Paving the Path to Lower Costs and Higher Gas Efficiency for Northwest Consumers

Despite historically low prices for natural gas, study after study has shown that large, cost-effective natural gas savings are still available across multiple sectors and markets.\(^1\) To capture energy savings in the water heating market, the alliance is investigating gas heat pump water heaters (GHPWHs)—a highly promising technology that represents an enormous energy savings opportunity for the region and the first significant jump in residential gas water heating efficiency in several decades.

In initial tests, some co-funded by the alliance, GHPWHs have demonstrated an exponential efficiency improvement opportunity, with results showing up to 50 percent savings on residential gas storage water heating. This increase in efficiency has the potential to save the region more than 100 million Therms annually and cut water-heating costs in half for natural gas customers in the Northwest.

But, in a market that has seen little innovation in recent years, enacting transformation in the gas water-heating space comes with a host of barriers. These barriers include limited market awareness of and demand for efficient gas water heaters, lack of a commercialized product, and installation challenges. Fortunately, the alliance has a number of lessons learned and market relationships—both local and national—to leverage from many years of electric heat pump water heater (HPWH) market transformation efforts.

Among these lessons learned is the importance of creating national alignment and support for emerging energy-efficient technologies. As it has done for electric HPWHs, the alliance is using its data and experience bringing efficient products to market to present a strong business case to manufacturers for GHPWHs to help them understand how the product can be a profitable venture for them.

“The alliance’s national partnerships increase the voice of the Northwest. This allows us to bring the best, most cost-effective and efficient products to Northwest consumers.”

- Aaron Winer, Senior Program Manager, NEEA

---

Northwest-Calibrated Technology Through National Alignment

To further these efforts, the GHPWH initiative is working with the Gas Technology Institute (GTI) and utilities across the country to implement a North American utility field test in 2020. The goal of the field test is to validate that GHPWHs perform well and deliver energy savings in every climate, including the Northwest, so that the product will be far more likely to be adopted in markets across the country. This widespread adoption will lead to more manufacturer production, lower costs for Northwest customers and a highly-efficient technology suited for all Northwest climate zones.

“NEEA’s active engagement and leadership have been instrumental in building the collaboration and coordination required to prepare the North American market, including the Northwest, for this exciting product.”

- Ryan Kerr, Senior Manager, Emerging Technologies, GTI