steam fitting	3	25%	12	22%
Refrigeration	3	25%	9	17%
Plumbing	1	8%	8	15%
Lighting	1	8%	5	9%
Electrical	2	17%	4	7%

Satisfaction with Initiative Experience

- **Active trade allies are generally satisfied with all HVAC initiative elements.** On average, active respondents reported high levels of satisfaction with their account managers and the overall initiative. There was less agreement among respondents about their satisfaction with marketing support, the

application process, incentive levels, and the selection of measures; however, most respondents still reported being at least a little satisfied with these elements (Figure 2).

Figure 2. Active Trade Allies Satisfaction with Initiative Elements [a]



[a] We removed labels with percentages less than 5% because they became obscured by the image.

Additionally, the 12 respondents that receive co-branded marketing support from the Initiative, all were either “somewhat” or “very” satisfied with that support.

Twenty-one of the 26 respondents that noted some type of dissatisfaction with the initiative (reported they were very, somewhat, or a little dissatisfied with an initiative element) provided details about their dissatisfaction.

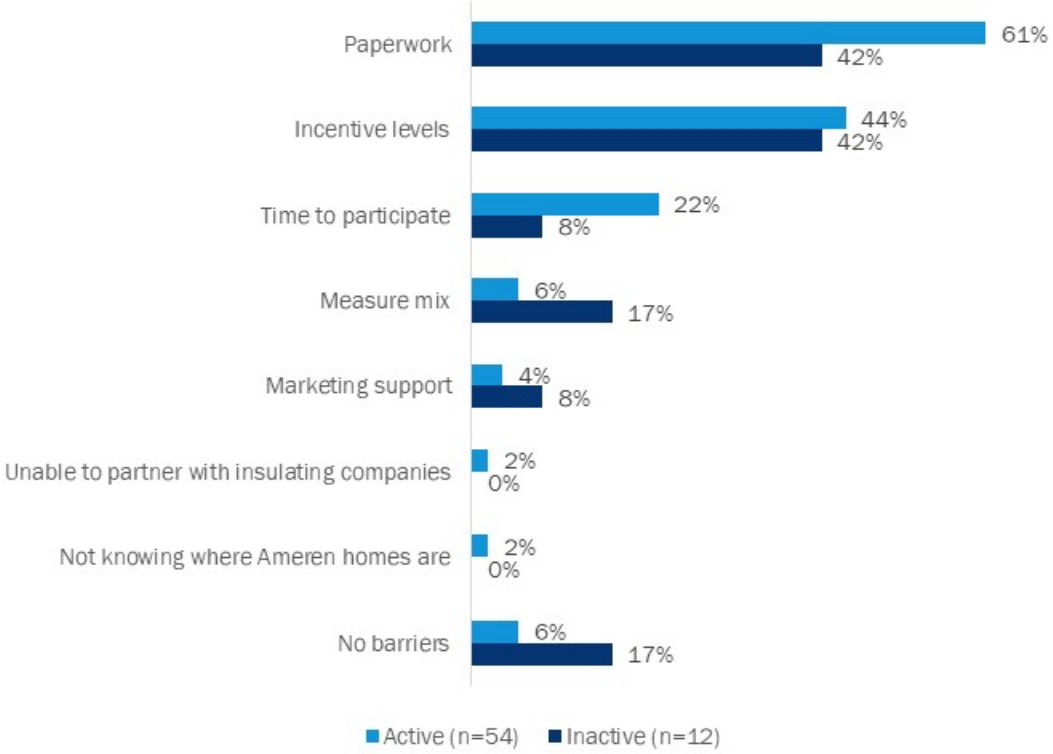
- Incentives were too low to spur action among customers (7 mentions).
- Communication with initiative staff needed improvement (6 mentions).
- Too few measures included in the initiative (5 mentions).
- Initiative paperwork and process is too confusing or time-consuming (4 mentions).
- Heat pump water heaters not promoted enough by initiative (1 mention).

- Replacing a 10 SEER air conditioner does not qualify for incentives (1 mention).[5]

Barriers to Trade Ally Participation and Solutions to Overcoming Those Barriers

- **Most trade allies report paperwork requirements and inadequate incentive levels as the key barriers to participating in the initiative.** About four out of five respondents indicated being at least a little satisfied with the initiative paperwork and incentive amounts (Figure 2) yet many respondents also reported that paperwork and low incentive amounts could be a barrier to participation. Less cited participation barriers included the time required to participate and an insufficient mix of measures offered by the initiative (Figure 3).

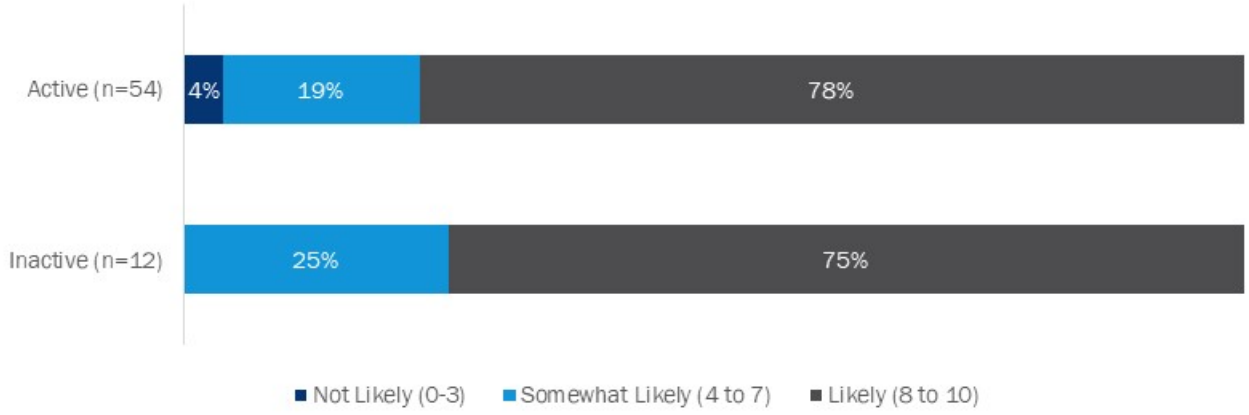
Figure 3. Barriers to Trade Allies Participating in the HVAC Initiative



- **Both active and non-active trade allies report they are likely to participate in the initiative in the future.** Three-quarters of respondents reported they were likely to participate and only two active respondents indicated they were not likely to participate in the future (Figure 4).

[5] This respondent thought that 10 SEER air conditioners were not incented even though the initiative information says they are.

Figure 4. Trade Ally Likelihood to Participate in the Future [a]



[a] Likelihood was asked about using a 0 to 10 scale where 0 was not at all likely and 10 was highly likely.

- **Most trade ally respondents provided suggestions for what the initiative could do to make it easier for trade allies to participate.** Forty-six respondents (39 Active and 7 Inactive) offered suggestions for ways that AIC could make it easier for their business to participate in the HVAC Initiative.
  - **Make the application process easier for contractors (22 mentions, 19 Active and 3 Inactive).** Recommendations to make it easier included providing an online application process that autofills some application information (like contractor contact information). One of these respondents suggested a smartphone application where contractors could upload photos to the application while on a customer site.
  - **Increase incentives (15 mentions, 13 Active and 2 Inactive).** A few of these respondents requested higher incentives for very efficient equipment (e.g. 20 SEER units) compared to lesser units (e.g. 16 SEER).
  - **Improve timeliness of initiative response (5 mentions, 3 Active and 2 Inactive).** One respondent specified that it takes too long for the initiative to process incentives.
  - **Improve communications between initiative and contractors (4 mentions, 4 Active and 0 Inactive).** One respondent specified that he would like more in-person contact with a initiative representative.
  - **Change mix of equipment that receives incentives (3 mentions, 3 Active and 0 Inactive).** One of these respondents reported that the initiative should remove the requirement that makes ultra-high efficient multi-stage equipment ineligible for rebates. Another respondent reported that individual pieces of efficient equipment should receive incentives and receiving an incentive should not require bundling measures together.

Effects of Initiative on Trade Ally Practices

- **Most active trade allies are aware of AIC's mass media and targeted marketing campaigns.** However, almost half of respondents (47%) rated the marketing efforts as a little effective, on a 4-point scale from not at all effective to very effective. The remaining respondents rated the marketing efforts as very effective (18%), extremely effective (3%), or not at all effective (32%).

1.5 Heat Pump Water Heater Research

A key challenge that initiative staff experienced with the HVAC Initiative in 2019 was a low uptake of HPWHs. Initiative staff attributed this to lack of customer awareness of HPWH technology and a limited number of trained initiative allies who can perform HPWH installations.

Historically, changing out a domestic hot water heater is a relatively simple task involving a single trade ally assuming the fuel type stays the same. However, recent research has shown that switching from natural gas to electric water heating (either a conventional electric water heater or HPWH) will often require a trade ally with electrical and plumbing knowledge or a fair amount of coordination between these two trades that do not typically work together. Removing the existing gas water heater requires an installer who will need to disconnect the water lines, disconnect the gas line, remove the water heater, and remove a portion of the gas piping and cap it. Installing a new HPWH often requires a plumber to reconnect the water lines. [6]

To better understand the reasons for low uptake and to understand the existing prevalence and possible adoption of heat pump water heaters (HPWHs) in AIC territory, we asked participants about their awareness and interest in HPWHs and what barriers they may face to installing a HPWH. Additionally, we asked trade allies to report about their awareness of HPWH technology, their experience installing HPWHs, customer interest in HPWHs, and their forecast for HPWH adoption.

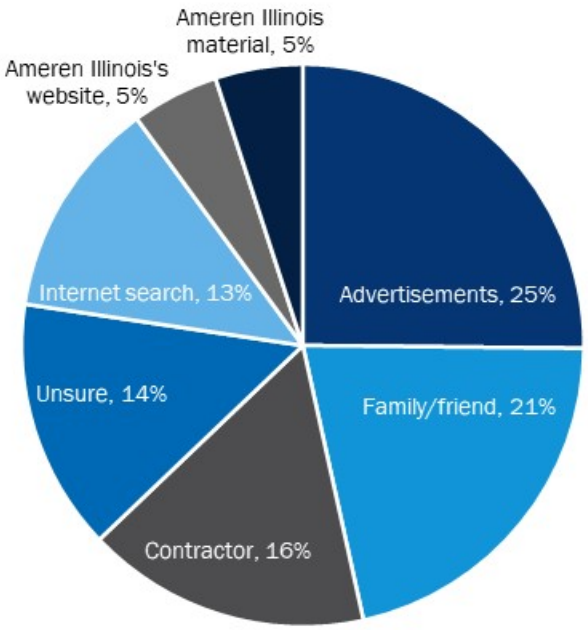
1.5.1 Participants

Awareness

- **Participant awareness of HPWH technology is relatively low.** About one-third (31%) of respondents indicated that they have heard of HPWHs. Not quite half of respondents who were aware of HPWHs (46%) heard about the technology through an advertisement or word-of-mouth (Figure 5). Not quite one-fifth of respondents learned about the technology through a contractor.

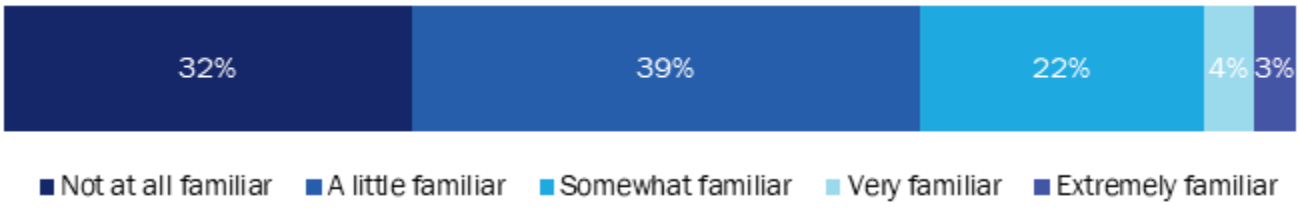
[6] *Successes and Challenges of Residential Heat Pump Water Heater Programs Through the Lens of Customers and Contractors*. American Council for an Energy Efficient Economy (ACEEE) Summer Study, 2020 Conference Proceedings (in development).

Figure 5. How Respondents First Heard about HPWHs (n=159)



- **Even among those who are aware of the technology, respondents reported low familiarity with HPWHs.** As seen in Figure 6, a majority (71%) of respondents who were aware of HPWHs indicated that they had little to no familiarity with the technology. A very small share of respondents (7%) said they were very or extremely familiar with HPWHs.

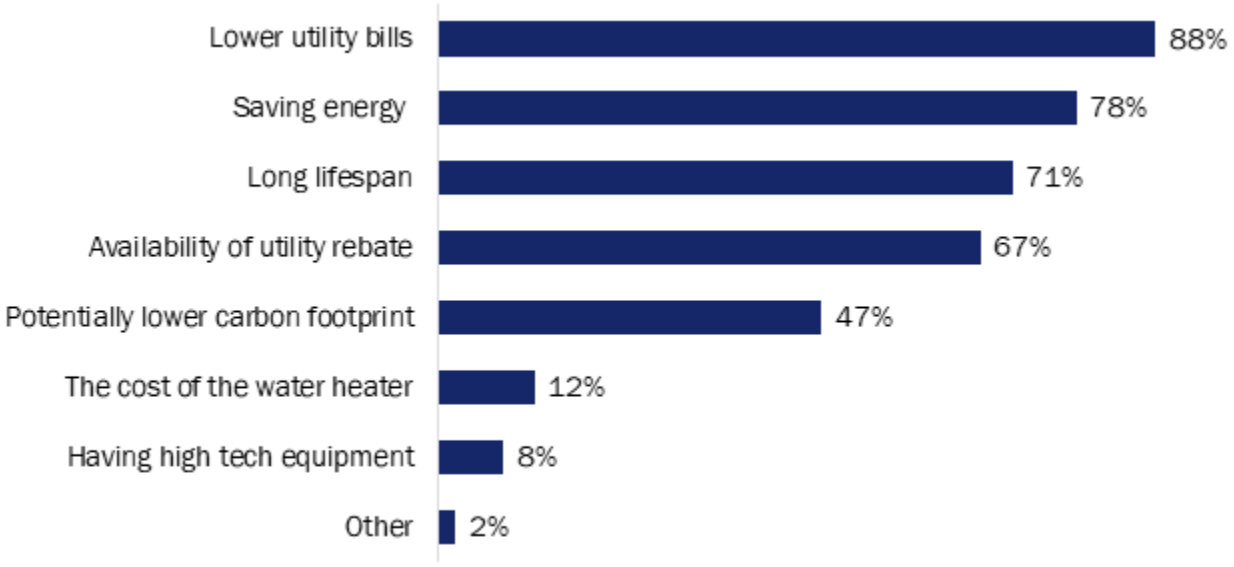
Figure 6. Respondent Familiarity with Heat Pump Water Heaters (n=155)



Participant Drivers

- **Participants reported the most popular features of HPWHs being lower operating costs and the opportunity to save energy.** Figure 7 presents the key benefits of HPWHs that respondents indicated an interest in. Respondents noted that achieving lower utility bills for water heating (88%) is the most desired benefit of residential customers. About three-quarters of respondents also listed saving energy and the longer lifespan of the unit as key HPWH benefits that they are interested in.

Figure 7. HPWH Benefits that are Attractive to Customers (n=51)

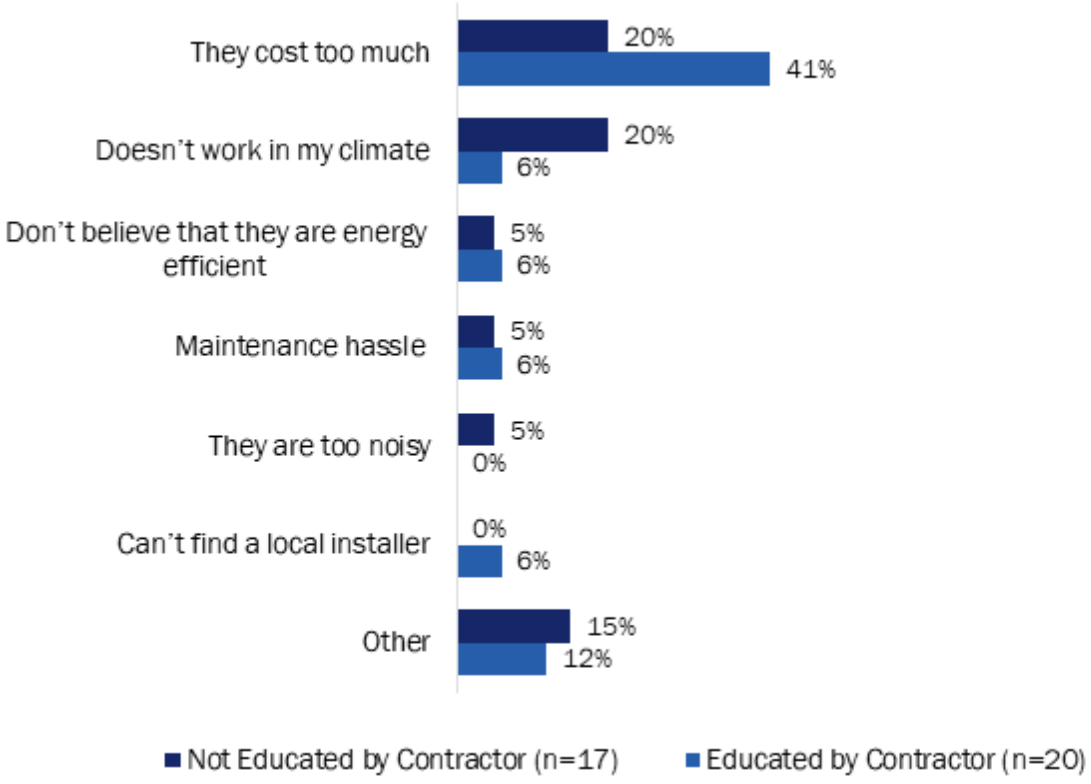


Participant Barriers

- **The largest barrier to adoption of HPWHs for participants is upfront cost.** Respondents were asked why they did not choose to install a HPWH if they indicated that their contractor had discussed the technology with them or if their contractor did not discuss the technology with them, but they had previously considered installing a HPWH in their home. Figure 4 compares the responses of these two groups. Both groups of customers noted the main reason they chose not to install a HPWH is due to the upfront cost of the unit.

  Respondents educated about the technology by their contractor indicated that cost (41%) was a more common concern than those not educated by their contractor (20%). Additionally, a fifth of respondents not educated by their contractor indicated concerns about HPWH performance in cold climates while only 6% of respondents in the educated group indicated this concern.

Figure 8. Reasons Customers Chose Not to Install HPWHs



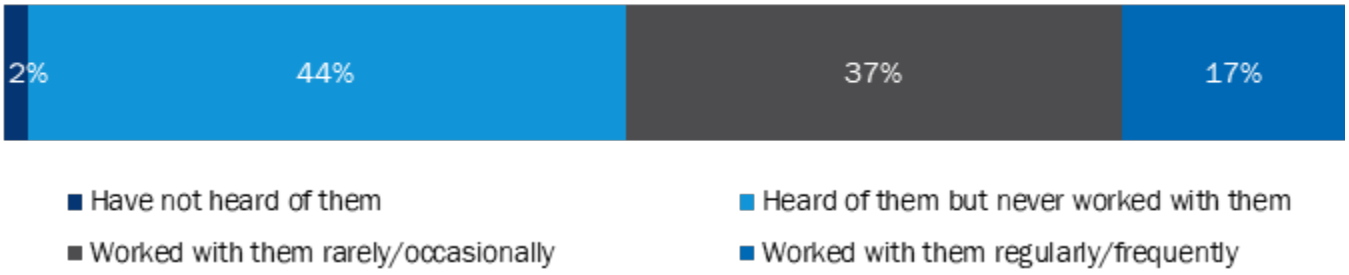
- **Survey results indicate that respondents are not likely to replace their existing water heater with a HPWH unless the existing unit breaks down (57%) or the cost of HPWHs decreases (57%).** Ten percent of respondents indicated that nothing would increase their likelihood of purchasing a new HPWH.

1.5.2 Trade Allies

Awareness and Recommendation Tendencies

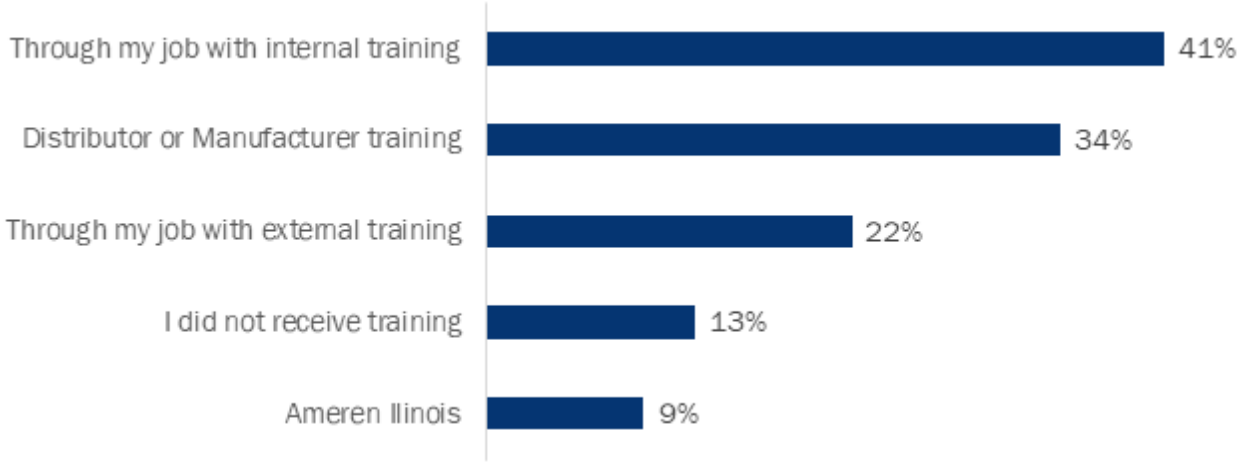
- **Trade allies indicated that they are somewhat familiar with HPWH technology.** As shown in Figure 9, 54% of respondents noted that they have worked with HPWHs regularly or on occasion while another 44% of trade allies had only heard of them but had never worked with them.

Figure 9. Trade Ally Awareness of HPWHs (n=54)



- **Trade allies primarily receive their training to install HPWHs from internal training or trainings from distributors or manufacturers.** As noted in Figure 10, many respondents (41%) received their training from internal job trainings with distributor and manufacturer trainings being the second most common training resource (34%).

Figure 10. Trade Ally HPWH Training Sources (n=32)



- **Trade allies are most likely to recommend HPWHs to their customers when the water heater has failed or is old or near failure.** When asked what percent of the time that contractors would recommend HPWHs to customers, 15% of respondents reported that they would recommend HPWHs more than half of the time when their customer is replacing a near failure water heater, a failed water heater, or in a new construction scenario.

  Respondents also provided insight into what scenario customers would be more likely to accept their recommendation to install a HPWH. Specific responses are highlighted below.

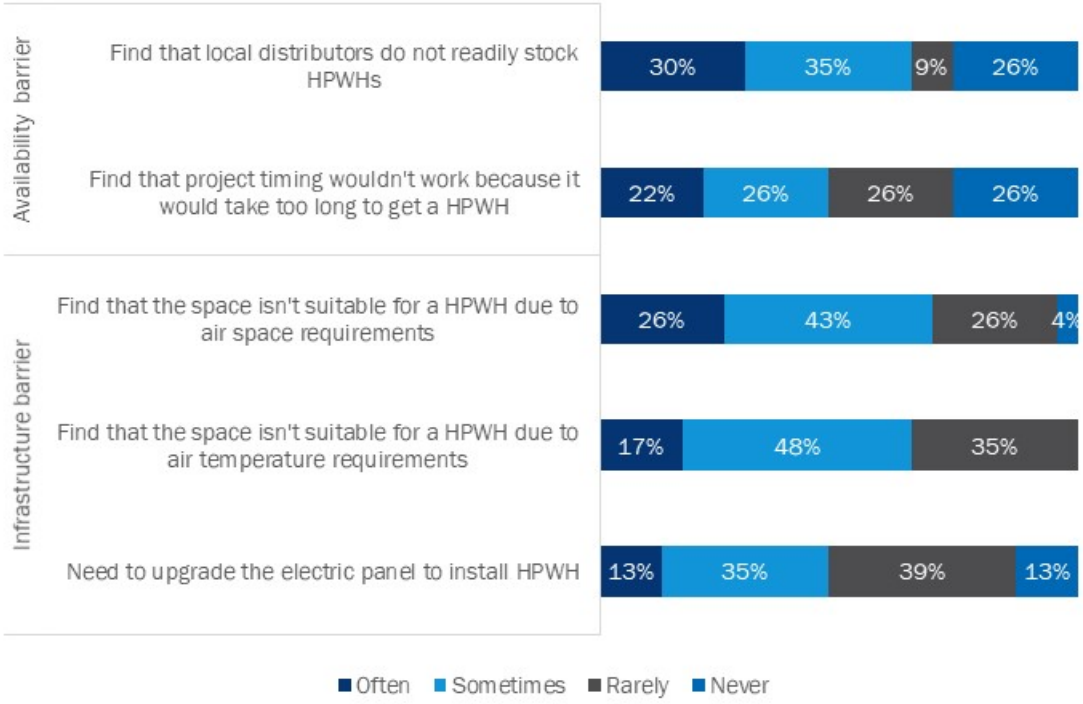
  - *Customers who have high hot water demand and who have the funds to install a HPWH.*
  - *When the space is available and when they can take advantage of the rebate*

- *If the prices and rebates are fair, they would be easier to recommend.*

Barriers to Installing HPWHs

- **Trade allies reported two overarching barriers to installing HPWHs: HPWHs are not readily available and customer's homes often cannot physically accommodate a HPWH.** HPWHs have specific infrastructure needs. They require at least 1,000 cubic feet of air space around the unit, require the air temperature around the unit to be from 40 to 90 degrees, and they need to be near a suitable power source.[7] Seventy-eight percent of trade allies noted they either often or sometimes found infrastructure barriers in homes that would make installing a HPWH difficult or impossible. Additionally, 65% of trade allies reported often or sometimes having difficulties acquiring HPWHs because distributors did not stock them, or they could not order them in time to complete a project. Figure 11 shows the specific infrastructure and availability barriers trade allies noted.

Figure 11. Frequency that Trade Allies Reported Barriers to Installing HPWHs (n=23)



- **Most residential trade ally business does not come from water heater replacement or repair.** Trade ally respondents reported that 6% of their residential business comes from water heater replacement and only 4% comes from water heater repair. Respondents who reported that water heater

[7] Energy Star. Considerations – Heat Pump Water Heaters. (Accessed on 9/1/2020). https://www.energystar.gov/products/water_heaters/high_efficiency_electric_storage_water_heaters/considerations

replacement was 20% or more of their residential business are companies that specialize in plumbing as well as HVAC.

HPWH Market Forecast

- **Trade allies predict that the HPWH market will either stay the same or experience growth in the next five years.** Trade ally respondents generally believe that the number of installations of HPWH will either stay the same or increase over the next five years (70%). Trade allies indicated that the main barrier to the customer is cost. As utilities offer more point of sale rebates and layered incentives to make the cost comparable to other water heater options, HPWHs could achieve greater market penetration. Contractors mentioned that due to the trend towards solar and all electric fuel sources, HPWHs could have more success in the residential market moving forward. Contractors expect new construction to drive the market for HPWHs because new homes can accommodate the size and electric demands of HPWHs. Other drivers of potential HPWH growth include increased contractor and customer awareness of HPWHs and their benefits, increased availability of utility initiative incentives that address first-cost barriers, and increased municipal, state, and federal greenhouse gas emission reduction goals.

1.6 Conclusions

Results of the participant and trade ally surveys lead us to reach the following conclusions and make a few recommendations.

- **Conclusion: Trade allies play the key role in recruiting participants to the initiative and they see value in participating in the initiative.** Almost three-quarters of participants heard of the initiative via their contractor and almost all trade allies--even non-active contractors and those expressing some dissatisfaction with the Initiative---indicated they are likely to participate in the initiative in the future.
- **Conclusion: Customers are largely satisfied with the initiative processes, contractors, and equipment.** Customer satisfaction was particularly high with contractors and equipment. The few participants that did report dissatisfaction specified unhappiness with perceived high energy bills and unclear initiative processes.
- **Conclusion: Trade allies were generally satisfied with all aspects of the initiative and most stated they would participate in the initiative in the future. However, most trade allies also reported paperwork requirements and inadequate incentive levels as the key barriers to participating in the Initiative.** Many trade allies described the paperwork as cumbersome and had recommendations for the online application portal released at the end of 2019. Some allies also stated that incentives were not high enough to make participants choose the efficient option and some other allies reported the initiative did not include enough measures in the initiative to appeal to other customers.
  - **Recommendation**: Conduct a tool usability study on the online application portal released at the end of 2019. A tool usability testing is a diagnostic method that identifies potential issues and improvements in a user interface, such as an online tool. Users may interpret an online tool in a manner completely different than that intended by its designers, or they may simply have difficulty navigating the tool. Through a usability study, feedback on the user interface and its navigation can be gathered, prioritized, and then updates can be made more cost-effectively. A study could also support (or not) the recommendations for improvement provided by a few trade ally respondents such as providing an autofill feature in applications and a way to easily upload pictures into the application while at a customer site.

- **Conclusion: Most trade allies associated with the HVAC initiative are not plumbing contractors.** Just over 10% of trade ally respondents reported that plumbing was a key part of their business[8] and few trade allies reported water heating was a key aspect of their business. As water heaters are a measure associated with the plumbing industry, it is likely that the initiative will need to engage more plumbers to encourage HPWH installations.
  - **Recommendation:** Look for ways to expand the trade ally network to include more plumbing contractors and handymen who are the trade allies that typically install HPWHs. This could include outreach to plumbing associations, distributors, and manufacturer representatives that support plumbing contractors in the field.
- **Conclusion: HPWHs are a nascent technology in AIC territory.** Few participants have a HPWH and few trade allies have experience with HPWHs. Awareness of HPWHs is low among participants, and few of those who are aware, are familiar with HPWHs. About one-third of participants were aware of HPWHs and about three-quarters of those, who were aware, indicated they had little to no familiarity with HPWHs. Furthermore, few trade allies have knowledge or experience installing HPWHs and trade allies reported that few (if any) customers ask for HPWHs. To increase adoption of HPWHs through the Initiative, trade allies in general and plumbing trade allies specifically will need more knowledge and experience with HPWHs that they can then share with their customers.
  - **Recommendation:** Provide workforce education and training opportunities to trade allies that work with water heating to address the benefits of HPWHs, the technical difference in installing HPWHs compared with traditional water heaters, and sales training. Educating customers about the benefits of HPWHs will fall on trade allies that with water heating and they will need to know how to effectively position the benefits of HPWHs to drive sales.
  - **Recommendation:** Consider providing HPWHs to trade allies for their own use so they can speak first-hand about their experience with the technology to their customers.
  - **Recommendation:** Develop a marketing campaign displaying the benefits of HPWHs to customers and trade allies that work with water heating. This campaign could include marketing collateral that trade allies could share with customers, online advertisements when people search for water heater replacement, and advertisements about HPWHs in distributor warehouses and big box stores like Home Depot, Lowes, or other retailers that sell HPWHs
- **Conclusion: Participants expressed the most interest in the following benefits of HPWHs: Lower utility bills, saving energy, and the long lifespan of the equipment.** More than two-thirds of participants reported interest in the lower utility bills, saving energy, and the long life-span of HPWHs. Fewer participants were interested in other benefits of HPWHs such as receiving a utility rebate and being "green" by installing a HPWH.
  - **Recommendation:** Consider using these three benefits as the foundation of a marketing campaign to drive HPWH awareness and familiarity.

[8] This is consistent with a review of initiative data that shows about 10% of all 320 trade allies have "plumbing" in their company name.