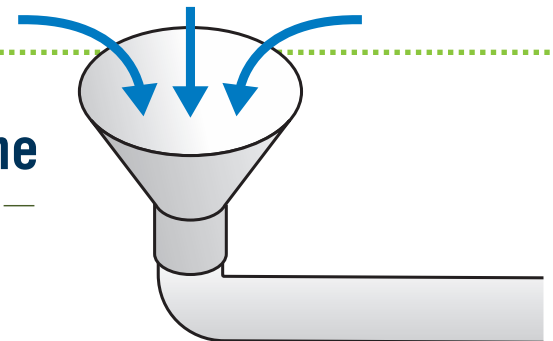


From 1997 through 2011, NEEA and the region have accumulated 707 average megawatts (aMW) total regional energy savings, which is enough electricity to power the cities of Boise, Portland and Seattle each year. NEEA’s goal is to work with the region to deliver an additional 200 aMW from 2010 to 2014, saving enough electricity to power an additional 152,000 homes each year.

## NEEA Fills the Energy Efficiency Pipeline

NEEA scans the market constantly for new sources of energy efficiency — championing innovation and driving emerging technologies.



### Bringing Heat Pump Water Heaters to Market

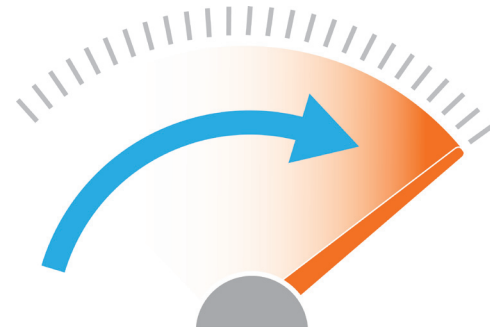
Filling the energy efficiency ‘pipeline’ with emerging technologies is critical to the region’s future. Heat pump water heaters (HPWHs) have the potential to save the region nearly 500 aMW by 2029, the equivalent to powering 381,500 homes each year. In order to achieve this potential, HPWHs need to be market-ready and reliable for the Northwest climate. NEEA’s Emerging Technology group makes recommendations, offers product testing and ultimately helps guide HPWH manufacturers successfully to market by meeting specification for energy efficient products. In 2010, AirGenerate modified its product to meet NEEA’s recommendations and delivered units to installers in the Northwest.

In 2011, NEEA and its partners helped draft and publish the revised Northern Climate Specification which provides added energy efficiency guidance to manufacturers developing HPWHs. Several large, well-known manufacturer products have been tested and are now compliant to the updated spec.

### Powering Up Energy Savings with Energy-efficient Power Supplies

NEEA was the first to invest in 80 PLUS, a national program to improve the energy efficiency of computer and server power supplies. In addition, NEEA worked with EPA on an updated specification for ENERGY STAR® PCs that, as of 2007, requires power supplies to meet the 80 PLUS criteria. The 80 PLUS program has partnered with leading North American computer manufacturers, such as HP, Dell and Lenovo, to bring these energy-efficient power supplies to market.

More than 200 power supply manufacturers have certified 80 PLUS power supplies, while increased competition among power supply manufacturers has reduced incremental costs. Market share of 80 PLUS certified power supplies was 0 percent in 2005, growing to at least 11 percent in 2008 (based on ENERGY STAR market share) to now stand at an estimated 37 percent of desktop PCs (including 80 PLUS or equivalent power supplies) sold in the U.S. in the first three quarters of 2010.



## NEEA Accelerates Market Adoption

NEEA identifies and removes barriers to market adoption of energy-efficient products, services and practices.

### Tuning into the Most Energy-Efficient Televisions

One of NEEA's unique values to the region is to accelerate the adoption of energy-efficient products, services and practices. In 2009, NEEA and Northwest utilities teamed up with California utilities, national manufacturers, retailers, and ENERGY STAR to accelerate the market adoption of super-efficient flat screen TVs. This team increased market supply through utility incentives to retailers and increased consumer demand through point-of-purchase marketing materials. NEEA worked with Walmart and Costco to post promotional labeling, helping consumers identify the most super-efficient models in the stores.

In the first year, market share increased by 15 percent in the Northwest, saving the region 3.6 aMW annually. NEEA worked with the EPA to leverage the market power of Northwest energy consumers to boost the 2012 ENERGY STAR standard by 65 percent.

### Warming up to Ductless Heat Pumps

Building off the BPA's successful demonstration project and to continue its pursuit to accelerate markets, NEEA partnered with Northwest utilities, BPA and the Energy Trust of Oregon at the end of 2008 to pilot energy-efficient Ductless Heat Pumps (DHPs) in homes. NEEA expanded the market's ability to deliver and install DHPs through education and training and partnered with regional utilities to encourage consumer purchases through marketing and utility incentives. By the end of 2011, more than 13,000 DHPs were installed in the Northwest through a network of nearly 1,000 contractors. Together, the region demonstrated that DHPs offer homeowners lower bills and added comfort, provide a business opportunity for HVAC installers, and have the potential to save the Northwest 200 aMW of energy savings each year.

### Continuous Energy Improvement

NEEA's goal is to remove market barriers to maximizing energy efficiency. One of these barriers is a lack of technical solutions developed in collaboration with specific industry segments.

#### ■ The 25inTENSity Challenge

Through the 25inTENSity Challenge, NEEA works with industrial executive management to lead industry groups to set group-wide energy intensity reduction goals of at least 25 percent in 10 years. In 2008 and 2009, NEEA helped the Northwest Food Processors Association (NWFPA) develop a ground-breaking industry-wide goal and roadmap for reducing energy intensity by 25 percent in 10 years and 50 percent in 20 years. In late 2010, the Oregon Association of Nurseries (OAN), an organization that represents more than 1,200 individual nursery stock producers, retailers, landscapers and related companies serving the nursery and greenhouse industry, announced its commitment to the 25inTENSity Challenge, and is now working on an Energy Roadmap with the help of NEEA, the Energy Trust of Oregon and other statewide organizations.

#### ■ Energy-efficient Practices Embedded into Healthcare Industry

NEEA, in partnership with local utilities, provides direct assistance to help hospitals adopt Strategic Energy Management (SEM) plans. These plans focus on implementing integrated, energy-efficient design in new construction, low-cost operations and maintenance improvements in existing facilities, and purchasing policies in new construction and equipment upgrades.

NEEA recently collaborated with local utilities and the American Society for Healthcare Engineers (ASHE) to deliver five Energy Efficiency Commitment (E2C) peer technical forums, expanding SEM knowledge and skills of 48 healthcare building operators. Participation in NEEA's ASHE Region 10 E2C Campaign has been successful, with 30 percent of hospital beds and 20 percent of hospitals in the region participating.

### Achieving Continual Savings through CFLs and Windows

One of the most telling signs of a successful market transformation initiative is when energy savings continue long after NEEA and its partners deliberately “exit” a market. That’s what happened with the two initiatives below, which continue to generate new savings each year with little or no further investment.

- Windows Become Market Standard

In 1997, market share for ENERGY STAR qualified windows was at only 12 percent. Using its core market transformation strategies of marketing, sales training, technical assistance and incentives, NEEA helped to influence window manufacturers, builders, retailers and distributors. In just four years, market share rose to 75 percent. Today in the Northwest, ENERGY STAR windows are sold almost exclusively and have saved the region 35 aMW through 2010.

- Compact Fluorescent Light Bulb Sales Top 24 Million

From 1997 to 2008, NEEA and its partners worked to increase sales of ENERGY STAR® qualified compact fluorescent light bulbs (CFLs) by addressing customer concerns with bulb size and performance, product availability and retail cost. In 2008, Northwest sales of ENERGY STAR qualified CFLs exceeded 24 million, saving four billion kWh and 5.8 billion pounds of greenhouse gas emissions. This is the equivalent to removing more than 500,000 cars from the road. Today, one out of every four bulbs sold in the region is a CFL and NEEA’s investment continues to pay dividends.

### Helping Commercial Property Owners and Managers Achieve Lasting Savings

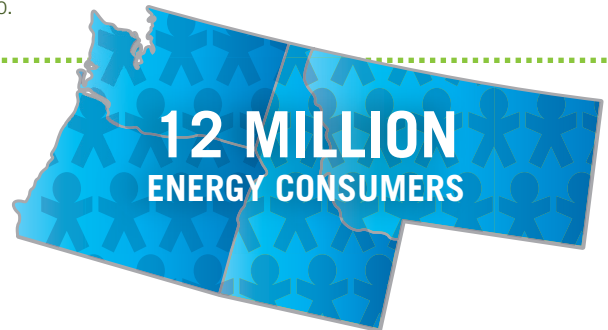
NEEA’s BetterBricks commercial real estate initiative helps make energy efficiency tangible to building owners and property managers and provides strategies to achieve measurable, long-lasting savings. Working with professional associations, utilities and other partners, NEEA offers coaching, measurement tools to benchmark energy use, scoping studies, and training to develop and implement energy management plans that emphasize low-cost operations and maintenance changes. From 2008 to 2010, participating buildings around the region achieved combined savings of 3.8 aMW.

To engage more properties in improving energy performance, NEEA works with the Building Owners and Managers Association in Seattle and Portland, plus local utilities, to sponsor energy benchmarking competitions that challenge owners and managers to reduce energy use over time. In 2010, 71 buildings competed in Seattle’s *Kilowatt Crackdown*, achieving more than 24 million kWh in projected annual savings, and 85 buildings were enrolled in Portland’s *Carbon4Square* competition. Similar competitions are in the works in Idaho.

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## NEEA Leverages the Power of the Region

To maximize energy efficiency, NEEA identifies and pursues opportunities that can be more efficiently achieved working regionally.



### Conduit – The Region’s One and Only Online Resource for Energy Efficiency Professionals

One of NEEA’s business plan goals is to support utilities and other energy efficiency organizations. To that end, in 2011, NEEA, with additional support from BPA, launched Conduit ([www.ConduitNW.org](http://www.ConduitNW.org)), a web-based resource that facilitates information-sharing, coordination and collaboration among energy efficiency professionals in the Northwest. Northwest utilities, the Energy Trust of Oregon and BPA are all facing substantial growth in their conservation goals over the next several years. During independent outreach and planning efforts in 2008 and 2009, NEEA and BPA each clearly heard their stakeholders’ needs for increased regional information-sharing, coordination and collaboration in order to help stakeholders meet their aggressive energy efficiency goals. This need was also confirmed during the work of the Northwest Energy Efficiency Taskforce (NEET) during 2008 and 2009. In late-2009, both BPA and NEEA identified an online energy efficiency community as one means to address those needs. By November Conduit had 1,000 registered users and BPA and NEEA continue to work closely on the implementation of this resource and ensuring value for Northwest utilities.



## Training and Education Build Regional Market Knowledge

Building regional market knowledge and capability through education and training is one of NEEA's strategic goals, and NEEA supports a wide range of training across sectors. In 2010, NEEA partnered with utility funders, market partners and others to expand Building Operator Certification (BOC) throughout the region, resulting in 177 new certifications in 2010 and estimated regional savings of 1.5 aMW. The BOC program teaches energy conservation strategies, connects participants with energy management resources and facilitates peer-to-peer information sharing on maximizing energy efficiency.

## Locking in Long-Term Savings through Codes

Raising energy codes for residential and nonresidential structures is a key area of focus for the Northwest because of the long-term energy savings they provide. Based on NEEA's Business Plan, improved codes and standards have the potential to save more than 25 aMW for the region from 2010 to 2014. NEEA plays a unique role by working collaboratively with utilities and market actors to build market readiness for more stringent codes and standards through voluntary programs. NEEA advocates for code improvements through state and national processes and provides training to increase compliance with new codes once they are adopted.

In the Northwest, 2010 was a banner year for codes progress. Idaho, Montana, Oregon and Washington adopted new residential or commercial codes that will increase energy efficiency by 10 to 20 percent. NEEA played a key role in these code adoptions with strong support from utilities. To help the states implement the aggressive code changes, NEEA provided training and education in urban and rural communities across the region, working with utility and state partners. More than 4,000 building officials, architects, engineers, builders and subcontractors participated—a record-breaking participation level for the region.

## Higher Standard for New Homes

Increasing the stringency of energy codes is a key strategy to reduce energy use in the region. In 2004, NEEA led negotiations with the U.S. EPA to establish a Northwest ENERGY STAR Homes specification—a spec that exceeds state building code and is the highest ENERGY STAR Homes standard in the nation. Between 2005 and 2006, the number of ENERGY STAR certified new homes in the Northwest increased more than 200 percent. In 2011, market share exceeded 14.6 percent, and home buyer awareness of the ENERGY STAR Homes brand exceeded 50 percent, up from 32 percent in 2007.

## EPA Recognition: Sustained Excellence

NEEA is committed to excellence in everything it does. The U.S. Environmental Protection Agency (EPA) awarded NEEA a 2010 ENERGY STAR® Sustained Excellence Award for its continued outstanding contributions to reduce greenhouse gas emissions by delivering information and services to increase energy efficiency. These awards recognize ongoing leadership across the ENERGY STAR program including energy-efficient products, services, new homes and buildings in the commercial, industrial and public sectors. Award winners are selected from more than 17,000 organizations that participate in the ENERGY STAR program. This is NEEA's seventh ENERGY STAR award for its market transformation work in the residential and commercial sectors.

## Northwest Energy Efficiency Alliance

Maximizing energy efficiency in partnership with:

