## **NEEA's Heat Pump Water Heater** Market Transformation



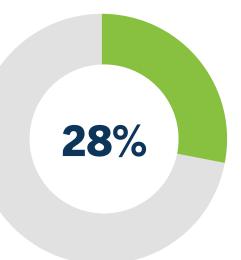
#### **NORTHWEST MARKET SHARE: 0%** PRE-2012 Supports manufacturers to invest in HPWH products. **NORTHWEST MARKET SHARE: 2%** • First ENERGY STAR<sup>®</sup> labeling, Northern Climate Specification (NCS) 2013-2014 and Qualified Product List (QPL). NEEA provides data and comments NEEA launches to U.S. DOE standards resulting in Program in market **October 2013** new requirements for large tanks. **NORTHWEST MARKET SHARE: 1%** 2012 • Retailer pilot results in 1,200% increase in HPWH sales. • Tier 2 product introduced in market: +29% energy savings. Launch of consumer information resource, smartwaterheat.org.

 Regional Technical Forum established Unit Energy Savings (UES) for use by utility programs.

# *Explore the significant milestones and achievements of NEEA's journey to Heat Pump Water Heater Market Transformation.*

### **NORTHWEST MARKET SHARE: 5%** 2016

- NEEA expands national collaboration.
- NCS evolves into Advanced Water Heater Specification (AWHS) 6.0.
- NEEA helps additional manufacturer enter the market, securing HPWH products with top national water heater manufacturers.



Awareness

### **NORTHWEST MARKET SHARE: 8%** 2018

 Washington state includes HPWH in 2018 residential new construction code.

**NORTHWEST MARKET SHARE: 4%** 

2015

- Tier 3 products introduced.
- Enhanced customer performance specifications for noise and exhaust-air management.
- Federal standards requiring HPWH for large tanks take effect.  $\square$



#### **NORTHWEST MARKET SHARE: 9%** 2017

- Program strategy expanded to include both consumer and installer education.
- Added distributor interventions.



**30-50%** Ir

#### **NORTHWEST MARKET SHARE: 12%** 2020

• Tier 4 products introduced.

• The program faces COVID-19 challenges.



**NORTHWEST MARKET SHARE: 10%** 

2019

- Program focus shifts to distributors and installers education.
- AWHS 7.0 includes optional grid connectivity.
- NEEA Comments on ENERGY STAR v5.



40-57% Insta

#### **NORTHWEST MARKET SHARE: 15%** 2021

- National Advanced Water Heater Initiative (AWHI) launched with NEEA as an active participant.
- NEEA runs "Boring But Efficient" consumer awareness campaign.



### **NORTHWEST MARKET SHARE: 17%**+ 2022

- U.S. DOE releases Technical Support Document showing HPWHs are cost-effective for national market.
- post-campaign awareness.
- consideration in the rulemaking process.



• NEEA provides Northwest-specific data to U.S. DOE.

- NEEA runs consumer-awareness campaign focused on rural regions, resulting in 20% increase in
- NEEA participates in a joint recommendation to U.S. DOE, along with manufacturers and energy efficiency organizations, proposing efficiency levels for



#### **NORTHWEST MARKET SHARE: 18%** 2024

• U.S. DOE elevates the federal water-heating standard, which they estimate will achieve 17.6 quadrillion BTUs of full-fuel-cycle energy savings over the next 30 years.



#### **NORTHWEST MARKET SHARE: 18%**

2023

- U.S. DOE cites the Advanced Water Heating Specification in federal rulemaking as a de-facto industry standard.
- U.S. DOE issues Notice of Proposed Rulemaking evaluating proposed amended energy conservation standards for consumer water heaters.



## 2029

•U.S. DOE estimates the federal water-heating standard will take effect in 2029.