



# Quarterly Performance Report » Q4 2017

## A Note from the Executive Director

The fourth quarter of 2017 concluded a busy and productive year for the alliance. Highlights from 2017 include strong market progress for heat pump water heaters, the addition of two promising technologies – low-e storm windows and electric split-system water heaters – to NEEA's portfolio and progress on the draft strategic direction for NEEA's 2020-2024 business cycle.

In December, the alliance presented the third annual Leadership in Energy Efficiency awards. On behalf of NEEA staff and the NEEA Board, I would like to congratulate all of the winners and nominees. Also in December, NEEA's Board of Directors approved the 2018 Operations Plan. Focus areas include keeping the region's energy efficiency pipeline full, launching and advancing several market transformation programs (both electric and gas), and continuing heat pump water heater momentum. The final plan is available on NEEA's website, at [neea.org/about-neea/neea-strategic-planning/](http://neea.org/about-neea/neea-strategic-planning/).

### Market Transformation Highlights:

- 2017 energy savings are expected to meet or exceed targets (final numbers will be available Q2 2018)
- Sales of NEEA-incented heat pump water heaters increased 80% in 2017
- The number of lighting trade allies with NXT Level designation increased by 155% in 2017

A handwritten signature in black ink that reads "Susan E. Stratton".

Susan E. Stratton  
Executive Director



## Electric Quarterly Performance Scorecard

		Target	Forecast/ Actual	Status Q3/ Q4	
<b>STRATEGIC GOALS</b> <i>(Updated quarterly)</i>	<b>Goal 1: Fill the Energy Efficiency Pipeline</b>	Scanning Portfolio Health (aMW)	1400	1344	
		Pipeline Health (aMW)	1000	955	
		Program Advancement (aMW)	175	200	
	<b>Goal 2: Create Market Conditions for Efficiency</b>	Program Milestones On-Track	90%	82% (pg. 3)	

		Target	Forecast	Status Q2/ Q3	
<b>CO-CREATED ENERGY SAVINGS (aMW)</b> <i>(Updated in Q1 and Q3)</i>	<b>Current Business Plan Investments (2015-19)</b>	1-yr Forecast (2017)	10	13 (pg. 3)	
		5-yr Forecast (2015-2019)	75	60-65	
		10-yr Forecast (2015-2024)	180	150-160	
	<b>All Investments (1997-today)</b>	1-yr Forecast (2017)	35	37	
		5-yr Forecast (2015-2019)	150	170-180	
	● = Within 20% of target ● = Within 1% of target or better ● = More than 20% below target				

		Budget	Forecast	Actual <sup>i</sup>	Status Q3/Q4	
<b>COST-EFFECTIVENESS FINANCE AND OPERATIONS</b> <i>(Updated quarterly)</i>	<b>Cost-Effectiveness</b>	Levelized Total Resource Cost <sup>ii</sup> (\$/kWh)	\$0.035	\$0.029	N/A	
	<b>Finance</b>	Current Quarter Expenses (\$M)	\$8.7	\$9.1	\$8.5	
		Annual Expenses (\$M)	\$35.3	\$33.9	\$33.3	
		Business Admin Expenses (%)	<13%	11.7%	11.8%	
	<b>Staffing</b>	Employee Retention % (12-month)	>90%	N/A	92%	
Finance: ● = Within 5% of target; ● = 5-10% above or below target; ● = More than 10% above or below target Employee Retention: ● = At target or better; ● = Within 10% of target; ● = More than 10% below target						

### Need to Know

- **Pipeline metrics:** Emerging technology pipeline is healthy (within 5 percent of business plan targets).
- **Program Milestones on Track:** NEEA's electric portfolio achieved eighty-two percent of program milestones in 2017, see page 3 for details.
- **All Investments (1997-2019):** Alliance is expecting to exceed both annual and 5-year Co-Created energy savings targets for All Investments.
- **Current Investments (2015-2019):** Five and ten year Co-Created savings forecasts are currently 10-15 percent below target. NEEA staff will update savings forecast in Q1, 2018.
- **Finance:** 2017 electric investment was 94 percent of the approved 2017 Operations Plan budget, see page 6 for details.

### Definitions:

Scanning portfolio health - 20-year aMW potential of opportunities NEEA is investigating.

Pipeline health - 20-year aMW potential of opportunities for which NEEA is developing programs.

Co-Created Energy Savings - Energy savings that the region and local programs achieve by working together.

Business Administration Expenses - Percent of total budget dedicated to business administration. Does not include program administration expenses.

<sup>i</sup> Excludes Special Funds and Natural Gas Funds

<sup>ii</sup> Current investments (2015-2019)



## Electric Portfolio Scorecard

### Co-Created Savings, Current Investments

Program	2017 aMW forecast	% of total 2017 aMW forecast	Annual program milestones on track (Q3/Q4)	1-yr aMW forecast* status (Q3/Q4)	5-yr aMW forecast* status (Q3/Q4)
Standards not associated with programs	3.6	28%			
Ductless Heat Pumps	2.8	22%			
Heat Pump Water Heaters	2.1	16%			
Codes not associated with programs	0.9	7%			
Retail Product Portfolio	0.9	7%			
Next Step Homes	0.8	6%			
Reduced Wattage Lamp Replacement	0.7	5%			
Super-Efficient Dryers	0.5	4%			
Certified Refrigeration Energy Specialist	0.4	3%			
Efficient Homes (retired in 2016)	0.3	2%	N/A		
Building Operator Certification	0.0	0%			
Luminaire Level Lighting Controls	0.0	0%			
Manufactured Homes	N/A	N/A		N/A	N/A
Commercial Code Enhancement	N/A	N/A		N/A	N/A
Window Attachments	N/A	N/A		N/A	N/A
Top-Tier Trade Ally Advanced Training	N/A	N/A		N/A	N/A
Commercial Real Estate	N/A	N/A		N/A	N/A
Industrial Technical Training	N/A	N/A		N/A	N/A
Strategic Energy Management	N/A	N/A		N/A	N/A
<b>TOTAL</b>	<b>13.0</b>	<b>100%</b>			

● = More than 20% below target   ● = Within 20% of target   ● = Within 1% of target or better

### Need to Know

- Energy savings forecast is unchanged from Q3; forecast will be updated in Q1 2018
- 2017 ended with 82 percent of program milestones on-track. In any given year, NEEA expects that 80-90 percent of milestones will be met and that 10-20 percent will be delayed, changed or canceled due to market uncertainty and other factors outside of alliance control.
- More information about individual program milestones is available in the Q4 Market Execution Report, which is available on Conduit at: <https://conduitnw.org/Pages/Group.aspx?rid=254>

\*Status indicates current energy savings forecast v. target; NEEA updates its savings forecast in Q1 and Q3



## Electric Quarterly Highlights

### STRATEGIC GOAL 1 » Fill the Energy Efficiency Pipeline



**Filling the pipeline:** Commissioned a modeling study of surface applied window films (SAF) to review their savings potential in both commercial and residential applications. SAF with low emissivity coatings offer the potential to significantly improve the thermal characteristics of windows and are being investigated as a potential addition to NEEA's Window Attachments program. Study results will be available in Q1.

**Convening the region to advance Smart Thermostat technology:** Brought together regional stakeholders to explore barriers, opportunities and next steps for Smart Thermostats, which were identified as a priority in the regional Consumer Products Market Strategy. A recap of the workshop, including presentations and discussion notes, is available on Conduit at: <https://conduitnw.org/Pages/Article.aspx?rid=3218>.



For the latest information about alliance emerging technology activities, see NEEA's quarterly Emerging Technology report, available at: <http://neea.org/initiatives/emerging-technology>

### STRATEGIC GOAL 2 » Create Market Conditions for Efficiency



**Accelerating Market Adoption of Heat Pump Water Heaters:** Drove 80% increase in NEEA-incented heat pump water heater sales year over year. Manufacturer markdowns, strong wholesale channel support and a successful Q4 partnership with Lowe's, resulted in over 12,000 NEEA-incented installations in 2017.



**Building Market Capacity for Advanced Lighting Practices:** Increased number of designated NXT Level I trade allies by 38 percent through a targeted fall campaign. By year end, the program had reached 115 designated participants, an increase of 155 percent since the end of 2016. In Q1 2018, the program will launch new in-person "Jump Start" training modules hosted by Bonneville Power Administration, Pacific Power, Energy Trust of Oregon and Idaho Power.



## Electric Quarterly Highlights

### Delivering Regional Value



#### Transforming the market for Certified Refrigeration Energy Specialist certification:

Transitioned management and implementation of CRES certification program to the national Refrigerating Engineers and Technicians Association (RETA). RETA will continue to provide program data so that NEEA can continue to track and report associated savings.



#### Enhancing Commercial Code:

Brought together key code stakeholders and utility representatives to develop State Coordination Plans for OR, WA and ID through NEEA's Commercial Code Enhancement program. Coordination plans will capture code challenges and opportunities and serve as road maps to influence code development and adoption in each state.



#### Convening the region to advance energy-efficient building practices:

Organized the 6th annual Home Efficiency Forum conference. The three-day event featured technical trainings, networking opportunities and the chance to share ideas around this year's theme: Building Collaboration. Participants included over 100 Northwest building experts and funder representatives.



#### Leveraging federal funding to create a framework for Community-based Strategic Energy Management (SEM) in the Northwest:

Finished Community Building Renewal case studies for Boise, Tacoma, Missoula and Eugene, as well as a City SEM Implementation Guide with funding from the Department of Energy. Preliminary analysis finds a potential of 1600 aMW of regional savings over the next 20 years through community-based SEM. The final report is available at: <https://newbuildings.org/resource/community-strategic-energy-management-implementation-guide/>



#### Analyzing Data to Support Decision-Making:

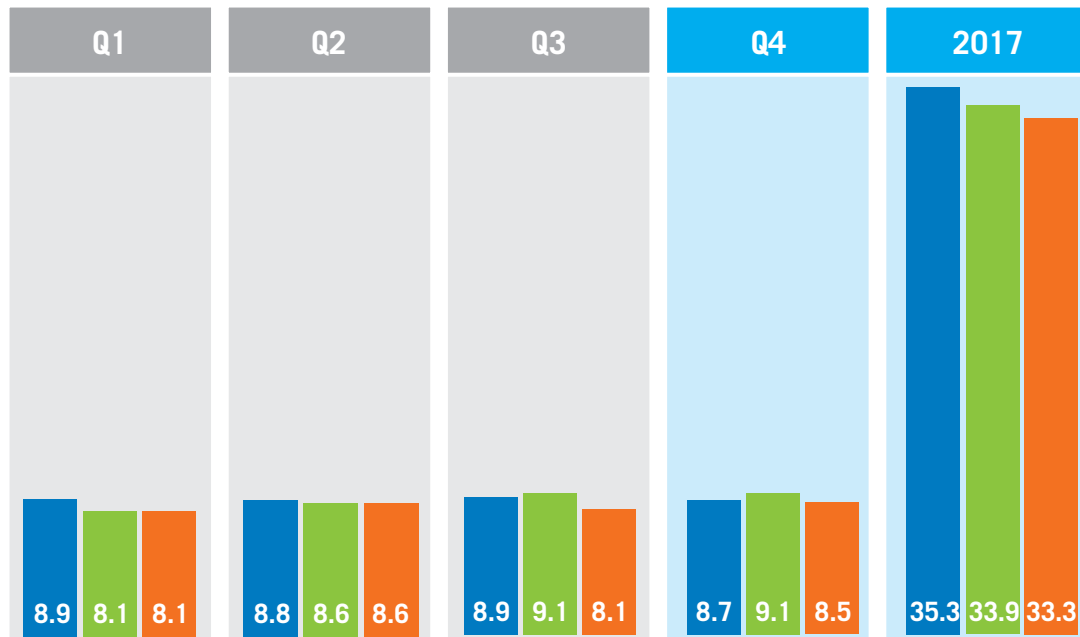
Delivered webinar to NEEA funders to increase awareness of alliance Market Intelligence services. NEEA's Market Intelligence team is working with funders to develop analytic tools to support customer engagement, program opportunity identification and regional efficiency goals.



Need to Know: Electric Investment

YTD Electric Investment = \$33.3 Million

2017 electric investment was 94% of the approved YTD Operations Plan budget and 98% of the fourth quarter forecast. Budget variance is primarily due to lower than anticipated consulting and professional services, strategy or market changes that resulted in delayed or canceled program pilots (Luminaire Level Lighting Controls, Window Attachments and Manufactured Homes) and a change to the Commercial Building Stock Assessment time line that pushed some activities to 2018. This budget underspend was partially offset by manufacturer/ retail incentives for heat pump water heaters, which continued to exceed expectations in Q4.



Budget Forecast Actual

\$Millions

YTD Key Budget Variances:

+	-
<ul style="list-style-type: none"> <li>\$908K - Heat Pump Water Heater incentives</li> </ul>	<ul style="list-style-type: none"> <li>(\$457K) - General and Administrative efficiencies and lower staffing costs</li> </ul>
	<ul style="list-style-type: none"> <li>(\$419K) - Manufactured Homes fewer pilots</li> </ul>
	<ul style="list-style-type: none"> <li>(\$413K) - Stock Assessments timing shift</li> </ul>
	<ul style="list-style-type: none"> <li>(\$350K) - Luminaire Level Lighting Controls pilots delayed</li> </ul>
	<ul style="list-style-type: none"> <li>(\$311K) - Window Attachment pilots no longer needed</li> </ul>

YTD Electric Expense Detail:



60% (\$20.1M)

Total Direct Program Expenses



32% (\$10.6M)

Total Salaries and Benefits



8% (\$2.5M)

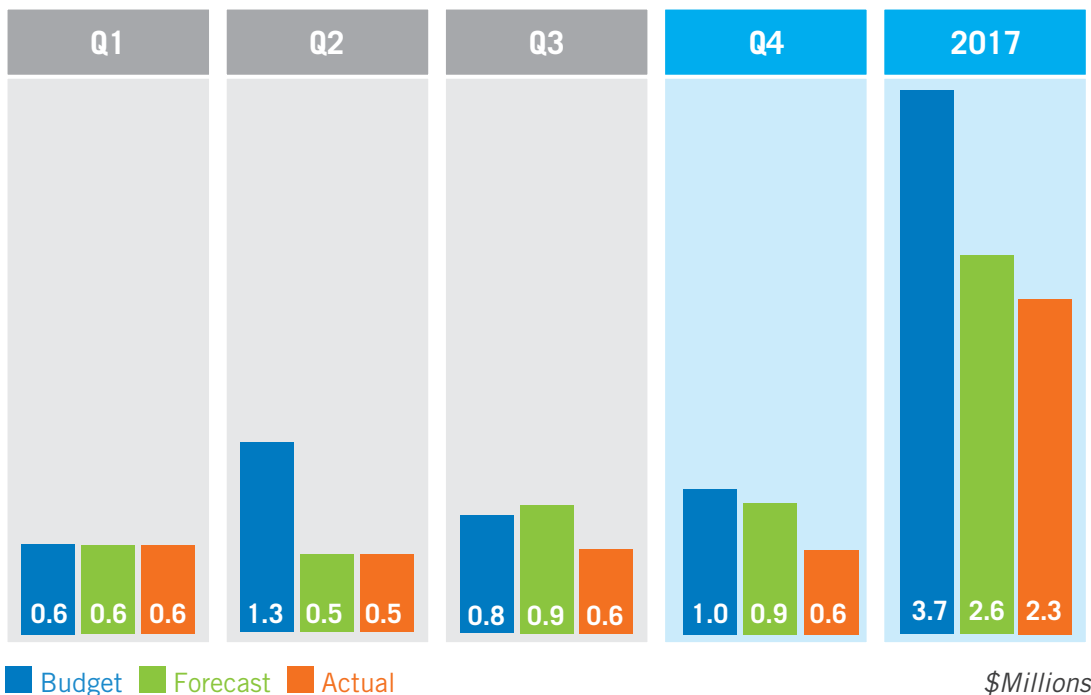
Total General and Administration



Need to Know: Natural Gas Investment

YTD Natural Gas Investment = \$2.3 Million

2017 natural gas investment was 62% of the approved YTD Operations Plan budget and 88% of the fourth quarter forecast. Budget variance is primarily due to gas heat pump water heater delays, less than budgeted cost sharing with electric business unit and savings from the Mid-cycle Assessment, which was less than originally budgeted.



YTD Key Budget Variances:

+	-
	<ul style="list-style-type: none"> <li>• (\$694K) - General and Administrative - less than budgeted cost-sharing with electric business unit, fewer staffing costs</li> </ul>
	<ul style="list-style-type: none"> <li>• (\$379K) - Gas-fired heat pump water heaters delayed expenses</li> </ul>
	<ul style="list-style-type: none"> <li>• (\$119K) - Market Research - Mid-cycle Assessment savings</li> </ul>

Quarterly Natural Gas Highlights:



**Efficient Gas Water Heaters** - Influenced the University of Florida to incorporate NEEA's Advanced Water Heater Specification testing and performance criteria into its gas heat pump water heater development plan



**Gas Heat Pumps** - Launched project with Blue Mountain Energy and Oak Ridge National Labs to value-engineer a residential gas heat pump and build and test proof-of-concept prototypes. The goal of this effort is to identify a clear channel for commercialization of a cost-competitive residential gas heat pump.



**Commercial Gas Furnaces** - Began road map for the development and implementation of a commercial gas furnace test method in partnership with representatives from Canada and United States to ensure cross-border consistency for manufacturer partners

YTD Natural Gas Expense Detail:



48% (\$1.1M)

Total Direct Program Expenses



35% (\$0.8M)

Total Salaries and Benefits



17% (\$0.4M)

Total General and Administration

**TOGETHER** We Are Transforming the Northwest



**Please address questions to:**

Virginia Mersereau  
Communications Manager  
vmersereau@neea.org  
503.688.5491

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