



HEAT PUMP INSTALLER NETWORKS BEST PRACTICE GUIDE



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About NEEP

NEEP was founded in 1996 as a non-profit whose mission is to serve the Northeast and Mid-Atlantic to accelerate regional collaboration to promote advanced energy efficiency and related solutions in home, buildings, industry, and communities. Our vision is that the region’s homes, buildings, and communities are transformed into efficient, affordable, low-carbon, resilient places to live, work, and play.

Disclaimer: NEEP verified the data used for this brief to the best of our ability. This paper reflects the opinion and judgments of the NEEP staff and does not necessarily reflect those of NEEP Board members, NEEP Sponsors, or project participants and funders. .

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Summary of Key Findings and Best Practice Recommendations

Achieving the full market potential of efficient air source heat pumps (ASHPs) in the Northeast will require a mix of technological innovation, consumer education and adoption, policy and program advances, and, critically, a large and skilled workforce that can deliver quality ASHP installation projects. To help grow the pool of qualified ASHP installers through training and peer exchange, states, utilities, and market actors have developed heat pump installer networks (HPINs).

Energy efficiency contractor networks are typically established to support state or utility energy efficiency programs, which are commonplace throughout the Northeast and have been operating in the market for 20 or more years in some instances. The emergence of HPINs has been more recent and has coincided with the growing focus on heat pump deployments, which has been driven by advancements in ASHP technology that deliver efficient heating services at temperatures well-below freezing.

These cold climate air source heat pumps (ccASHPs) deliver energy efficiency, pollution reduction, and customer bill savings across the Northeast. The largest savings occur when they are installed to replace or displace heat delivered from electric resistance heating or fossil fuel furnaces and boilers. The benefits of ccASHPs are significant. However, ccASHP installation can require more sophisticated design, sizing, and installation practices compared to traditional “one-way” heating or cooling HVAC solutions. HPINs that embrace best practices and train contractors on the nuances of ccASHPs can deliver more high-quality, high-impact installations.

HPINs support contractors by offering access to an engaged consumer market that is seeking HVAC upgrades and can further support installers’ and programs’ efforts to stay on top of the latest ccASHP standards, market and technology trends, and project installation and consumer operation best practices. The networks support consumers by providing quality assurance and help programs that seek to transform the high-efficiency HVAC market by increasing the number of skilled installers. Recognizing these benefits and the role that HPINs can play in programs and the broader market, several Northeast states and utilities have evolved their historic qualified energy efficiency contractor networks to include some version of an HPIN.

To support the growth and effectiveness of HPINs in the Northeast, this report reviews HVAC-oriented energy efficiency contractor networks and HPINs in the region, including evaluation of interviews with a subset of programs. The analysis identifies best practices for program administrators that are considering establishing an HPIN or evolving an existing network to better accommodate ccASHPs. Successful HPINs typically have a tailored design and implementation strategy closely aligned with program and policy objectives. The research and interviews informing this guide suggest five key best practice areas relevant to any HPIN:

1. Emphasize heat pump system sizing and design in required training
2. Prioritize flexible continuing education offerings that highlight emerging innovations and best practices
3. Provide continuous learning and accountability through meaningful quality assessment and quality control procedures
4. Foster a community of opportunity and recognition to make contractor participation worthwhile
5. Adapt programs and networks to local conditions but identify opportunities to align standards across the region



Introduction

For decades, states and utilities in the Northeast have been implementing broad and far-reaching energy efficiency programs aimed at easing grid strain, lowering consumer energy bills, reducing pollution, and improving household comfort. Some of the most impactful programs are those that directly invest in home upgrades, through a range of relatively easy-to-install interventions like efficient light bulbs and weatherstripping or deployment of more substantial retrofits like HVAC replacements or added insulation.

Successful programs recognize the critical role that the residential energy workforce plays in the market. Builders, plumbers, HVAC experts, electricians, and other contractors have direct influence over consumers' and building owners' decisions on things like appliance and mechanical system selection or structural updates that may provide energy, comfort, or safety benefits. Ideally, this workforce is aware of the benefits efficiency programs can bring to households and is properly trained in best practices to ensure customer satisfaction and successful projects.

To support this critical nexus between energy efficiency programs and a qualified workforce, most states and programs have established trade ally networks—groups of trained and vetted contractors that consumers can trust to help navigate programs and deliver quality projects. Energy efficiency trade ally networks benefit both programs and contractors. Contractors receive the benefit of being identified as a trusted partner to a program that can save consumers money; meanwhile, programs have a subset of contractors ready to complete projects that capture energy savings and help meet program goals. These trade ally networks help ensure that the residential energy contractor market is educated on the latest best practices in energy efficiency.

While trade ally networks have matured over the past decade, program goals have begun to evolve, and efficiency technologies have advanced in ways that are changing the market. Heat pumps—HVAC equipment that provides both heating and cooling services in one product at efficiencies two to four times greater than traditional fossil fuel or electric resistance heating systems¹—are breaking into the market in record numbers² and state and utility programs need to be prepared to support contractors in meeting consumer demand, program goals, and policy objectives.

This alignment of HVAC technology innovation and policy and program progression creates an inflection point in the market and an opportunity to evolve the traditional energy efficiency trade ally network model. Heat pump installer networks (HPINs) can supplement and complement traditional energy efficiency contractor networks by ensuring participating installers are trained on the latest heat pump best practices and can support successful heat pump projects that achieve program goals.

¹ Peak efficiency operations of traditional combustion- and resistance-based heating systems inherently top out at below 100 percent; however, heat pumps often operate at efficiency levels of 200–400 percent.

² RMI. *Tracking the Heat Pump & Water Heater Market in the United States*. Accessed April 2026. Available at: <https://rmi.org/insight/tracking-the-heat-pump-water-heater-market-in-the-united-states/>



Heat Pumps and Regional Market Growth

Air source heat pumps (ASHPs) are air conditioners designed to operate in two directions, providing both cooling and heating. Because they move heat from one place to another rather than generate it through combustion or electric resistance, ASHPs can operate at high efficiencies. In some parts of the country, like the Southeast, ASHPs have been installed in homes for decades. Thanks to advancements in heat pump technology over the past 15 years, these “two-way” HVAC systems can also efficiently deliver heat in cold climates.³ Cold climate air source heat pumps (ccASHPs) can help households save money, increase comfort, reduce pollution, and meet the specific needs of a home thanks to a variety of system designs.⁴

Prior to the cold climate technology breakthrough, ASHPs were not often installed as the primary heating system in much of the Northeast region, with the exception of the warmer climates in the Mid-Atlantic. Now, with ccASHP technology widely available, these products have broken into the market in earnest.

Heat pump sales in New England and New York increased nearly 400 percent from 2013 to 2021, and NEEP estimates that from 2021 to 2023, heat pump sales in that same region saw a 12 percent increase while the national market saw a decline.⁵ Meanwhile, several Northeast states have explicitly called for heat pump sales to make up 65 percent of the HVAC sales market by 2030 and are developing and implementing policies, programs, and market transformation activities to achieve this goal.⁶

Thanks to technology improvements, increasing demand for cooling, and robust policy goals and program funding that target heat pump deployment, this market growth for heat pumps is likely to continue in the Northeast. However, sustained, accelerated market growth for high-efficiency building products often takes more than technological innovation, consumer interest, and policy goals. More significant efficiency interventions like ASHP installations or deep envelope retrofits may remain under-deployed until a supportive and skilled workforce is scaled up to meet demand, educate consumers, and successfully install efficient products.

Heat Pump Installer Networks Help Capture Market Opportunity

The need for a highly skilled and trusted workforce capable of scaling deployment of high-performance ASHP and ccASHP solutions is especially great in the Northeast, where colder temperatures and an aging housing stock present unique challenges. The variable-speed compressors in ccASHPs have made the products a viable HVAC solution for cold climate regions like the Northeast and can be leveraged in several HVAC technology

³ U.S. Department of Energy. *Residential Cold Climate Heat Pump Challenge*. Accessed June 2026. Available at: <https://www.energy.gov/cmei/buildings/residential-cold-climate-heat-pump-challenge>

⁴ Northeast Energy Efficiency Partnerships. *Air Source Heat Pump Buying Guide*. Accessed in June 2026. Available at: https://neep.org/sites/default/files/resources/ASHP_buyingguide_5.pdf

⁵ Luoma, Jeff, Jon Kolinar, Justin Margolies, and Sophia Seol. *Northeast High-Performance HVAC Market Assessment Report*. 2025. Northeast Energy Efficiency Partnerships. Accessed in May 2026. Available at: https://neep.org/sites/default/files/media-files/neep_ne_high_performance_hvac_market_assessment_final_0.pdf

⁶ *Accelerating the Transition to Zero-Emission Residential Buildings: Memorandum of Understanding*. California, Colorado, Washington, D.C., Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Washington. 2024. Accessed in May 2026. Available at: <https://www.nescaum.org/documents/Residential-Buildings-Multistate-MOU.pdf>



setups, including traditional central split systems, ductless split systems, packaged units, and more, allowing for installations across residential building typologies including the region’s older housing infrastructure. Even as ccASHPs have become more ubiquitous in the efficiency and housing industries in the Northeast, the products present unique design, installation, and operational characteristics. As incentive and deployment programs have been established across the Northeast, program administrators have recognized the critical role that system design and installation play in long-term energy savings and consumer satisfaction.

Qualified contractors familiar with heat pumps—especially ccASHPs—deliver the most effective design and installation of this burgeoning corner of the HVAC industry. To support deployment goals and adapt to nuances of ASHP projects, state and utility programs have established networks of qualified contractors—HPINs—to complete installation projects, assist consumers with incentive navigation, and stay up to date on the latest trends, best practices, and educational opportunities in the energy efficiency and heat pump worlds.

The number of individual HPINs is growing; however, the concept is still relatively new, no two programs are the same, and limited research has been completed on HPINs. This analysis fills that gap and aims to identify core best practices for HPIN design and implementation.

Objectives, Scope, and Research Methods

Objectives and Scope

This best practice guide was developed to identify common themes and components of trade ally networks supporting heat pump programs in the Northeast (i.e., HPINs) based on research and interviews of program leaders.

This guide is specific to key themes and recommendations for trade ally and installer network development and design and is not intended to provide recommendations specific to individual installer trainings. NEEP has published several other best practice guides and resources pertaining to heat pump sizing, design, selection, installation, and workforce training and development. These resources⁷ include but are not limited to:

- Guide to Installing Air-Source Heat Pumps in Cold Climates⁸
- Training Recommendations for Designing and Sizing Air Source Heat Pumps in Cold Climates⁹
- High-Performance HVAC Midstream Program Best Practice Guide¹⁰

⁷ Northeast Energy Efficiency Partnerships. *Technology Market Transformation Resource Center*. 2026. Accessed in May 2026. Available at: <https://neep.org/high-performance-air-source-heat-pumps/ashprf-resource-center>

⁸ Northeast Energy Efficiency Partnerships. *Guide to Installing Air-Source Heat Pumps in Cold Climates*. Accessed in April 2026. Available at: https://neep.org/sites/default/files/resources/InstallingASHPinCold_edits.pdf

⁹ Wall, Parker, and Tara McElhinney. *Training Recommendations for Designing & Sizing Air Source Heat Pumps in Cold Climates*. 2025. Northeast Energy Efficiency Partnerships. Accessed in April 2026. Available at: https://neep.org/sites/default/files/media-files/neep_training_recommendations_for_designing_sizing_air_source_heat_pumps_in_cold_climates_final.pdf

¹⁰ Dutt, Deepti, and Andre Javier-Berry. *High-Performance HVAC Midstream Program Best Practice Guide*. 2025. Northeast Energy Efficiency Partnerships. Accessed in April 2026. Available at: https://neep.org/sites/default/files/media-files/neep_high_performance_hvac_midstream_program_best_practice_guide_final.pdf



- High-Performance HVAC Workforce Development Program Best Practice Guide¹¹
- Co-promotion of Weatherization and High Performance HVAC in Programs Best Practice Guide¹²

The existing networks and programs researched and evaluated for this guide were limited to those serving residential homes in the NEEP region (Washington, D.C., West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine). Further, the best practices guide is limited to networks focused on high-performance air-to-air heat pumps, as interest in this market is growing in the NEEP region. Air-to-water, ground-source, and other heat pump technologies are not within the scope of this best practice guide; however, these solutions can be included within the scopes of the HPINs that this report examines.



Research Methodology and Approach

Two primary research methods were employed to evaluate existing trade ally networks in the region. Specifically, the research team:

- Performed a detailed online review of existing contractor networks associated with primary energy efficiency programs in the region, specifically working to identify high-performance HVAC programs within the broader trade ally networks and key features of each HPIN. This review was performed primarily in 2025.
- Conducted virtual interviews with program leaders from eight energy efficiency programs in the region that were identified through the online research as specializing in various heat pump deployment programs. Interviews were conducted in 2025.

The insights and findings from the interviews were carefully considered and distilled into key best practices that can guide contractor network developers and program administrators as they work to scale the heat pump market across the Northeast.

¹¹ Dutt, Deepti, and Melissa Gobar. *High-Performance HVAC Workforce Development Program Best Practice Guide*. Northeast Energy Efficiency Partnerships. Accessed in April 2026. Available at: https://neep.org/sites/default/files/media-files/neep_high-performance_hvac_workforce_development_program_best_practice_guide_final.pdf

¹² Wall, Parker, and Jeff Luoma. *Co-promotion of Weatherization and High Performance HVAC in Programs Best Practice Guide*. Northeast Energy Efficiency Partnerships. Accessed in April 2026. Available at: https://neep.org/sites/default/files/media-files/neep_co-promotionofwxandhigh_eff_hvac_bestpracticeguide_final.pdf



Results: Summary of Existing Contractor Networks in the Northeast

Table 1 summarizes several key features of 16 program and contractor network partnerships across the Northeast, based on the online research landscaping exercise detailed in the Research Methodology and Approach section. Some characteristics of individual networks, such as the number of participating contractors, are dynamic and we recommend readers use the provided website links to explore the latest features of the contractor networks.

The scan of programs provided in Table 1 is intended to provide introductory but critical information on some of the major contractor networks and their associated energy efficiency programs in the region. This includes information regarding:

The Installer Network Name – Contractor network names vary and do not always have a self-identifying, distinguishable name, often resulting in general language that ties the participating contractors to the program name. The column in Table 1 provides hyperlinks to landing pages for the various contractor networks for the associated program.

The Type of HVAC Contractor Network – Energy efficiency programs across the region contain several types of HVAC retrofit programs, some focused exclusively on ASHPs, others that include incentives for heat pumps, furnaces, and central air conditioners. The “Network Type” column in Table 1 identifies if the contractor network is specially focused on heat pumps or if it is tailored more toward a selection of “General HVAC” contractors.

Rebate Eligibility – Most, but not all, energy efficiency programs require customers to work with an HVAC contractor that is enrolled in the affiliated contractor network to be eligible for the applicable equipment rebate incentive. The “Rebate Eligibility” column in Table 1 captures if the ASHP rebate is contingent on the project being completed by a participating contractor in the given network.

Participation Agreement – Most contractor networks in the region require participating contractors to execute some form of agreement with the program administrator. These participation agreements vary in complexity and substance but are critical to a healthy network. The “Participation Agreement” column provides direct links to available participation agreements or their associated landing sites. When an easily accessible participation agreement was not found, a separate relevant link—often one to a “find a participating contractor” tool—was included to provide additional opportunity to highlight a relevant feature of the network. Participation agreements may contain information regarding:

- Education or training thresholds-to-entry that can range from something as simple as providing an active state HVAC technician license to providing professional credential verification such as Building Performance Institute certification
- Program requirements regarding quality assurance and control (QA/QC) reviews to ensure program compliance, customer satisfaction, and proper product installation
- Project expectations for following equipment sizing, selection, and installation best practices
- Communication norms between HPIN administrators and participating contractors
- Project records retention policies



Based on the initial Internet research previously described, interviews were then conducted with leaders from eight programs that focus on heat pump incentive. Interviews were conducted with program leaders from Baltimore Gas & Electric, Efficiency Maine, Efficiency Vermont, Eversource, National Grid, Avangrid, Rhode Island Energy, and Clean Heat Rhode Island for programs in Maryland, Maine, Vermont, Connecticut, Massachusetts, and Rhode Island.

Interviewed program leaders were first asked to describe the original rationale for the development of their HPIN. This foundational question of “why” an HPIN is established is often a key insight into subsequent decisions about the structure, requirements, and overall design of the network. The interview responses revealed a few consistent themes at the heart of HPINs:

- HPINs are typically established to help meet program-specific goals, whether those goals are based on energy efficiency savings targets, rebate uptake goals, and/or emission reduction targets.
- States with strong decarbonization policies and program goals often emphasize whole-home ASHP projects (i.e., ASHP projects that are designed to deliver all or the large majority of a home’s heating load). These projects contain unique design, installation, and operational characteristics and are best served by a skilled workforce.
- HPINs often aim to spark an upskilling within the local HVAC workforce that will lead to more consistent comfort and performance outcomes for consumers.



Table 1: Sample of Heat Pump or High-Efficiency HVAC Installer Network Programs in the Northeast

State	Program Administrator	Installer Network Name	Network Type – ASHP Specific or General HVAC?	Total # of Participating Contractors*	Are Rebates Predicated on Use of a Participating Installer? **	Participation Agreement or Other Relevant Link(s)?
CT	Energize CT	CT Heat Pump Installer Network	ASHP Specific	540	Yes	Participation Agreement
DE	Energize Delaware	Home Performance with ENERGY STAR	General HVAC	57 (HPwES) 35 (HPwES with HVAC Specialty)	Yes	Participation Agreement
MA	Mass Save	Mass Save Heat Pump Installer Network Heat Pump Leaders Network	ASHP Specific	1,536 (HPIN) 71 (HPLN)	Yes	Participation Agreement HPLN Guide
MD	BGE: Empower Maryland	Participating HVAC Contractor Home Performance with ENERGY STAR	General HVAC ¹³	422 (Instant Rebate HVAC) 47 (HPwES) 25 (HPwES with HVAC Specialty)	Yes for HPwES	FAQ Site for Contractors Interested in Participating in Network
ME	Efficiency Maine	Efficiency Maine Residential Registered Vendors	ASHP Specific	641	Yes	
NH	NH Saves	NH Saves is in process of establishing an HPIN at time of publication. For more information: https://nhsaves.com/contractors/				
NJ	PSEG Energy Efficiency Solutions Instant Rebates Whole Home Program	PSEG Trade Ally HVAC Instant Rebates Whole Home Energy Solutions	General HVAC Consumer can filter for ASHP Specialty in “Find an HVAC Contractor” tool	448 (HVAC Instant Rebate) 38 (Whole Home Program)	Yes	PSEG Trade Ally Portal

Table continues >

* The numbers of participating contractors provided in Table 1 were determined by navigating to program webpages and using the “find a contractor” tools in April 2026. When navigating a more general contractor list that was not already heat pump-specific, filter tools were used for “HVAC” and/or “air source heat pump” when available. Participant numbers are dynamic and may change. NEEP recommends navigating to contractor network resources to retrieve the most up-to-date information.

** In some cases, a participating contractor may not be required for the project to receive a rebate; however, the program may require the ASHP product come from a participating HVAC distributor. Those situations vary and readers are encouraged to contact each program directly

¹³ BGE has elected to end incentives for gas furnace equipment and one-way central air conditioners, effectively making their midstream HVAC program and HPwES programs focused on ASHP installations; however, the contractors in the network remain identified as a “Participating HVAC Contractor” and HP expertise is not further delineated.



NJ	Rockland Elec. Company Instant HVAC Rebate Clean Heat Whole Home Energy Solutions	Participating Contractor network handles both Instant HVAC Rebate and Clean Heat Programs. Participating Contractor for Whole Home Solutions Program	Mix of General HVAC and ASHP Specific	46 (Instant HVAC Rebate and Clean Heat) 9 (Whole Home Energy Solutions)	Yes	Contractor Finder Tool
	NY	Clean Heat Participating utilities include: Central Hudson; ConEdison; Orange & Rockland; NYSEG; RG&E; and National Grid PSEG-LI	Participating Contractor Home Comfort Partners	ASHP Specific ASHP Specific	900 84	Yes Yes NY State Clean Heat Program Manual Find a Contractor Landing Site Partner Application Home Comfort Partners Participation Guidelines
PA	PPL Electric Savings	Trade Ally Network ¹⁴	General HVAC	23	No	Trade Ally Registration Page
	First Energy HVAC Rebates ¹⁵	HVAC Contractor	General HVAC	N/A	No	HVAC Contractor Portal
RI	RI Energy Rebates and Savings Programs	Participating Contractors List	General HVAC	48	Yes for Enhanced Rebate, no for Standard Rebate	Rebates Page
	Clean Heat Rhode Island	Heat Pump Installer Network	ASHP Specific	118	Yes	HPIN Landing Page and Application
VT	Efficiency Vermont	Efficiency Excellence Network	General HVAC Consumer can filter for ASHP Specialty in “Find an HVAC Contractor” tool	203 (Ductless HPs) 161 (Ducted HPs)	Yes for Home Energy Loan Program No for Instant Rebate Programs	Find a Pro Landing Page
WV	Appalachian Power – Home Performance Program	Qualified Contractor Network (QCN)	ASHP Focus for Home Performance Ductless Mini-Split ASHP Focus for Instant Rebate ASHP Focus for Go Electric Program	41	Yes for Home Performance Program No for Instant Rebates on Ductless Mini-Split HPs	Find a Contractor Landing Page

¹⁴ New PPL Electric programs have launched in June 2026. The latest Find a Contractor tool features include a filter for identifying a “Certified Heat Pump Installer Network.” However, more detailed information regarding the HPIN was not found online at the time of publication and the information provided in Table 1 reflects the information available on PPL’s Trade Ally Network and Rebates webpages. Please check back with <https://www.pplelectricsavings.com/pp/> for future updates.

¹⁵ As of June 2026, First Energy is in the processing of developing and launching new HVAC Rebate program offerings for residential customers. Please check back with First Energy for updated information regarding their heat pump rebate offerings and any changes to their contractor network by navigating to their website at: https://www.firstenergycorp.com/save_energy/save_energy_pennsylvania/for_your_home_pa.html



Best Practices for Heat Pump Contractor Networks in the Northeast

The recent development and launch of HPINs is a testament to the expanding ASHP market and the criticality of a strong workforce to support the industry. The growth and evolution of these networks will help make or break program and policy goals, and the efficiency sector should make a concerted effort to ensure the success of HPINs.

The lessons learned from research of existing HVAC contractor networks and interviews with current program administrators revealed several decision points and structural design choices that can make or break an HPIN. Leveraging the following best practices in an HPIN can help maximize impact, consumer satisfaction, and comfort as well as market growth of both products and workforce.

BEST PRACTICE 1

Emphasize Heat Pump System Sizing and Design in Training Requirements

The colder climates in the Northeast often mean that a residential housing unit's heating loads exceed summer months' cooling loads. This load profile requires special attention to ccASHP equipment sizing, design, and selection decisions for installations, whether they are intended to cover the entire heating needs of the home or paired with an existing fossil fuel furnace or boiler for back-up heat. Common risks for ccASHP projects can include:

- Oversized equipment that leads to inefficient short-cycling events in shoulder seasons or humidity issues in the cooling season
- Improper placement of an outdoor unit that increases chances of equipment-debilitating ice events or excessive defrost cycles that decrease the efficiency of the system
- Equipment sizing decisions that trigger the need for ductwork retrofits or replacements

Contractors delivering ccASHP projects must consider a series of factors for each project. HPINs, with the proper training and education requirements integrated into their participation agreements and supplemental continuing education offerings, can help scale sizing, design, and equipment selection best practices.

HVAC trade ally networks and HPINs in the Northeast generally recognize the importance of sizing for ccASHP projects and often rely on industry standard sizing practices like load calculations using the Air Conditioning Contractors of America (ACCA) Manual J or leveraging third party tools like NEEP's ccASHP Sizing Tool.¹⁶ Networks often provide guidance on system design and equipment selection and rely on clear performance eligibility requirements established in qualified product lists (QPLs), but do not establish overly prescriptive equipment selection criteria that would limit customer choice on things like particular manufacturer brands.

¹⁶ NEEP's ccASHP Sizing Tool is available as a feature in the ccASHP Product List, available to access at: https://ashp.neep.org/#!/product_list/



In the Northeast, some newer HPINs that identify top-of-the-market installers, as well as some that support low-income ASHP programs, are establishing practices that include more robust and detailed sizing, system design, and equipment selection evaluation as part of incentive approval processes or participation agreements. For example, the Massachusetts Heat Pump Leaders Network requires that participating companies have all sales and design staff complete Manual J training and perform ACCA-approved load calculation software for every install.¹⁷

New or evolving ASHP trade ally networks should ensure all participating contractors understand that sizing and system considerations can make or break the success of a project and are trained to perform sizing, design, and equipment selection industry standards and best practices for every project. The emphasis on sizing and design can best fit within two important sub-structures of a contractor network:

- Workforce training programs
- Participation agreements or best practices contained in program manuals

Sizing, Design, and Equipment Selection in Contractor Network Workforce Training

Contractors participating in ASHP networks are often required to demonstrate completion of a variety of trainings or certifications related to HVAC and ASHPs. These likely include refrigerant handling certifications or manufacturer- or distributor-led system design and product installation trainings. In some cases where heat pump installation is part of a whole-home or multi-intervention program, contractors are often required to have a more comprehensive home energy training history such as Building Performance Institute certifications. Foundational HVAC and building energy science trainings are important and typically cover proper sizing, design, and equipment selection techniques and standards.

Even with these core competencies and fieldwork experience, continuing education for participating contractors on the latest best practices on ccASHP equipment sizing, design, and selection will help maximize project and program impact. Networks can prioritize training that exposes contractors to helpful and new tools that can

NEEP's ccASHP Design and Installation Considerations for Workforce Training Programs

1. Assess the home for load reduction and weatherization opportunities
2. Conduct a load calculation using information accurate to the home's envelope and interior spaces
3. Select a system type that fits the needs of the home
4. Select a ccASHP that is sized appropriately
5. Assess the dehumidification needs of the home to determine if supplemental dehumidification is necessary
6. Select and implement a control method that best fits the needs of the home
7. Properly locate the exterior unit to optimize efficiencies, protect the system, and ensure home comfort
8. Assess the duct system for airflow capacity and balance to thermal loads

¹⁷ Mass Save. Heat Pump Leaders Network Contractor Guide. Accessed in June 2026. Available at: <https://www.masssave.com/-/media/Files/PDFs/Partners/HPLN-Contractor-Guide.pdf>



create job efficiencies like new software programs that can help with time-intensive Manual J procedures and calculations or that can provide homeowner-accessible summaries of technical sizing or design decisions.

Sizing, Design, and Selection in Contractor Network Participation Agreements and Program Manuals

For most HPINs, participating contractors are required to execute a participation agreement. These agreements vary and can include affirmations of required industry certifications, company legal status, a description of the benefits available to participants, QA/QC processes, document retention policies, customer service expectations, and sometimes even basic project guidance.

Participation agreements are often accompanied by and directly reference program manuals or project requirements summary documents. These program manuals and supplemental materials provide additional details on things like QPLs, documentation needed for rebate and incentive processing and approval, and best practices for successful projects.

Working closely with program administrators, contractor networks can leverage these participation agreements and program manuals to strongly encourage or require sizing, design, and equipment selection best practices. As these documents are updated relatively regularly, this also allows for updates to sizing and design techniques based on the latest research, technological advancements, and market trends.

BEST PRACTICE 2

Prioritize Flexible Continuing Education Offerings That Highlight Emerging Innovations and Best Practices

Workforce training is an important part of any energy efficiency trade ally network and ASHP-specific training is vital for programs that are aiming to scale ASHP deployment. The industry has developed countless education and training programs tailored to ASHP projects, ranging from introductory sessions for technicians learning about ASHPs for the first time to sizing and design deep dives to help even the most seasoned ASHP installers stay up to date on new best practices. These training and certification programs are even offered from a wide variety of institution types. Interested contractors can look to local HVAC industry associations, global manufacturers, and government-recommended providers. See the call-out box for a snapshot of ASHP training resources.

Northeast contractor networks' participation agreements typically detail the baseline expectations for ASHP installer certifications and training to be approved as a network member. Importantly, many of the ASHP installer networks also provide ongoing training opportunities for members as continuing education.

Beyond the necessary equipment sizing, design, selection, and installation best practices knowledge highlighted above in Best Practice 1, three further considerations can be keys to success for new or expanding networks:

1. Continued Exposure: Allow for frequent review and evolution of training subject matter to account for the continued technological advances and project best practices for ccASHPs.
2. Support Ambassadors: Work with contractors to help them become ambassadors of heat pump technology.



3. Offer Flexibility: Provide a variety of training options and opportunities for participating contractors to account for their unique and demanding field.

Continued Exposure to Heat Pump Innovations and Market Trends and Standards

Innovations in heat pump technology are rolling out every year, and manufacturers, researchers, distributors, and contractors are finding new ways to decrease project costs and increase field performance, which in turn increases customer satisfaction and comfort. Recent trends include, but are not limited to:

- Development and manufacturing of new heat pump product designs like window-saddle room heat pumps¹⁸
- Program requirements for products to integrate load management technology to better interact with demand response programs¹⁹
- Modern rate design offerings that consumers can enroll in to avoid excessive operating costs²⁰
- Regulatory updates to refrigerant products that can be used in residential HVAC systems, which have come into effect in 2026²¹
- Advances in products like coil-only HPs that make it even easier to install HPs instead of one-way central air conditioners at the time of AC failure²²
- Research identifying ways to avoid expensive and time-consuming electric panel upgrades when electrifying heating²³

Example of Technology Innovation and Market Transformation Sparking New Education Needs and Opportunities

Beginning in January 2026, the Consortium of Energy Efficiency specification for ASHPs requires manufacturer-reported compliance with AHRI 1380, an industry standard for demand response management capabilities in variable-speed HVAC equipment like ccASHPs. CEE specifications are sometimes cited in QPLs for energy efficiency programs, potentially leading to the need for new continuing education sessions for ccASHP installers. As the AHRI 1380 standard is adopted in additional program QPLs and their related specifications, ASHP trade ally networks may offer continuing education opportunities on AHRI 1380.

¹⁸ NYSERDA. *Clean Heat for All: Room Heat Pump Program*. Accessed in April 2026. Available at: <https://www.nyserd.org/All-Programs/Room-Heat-Pump-Program>

¹⁹ Consortium for Energy Efficiency 2026 specification for air-source heat pumps requires reporting of AHRI 1380 compatibility. CEE specification available for download at: <https://cee1.my.site.com/s/resources?id=a0V2R00000sUQby>. AHRI 1380 standard available at: https://www.ahrinet.org/system/files/2023-06/AHRI_Standard_1380_I-P_2019.pdf. Both sites accessed April 16, 2026.

²⁰ Cosgrove, Erin, Luke Miller, and Abigail Brown. *Modern Rate Design in the Northeast: Unlocking Efficiency, Affordability, and Electrification*. Northeast Energy Efficiency Partnerships. 2025. Accessed in April 2026. Available at: https://neep.org/sites/default/files/media-files/neep_modern_rate_design.pdf

²¹ United States Environmental Protection Agency. *Background on HFCs and the AIM Act*. 2026. Accessed April 2026. Available at: <https://www.epa.gov/climate-hfcs-reduction/background-hfcs-and-aim-act>

²² Commonwealth Edison Company and Center for Energy and Environment. *Variable Speed Heat Pumps as Air Conditioner Replacement*. 2024. Accessed in April 2026. Available at: <https://innovate.comed.com/wp-content/uploads/2024/04/ComEd-Customer-Innovation-Variable-Speed-Heat-Pumps-as-Air-Conditioner-Replacement-Executive-Summary.pdf>

²³ New Buildings Institute. *We Can Power the Homes of the Future With Electric Panels of the Past*. July 24, 2023. Available at: <https://newbuildings.org/we-can-power-the-homes-of-the-future-with-electric-panels-of-the-past/>



Some of these innovations and changing market dynamics can act as a market accelerant, making products more viable and attractive to consumers; however, others can stymie market growth if the workforce is not primed to implement the industry shifts. Contractors should be familiar with these and other advancements not only to help programs meet deployment and savings targets, but also to grow their business by capturing new opportunities. Trade ally networks should aim to help their participants learn about these industry improvements so that program momentum increases and markets do not stagnate.

Support Contractors Becoming Heat Pump Ambassadors

When contractors become more fully immersed in ASHP technology capabilities, benefits, and applications they can become some of the best advocates and salespeople for the products in the market. Trainings for contractors on “kitchen table”-style conversations and best practices to educate consumers on the positive impacts an ASHP can bring to a home can increase overall program success.

When a contractor can describe some of the sizing and design considerations that go into system selection, a homeowner or resident may be more comfortable and confident in the ASHP system. Contractors do not want to and should not overwhelm a potential new ASHP owner, but trade ally networks should consider education opportunities for contractors that equip them with good ASHP communications skills to help consumers through the process smoothly and effectively.

Flexible Training Offerings

As the progression of heat pump field performance research and technology advances, it can be tempting to require near constant training engagement from trade ally network participants. However, it is unrealistic and often counter-productive to have contractors pulled out of the field, away from revenue-earning and efficiency deployment jobs and into a classroom (virtual or in-person) for every new ASHP market advancement.

Live training—in-person or virtual—is highly valuable; however, training programs for HPINs should aim to take advantage of modern communications technologies and industry realities by offering diverse training opportunities. This should include mobile-friendly how-to guides and short video modules that can be viewed and absorbed on job sites.

HPINs will also need to accommodate diverse levels of engagement from individual contractor companies and be prepared to assist the dissemination of important ccASHP project best practices throughout member companies. Train-the-trainer style sessions equip attendees with both the subject matter knowledge and the skills to bring the information they learned back to their colleagues.

An important pathway to reach contractors with continuing education and ASHP best practices in HPINs may be through close coordination and collaboration between the continuing education team and the network’s QA/QC processes.



**BEST
PRACTICE
3**

Provide Continuous Learning and Accountability Through Meaningful Quality Assessment and Quality Control Procedures

Every Northeast HPIN interviewed for this guide features some version of a QA/QC, often directly tied to efficiency program requirements; however, QA/QC structures in programs and HPINs are not standardized across the region. Generally, QA/QC within the networks consists of desk review of project and rebate submittals paired with various versions of field inspections.

Desk reviews of projects can range from job photo review and QPL checks that confirm product eligibility to review of savings projections from energy modeling software. Field inspections may include simple visual inspections of project sites to verify presence of the eligible product, which may be the methodology for programs designed to move high volume of rebates and products such as midstream programs. In some cases, field inspections are more involved and include more in-depth installation review and customer satisfaction inquiries, which can be more common for projects targeted at income-eligible households. Some of the programs and newer, more premier HPINs are developing and rolling out QA/QC processes and inspections that include review of ASHP sizing and design decisions, aiming to emphasize the importance of these steps in the project.

The QA/QC processes are needed to ensure that contractors can deliver the energy savings that programs claim and consumers receive the economic, safety, and comfort benefits of heat pumps. However, the QA/QC processes should be viewed as a feature for contractors, not simply an enforcement mechanism to catch mistakes and threaten participation status.

QA/QC of HPIN contractor projects can, essentially, be another version of in-field training and continuing education for installers, especially as new best practices are identified for ASHP sizing and installation. For example, given the importance of ASHP sizing and system design best practices, inspectors should look for opportunities to highlight good sizing practices like quality Manual J calculations within project reviews, reinforcing this best practice. Alternatively, inspectors should use the occasional projects flagged with issues as learning opportunities. For instance, a project design that would deliver

Mass Save Heat Pump Leaders Network

Mass Save has launched a new Leaders Network within their HPIN. All HPIN contractors are eligible to join the HPLN provided they meet certain criteria as detailed in the HPLN Contractor Guide that can range from having bilingual staff to supporting better customer experiences to having dedicated partnerships with quality insulation installers.

Importantly, the HPLN guidelines contain more robust QA/QC protocols from the participating contractors, with a particular focus on evaluative measures and design guidelines that aim to deliver more consistent and quality equipment sizing and design choices.

In return, HPLN members receive additional recognition on the Mass Save Find-A-Contractor tool, direct access to a program account manager and support specialist from the program, and more.



insufficient dehumidification opens an opportunity to work with the contractor to identify where the sizing process deviated from best practices and to set expectations for future projects.

Implementation of program QA/QC requirements can be time and resource intensive, which often results in a process that prioritizes customer satisfaction and project eligibility reviews, which are important measures of success and compliance for any program. However, a QA/QC program for ASHPs with that more limited focus may miss an opportunity to invest more heavily in robust, effective contractor support, education, and retention.

**BEST
PRACTICE
4**

Provide Continuous Learning and Accountability Through Meaningful Quality Assessment and Quality Control Procedures

One barrier for HPINs to overcome is attracting enough contractors to sign up and participate. Contractors need to see network participation translate to business opportunity. HPINs and program administrators have several tools in their toolbox to help contractors capture market opportunity and make participation worthwhile.

Exclusive Rights to Deliver Consumer Rebates and Financial Incentives

One of the clearest, most frequently employed, and most effective ways to attract contractor participation is to predicate consumer rebates on ASHP projects that are completed by an affiliated trade ally contractor. Contractors that can advertise their ability to leverage energy efficiency program rebates and other financial incentives have an advantage in business development, as consumer decision-making can be heavily influenced by financial bottom-lines, especially for HVAC replacement or retrofit projects that can cost thousands of dollars.

If programs are wary of predicating rebate eligibility on working with a participating contractor, the program and network could instead establish higher incentive amounts or tiers for projects completed by network participants. For example, Rhode Island Energy (RIE) offers an Enhanced Rebate of up to \$1,500/ton for electric baseboard customers that install a high-efficiency heat pump and use a participating contractor from their Heating and Cooling Program Participating Contractor List; however, RIE also offers a Standard Rebate of up to \$625/ton for other customers (gas, electric, oil, or propane users) installing heat pump equipment that does not require the work to be completed by a participating contractor.

Direct Financial Incentives to Contractors for Successful or Specific Job Delivery

To complement consumer financial incentives, programs could establish direct financial incentives to installers for completing quality or specific project types. Programs may elect to provide direct financial incentives to contractors that complete a project in a low-income household or environmental justice communities, or if the project involves multiple electrification interventions. For example, Baltimore Gas and Electric's Home Performance with ENERGY STAR program provides these direct-to-contractor incentives after completion of successful projects to encourage program participation.



Legislation establishing the U.S. Department of Energy's Home Energy Rebate programs also leveraged this approach by providing a direct-to-contractor financial incentive. The federal rebate programs were designed to include between up to \$500 in direct rebates to contractors for each completed project depending on the technology installed and the community in which the project was completed (i.e., increased incentives for projects in disadvantaged, low-income communities).

Exclusive Events and Training Opportunities

HPINs can use their influence in the market to attract unique and exclusive events and training opportunities for contractor participants. Equipment manufacturers, distributors, and product innovators may view the contractor networks as an efficient and effective pathway to release new research findings or product offerings to an audience predisposed to adoption and with an eagerness to learn about the latest trends in their specialty market. These kinds of exclusive trainings and partnerships can be attractive to a contractor that is interested in staying at the forefront of a competitive industry.

Establish and Maintain Clear Communications Channels and Norms

In addition to regular training opportunities and QA/QC touch-points, program administrators and HPIN leaders should establish consistent and regular communication channels regarding program changes, feedback opportunities, learning opportunities, industry news, and more. HPINs can host digital newsletters, virtual calls, in-person feedback sessions, and program briefings to establish and maintain relationships with the participating contractors. Changes to program guidance or requirements can disrupt regular business practices for contractors; however, HPINs that provide transparency, frequent updates, and two-way feedback are more likely to see engagement and uptake by participating contractors. Importantly, the more contractors see their feedback incorporated into HPIN practices or program administration, the more the participants have shared ownership over the success of the program. These commitments to open dialogue and clear, dependable communication practices can create strong community and trust within the HPIN.

Branding, Promotion, and Identification That Sets Contractors Apart From Their Peers

Network branding and recognition can be leveraged in marketing and can make participation in a trade ally network appealing. In a competitive market like the home retrofit industry, third party endorsement from well-known sources (i.e., state and utility programs) can drive business and instill confidence in potential customers. One of the most foundational and important tools used in a network to capture the value of that branding for participating contractors is a user-friendly and easily accessible qualified contractor list.

Baltimore Gas & Electric Contractor Rebates

The Home Performance with Energy Star program from Baltimore Gas & Electric (BGE) offers customers a whole-home energy assessment and access to energy-efficiency incentives. Contractors that are a part of the program receive a \$300 incentive for each home energy audit and assessment performed. These assessments are the first step to unlocking higher heat pump incentives for customers.



General energy efficiency trade ally networks will often provide these searchable directories of participating contractors including a feature to sort and filter participating contractors based on project expertise like insulation and envelope upgrades, electrical upgrades, or HVAC specialties. Within HPINs, program and network administrators could go a step further and create tiers of contractors that could also be filtered by users. These kinds of preferred partner recognitions would not only identify contractors with a verifiable history of high-quality ASHP installations and satisfied customers but could also be established with deeper project review and QA/QC processes to provide customer assurance of project quality, such as the previously discussed Heat Pump Leaders Network in Massachusetts.

New York Clean Heat Contractor Badges

The New York Clean Heat program has established gold, silver, and bronze badges aimed to identify high-performing contractors. The badges appear on the Clean Heat Contractors list. To be eligible, contractors must submit at least three projects during the review period and meet certain point thresholds.

The badge point system scores the percent of project applications successfully processed versus submitted, project QA/QC inspection scores, and percentage of project applications that were flagged with “attention required” during internal review.



BEST PRACTICE 5

Adapt Programs and Networks to Local Conditions but Identify Opportunities to Align Standards Across the Region

Contractors and ASHP installer networks are built to meet program goals and deliver quality energy efficiency interventions that leave customers comfortable, satisfied, and earning a return on their investment thanks to lower utility bills. Successful HPINs will thrive when they hold deep knowledge of unique local market challenges and opportunities as well as an understanding that each ASHP project is different. A 2,400-square-foot single-family home built in 1992 upgrading from a central air conditioner and furnace combination to a ccASHP that covers the entire heating load is a very different project from one that may be just five blocks down the street in a 1950s-era 1,600-square-foot duplex that has window AC units and a fuel oil forced-air furnace and is looking for a dual-fuel heating approach with a new mini-split ASHP. Not to mention, a ccASHP project in central Maryland in climate zone 4 will have different load profiles and humidification considerations than a project in the much colder climate zone 6 region of upstate New York. The ability of a contractor network to meet the needs of the diversity of projects in their community is paramount.

At the same time, program and contractor network fragmentation presents impactful challenges and obstacles in the market. Contractors that work across utility territories—or state lines if they have proper licensing in each state—may have to join multiple contractor networks, follow different rebate processing procedures, attend



different trainings, or utilize different QPLs. These differing program and participation requirements add another layer of complexity to an industry that prides itself on supporting small businesses, which may have less capacity to navigate business development, administration, project work, and customer service plus navigation of energy efficiency and contractor network program requirements.

Contractor networks should work for their local community, but program and network administrators should identify opportunities to align things like contractor training requirements, educational opportunities, QPLs, rebate processing procedures, and other features that reduce administrative burden and barriers to entry for contractors.

Conclusion

HPINs are a critical tool to scale the ASHP market, ensure successful energy efficiency programs, and deliver customer satisfaction and comfort. In the Northeast, where a mix of policy and program goals have combined with ccASHP technology advances, HPINs have an opportunity to help grow local businesses and transform the HVAC market. Traditional energy efficiency trade ally networks embedded in state and utility efficiency programs can and should evolve to ensure the growing heat pump market is supported.

HPINs need careful crafting to help deliver quality household projects thanks to the unique characteristics of ccASHPs, which are often best handled by experienced and skilled installers. These unique features mean that HPINs should be established not just to hit rebate and project install numbers, but to build a space that HVAC contractors proactively seek to join because it will help grow their business, ensure they are up to date on the latest technology trends and equipment sizing, design, and installation best practices, as well as provide ongoing support and feedback.

By incorporating the HPIN best practices identified in this guide, remaining nimble to incorporate emerging heat pump trends and research, and embracing lessons learned from similar networks, program leaders can build a more robust and effective workforce that can help fulfill the opportunity presented by the ASHP market.

ASHP Program and HPIN Cohesion

Through New York Clean Heat and Mass Save, New York and Massachusetts have developed cross-utility incentive structures that have allowed those programs to design and implement a stronger, centralized HPIN within each state that also helps contractors avoid the need to join multiple trade ally networks to serve different parts of the state.

Meanwhile, the New England Heat Pump Accelerator was launched in 2026 and is structured to streamline flexible and stackable ASHP rebates that supplement state and utility incentives across five New England states. This incentive approach in the Accelerator makes it easier for HPIN participants across the five Accelerator states to learn and deploy the incentives.