



ADVANCED WATER HEATING INITIATIVE®

2025 State of the Heat Pump Water Heater Market Report



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Introduction

To describe the state of the heat pump water heater (HPWH) market in 2025, the Advanced Water Heating Initiative (AWHI) might borrow a phrase from Charles Dickens, “It was the best of times, it was the worst of times.”

Topping the list of reasons for optimism in 2025 was the technology itself. Both residential and commercial manufacturers released more new and updated products than any other year in the product’s history. Five new residential manufacturers brought heat pump water heaters to market, and many other established manufacturers brought updated and increasingly innovative products to market. New configurations and form factors also emerged, from flexible voltage (120-volt and 240-volt in the same unit) products, to split systems (where the compressor and tank are separated), to high temperature commercial and industrial HPWHs, to HPWHs with thermal storage. HPWH innovators did breathtaking work in 2025.

The challenges in 2025 revolved around policy setbacks. HPWHs lost their federal tax credits in legislation that was passed in July, and this had a significant effect on HPWH adoption in new construction. Air quality districts saw some momentum shift away from efforts to phase out air pollution from water heaters, and have delayed, weakened, and in some instances voted not to continue with policies that appeared to be a key driver of the technology just one year ago. The Federal government froze funding for clean technology research and cancelled hundreds of projects (though this was recently deemed unlawful). And the fate of a key partner, ENERGY STAR, was in limbo all year which disrupted HPWH marketing and sales tracking efforts.

Yet, despite the significant headwinds experienced in 2025, the HPWH market remains strong and the future remains bright. Some areas with limited adoption of HPWHs to date (the Southeast for example) saw sales accelerate due to effective rebate programs. Consumer and installer awareness continues to increase, manufacturers remain “all in” on this product type, and the Federal Standard for water heating is still expected to drive significant HPWH growth before the end of the decade. This report, created by New Buildings Institute (NBI) on behalf of the Advanced Water Heating Initiative (AWHI), will examine both past and likely future trends that will drive HPWH adoption over the next few crucial years.

HPWH Growth in 2024 & 2025

Comprehensive sales figures for HPWHs have historically been limited and were even more so in 2025. The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) tracks water heater shipment sales but does not separate HPWH sales from electric resistance. The general trend towards electric water heaters (WH) can be seen in AHRI data but not HPWH growth.

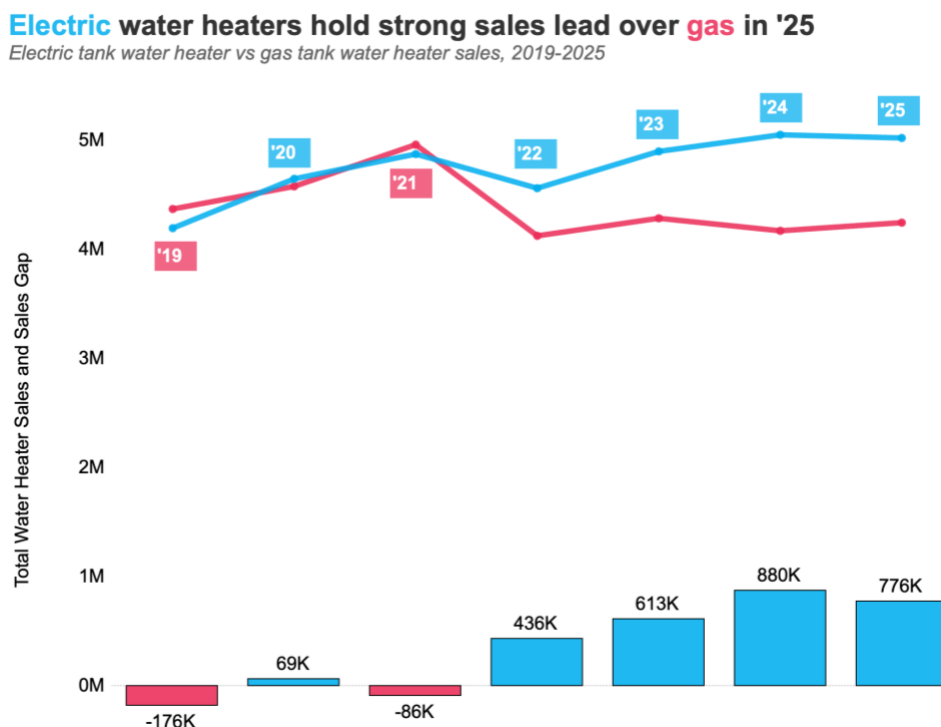
Until 2025, HPWH sales/shipment data was provided by ENERGY STAR. Since virtually every HPWH is ENERGY STAR certified, ENERGY STAR shipments were a good overall indicator of overall HPWH sales. Yet, in 2025, ENERGY STAR saw the vast majority of its staff reduced and reassigned and did not issue a unit shipment report for 2024. AWHI worked with many national partners to try to obtain this data for the industry and public, but to date, efforts have been unsuccessful. AWHI compiled data from national utility rebate programs as a proxy for HPWH growth and shows those figures below.

Electric vs. gas water heater sales

In 2025, [AHRI reported](#) that electric water heater sales declined by .6% over 2024 sales while gas water heater sales increased by 1.8%. Yet, for the fourth year in a row, tanked electric water heaters continued to significantly outsell gas water heaters which had been a rare occurrence in the decades before 2020. And electric water heaters crossed the five-million-unit sales mark for only the second year on record (the last time being 2024).

FIGURE 1: ELECTRIC TANK WATER HEATER VS GAS TANK WATER HEATER SALES, 2019–2025

Source—AHRI. See spreadsheet of sales [here](#).



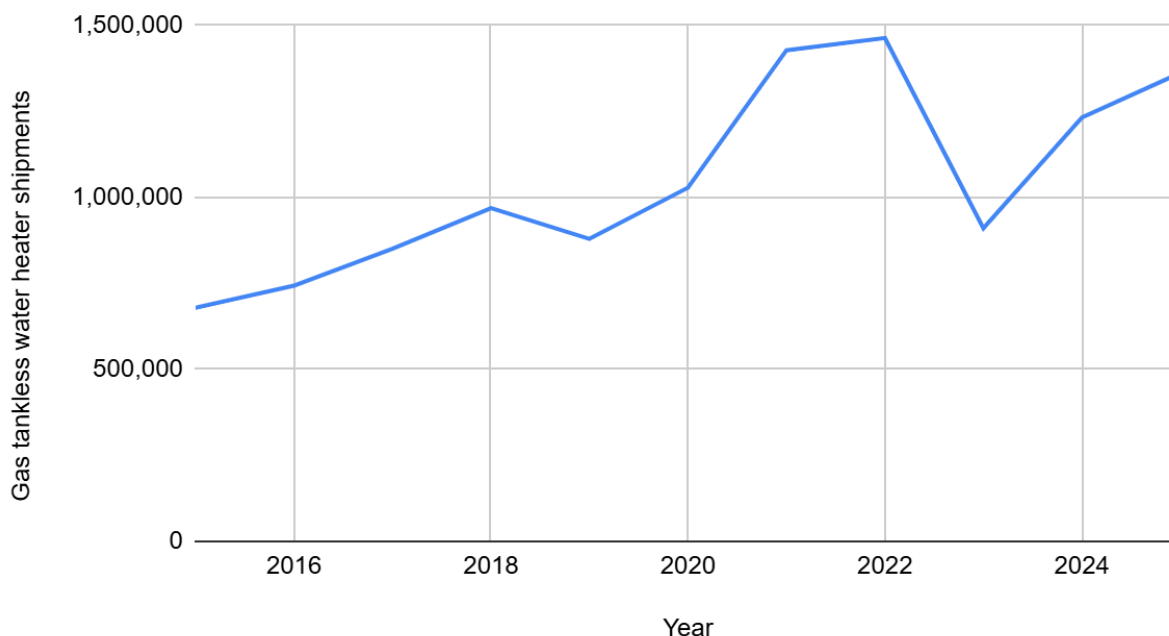
This indicates a likely trend away from fossil fueled water heaters towards electric. If the [National Appliance Energy Conservation Act \(NAECA\) 4](#) water heating standard goes into place as expected in 2029, a significant percentage of electric water heaters could become HPWHs by the end of the decade.

Gas tankless water heater sales

Gas tankless water heater sales are not captured in AHRI data. Using gas tankless imports as a proxy for the market size—U.S. census report data shows significant growth in sales the last decade (from 680,000 in 2015 to 1,360,000 in 2025). Yet imports over the last five years have fluctuated significantly, ending in 2025 below their total in 2021. This period corresponds with the period of market lead for electric resistance over gas storage water heaters and indicates that the decline in gas storage market share is likely not be due to an increase in gas tankless water heaters (as their overall numbers remained level in this period) but rather shows an overall trend toward electric.

FIGURE 2: GAS TANKLESS IMPORTS, 2015–2025

Source: US Census Bureau. See [spreadsheet of sales](#).



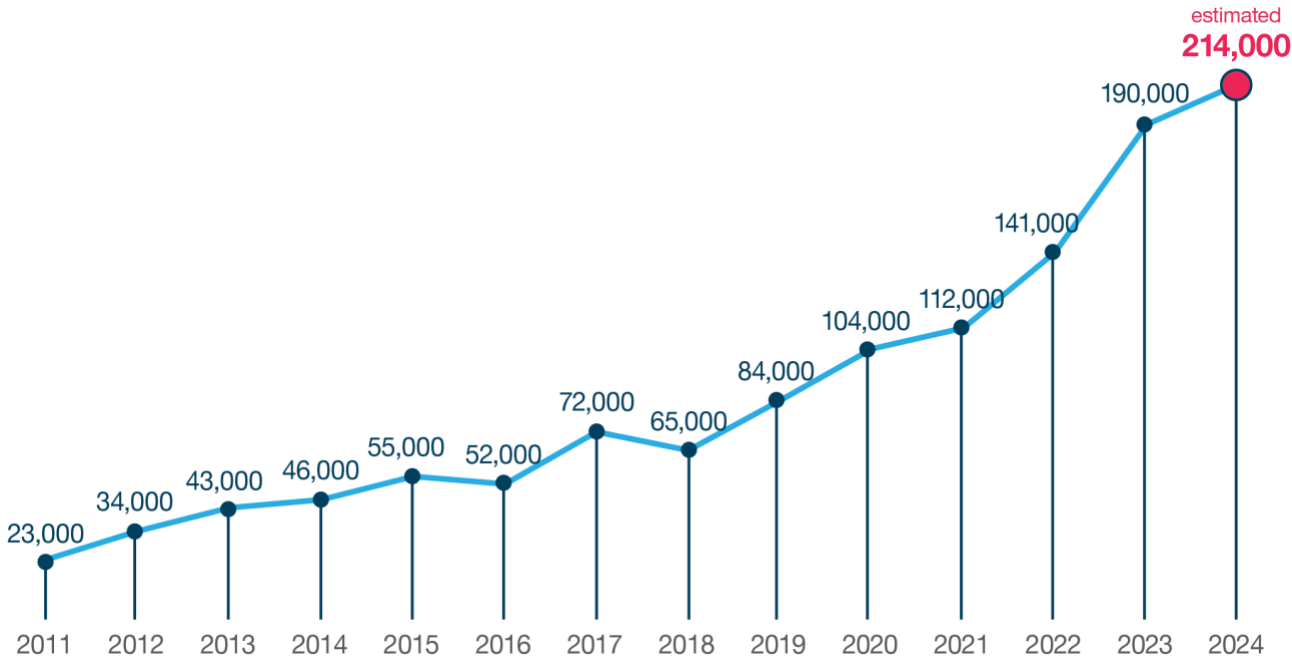
HPWH sales

Due to the lack of the crucial ENERGY STAR unit shipments report, there is no firm data on national HPWH sales from 2024 (overall national sales numbers are normally delayed by 9 months, the time it takes for ENERGY STAR to issue its unit shipment report).

AWHI compiled [available information](#) on sales data across the country for both a granular and overall glance at HPWH sales. While not comprehensive of all available rebate programs or all

sales, this data represents close to half of all HPWH shipments contained in ENERGY STAR shipment numbers. From this data, AWHI observes a 12% HPWH average growth in 2024 which would translate to a sales number of approximately 214,000 nationally. This is just an estimate based on past data sets in the absence of ENERGY STAR shipment data.

FIGURE 3: HPWH SHIPMENTS 2011–2023, 2024 ESTIMATED SHIPMENTS



The top states for HPWHs installs as of 2024 according to these estimates are California (43,000), Washington (22,000) Maine (10,000), Massachusetts (7,500) and Oregon (6,700).

HPWH Market Advancements, Challenges and Trends

Here we analyze HPWH growth in 2025 through the lens of market transformation and the focus areas that make up its three-legged stool—technology, policy, and market.

Technology

As mentioned in the introduction, HPWH technology was the shining star of 2025. The market saw a flurry of new manufacturers and products, along with rapid increases in form factors and HPWH features.

Residential—new manufacturers

In the residential HPWH space, several established and start-up manufacturers released products in 2025. GE, Navien, Cala, Ecological, and Midea brought HPWH products to market for the first time in 2025, increasing the number of HPWH manufacturers to 13 (see residential manufacturers chart below).

Manufacturers already in the market also released innovative updates to their HPWHs. Bradford White, Rheem, and Ariston all released updated versions of their HPWHs. Meanwhile, the remaining manufacturers, Bosch, LG, Rinnai, and A.O. Smith either brought to market new HPWHs or updated models in 2024. The HPWH product category as a whole shows rapid innovation.

Residential HPWH—product innovations

Residential heat pump water heaters saw significant innovation across manufacturers in 2025. The table below lists product innovations that manufacturers brought to HPWHs that year.

TABLE 1: 2025 HPWH PRODUCT INNOVATIONS

Product Innovation	Details and Significance
Top + Side Water Connections	Make it easier to install a HPWH regardless of where existing water piping is located. Many HPWH manufacturers now include these as standard.
Top Venting	Less clearance needed when placing HPWHs against a wall.
Over 4.0 UEF Efficiency	Increased rated efficiency, now 4X more efficient than a standard electric water heater.
Improved Repairability	Increasing the ability for installers to troubleshoot and repair a HPWH in the field rather than having to swap for a new unit.
Variable Speed Compressors	Allow for quieter, more efficient operation even in lower ambient temperatures.
Quieter Operation	Virtually all HPWH manufacturers are now below 50 dB with many at or below 45.

Product Innovation	Details and Significance
New Lower Global Warming Potential (GWP) Refrigerants	R1234YF was used in a HPWH for the first time (GWP of 0.5). Lower GWP refrigerants mean less global warming impact from the release of refrigerants.
Paired Recirculation Pump	This feature appeared for the first time in 2025 and allows HPWHs to communicate closely with recirculation pumps to intelligently operate on-demand and reduce recirculation losses.
Stainless Steel Tank	Stainless steel tanks can reduce tank corrosion and extend the life of a HPWH.
Improved Ducting	Improved ability to duct HPWHs when necessary, along with configurations that remove the need to purchase proprietary ducting kits.
HPWH with Predictive Controls	HPWHs with predictive controls emerged that could potentially learn consumer behavior and integrate solar energy and time of use pricing.

Two particular innovations stand out due to their significant potential for increasing heat pump water heater adoption.

Split HPWHs—The split heat pump water heater was a key form factor in 2025. Split HPWHs are systems where the compressor is outside the building, and the thermal storage is inside. Sometimes the connection between the inside and outside is a refrigeration circuit and sometimes it is hydronic. Eco2 Systems has been selling their SANCO2 split heat pump water heaters in the U.S. for over a decade, but in 2025 more manufacturers came to market with a variety of tank sizes to try to meet challenging replacement scenarios such as multifamily buildings and manufactured housing. The manufacturer Ecological brought a split heat pump water heater to market with quick connect refrigerant lines, an outdoor compressor, and a tall, skinny tank. The manufacturer A. O. Smith announced at AWHI's 2025 HPWH Day that it is bringing to market a CO2 based split heat pump water heater in early 2026 that will have a variety of tank sizes. Other manufacturers are producing split heat pump water heaters, and the Northwest Energy Efficiency Alliance (NEEA) will award a hot water innovation prize for a competitively priced split heat pump water heater in 2026. AWHI will be conducting the first comprehensive, in-depth field studies on this new generation of split HPWHs in multi-family buildings and manufactured housing beginning in 2026. See [AWHI's session on split HPWHs](#) on HPWH Day for a deeper dive on this important technology.



Flexible voltage HPWHs—The emergence of flexible voltage (120V + 240V) heat pump water heaters builds on and expands upon impact from plug-in 120-volt HPWHs, which have been in the market since 2022. In April 2025, the TECH program reported in California that 21% of rebated HPWHs were 120-volt and that these plug-in water heaters lowered installation cost by 22%. In 2025, the first flexible voltage HPWH came to market: the GE Geospring. This water heater can be plugged into a standard 120-volt outlet and later can be converted to 240-volt power if a household decides that they want to use the included electric resistance elements for faster recovery during high usage times. Many believe that this flexible voltage HPWH will make gas replacements, which have been a challenge, significantly easier. AWHI will lead the first flexible voltage field study in the nation in 2026 to understand better the potential of this technology.



Images from AWHI's first installation of a flexible voltage HPWH in February 2026.

List of current HPWHs in market

Below is a table of the current residential heat pump water heaters in market.

TABLE 2: 240-VOLT UNITARY HPWH MANUFACTURERS I

				
Manufacturer	A.O. Smith	Ariston	Bosch	Bradford White
Model	Voltex	Nuos	Greentronic	Aerotherm
UEF	4.02	4.01	4	4.2
Voltage	120/240	240	240	240
Tank Sizes	50, 66, 80	40, 50, 65, 80	50, 65, 80	50, 65, 80
FHR	65–95	66–87	72–92	65–88
kWh/year (80 gallon model)	1306	1238	1240	1240
Sound dBA	45	49.1	49	49

TABLE 3: 240-VOLT UNITARY HPWH MANUFACTURERS II

				
Manufacturer	Cala	GE	LG	Midea
Model	Cala	Geospring	Inverter	Combo
UEF	3.76	4.5	3.9	4
Voltage	240	120/240	240	240
Tank Sizes	65	40, 50, 65, 80	58, 72	50, 65, 80
FHR	78	46–101	76–94	69–91
kWh/year (80 gallon model)		1102	1272	1240
Sound dBA	48	41	45	49.5

TABLE 4: 240-VOLT UNITARY HPWH MANUFACTURERS III



Manufacturer	Navien	Rheem	Rinnai	Steibel Eltron
Model	NWP500	Proterra	REHP Series	Accelera
UEF	4.05	4.07	4	3.6
Voltage	240	120/240	240	240
Tank Sizes	50, 65, 80	40, 50, 65, 80	50, 65, 80	58, 80
FHR	65–85	46–87	73–91	50–74
kWh/year (80 gallon model)	1265	1224	1225	1289
Sound dBA	45	45	49	52

TABLE 5: 240-VOLT UNITARY HPWH MANUFACTURERS IV



Manufacturer	Vaughn
Model	MK II
UEF	3.5
Voltage	240
Tank Sizes	50, 65, 80, 119
FHR	58–115
kWh/year (80 gallon model)	1375
Sound dBA	54

TABLE 6: SPLIT HPWHS



Manufacturer	SANCO2	Eco-Logical	A.O. Smith	Smart Solar
Model	SANCO2	Omni	Vortex X	SSG2 ES
UEF	3.66, 3.80, 3.72	3.3, 4.23, 4.11	3.55, 3.70, 3.80	2.52, 2.71, 2.85
Voltage	230	110–120 (120), 208–240 (240)	HP - 208/240V Tank - 120V	120
Tank Sizes	43, 83, 119	50 (120), 50 (240), 80	50, 66, 80	65, 80, 120
FHR	69, 121, 134	50 (120), 57 (240), 82 (240)	70, 82, 95	46, 55, 83
kWh/year	1313	681 (50–120), 769 (50–240), 1206 (80–240)	1306 (80 gallon)	893, 1192, 1741
Sound dBA	37	49	40	48

TABLE 7: AIR TO WATER COMBI HEAT PUMPS I



Manufacturer	SpacePak	Chiltrix	Enertech	Harvest Thermal
Model	Solstice R32 CC32-18	CX35, CX50	Advantage AV030, AV060	Harvest Open
Type	Monobloc	Monobloc	Monobloc	Monobloc
COP	5.01–4.04	4.90, 4.62	AV030-5.12 (@47°F) AV060-4.83 (@ 17°F)	5.5
Refrigerant	R32	R410A (CX34), R32 (CX50)		R744CO2
Tank Sizes	35 gallons, 70 gallons	35 gallons, 70 gallons		83 gallons, 119gallons
Space Heating	✓	✓	✓	✓
Space Cooling	✓	✓	✓	✓
Hot Water	✓	✓	✓	✓

TABLE 8: AIR TO WATER COMBI HEAT PUMPS II



Manufacturer	Daikin	Mitsubishi	LG	Arctic Heat Pumps
Model	Altherma 3 H HT	Ecodan	KPHTC411M	Arctic HPWH
Type	Split	Split	Monobloc	Standalone
Refrigerant	R32	R32	R32	R134A
Tank Sizes	40 gallons, 50 gallons, 60 gallons	60 gallons, 85 gallons		50 gallons, 80 gallons
Space Heating	✓	✓	✓	✓
Space Cooling	✓	✓	✓	✓
Hot Water	✓	✓	✓	✓

Commercial HPWH—new products

Like residential HPWHs, commercial HPWHs (CHPWH) technology saw significant innovation in 2025. From new manufacturers of central HPWHs, to new products, to new storage configurations, design and technology made rapid advancements.

Small commercial heat pump water heaters

The market for CHPWHs is expanding from a base in the multifamily sector to include commercial kitchens and other small commercial applications. AWHI is conducting the first field study of installations using 120-gallon unitary products such as the A. O. Smith CHP120 as well as smaller split systems from Eco2 and A. O. Smith. This field study is monitoring the performance of units in California, Texas, Washington, and Oregon. Preliminary results were discussed in a [CleanTechnica article](#) in April 2026; full results will be published in late 2026.



Parallel stratified storage tanks

Manufacturers and system providers continue to optimize thermal storage tanks and piping configurations. This includes guidelines from several manufacturers including Laars with its E-Therm heat pump shifting from in-series storage tanks to using parallel tanks with reverse-return piping for better thermal stratification.

Demand flexibility and load shifting

Manufacturers and system providers of commercial systems are beginning to follow the shift in residential products to respond to market demand for load shifting by integrating CTA2045 communications capabilities and logic for load-up and shed periods of operation. Examples of products integrating load shift controls include the Laars E-Therm, Mitsubishi HEAT2O, and the WaterDrop from Small Planet Supply.

Unpressurized storage

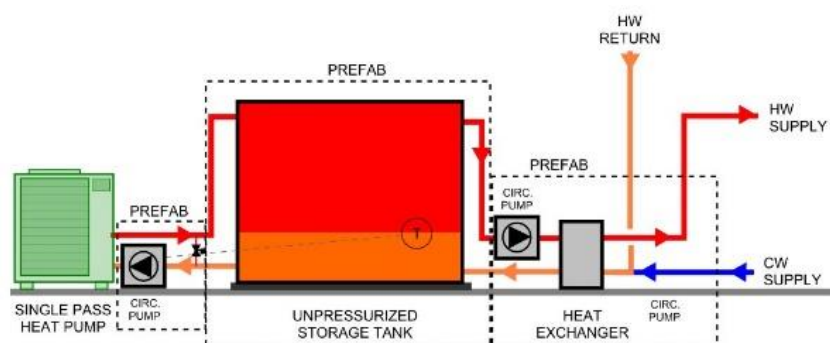


Image courtesy of Ecotope

Several system providers are experimenting with the use of unpressurized thermal storage rather than pressurized potable water storage. This offers several potential advantages including reduced cost, smaller footprint, ease of installation, freeze protection, low pressure

operation of heat pumps, and improved legionella control. There is a current CalNEXT study evaluating performance of a Nyle heat pump with an unpressurized skid package from HTEC.

High temperature HPWH

Innovations in the design of heat pump refrigerant circuits and handling are enabling higher temperature water delivery. This includes the Flow ANSWR product which can deliver water temperatures above 180°F.

Low GWP refrigerants

Most manufacturers are developing new products and transitioning existing products to use low GWP refrigerants. This includes synthetic refrigerants such as 454B and 513B (e.g. Colmac and Nyle), as well as CO2 (744) (e.g. Laars, Mitsubishi, Transom) and Propane (R290). Many manufacturers offer R290 monoblock HPWHs in Europe and Asia, but those products are not yet allowed in the U.S. in most jurisdictions.

Phase change materials

Products are emerging that integrate phase change materials other than water for primary thermal storage. This allows for smaller footprints and freeze protection. This includes the partnership between Nyle and HTEC to produce the fully prepackaged Pyroclast/Medusa product.

Dual fuel systems

A retrofit CHPWH installation (part of NBI's MAGIC HPWHs project) at a Chicago affordable multifamily building found that using a tankless gas water heater as a backup for Central HPWHs was able to save approximately \$100,000 in electrical infrastructure upgrades, which would have been required with electric resistance backup. This would have been a prohibitive cost for this project. More research is needed in retrofit CHPWH systems which allow existing gas systems to provide backup power.

List of central HPWHs

Here is a table of Central HPWHs currently on the U.S. Market.

TABLE 9: CENTRAL HEAT PUMPS I

				
Manufacturer	Colmac	Colmac	Intellihot	Intellihot
Series	WaterHeat	WaterHeat	Electron	Electron
Model	CxA	CxV*	iE1*	iE6
Nominal Capacity (kBtu/h)	104, 136, 200, 238, 271	63, 120	90	300
Min. Dwelling Units	50	20	40	125
Ambient Design Temp.	23°F	10°F	-10°F	-10°F
Refrigerant	R513a	R410A, R454B	CO2 (R744)	CO2 (R744)
Refrigerant GWP	631	2088, 466	1	1
CTA-2045 Port	Yes	Yes	Yes	Yes

TABLE 10: CENTRAL HEAT PUMPS II

				
Manufacturer	Lync	Lochinvar	Mestek/Transom	Mitsubishi
Series	Aegis	Veritus	Simcoe	QAHV
Model	A (250, 350, 500)	AHP (60, 140, 200, 280, 350)*	CWV (350, 700)*	QAHV-N560YA-HPB
Nominal Capacity (kBtu/h)	210, 329, 494	60, 140, 200, 280, 350	320, 640	136
Min. Dwelling Units	75	20	125	50
Ambient Design Temp.	-4°F	23°F	0°F	-13°F
Refrigerant	CO2 (R744)	R513a	CO2 (R744)	CO2 (R744)
Refrigerant GWP	1	631	1	1
CTA-2045 Port	No	No	Pending	No

TABLE 11: CENTRAL HEAT PUMPS III



Manufacturer	Nyle	Nyle	ECO2 Systems	Laars
Series	C-Series	E-Series	SANCO2	E-Therm
Model	C (90A, 185A, 250A)	E360*	GS3-45HPA-US-SP	E-Therm*
Nominal Capacity (kBtu/h)	111, 225, 272	360	15	322
Min. Dwelling Units	50	150	10	125
Ambient Design Temp.	3°5F	10°F	-25°F	0°F
Refrigerant	R134a	R513a	CO2 (R744)	CO2 (R744)
Refrigerant GWP	1430	631	1	1
CTA-2045 Port	No	Yes	Yes	Yes

TABLE 12: CENTRAL HEAT PUMPS IV



Manufacturer	A. O. Smith	Rheem	Nyle / HTEC
Series	Emerge-x	Commercial Air-to-Water Heat Pump (HPHD)	Pyroclast / Medusa
Model	AHPA-60, -140, -200, -280, and -350	HPHD-60/-135	Pyroclast / Medusa
Nominal Capacity (kBtu/h)	67, 136, 203, 273, 339	60, 135	105
Min. Dwelling Units			
Ambient Design Temp.		40F	35F
Refrigerant	R513a	R134a	R513a
Refrigerant GWP	631	1,430	631
CTA-2045 Port	No	No	No

Policy

Policy rollbacks following the 2025 federal administration change created the most significant obstacles to HPWH adoption. While there were still bright spots such as new, innovative, and successful rebate programs, many HPWH policy drivers were impacted by a reduced focus on energy efficiency.

Federal—NAECA 4 standard in place

In 2024, the Department of Energy (DOE) finalized new efficiency standards for water heaters that, starting in 2029, will effectively require electric tank water heaters over 35 gallons to be HPWHs. This standard will likely drive HPWH sales into the millions (up from 190,000 in 2023). Updates on the standard are summarized in the paragraphs below.

In April 2025, Congress passed a Congressional Review Act resolution to undo new standards for gas tankless water heaters, but this does not affect the standards for electric or gas tank water heaters. In May, DOE published 17 proposals to repeal efficiency standards for a range of products, which did not include water heaters. DOE received comments opposing the rollbacks from a wide range of stakeholders including affected manufacturers, and eight months later DOE has still not finalized these rollback proposals. Comments from efficiency advocates outlined how the proposed rollbacks would raise costs for consumers, increase energy waste, and undermine manufacturer investments, in addition to being unlawful. Advocates are watching for any additional proposed rollbacks. For more information on these items listen to the [AWHI All Stakeholders Working Group call](#) from June 2025.

In early November, the U.S. Court of Appeals for the DC Circuit upheld recently updated standards for commercial gas water heaters, which were challenged by gas utility trade associations. The gas industry subsequently filed a petition for review with the Supreme Court. For more information see [AWHI's All Stakeholder Meeting from December 2025](#).

Federal tax credits for HPWHs ended in 2025

HPWHs lost their federal tax credits earlier than expected at the end of 2025, the result of the U.S. federal statute passed by the 119th United States Congress containing tax and spending policies and signed into law on July 4, 2025.

With the passage of the Inflation Reduction Act in 2022, which was designed to last for approximately 10 years, HPWHs were eligible for the Energy Efficient Home Improvement Credit (25C). This saved homeowners 30% of installation costs, up to \$2,000 starting in 2023. Homebuilders were also incentivized, with Section § 45L, to install HPWHs to earn credits towards the ENERGY STAR (\$2,500) and Zero Energy Ready Homes (\$5,000) tax credits. These tax credits inspired homebuilders such as Clayton Homes [to begin to install tens of thousands of HPWHs](#) in new homes every year, however this changed when the incentive program ended.

While the removal of HPWH tax credits will have an unknown effect on most consumers (tax credits are a significantly deferred incentive which may have less influence on consumer

decision making), they had an immediate and negative impact on HPWHs being installed in new construction. Home builders such as Clayton, announced that they would no longer install HPWHs as a standard option in their new homes as a result of the lost tax credit depriving the market of tens of thousands of sales annually.

States—Delay of All Electric Buildings Act in New York

New York State passed the All-Electric Buildings Act in 2023, which was to be the first state in the nation to prohibit new gas hookups starting on January 1, 2026. It's likely that this law would have significantly boosted HPWH adoption in the 50,000+ new residential homes and apartment units built annually in the state. In November 2025, New York State decided to delay implementation of this law while it is being litigated at the U.S. Court of Appeals.

Low GWP refrigerant requirements in New York

On January 1, 2026, New York began prohibiting installation of heat pump systems using refrigerants with a global warming potential (GWP) > 700. The traditional HPWH refrigerant R410 A is thus no longer allowed in New York State. On January 1, 2027, new residential HPWHs will need ultra-low GWP refrigerants (<10 GWP) to comply with new regulations. This will be the first state to require low GWP refrigerants from HPWHs and will likely cause the market to move towards lower GWP refrigerants in general.

Building Codes

2024 and 2027 IECC

The 2024 IECC (International Energy Conservation Code) encourages heat pump water heaters through the performance and prescriptive pathways, but work should continue to “debias” the performance pathway and fully capture the efficiency gains over gas service water heating systems. The 2024 IECC has a set of flexible requirements for commercial and residential prescriptive pathways. Using a “credit” or point-based system, the code allows builders to pick and choose the best set of options. For instance, a project team might elect to increase wall insulation to achieve extra points and then be allowed to install windows that may be minimally energy-efficient but have important design features to meet another priority of the client. The 2024 IECC credit system encourages heat pump water heaters for commercial and residential projects by allowing extra credits to be captured for higher efficiency water heater models. In most climate zones and building types—especially in apartments, houses, hotels—heat pump water heaters offer a greater number of credits than fossil fuel alternatives. Proposals being considered for the 2027 IECC may weaken credits for HPWH credits in cold and mixed climates.

Washington State

The 2021 Washington State Energy Code (WSEC) became subject to a series of legal disputes which resulted in changes finalized in 2024. The initial version of the 2021 WSEC required heat pumps for space cooling and heating and service water heating, with limited exceptions. This led to a natural gas industry-funded initiative which ended up on the November 2024 voter ballot as Initiative-2066, and it passed by a narrow margin. I-2066 specifically targeted WSEC and bans any law, regulation, ordinance, or act that “prohibit, penalize, or discourage” the use of

natural gas. The broad nature of the term “discourage” is concerning, but it is not unique to Washington; it is identical to language which has passed across the country. A counter lawsuit ruled that I-2066 was unconstitutional, and as of September 2025, the case, *Climate Solutions v. Washington State*, is awaiting hearing in the State Supreme Court. So far, little has been resolved since the challenges began in 2021. With this legal uncertainty, in 2024, Washington State’s Building Code Council (WSBCC) decided to revise the code and remove the heat pump requirement. All fuel types are now allowed, rolling back to the 2018 WSEC requirements on the installable service water heating systems allowed.

However, the WSBCC did ensure the 2024-revised version of the 2021 WSEC now includes an even more stringent credit system, and heat pump water heaters are incentivized through these credits for both commercial and residential projects. HPWHs are especially incentivized in residential provisions. Gas-fired heat HPWHs can provide 1.5-2.0 credits and all-electric models can provide 2.0-2.5 credits. This is a large number of credits and significantly incentivizes HPWHs, especially in larger homes. Depending on the square footage of the house, 5.0 to 9.0 WSEC credits are required. The WSEC also relies on NEEA’s Advanced Water Heating Specifications for minimum efficiencies.

Seattle

Seattle has become a leader in HPWH mandatory requirements. In November of 2024, the city adopted their latest version of the energy code, which limits the use of fossil fuel burning furnaces and requires HPWHs with limited exceptions for commercial buildings. The code states that hot water service shall be provided by an electric air- or ground-source HPWH system. NEEA’s AWHs 8.0 is referenced as a pathway for limited exceptions, and solar thermal is also allowed in some cases.

The residential energy code in Seattle encourages/requires HPWHs, with few exceptions, and a credit system similar to that in the IECC allows projects to achieve multiple points if HPWHs are installed for service water heating. Following the Washington State Code, the Seattle Code requires more credits the larger the home gets, which benefits HPWHs in two ways. For small projects, such as Accessory Dwelling Units or homes under 1,500 sf, fewer credits must be achieved and HPWHs can provide 40% of the credits needed. For larger projects, such as low-rise multifamily or homes over 5,000 sf, additional credits are required, and so capturing those credits offered by HPWHs becomes an attractive, cost-effective way to gain the extra credits needed for those larger energy consumers.

California

Under California’s Title 24 Building Energy Efficiency Standards, the 2022 code effectively made heat pump water heaters (HPWHs) the prescriptive baseline for new residential construction. In many climate zones, gas-fired water heaters cannot meet energy targets without additional efficiency trade-offs, making HPWHs the simplest compliance pathway. The code also required new homes and multifamily buildings with gas or propane systems to be “electric-ready,” including dedicated space and electrical capacity for a future HPWH, reducing retrofit costs and barriers over time.

The 2025 Title 24 update strengthens this direction by establishing single-fuel baselines for both space and water heating, with heat pumps as the prescriptive standard in many cases. The 2025 update also specifies requirements for backup electric resistance heat as well as vented doors and ductwork for space-constrained HPWH installation locations. While the venting and ductwork measures add requirements, they ultimately allow more flexibility in installation locations, and this means HPWHs can be installed in tighter spaces and may increase uptake in smaller, space-constrained dwelling units. As of 2025, Title 24 nonresidential provisions now also require HPWHs for schools under four stories and 25,000 sf in some climate zones. Together, these provisions position HPWHs as the default technology for meeting California's building energy requirements and will accelerate their adoption in new construction starting in 2026.

Air quality districts

2025 saw both challenges and progress in limiting air pollution from combustion water heaters.

Bay Area Air District

The Bay Area Air District (BAAD) adopted an air quality regulation in 2023 that required newly installed gas water heaters under 75,000 Btu/hr to emit zero nitrogen oxides (NOx) starting in 2027, with the regulation taking effect for larger equipment up to 2 million Btu/hr in 2031. Along with the corresponding rule on furnaces, these rules would avoid \$890 million dollars annually in health impacts and 85 premature deaths [according to the district](#).

In October 2025, staff at BAAD issued a concept paper outlining potential exemptions and flexibility for the 2027 compliance date. They proposed to remove the zero-NOx requirement for water heaters under 35 gallons since there are currently no HPWHs that size. They also proposed a process for self-certified exemptions for income-qualified customers—and homes or businesses with difficult installation scenarios, such as hydronic heating or homes with electrical and space constraints. BAAD is currently working out the limits of available exemptions, the nuances of the self-certification process, and the low-income thresholds, but these exemptions will likely lead to fewer HPWH installations early on than envisioned in the original 2023 rulemaking. For more information, please see the BAAD presentation at the [AWHI Residential Working Group meeting from January 2026](#).

South Coast Air Quality Management District (SCAQMD)

In June of 2025, the SCAQMD Board voted 7–5 to delay a rule that would have reduced NOx emissions from residential gas tank water heaters. This came after staff at the district had proposed an altered version of the rule where manufacturers would have been encouraged rather than required to sell zero-NOx producing equipment, through the use of zero NOx equipment sales targets and mitigation fees. The district is currently investigating whether public comments opposing this rule [were largely crafted by AI](#). This rule is due to come back to committee in late 2026.

The vote also came after the board adopted a regulation in 2024 to drive installation of zero-NOx tankless and commercial gas water heaters. This rule began to take effect in January 2026 for some equipment categories in new buildings, with cascading compliance dates continuing

through 2033. For more information, please see the [AWHI Commercial Working Group meeting from September 2025](#).

California Air Resources Board (CARB)

In December 2025, CARB shifted its zero-emission water heating rulemaking back into a more active mode, presenting a new rule concept that focuses on manufacturer sales limits on emissive equipment beginning in ~2030. The rulemaking is expected to be active through 2026.

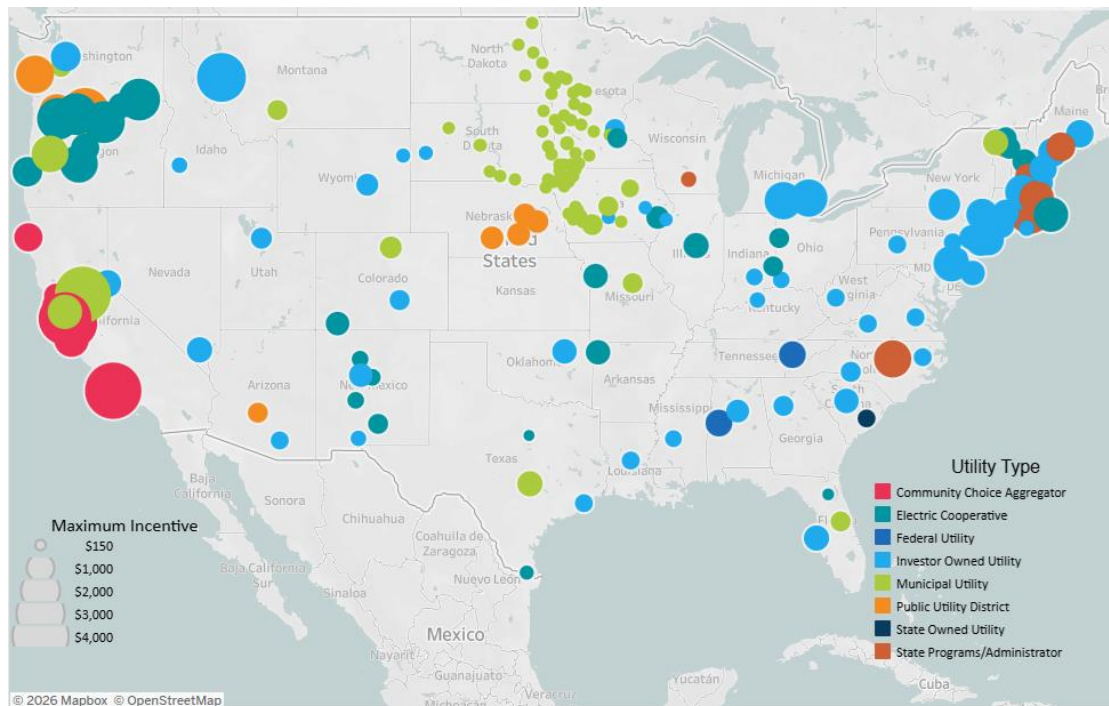
Incentives—continued growth

HPWH incentives remain a bright area driving HPWH adoption. Incentives continue to remain robust; many utilities and energy offices now offer incentives nationally and rebated HPWHs continue to grow year over year in most jurisdictions. AWHI profiled some of the top HPWH incentives in a [CleanTechnica article in November 2025](#).



AWHI also created a utility incentives tracker that shows 150 different HPWH incentives (current as of February 2026) across the United States.

FIGURE 4: UTILITY HPWH INCENTIVE MAP (FEB 2025–FEB 2026)



Access the incentive tracker here: [Unlocking Savings: Utility HPWH Incentives Map](#)

Note: Data collection period is from February 2025–February 2026. This map reflects most of the HPWH incentive programs across US (not all), some of which may have changed or been discontinued.

Market

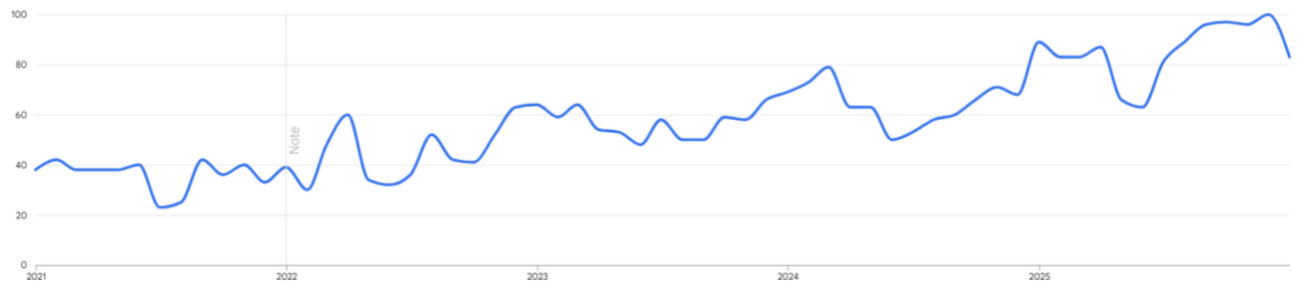
Consumer and installer familiarity with HPWHs are key to successful market transformation. The data points are scarce on HPWH familiarity with only a couple of regions, predominantly on the West Coast, tracking awareness over time. The data we do have shows that HPWHs are becoming more familiar to the general public, but we still have a long way to go.

Heat pump water heater awareness according to Google search trends

Heat pump water heater awareness continues to grow nationally according to Google Search trends. Rather than cyclical interest in the technology as seen for searches of electric or gas water heaters, HPWHs show a steady upward trend in searches in the United States over the past five years, with 2025 showing the highest levels in the product’s history. This is a partial picture of the situation because other terms are sometimes used to describe the same products (for example, hybrid water heaters).

FIGURE 5: CONSUMER INTEREST OVER TIME

HPWH searches over the past five years show steady increase in consumer interest. Table compiled in February 2026 from [Google Trends search](#) of “Heat Pump Water Heaters”



HPWH awareness by region

Northwest

The Northwest Energy Efficiency Alliance has seen a steady increase in consumer awareness for HPWHs. HPWHs had virtually zero consumer awareness before 2010 and as of 2024, 47% of consumers were aware of HPWHs and they had grown to have a 19% market share of electric water heaters.

FIGURE 6: MARKET SHARE OF HPWHs IN THE NORTHWEST

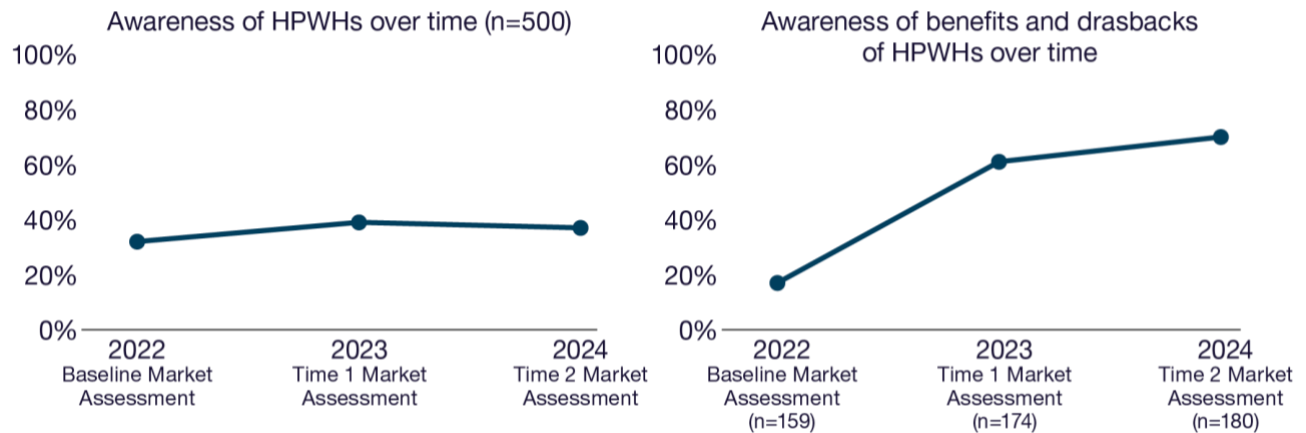
As a percentage of total electric water heater sales (NEEA MPER 8)

Year	Pre-2012	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market Share	0%	1%	2%	3%	4%	5%	9%	8%	10%	11.6%	14.6%	17.2%	17.5%	18.7%

California

The California TECH program has surveyed California consumers about HPWHs since 2022. Their most recent survey from 2024 shows that 37% of consumers in the Golden State are familiar with HPWHs, a slight increase from 2022, but well below customer awareness of heat pumps for HVAC (60%). Those who were “very familiar” with HPWHs increased substantially, and homeowners who could name the benefits of HPWHs also grew.

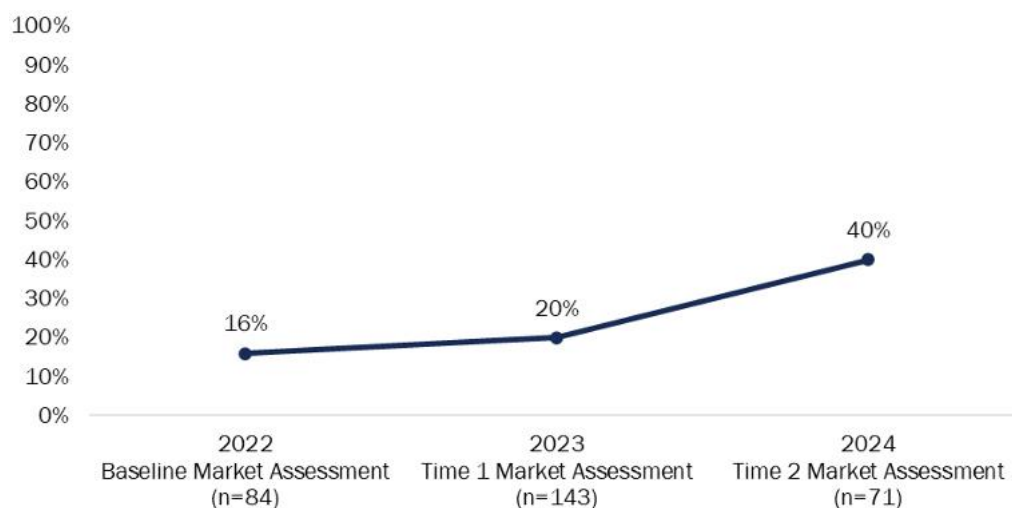
FIGURE 7: HOMEOWNER AWARENESS OF HPWHs INCREASED SINCE 2022



Contractor familiarity also increased in California. Of all water-heating installations completed by surveyed contractors in the year prior to the survey, 40% were HPWHs (among those for whom at least 50% of their water-heating business came from installation jobs).

FIGURE 8: AVERAGE PERCENTAGE OF INSTALLATION JOBS THAT WERE HPWHs OVER TIME

Source: https://www.calmac.org/publications/TECH_Time_2_Market_Assessment_Final.pdf



AWHI market awareness efforts

AWHI leads market awareness efforts for HPWHs by hosting and publishing some of the leading content nationally with the goal of raising industry, contractor, and consumer awareness. From working group meetings to webinars, from articles in national publications to AWHI newsletters, to our premier event HPWH Day. The table below shows some of the HPWH awareness raising efforts by AWHI in 2025.

TABLE 13: AWHI MARKET AWARENESS EFFORTS

Awareness Effort	Outcomes
Working Group Meetings	60+ working group meetings had 3000+ attendees and thousands of recording views.
HPWH Articles in National Media	14 articles in CleanTechnica and six in PHCProPros over 250,000 estimated reads.
Newsletters	AWHI grew its mailing list by 30% to over 7,000 subscribers and sent out 22 newsletters with 160,000+ reads.
Webinars	AWHI hosted 19 webinars with over 2500 attendees and thousands of recording views in 2025.
HPWH Day	Over 1,100 attendees across the week including a live installer training event with over 130 installers in San Jose, CA.
Website and Video Recordings	AWHI had over 20,000 website visits in 2025 and 21,000 recording views on YouTube.

Conclusion

Heat Pump Water Heaters saw significant innovation and growth in both installations and consumer awareness in 2025. This accomplishment is significant, especially considering the policy headwinds that energy efficient technologies faced last year.

2026 looks like a continuation of trends from 2025, where innovative heat pump technology accelerates, more manufacturers enter the market, and growth continues. This positive momentum will be key to preparing the market for the rapid adoption of this key energy efficiency technology predicted by the end of the decade.

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The Advanced Water Heating Initiative (AWHI)[®] is working to realize the significant energy savings potential of heat pump water heaters. We are a member-funded collaborative of building owners, utilities, federal agencies, state and local governments, manufacturers, engineers, installers, advocates, researchers, and building industry professionals from across the U.S.

Learn more at newbuildings.org and advancedwaterheatinginitiative.org.

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