



Success Story: Ductless Heat Pumps

Ductless Technology Transforms Residential HVAC Efficiency in the Northwest

When a 2010 pilot study determined the viability of ductless heating and cooling systems (also known as ductless heat pumps or ductless mini-splits) in displacing electric resistance heat, the alliance launched the NW Ductless Heat Pump Project to accelerate Market Transformation for the technology. By the end of 2021, the Project and participating utilities had paved the way for more than 150,000 target market installations* across the Northwest. To get there, they used a range of market interventions, including working with upstream and midstream supply chain partners, promoting and supporting the effective installation of ductless systems in existing homes, supporting programs offered by Northwest utility stakeholders, and building consumer and market awareness.

Demonstrating the Project's efficacy, approximately 70% of the 150,000 ductless system installations received rebates from 108 participating Northwest utilities. And even beyond the continued advancement of ductless systems, the Project developed relationships and sharpened strategies to build a foundation for Market Transformation work across the residential HVAC market.

Small Businesses Play a Big Role in Market Transformation

From the beginning, the Project approached the market with a flexibility to market conditions and partner needs. Central to this approach, the Project supported manufacturer training programs with technical materials, guidance and delivery to help local businesses deliver energy-efficient services to local communities, including helping them

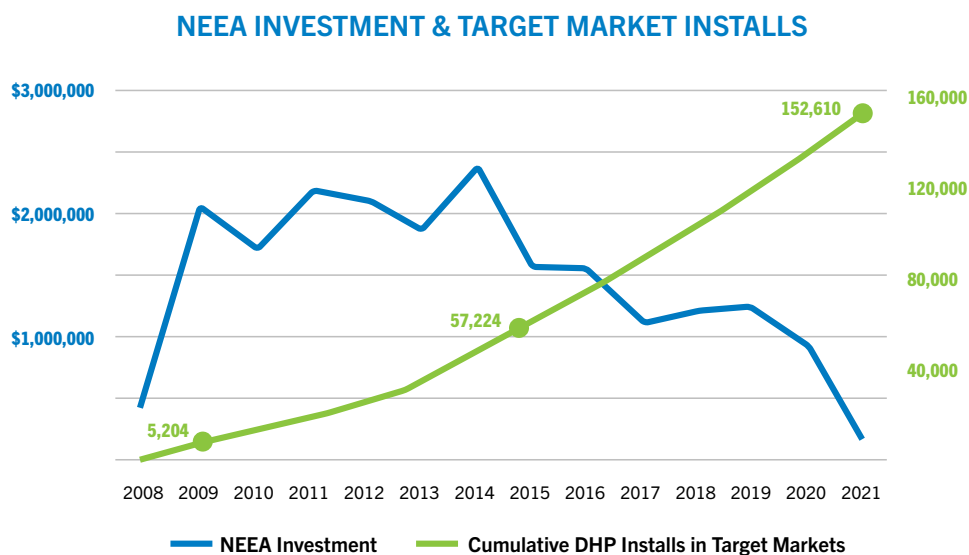


properly size and design ductless systems to work efficiently and effectively in all climates. This built-in flexibility and responsiveness helped the Project establish a new ductless-ready market that opened revenue streams for hundreds of small businesses and individuals across the region. And with a lasting foothold in the Northwest, ductless systems are now more available than ever to provide comfortable heating and cooling to a wide variety of consumers.

The Next Phase of Market Transformation

- Ensuring market adoption continues to grow by tracking target market progress, particularly in colder areas of the region.
- Continuing to access ductless system and other HVAC sales data through supply chain partnerships.
- Advancing an improved test procedure and rating system for residential heat pumps to ensure clear and accurate differentiation among ductless products.
- Maintaining strong supply chain relationships to engage with new products and monitor market dynamics.
- Performing market scanning and research on new products, applications and trends.
- Informing the creation of new residential HVAC programs.

An Ongoing Legacy of Residential HVAC Market Transformation



The alliance’s flexible and responsive approach has permanently transformed the market for ductless systems in the Northwest. In a 2021 survey, 96% of HVAC installation companies in the Northwest reported installing ductless systems. These installers also reported they “always” or “often” recommend a ductless system when applicable.



Before 2010, ductless systems had low awareness and Northwest supply chain actors weren't often carrying, recommending or installing them. By the end of 2021, the alliance's Market Transformation efforts had influenced more than 150,000 installations.



From 2008–2021, the alliance generated 22.5 aMW in co-created through Market Transformation interventions including training, promoting and supporting the effective installation of ductless systems in existing homes, supporting programs offered by Northwest utility stakeholders, and building consumer and market awareness.



The alliance worked flexibly and responsively with upstream and midstream supply chain partners to accelerate adoption in the Northwest. Now, more than 1,300 HVAC companies have been certified by the Project.



With 96% of HVAC companies in the Northwest installing ductless systems, the market is now ductless ready, providing an economic boost to local businesses and efficient, comfortable heating and cooling to homeowners across the Northwest.

Find out more about this and other NEEA Market Transformation programs at [neea.org/market-transformation-portfolio](https://www.neea.org/market-transformation-portfolio).