The alliance identified gas heat pump water heaters (GHPWHs) in 2015 as an emerging opportunity for natural gas energy savings in the region. At the time, a commercialized product seemed like a distant goal. Nevertheless, NEEA saw an opportunity to both speed up product development and ready the market for this new technology. From 2015-2019, the alliance collaborated with national and international partners to fast-track product development and prepare the market to support this new product. In that time, GHPWHs have gone from lab testing to field trials to a large scale North American demonstration project, which kicked off in 2020.

**PARTNERING FOR PRODUCT DEVELOPMENT**

To speed up product development in a market that doesn’t yet exist, the alliance collaborated with a consortium of like-minded partners, including the research and development organization GTI. “NEEA plays a crucial role acting as the bridge between participating manufacturers, technology developers and utilities,” said Ryan Kerr, Senior Manager of Emerging Technologies, GTI. “They know which levers we need to pull to efficiently develop, commercialize and deploy GHPWHs.”

Rinnai, North America’s leading manufacturer of tankless water heaters, is another key partner. NEEA staff worked closely with Rinnai to support its development of what will be the world’s first commercialized GHPWH product, anticipated to launch in 2022. As a participant in the North American field demonstration project, Rinnai will provide up to 100 of its pre-commercialized GHPWH units for installation and monitoring.

“Energy efficiency is part of our DNA,” says Raymond VanAssche, Rinnai Vice President of Innovation. “Our vision is being able to rapidly identify, develop and commercialize high performance solutions that meet our customer’s needs. Working with NEEA expedites the entire product development process and ensures that we have a much higher chance of success.”
I’ve been in the innovation space for a while. What usually ends up happening is that you get a lot of activity, interest and financial support upfront, but as commercialization begins, all the activity stops. This field demonstration will help raise awareness with customers, build trust in this product and provide a pulling effect by generating interest prior to commercialization.”

—Raymond VanAssche, VP of Innovation, Rinnai

In 2020, the alliance and its partners — including GTI, Rinnai and up to 12 utilities across North America that serve more than 38 million energy consumers — will kick off one of the largest field demonstration projects in NEEA’s history. Demonstration results will provide real-world data on performance, savings, costs, and installation best practices and position Northwest utilities to more quickly and affordably develop programs once the product is commercially available. By supporting adoption across the U.S., the demonstration project will lead to broader acceptance of GHPWHs and encourage more manufacturers to enter the market. Increased competition and product availability will ultimately lower costs for Northwest consumers.

Bringing a mass market gas heat pump water heater to North America and promoting wide-scale adoption is a significant challenge that will require the region’s holistic approach to market transformation. Although the alliance is relatively new to natural gas market transformation, NEEA will leverage its two decades of experience in electric market transformation to help facilitate the rapid commercialization and adoption of GHPWH technology.

Together We Are Transforming the Northwest