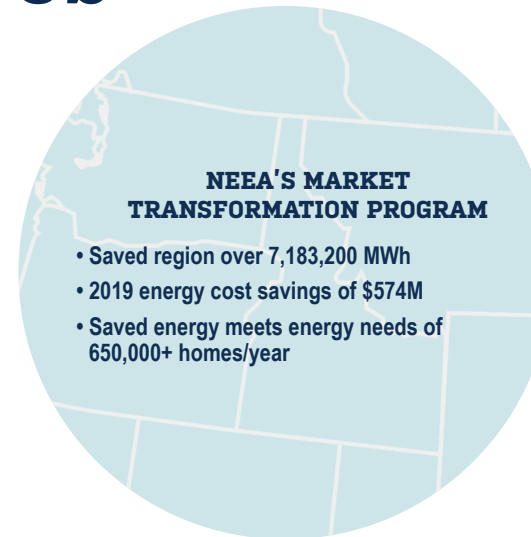


NEEA'S Efficient Technology Initiatives

Since it was established in 1996, the Northwest Energy Efficiency Alliance (NEEA) has been delivering cost-effective energy savings through market transformation initiatives in collaboration with utilities throughout Oregon, Washington, Idaho, and Montana. Through this work, NEEA has developed productive and supportive working relationships with product manufacturers, distributors, and installation contractors, and have brought new technology, products, and services to utility customers in the Northwest. Below highlight a few of NEEA's successful programs and results.



COMPLETED INITIATIVES

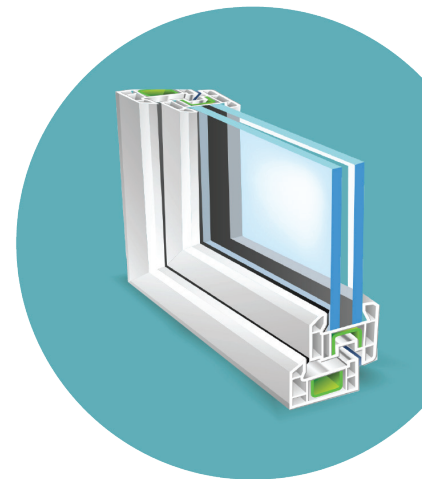
High Efficiency Windows

In 1997, market share for energy efficient windows stood at 13%. With very little information known about the product, demand was low. Seeing an opportunity to increase market share for efficient windows, NEEA worked with manufacturers to find simple ways to qualify their products and create an affordable manufacturing processes to help reduce the cost barriers.

Market Transformation Impact

To increase product awareness, NEEA worked with manufacturers on tailored marketing programs. Targeting key manufacturers early created healthy competition and attracted more companies to enter the market. Product training at both large and independent stores led to more than 300 retailers participating within the same year. As a result, builders were able to buy more efficient windows off the shelf, increasing sales and reducing overall unit cost.

Window technology continues to improve. NEEA is currently working with the supply chain to accelerate the availability of more affordable, high-performance insulating window products, such as Thin Triple windows. This creates opportunity for innovation and job growth for window manufacturers, including companies based in Minnesota. NEEA has been working with manufacturers to advance this product and will work on accelerating adoption in the coming years.



Outcomes

- **147,168 MWh** in energy savings annually
- **\$11,773,440** in savings on energy bills annually

Energy Efficient TVs

In 2009, the transition to digital broadcasting made most televisions obsolete. At the same time, flat panel display technology was rapidly advancing, and prices were dropping — but most of these televisions were very inefficient and expensive to operate. Sensing that these trends could have a serious impact on the power system, NEEA sought to develop a program to influence the efficiency of products in this market.

Market Transformation Impact

Northwest utilities, NEEA, and ENERGY STAR worked to create customer awareness and remove market barriers through new standards and incentive programs for retailers. Manufacturers readily adopted the new ENERGY STAR specifications, which 90% of televisions sold now meet.



Outcomes

- **374,052 MWh** in energy savings annually
- **\$29,924,160** in savings on consumer energy bills annually

INITIATIVES IN PROGRESS

Heat Pump Water Heaters (HPWHs)

- HPWHs are 75% more efficient than conventional electric water heaters. NEEA worked with manufacturers to advance this technology to serve colder northern climates by developing product specification and incentives to commercialize products that met the specifications. Four of the largest water heater manufacturers now produce and sell advanced and highly efficient HPWH products.
- Results: HPWH market share has grown from less than 1% to 9%, with over 50,000 HPWHs installed in the region.

Ductless Mini-Split Heat Pumps

- Ductless heat pumps can cut heating costs in half for homes with electric resistance heat. This technology was not readily available in the North American market until NEEA began working with manufacturers, distributors, installers, and utilities to bring it to the U.S. market and accelerate adoption.
- Since this initiative began, there have been 80,000 mini-split installations in the Northwest.

Efficient Rooftop Units (RTUs)

- RTUs are commonly used in commercial application due to their low cost and combined heating and cooling capabilities. However, there has been very little product advancement to make them more efficient.
- NEEA is creating measures to differentiate efficient products from others on the market. As well as developing a product specification to spur advancement in the high-efficiency RTUs to ensure that all new products sold and installed are more efficient and cost less to operate.

Questions? Contact Jamie Fitzke
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