

Study 16-RES 25: Heating/Cooling Contractor Interview Findings

Type of Study: Process Evaluation
Evaluation Conducted by: Navigant Consulting
Illume Advising
Date Evaluation Conducted: 10/31/2016

Study Objective and Summary of Results:

The purpose of this study was twofold: 1) Support RES 16 condensing equipment research and 2) collect information from heating and plumbing contractors on industry practices and program participation barriers related to both condensing boilers and water heating equipment. This memorandum focuses on presenting results related to the second goal; RES 16 contractor-related findings are reported separately under that research area report.

Through these contractor interviews, the research team sought to better understand, from contractors' perspectives, barriers to customer adoption of efficient HVAC and water heating equipment, as well as any barriers that may exist to program participation. This research was qualitative in nature, intended to inform program processes and design.

The study provides the following key findings:

Heat Pump Water Heater Practices and Perceptions

- Contractors we spoke to generally reported selling few HPWHs, with nearly half saying they installed fewer than 5 in the past 12 months. However, nearly all these projects went through PA incentive programs.
- Most respondents had a generally positive opinion of heat pump water heaters, but expressed that HPWHs are only suitable in certain homes, and for certain customer types.
- Water heater contractors are apt to present heat pump water heaters to customers with a location in their home amendable to optimized HPWH function: Adequate clearance in a non-conditioned space.
- While most contractors install HPWHs to replace failed units, about a third reported that most their HPWH installations replace working units.
- Half of interviewed contractors most commonly install smaller-capacity (<55 gallons) HPWHs, while a third of contractors are more likely to install larger units. This is because contractors think smaller-capacity units supply sufficient hot water for most homes.

Contractor Experience with Other Water Heater Technologies

- Nearly all interviewed contractors reported a rise in customer demand for tankless water heaters in recent years.
- Most contractors did not view wireless-enabled water heater technology as a useful technology – a few saw its value in specific cases of second homes or frequent travel.
- Indirect water heating systems are popular with both contractors and customers in homes with high-efficiency boilers.

Use of Utility Incentives in Business Model

- Nearly all respondents had used utility incentives to help sell efficient equipment.
- Across both the condensing boiler respondents and the HPWH respondents, almost all have recently participated in an incentive.

Recommendations for Program Improvement

- Contractors recommend at least maintaining the rebate amounts and improving program processes by streamlining the current paper-based rebate process.

Experience with Industry Training and GasNetworks

- Most contractors had recently attended industry training – most commonly manufacturer-sponsored.
- Contractors are aware of GasNetworks' resource offerings and mostly use these offerings for assistance with rebate paperwork.

Core Initiatives to which the Results of the Study Apply:

- Residential Heating and Cooling (Electric & Gas)

Evaluation Recommendations:

No formal recommendations were made in this evaluation.

Explain Whether or Not the PAs Decided to Adopt the Recommendations from the Study:

N/A (no formal recommendations were made in this evaluation)

How the Study Affected Program Results and Its Significance:

This study provides the PAs with insights from HVAC contractors on key pieces of efficient equipment – most notably condensing boilers and heat pump water heaters

(HPWH). Most of the findings from this research pertaining to condensing boilers is reflected in the RES 16 report. The RES 25 report provides contractor attitudes, perceptions, and practices around HPWHs, including how frequently they discuss and recommend HPWHs with customers and under what circumstances they choose to promote HPWHs or not. The report also provides contractor feedback (for both boiler and HPWH contractors) on training attendance and use of GasNetworks resources.

Overview of Study Method:

The research team received a variety of contractor contact lists through the Massachusetts PAs, designed an email-based prescreening survey, and offered a \$50 gift card to contractors who completed the interview. Initial lists did not provide adequate contacts with HPWH experience, so the team eventually received an additional list of contractors from Blackhawk Engagement Solutions. In total, the research team spoke with 60 contractors, 35 of whom were HPWH contractors. All interviews occurred by phone.

The research team analyzed interview data using both the statistical program R to run frequencies on quantitative responses, as well as Excel to analyze qualitative responses.

Application of Results: Prospectively

A copy of the complete study can be found in Appendix X, Study 16-XX.