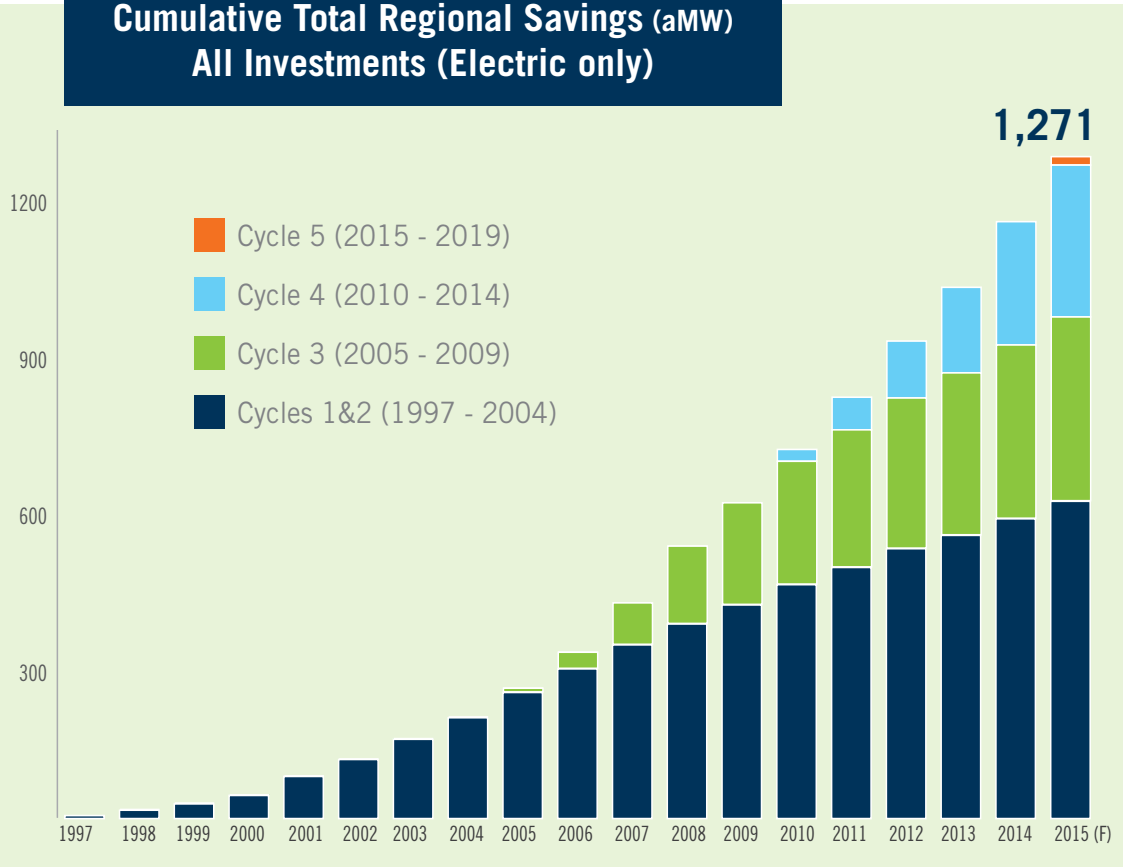




# Q4 2015 Quarterly Performance Report

**Cumulative Total Regional Savings (aMW)  
All Investments (Electric only)**



## ELECTRIC BUSINESS PLAN GOALS

The following are fourth-quarter program highlights organized by NEEA's two strategic goals. See page four for a complete overview of NEEA's portfolio.

### Goal 1: Fill the Energy Efficiency Pipeline

- Reviewed nine unsolicited proposals for emerging technologies, identifying several for further investigation including connected thermostats and quick connect ductless heat pumps. Details about all of NEEA's Q4 emerging technology activities are available at [neea.org/initiatives/emerging technology](http://neea.org/initiatives/emerging technology).
- Coordinated and collaborated with Energy Trust of Oregon in a field test of high efficiency heat recovery ventilation systems for commercial buildings. NEEA staff will collect data for a year to validate the design approach and energy savings (estimated to be around 40 percent).

### Goal 2: Create Market Conditions for Energy-Efficient Products, Services and Practices

- Heat Pump Water Heaters:** Achieved a 42 percent year-over-year increase in unit sales as a result of 2015 regional promotional efforts conducted in partnership with GE and Northwest utilities. Increasing sales of heat pump water heaters demonstrates market acceptance of the product and influences retail and supply chain availability. In total, 4,811 heat pump water heaters were sold in 2015 versus 3,384 in 2014.
- Reduced Wattage Lamp Replacement:** Realized program objective that all major lighting manufacturers provide special pricing for program participants. In many cases, special pricing enables the distributors to sell reduced watt (i.e. 28W) lamps for less than 32W lamps.
- Efficient Homes:** Received four national marketing awards for the 2014 Northwest ENERGY STAR Homes Homeowner Testimonial Campaign and Efficient Homes Pilot Video. The Homeowner Campaign, created in collaboration with regional partners (Avista, Benton REA, Benton PUD, Clark County PUD, Energy Trust of Oregon, Idaho Power, and Puget Sound Energy) raised consumer awareness about Northwest ENERGY STAR Homes. The Efficient Homes Pilot video, which was a joint collaboration between NEEA and Puget Sound Energy, was developed to educate consumers and promote the benefits of highly efficient homes (<http://northwestenergystar.com/super-efficient-homes/what-is-super-efficient>).

(Continued on page 5)

## Quarterly Performance Scorecard (Electric Only)

### Value Delivery Metrics

Emerging Technology 20-year Pipeline (aMW)	TARGET	FORECAST	ACTUAL	STATUS
Scanning Portfolio Potential	1400	N/A	1427	
Regional Potential in Process	1000	N/A	520	
Readied for Market 2015 - 2019	175	175	N/A	
Accelerating Market Adoption/Regional Advantage	TARGET	ACTUAL		STATUS
Additional Value Secured (\$millions YTD)	\$4	\$1.7		
2015 Energy Savings from Current Investments	TARGET	FORECAST	ACTUAL <sup>i</sup>	STATUS
Total Regional	19	14	N/A	
Net Market	5	2	N/A	
Co-Created	8	5	N/A	
2015 Energy Savings – All Investments	TARGET	FORECAST	ACTUAL <sup>i</sup>	STATUS
Total Regional	124	125	N/A	
Co-Created	33	40	N/A	
2015-2019 Business Plan – Current Investments	TARGET	FORECAST	ACTUAL <sup>i</sup>	STATUS
5-year aMW savings (2015 - 2019)				
Total Regional	145	145	N/A	
Net Market	N/A	55	N/A	
Co-Created	75	75	N/A	
10-year aMW savings (2015 - 2024)				
Total Regional	365	365	N/A	
Co-Created	180	180	N/A	

### Operational Metrics

Financial Metrics (General Funds Only <sup>ii</sup> )	TARGET	FORECAST	ACTUAL	STATUS
Levelized Total Resource Cost (\$/kWh)	\$0.035	\$0.035	N/A	
Current Quarter Expenses (\$millions)	\$8.0	\$9.6	\$9.3	
Full Year Expenses (\$millions)	\$33.1	\$31.5	\$31.2	
Business Administration Expenses (% of total expenses)	<13%	11.2%	11.4%	
Other Operational Metrics	TARGET	FORECAST	ACTUAL	STATUS
Employee Turnover (trailing 12 months %)	<10%	N/A	7.3%	

<sup>i</sup> Actual 2015 savings will be validated by NEEA's Cost-Effectiveness Advisory Committee in 2016

<sup>ii</sup> Excludes \$620K in Special Funds and Natural Gas Funds

## Scorecard Comments

NEEA's quarterly scorecard reports performance toward long-term value delivery targets and other key metrics. See 'NEEA Definitions' on page 6 for descriptions of individual metrics.

### Emerging Technology Pipeline

**Scanning Portfolio Potential:** The energy savings potential in NEEA's Scanning Portfolio increased 30% in Q4 from 1085 to 1427 aMW.

**Regional Potential in Process:** NEEA is accelerating the advancement of three opportunities into the pipeline in 2016: Manufactured Homes, Commercial Secondary Window Glazing and Commercial New Construction.

### Additional Value Secured

Market-facing activities were limited in 2015 due to a Board-approved refocus on upstream marketing efforts.

### Energy Savings

**Current Investments:** As previously reported, NEEA's 2015 forecast for Current Business Plan Investments (2015-2019) is below target. This is primarily due to slower-than-anticipated market uptake of reduced wattage lamps.

**All Investments:** NEEA expects to achieve its 2015 target for All Investments (those made between 1997 and 2015). The Cost Effectiveness Advisory Committee will validate the forecast in May, 2016.

*Value Delivery Metrics: Red status indicates that forecast is less than 80% of target; yellow status indicates that forecast is greater than 80% but less than 100% of target.*

### Operational Metrics

Full year expenses were 94% of budget. See page 3 for details.

*Operational Metrics: Current quarter expenses yellow status indicates that actual is 90-95% of forecast; Carbon emissions yellow status indicates that forecast exceeds target by more than 10%; Employee turnover red status indicates that turnover exceeds target by more than 25%.*

## 2015 Financials (Electric Only)

### Financial Summary

2015 expenses were 94% of budget primarily due to slower-than-anticipated progress advancing new initiatives into the pipeline, some product and program delays, staff vacancies, lower administrative costs, and negotiated reductions in contracting costs.

### Q4 2015 Electric Expenses (\$ millions)

Q4 Budget

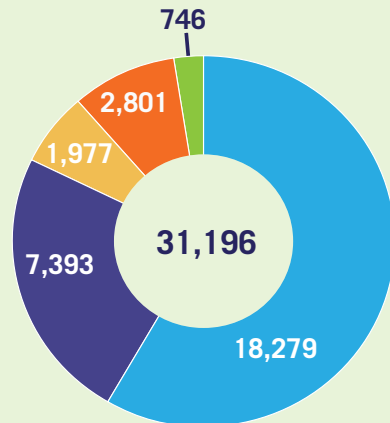
8.0

Q4 Actual

9.3

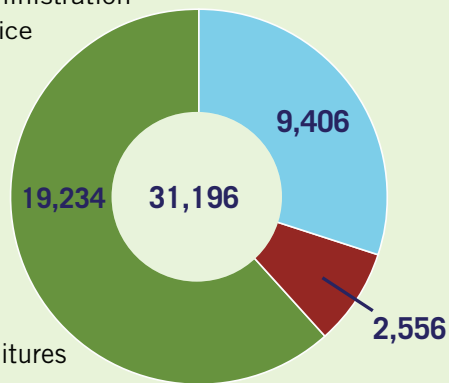
### 2015 Actual Electric Expenses (\$ thousands)

#### By Business Unit



- Market Strategy & Execution
- Technology, Planning & Evaluation
- Stakeholder Relations
- Business Administration
- Executive Office

#### By Expense Category



- Project Expenditures
- General & Administrative
- Salaries & Benefits

### 2015 Electric Expenses (in \$ thousands)

#### By Business Unit

	Annual Budget	YTD Budget 12/31	YTD Actual 12/31	YTD Actual as a % of Budget
Market Strategy & Execution	19,555	19,555	18,279	94%
Technology, Planning & Evaluation	7,635	7,635	7,393	97%
Stakeholder Relations	2,046	2,046	1,977	97%
Business Administration	3,035	3,035	2,801	92%
Executive Office	804	804	746	93%
<b>Total Organization</b>	<b>33,075</b>	<b>33,075</b>	<b>31,196</b>	<b>94%</b>

#### By Expense Category

	Annual Budget	YTD Budget 12/31	YTD Actual 12/31	YTD Actual as a % of Budget
Salaries & Benefits	9,825	9,825	9,406	96%
General & Administrative	3,099	3,099	2,556	83%
Project Expenditures	20,151	20,151	19,234	95%
<b>Total Organization</b>	<b>33,075</b>	<b>33,075</b>	<b>31,196</b>	<b>94%</b>

#### Reason for Budget Variance:

Slower progress advancing budgeted new initiatives into the portfolio; product and program delays; lower contracting costs.

Deferred research for luminaire lighting; lower than anticipated scanning activity.

In-sourcing of professional services and staff turnover.

Lower salary costs related to staff transition; deferred consulting; administrative allocation to Natural Gas and Special Funds.

Lower consulting fees.

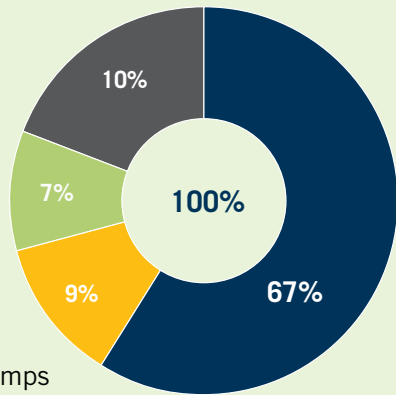
Vacancy rate higher than budgeted.

Lower-than-anticipated temporary help, consulting and sponsorship expenditures

Program and product delays (dryers, luminaire lighting, advanced lighting training); slower progress in advancing budgeted new initiatives into the portfolio; lower negotiated contract costs.

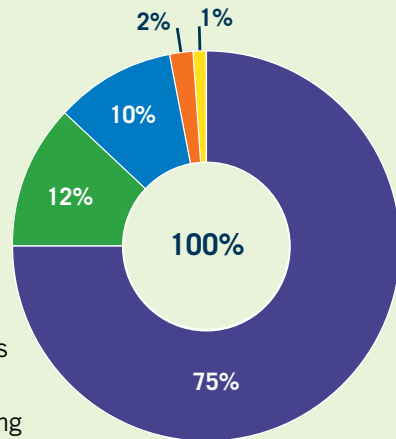
## 2015 Co-Created Savings Forecast (aMW) Current Investments (Electric Only)

### By Initiative



- Ductless Heat Pumps
- Heat Pump Water Heaters
- Reduced Wattage Lamp Replacement
- Others

### By Strategic Market



- Consumer Products
- Other Markets
- Commercial Lighting
- Residential New Construction
- Commercial New Construction

## Electric Market Transformation Portfolio

Scanning	Concept Opportunity Assessment	Market and Product Assessment	Strategy, Testing & Finalization	Market Development	Long-term Monitoring
<ul style="list-style-type: none"> <li>• Combined Space &amp; Water Heating</li> <li>• Residential Secondary Window Glazing</li> <li>• Advanced Water Heating Systems</li> <li>• Advanced Rooftop Units</li> <li>• Upstream Lighting Product</li> <li>• Business IT</li> <li>• Automated Measurement and Verification</li> <li>• Extended Pump Products</li> <li>• Pump Certifications</li> <li>• Pivot Commissioning</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial Secondary Window Glazing</li> <li>• Commercial New Construction</li> <li>• Manufactured Homes</li> </ul>	<ul style="list-style-type: none"> <li>• Super-Efficient Dryers</li> <li>• Luminaire-level Lighting Controls</li> <li>• Retail Product Portfolio</li> </ul>	<ul style="list-style-type: none"> <li>• Next Step Homes</li> <li>• Certified Refrigeration Energy Specialist Certification</li> </ul>	<ul style="list-style-type: none"> <li>• Heat Pump Water Heaters</li> <li>• Ductless Heat Pumps</li> <li>• Efficient Homes</li> <li>• Reduced Wattage Lamp Replacement</li> <li>• Building Operator Certification Expansion</li> <li>• Other Codes &amp; Standards*</li> <li>• Top-tier Trade Ally Advanced Training</li> <li>• Industrial Technical Training</li> <li>• Integrated Design Labs</li> <li>• Commercial and Industrial Strategic Energy Management</li> </ul>	<p>NEEA is continuing to monitor and track energy savings from 13 previously funded initiatives.</p>

\* Codes & standards that are not associated with a market transformation program

## Energy Savings by Strategic Market (aMW) Current Investments (Electric Only)

	Co-Created		Total Regional Savings		Net Market Effects	
	2015 Target	2015 Forecast	2015 Target	2015 Forecast	2015 Target	2015 Forecast
<span style="color: #333399;">■</span> Consumer Products	3.0	3.7	5.3	5.6	0.7	0.8
<span style="color: #FFCC00;">■</span> Residential New Construction	0.1	0.1	0.2	0.2	0.1	0.1
<span style="color: #339933;">■</span> Commercial Lighting	3.6	0.5	4.0	0.6	3.6	0.3
<span style="color: #0066CC;">■</span> Commercial New Construction	0.0	0.0	0.1	0.0	0.0	0.0
<span style="color: #FF6600;">■</span> Other Markets	1.0	0.6	9.8	8.0	0.7	0.5
<b>Total for All Markets</b>	<b>7.7</b>	<b>4.9</b>	<b>19.4</b>	<b>14.3</b>	<b>5.2</b>	<b>1.8</b>

Note: NEEA updates its savings forecast in Q1 and Q3

## Goal 2: Creating Market Conditions (Continued from Page 1)

- **Industrial Technical Training (Optional Infrastructure Program):** Offered eight in-class trainings and two webinars to support the region's industrial energy efficiency programs and build market capacity. Attendees and utility sponsors continue to report very high satisfaction ratings.
- **Commercial and Industrial Strategic Energy Management:** Hosted the 4th annual Northwest Strategic Energy Management Collaborative Workshop in close partnership with regional stakeholders including Energy Trust of Oregon and Bonneville Power Administration. Sixty-five utility program staff, consultants, evaluators, and other experts attended the event, which builds and supports regional industrial efficiency delivery capability.

## Regional Coordination and Collaboration

- **Regional Strategic Market Planning:** Launched the regional strategic market planning process for the Consumer Products market. Through a process facilitated by NEEA, the region will develop a 10+ year strategic view of the consumer products market, including roles and responsibilities for NEEA, utilities and other regional energy efficiency organizations. The Consumer Products strategic market plan is targeted for completion in Q2 2016.
- **Conduit:** Hosted successful ConduitEd Education series on Market Transformation, with more than 75 participants and 500 views and comments. Developed in partnership with Bonneville Power Administration, Conduit is an online community that facilitates information sharing, coordination and collaboration among energy efficiency stakeholders in the Northwest.
- **Northwest Energy Efficiency Leadership Meeting:** Convened chief executive officers from utilities and key regional energy efficiency groups (Natural Resources Defense Council, NW Energy Coalition, Northwest Power and Conservation Council, Pacific Northwest Utilities Conference Committees) to discuss the future of energy efficiency in the region.

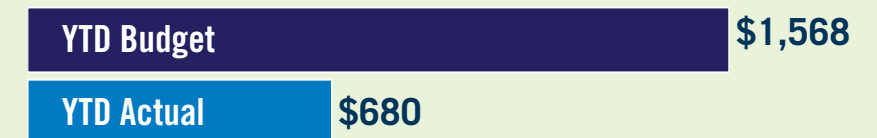
## Codes and Standards

- Played a key role in the U.S. Department of Energy negotiations that resulted in a new energy efficiency standard for commercial rooftop HVAC units. This ruling represents the largest energy savings of any rule ever issued by the agency - an estimated 4.8 billion MWh of energy savings nationally over 30 years. The new standard has two efficiency tiers that come into effect in 2018 and 2023.
- Delivered code compliance training to 1,987 homebuilders, real estate agents and building officials (YTD) across all four Northwest states.

## Natural Gas Market Transformation Update

- **Rooftop HVAC:** Launched regional pilot of commercially available high efficiency rooftop HVAC units in four sites across the Northwest: Chehalis, WA, Lake Oswego, OR, Spokane, WA, and Yakima, WA. The goal of the pilot is to test heating performance and validate energy savings in various Northwest climates.
- **Combination Systems:** Launched prototype testing to evaluate viability and performance of a new technology aimed at providing both space and water heat for natural gas customers.
- **Gas-fired Heat Pump Water Heaters:** Completed early feasibility assessment of gas-fired heat pump water heaters. Results show that the product design concept has the potential to save energy in the Northwest.
- Completed staffing of the Natural Gas team by hiring a dedicated product manager.

## 2015 YTD Budget vs. Actual (in \$ thousands)



2015 Natural Gas Market Transformation expenses were 43% of budget, primarily due to later-than-anticipated contract approvals and subsequent program ramp-up.

## NEEA Definitions

<b>All Investments</b>	All NEEA investment since 1997
<b>Annual Savings Target</b>	Annual Operations Plan energy savings target toward five-year business plan goal
<b>Baseline Savings</b>	Energy savings from naturally occurring market change without utility, NEEA, BPA or Energy Trust of Oregon intervention
<b>Co-Created Savings</b>	Energy savings resulting from the region working together to transform markets: Net Market Effects plus Local Program savings
<b>Current Investments</b>	Investments made during the current 2015 - 2019 Business Plan
<b>Infrastructure Program</b>	A holistic and integrated set of resources that NEEA helps develop to support utilities and the market in building market capability, awareness and demand for energy-efficient products and practices.
<b>Initiative</b>	A set of interdependent (or strategically related) interventions that achieve market transformation goals managed in a coordinated way through a single logic model and NEEA's cost-effectiveness model
<b>Levelized Cost</b>	Levelized Total Resource Cost (\$/kWh) is the net present value of all the costs annualized over 20 years and divided by the annual electricity savings in kWh
<b>Local Program Savings</b>	Energy savings claimed through utility, Energy Trust of Oregon or Bonneville Power Administration (BPA) energy efficiency programs
<b>Net Market Effects</b>	Savings associated with market change and not locally incented programs or baseline changes
<b>Platform</b>	A flexible mechanism that supports multiple market transformation programs and speeds the time to market for new efficiency opportunities
<b>Savings Forecast</b>	Energy savings forecasts based on key assumptions and the latest available market data
<b>Strategic Market</b>	The markets for which NEEA sees a long-term opportunity to help the region achieve its energy efficiency goals through market transformation work and regional leverage
<b>Total Regional Savings</b>	Energy savings associated with all market changes: Net Market Effects plus Local Program and Baseline Savings

All NEEA performance reports are available on [neea.org](http://neea.org)

If you have questions about this report, please contact:

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