



## ***ELECTRIC HYBRID AND EFFICIENT GAS WATER HEATERS: A DUAL-FUEL APPROACH TO MARKET TRANSFORMATION***

For decades, the alliance has built lasting relationships across the supply chain to drive the adoption of efficient water heating technology. These efforts continue to transform the electric water-heating market in the Northwest—compared to a national average of 1.1%, electric hybrid water heaters, also known as heat pump water heaters, account for 10% of all electric water heaters sold in the region.

Through its work with manufacturers, utilities and market partners, the alliance is recognized as a national leader in water-heating Market Transformation. In 2020, the alliance worked with water heating manufacturers to introduce the first Tier 4 water heater to the market - the highest level of efficiency currently available – based on the alliance’s Advanced Water Heating Specification (AWHS). The AWHS provides guidance to manufacturers for developing products that provide high levels of consumer satisfaction and energy performance. And most recently, the Environmental Protection Agency (EPA) released its latest version of the Residential Water Heaters Specification Version 4.0. The updated specification, which goes into effect January 2022, brings greater alignment between ENERGY STAR® and NEEA’s AWHS.

Now, building on the relationships and lessons learned at the forefront of electric hybrid technology, the alliance is opening the door for gas heat pump water heaters to enter the market with considerable momentum.

### **CREATIVE SOLUTIONS TO UNEXPECTED CIRCUMSTANCES**

The innovation and flexibility of the alliance’s electric hybrid and gas heat pump water heater programs helped both teams successfully pivot amid the unknowns of the COVID-19 pandemic. Nimble adapting to changing market demands and the decline of in-person opportunities, the programs shifted their approach to continue elevating water-heating efficiency in the Northwest and beyond.

The **electric hybrid water heater program** seized the opportunity during stay-at-home orders to drive deeper engagement with installers by developing tactical advice and posting marketing and engagement tips for alliance installer partners. These tools were designed to guide professionals through the shifting consumer landscape and promote adoption of electric hybrid water heaters in support of Market Transformation. In addition, the alliance offered an incentive to installers who completed advanced online electric hybrid installation training, published an electric hybrid landing page and blog posts on their website, and executed social media campaigns promoting the technology by a specific date. And, the alliance pivoted from in-person to online trainings in tandem with these incentives to make good use of installer downtime while deepening their skills and understanding of electric hybrid water heaters. This period allowed installers to commit more time and attention to understanding the program’s business case and the many benefits of electric hybrid technology.

“When the economy shut down, it allowed us to engage with the market when they were in a position to be more receptive to our message,” said Jeff Mitchell, Senior Manager of Products at NEEA. “The world got quiet, but we were still talking.”

This engagement motivated more Northwest installers than ever to promote the technology when stay-at-home orders subsided, helping the alliance exceed its 2020 goals despite the unlikely odds. Further 2020 accomplishments of the alliance's electric hybrid water heater program include:

- Welcomed the first Tier 4 water heater into the market, the most efficient product available.
- Joined forces with California utilities to influence manufacturers to build 120v and 40-gallon products. The development of these products helps serve more Northwest customers by accommodating previously hard-to-install situations.
- Helped achieve a Washington state requirement that all water heaters must be CTA-2045 enabled. This requirement connects an otherwise disconnected device, allowing utilities to shift water heater loads, reduce peak load and integrate renewable energy.

Meanwhile, the **efficient gas water heater program** also quickly pivoted to continue its efforts to debut a gas heat pump product and ready the North American market. Despite the pandemic delaying a planned field demonstration, the efficient gas water heater team helped sustain the commitment and motivation of a nascent collaborative of 12 utilities across North America serving more than 38 million energy consumers. The alliance has played a leadership role in this collaborative, chairing or participating on all committees and attending the frequent and multimodal virtual meetings with VP- and director-level staff among the gas utilities across all parts and climate zones of North America.

This level of broad collaboration gives the product a quantifiable and significant market footprint, motivating manufacturers to commit resources to developing and evolving the technology.

“Avista’s involvement in the field demonstration and North American collaborative are in large part due to the alliance and their efforts to increase adoption of gas heat pump water heaters. It would have been a much larger risk and cost if we had tried to take on some of these activities on our own. The strength of scale makes the collaborative’s work highly beneficial for us.”

Carlos Limón, DSM Energy Engineer, Avista

Empowered by the experience of the electric hybrid water heater team, the efficient gas water heater team understood that typical interventions would not be enough to achieve the aggressive adoption goals of the collaborative. With this in mind, the team built a task force of collaborative members who used design-thinking (a solution-based and human-centric approach to problem-solving) to develop creative, outside-the-box Market Transformation strategies. These new approaches, including streamlining product delivery models and alternative financing solutions, will ensure rapid and broad product adoption.

Thanks to the relationships, experience and knowledge gained over decades of electric hybrid water Market Transformation efforts, gas heat pump water heaters are primed for a swift market adoption. “With electric heat pump water heaters, we learned that we can’t rely solely on post-launch market interventions,” said Limón. “That’s why we’ll need a sustained level of investment and engagement with the supply chain, funders and collaborative sponsors to drive demand for gas heat pump water heaters even before they hit the market.”

## TOGETHER *We Are Transforming the Northwest*

