



Market Progress in the Northwest

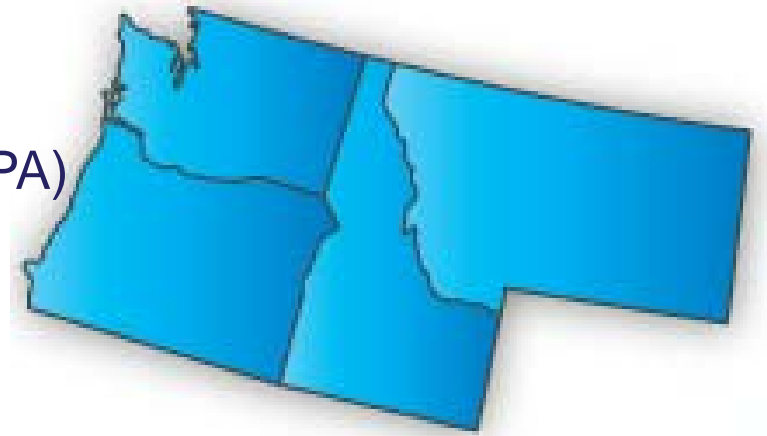
NORTHWEST ENERGY EFFICIENCY ALLIANCE

Presentation Overview

- NEEA Overview
- Northwest Opportunity
- Our Market Approach
 - Successes and Barriers
 - Messaging research and MPER
- Future focus

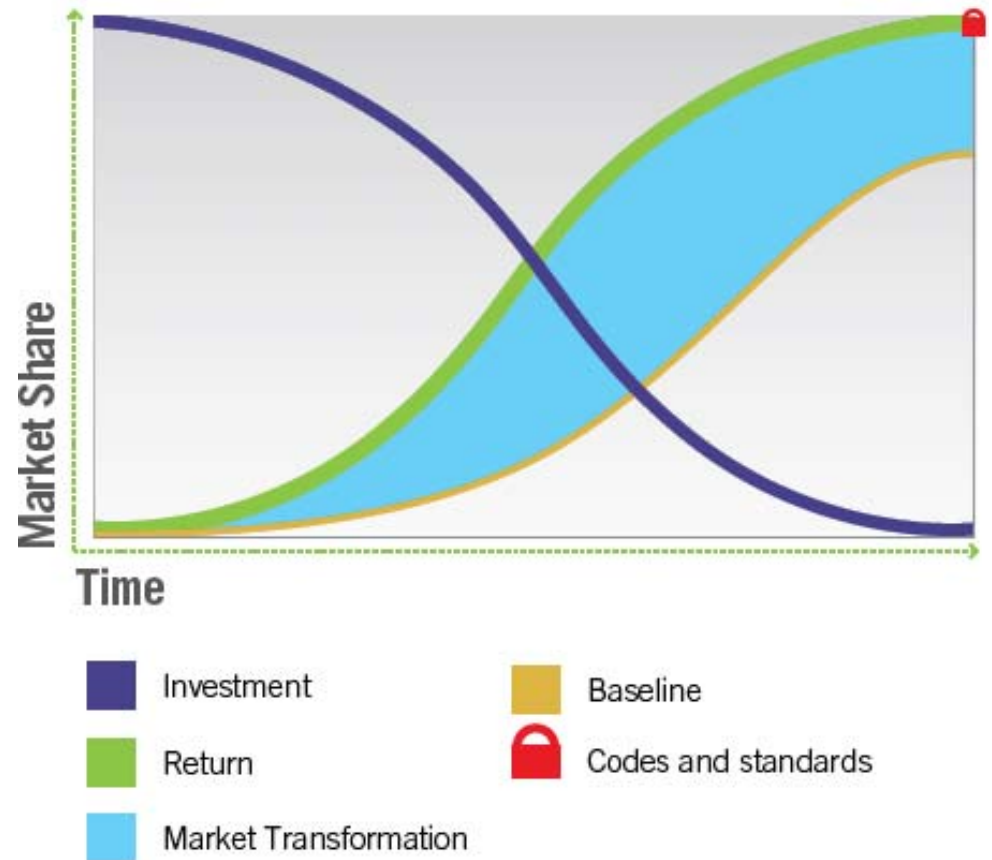
Northwest Energy Efficiency Alliance (NEEA)

- Nonprofit organization using **market transformation** to maximize energy efficiency and meet future energy needs
- Funded by:
 - Bonneville Power Administration (BPA)
 - Energy Trust of Oregon
 - More than 100 Northwest utilities
- Covers Idaho, Montana, Oregon and Washington
- Energy efficiency is now the region's third largest power resource



NEEA's Market Transformation Approach

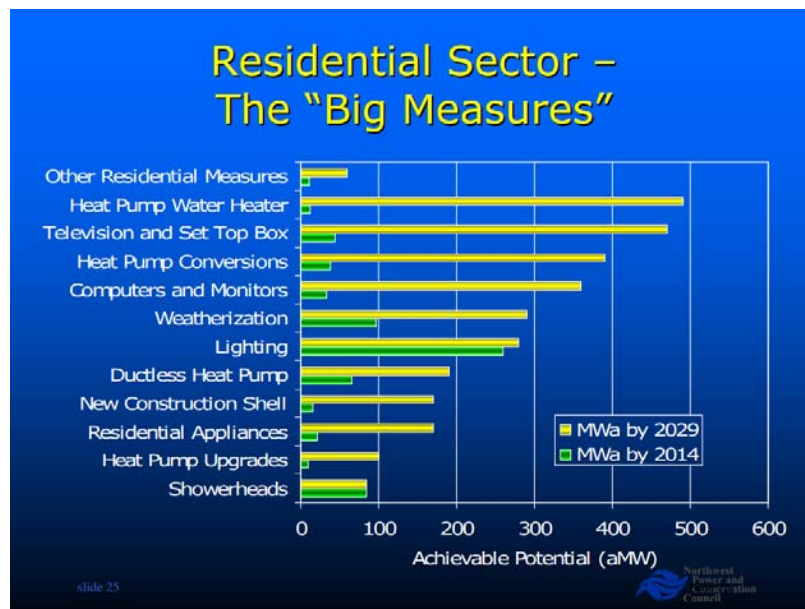
1. Identify market barriers
2. Assess opportunities and leverage points
3. Develop and implement market interventions
4. Evaluate and adopt initiatives



Why Heat Pump Water Heaters?

Prime choice for market transformation

- **64%** of NW homes have electric water heaters
- **6.3%** of existing homes replace their water heater yearly
- **Largest energy saving** measure for the NW residential portfolio



Hot Water Solutions Initiative

Goals and Objectives

- Influence Federal Standards by 2025 to require HPWH-level water heating efficiency
- Ready the market for HPWH technology by:
 - Reducing HPWH cost-related barriers
 - Advancing product to meet the needs of colder climates
 - Promoting retail stocking and sales associate education
 - Developing trained and engaged contractor network
 - Supporting utility HPWH rebate programs
 - Assisting in consumer education and product positioning



RELIABLE HOT WATER, RELIABLE SAVINGS

Heat pump water heaters offer the same hot water for less
Heat pump water heaters provide so much more than reliable hot water. With a heat pump water heater, you'll get:

- ✓ **EFFICIENCY**
Reduce water-heating energy consumption by up to 50%* compared to standard electric water heaters
- ✓ **COST SAVINGS**
Save up to 10% on your household electric bill
- ✓ **INCENTIVES & TAX CREDITS**
Collect up to \$1,985 by combining utility incentives with state tax credits
- ✓ **CONTROL**
Dial in efficiency and find the setting that best meets your hot water needs

*Based on findings from the NW Regional Technical Forum and the U.S. Department of Energy



"OUR WATER HEATS MUCH FASTER, AND WE'VE SEEN SAVINGS ON OUR ELECTRIC BILL."
— Michelle, Beaverton, Ore.

HOT WATER SOLUTIONS

Hot Water Solutions Initiative

Current Activities

- Manufacturer promotions
- Utility support
- Supply chain engagement
- Marketing support

Successes to date:

- Influenced over 7,600 HPWH sales to date
 - Majority of these sales have been planned replacements
- Supported 43 utilities with rebate programs
- Trained 499 contractor companies
- Recent study shows 93% customer satisfaction with the technology

Recent Findings

NEEA Consumer Messaging Research:

- Key consumer barriers include
 - Upfront cost
 - Lack of product familiarity and confidence
 - Ease of installation
- Most consumers plan to replace their water heater when it breaks
- The most motivating HPWH messages were reported to be:
 - Saving money on energy bills
 - Saving energy
 - Durability of equipment

The infographic compares two water heaters side-by-side. On the left is a 'STANDARD ELECTRIC WATER HEATER' and on the right is a 'HEAT PUMP WATER HEATER'. Both are depicted as tall, cylindrical units. The standard heater is white with a dark blue base, while the heat pump heater is white with a dark blue top section. Below each heater is a list of features with checkboxes. The standard heater has three checked boxes: 'Heats Water', 'Built To Last', and 'High Quality', and one unchecked box: 'Uses Up To 50% Less Energy'. The heat pump heater has four checked boxes: 'Heats Water', 'Built To Last', 'High Quality', and 'Uses Up To 50% Less Energy'. At the bottom, a text box states: 'JUST BECAUSE THEY LOOK THE SAME DOESN'T MEAN THEY WORK THE SAME. That's because heat pump water heaters work much more efficiently than their standard electric counterparts. And that means you can save up to 50% on your monthly electric water heating costs for years to come.'

Feature	Standard Electric Water Heater	Heat Pump Water Heater
Heats Water	✓	✓
Built To Last	✓	✓
High Quality	✓	✓
Uses Up To 50% Less Energy	✗	✓

JUST BECAUSE THEY LOOK THE SAME DOESN'T MEAN THEY WORK THE SAME.
That's because heat pump water heaters work much more efficiently than their standard electric counterparts. And that means you can save up to 50% on your monthly electric water heating costs for years to come.

Recent Findings

Market Progress Evaluation Report key findings:

- Most HPWH sales to-date were planned purchases, not emergency replacement situations
- Current HPWH purchasers are comprised of households with higher incomes and education levels than the general population
- Installers do not stock HPWHs and it takes longer for HPWHs to be installed than electric resistance water heaters (from the time of purchase to install)
- The new construction market may be a large opportunity
- Installs to date have yielded a high rate of consumer satisfaction
- Consumers are aware but not familiar with the product category and greater education is needed

What is Next?

- Continue influencing planned replacements through product markdowns and marketing campaigns
- Begin influencing emergency replacements (since this comprises 61% of the market) by:
 - Continuing to overcome cost barriers
 - Increasing consumer awareness and familiarity with the technology
 - Increasing installer and retail sales associate education and buy-in
- Explore opportunities in the new construction market
- Influence the general population (beyond early adopters) to purchase HPWH technology