



Quarterly Performance Report » Q3 2018

A Note from the Executive Director

It's hard to believe, but 2018 has almost come to a close. In the third quarter of the year, NEEA staff were busy with 2019 operations planning. Meeting the alliance's 5-year business plan goals and preparing for the transition to Cycle 6 (2020-24) are top among the organization's focus areas. Potential risks to market transformation success include regional alignment challenges and a lack of progress at the federal level in advancing codes and standards. To address these risks, staff will continue working with funders to identify opportunities for flexibility in program implementation and partnering extra-regionally to increase Northwest influence.

In September, the alliance launched a broad regional outreach effort to collect public input on the draft 2020-24 Business and Strategic plans. Approximately 5,600 stakeholders were directed to the plans via Conduit, email, and the BPA and NEEA newsletters. In addition, NEEA board and staff made in-person presentations to 334 people. General themes and specific input were collected and synthesized for Board review and consideration. Final 2020-2024 Business and Strategic Plans will be presented to the Board for approval in December.

Market Transformation Highlights (see pages 4-5 for more detail):

- Convened three extra-regional events to increase awareness and adoption of HPWHs outside the Northwest; greater national adoption is critical to manufacturers achieving economies of scale, which will reduce costs for Northwest consumers, and for building support for a 2028 code change
- Held the first HVAC ventilation training for high-performance commercial buildings in partnership with Puget Sound area utilities
- Saw the first NEEM+ manufactured home sold in the region, which will be sited in Washington's Okanogan PUD #1 service territory

A handwritten signature in black ink, reading "Susan E. Stratton". The signature is fluid and cursive, written over a white background.

Susan E. Stratton
Executive Director



Electric Quarterly Performance Scorecard

		Target	Forecast/ Actual	Status Q1/Q2	
STRATEGIC GOALS <i>(Updated quarterly)</i>	Goal 1: Fill the Energy Efficiency Pipeline	Scanning Portfolio Health (aMW)	1400	1340	
		Pipeline Health (aMW)	1000	1190	
		Program Advancement (aMW)	175	200	
	Goal 2: Create Market Conditions for Efficiency	Annual Program Milestones On-Track	90%	79% (pg. 3)	

		Target	Forecast	Status Q1/ Q2	
CO-CREATED ENERGY SAVINGS (aMW) <i>(Updated in Q1 and Q3)</i>	Current Business Plan Investments (2015-19)	1-yr Forecast (2018)	15	15 (pg. 3)	
		5-yr Forecast (2015-2019)	75	60-70	
		10-yr Forecast (2015-2024)	180	180-210	
	All Investments (1997-today)	1-yr Forecast (2018)	34	38	
		5-yr Forecast (2015-2019)	150	190-210	
= Within 20% of target = Within 1% of target or better = More than 20% below target					

		Budget	Forecast	Actual ⁱ	Status Q1/Q2	
COST-EFFECTIVENESS FINANCE AND OPERATIONS <i>(Updated quarterly)</i>	Cost-Effectiveness	Levelized Total Resource Cost ⁱⁱ (\$/kWh)	\$0.035	\$0.029	N/A	
	Finance	Current Quarter Expenses (\$M)	\$8.7	\$9.1	\$7.8	
		Annual Expenses (\$M)	\$34.6	\$32.6	\$23.0	
		Business Admin Expenses (%)	<13%	9.6%	10.1%	
	Staffing	Employee Retention % (12-month)	>90%	N/A	96%	
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:** Scanning portfolio is slightly (5%) below target after the advancement of High-Performance HVAC into the pipeline. Overall, the pipeline remains very healthy.
- Annual Program Milestones On-track:** Milestone progress dipped to 79% in Q3 due to market factors and some regional alignment issues. See pg. 3 for more detail.
- Current Investments (2015-2019):** 5-year savings estimate for current investments has increased since Q1 and is now 60-70 aMW (up from 65-70 aMW).
- Current Quarter Expenses:** Q3 expenses were 86% of forecast due to program/ project delays and some canceled activities. See pg. 6 for details.
- Annual Expenses:** 2018 expenses are forecast to be \$2M under budget. See pg. 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.

Program Advancement - 20-year aMW potential of opportunities expected to move from program development into market development during this business cycle (2015-2019).

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 and executive cost centers.

ⁱ Excludes Special Funds and Natural Gas Funds

ⁱⁱ Current investments (2015-2019)



Electric Portfolio Scorecard

Co-Created Savings, Current Investments

Program	2018 aMW forecast	% of total 2018 aMW forecast	Annual program milestones on track (Q1/Q3)	1-yr aMW forecast* status (Q1/Q3)	5-yr aMW forecast* status (Q1/Q3)
Standards not associated with programs	3.8	25%			
Codes not associated with programs	3.0	20%			
Ductless Heat Pumps	2.6	17%			
Next Step Homes/ Efficient Homes	2.2	14%			
Heat Pump Water Heaters	1.5	10%			
Super-Efficient Dryers	1.1	7%			
Reduced Wattage Lamp Replacement	0.6	4%			
Retail Product Portfolio	0.4	3%			
Certified Refrigeration Energy Specialist	0.1	1%			
Luminaire Level Lighting Controls	0.0	0%			
Building Operator Certification	0.0	0%			
Manufactured Homes	0.0	0%		N/A	N/A
Commercial Code Enhancement	0.0	0%		N/A	N/A
Extended Motor Products	0.0	0%		N/A	N/A
High Performance HVAC	0.0	0%		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
TOTAL	15.3	100%			

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

Need to Know

- Alliance is on-track to meet annual (2018) energy savings targets.
- In Q3, four programs experienced delays in milestone progress:
 - Heat Pump Water Heaters** – Market factors, including steel tariffs and reduced tax credits, have increased the price barrier, resulting in slower than expected market adoption. In Q4, program will continue efforts to promote the value of HWPBs to consumers and work to increase market adoption nationally, which is critical to manufacturers achieving economies of scale.
 - Super-Efficient Dryers** – Increased product availability has not accelerated market adoption, which remained slow in Q3. In Q4, program is tackling consumer awareness and price barrier with a new manufacturer promotion.
 - Ductless Heat Pumps** – Cost remained a barrier in Q3. Program has shifted strategy away from engaging non-traditional installers and is continuing to explore other opportunities to reduce installation costs.
 - Next Step Homes** – Shift in strategy away from establishing state-level action plans for Next Step Homes means a delay in program milestone progress.

More information is available in the Q3 Board Packet Appendix posted on Conduit at: <https://conduitnw.org/Pages/Group.aspx?rid=254>

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



Electric Quarterly Highlights

STRATEGIC GOAL 1 » Fill the Energy Efficiency Pipeline



Filling the Pipeline: Continued to test and investigate a pipeline of energy-efficient technologies representing more than 1,300 aMW of potential 20-year energy savings, including: combination space and water heating systems, smart thermostats, HVAC split systems, next generation lighting systems, and motors.



Removing barriers to efficient thin triple pane windows - Worked to overcome product availability barriers to thin triple pane windows by developing a business case and value proposition for window manufacturers. These windows, which are comprised of a thin pane of glass between two regularly-sized panes, can be installed in a double-pane window sash and offer twice the efficiency. Although this technology has been available for some time, production costs have recently dropped significantly.



For the latest information about alliance emerging technology activities, see NEEA's quarterly Emerging Technology report, available at:

neea.org/our-work/emerging-technologies

STRATEGIC GOAL 2 » Create Market Conditions for Efficiency



Addressing consumer awareness as a critical barrier to heat pump water heater adoption - Completed 8-week consumer awareness campaign throughout the region resulting in nearly 17 million media impressions, 6.9 million video views, 10,903 new visitors and 21,321 total clicks to the program website - far exceeding campaign goals. During the campaign, there was a four-fold increase in visits to the program website's 'Find an Installer' and/or 'Find a Retailer' pages.



Understanding High-Performance HVAC - Launched market characterization study to better understand the market for very high efficiency dedicated outdoor air systems (VHE DOAS). Although common in Europe, this HVAC system configuration is new to the Northwest and North America as a whole. To begin building an understanding of high-performance ventilation, the program partnered with Puget Sound-area utilities and NEEC (Northwest Energy Efficiency Council) to hold the first Northwest training on ventilation for high-performance commercial buildings. The event was well received by 52 attendees, almost half of whom were utility engineers and staff.



Electric Quarterly Highlights Continued:

STRATEGIC GOAL 2 Continued » Create Market Conditions for Efficiency



Increasing availability of qualified super-efficient dryers - Analyzed testing data from manufacturer Miele's new compact heat pump dryer. Results place it at a Tier 5 performance level (the second highest in NEEA's specification), making it the first product to meet that criteria. With the addition of the Miele dryer, NEEA's Qualified Products List includes models at all performance tiers.



Building the business case for a Super-Efficient Laundry program - Began a literature review of clothes washer data, including product performance, attachment rates (i.e. how often washers and dryers are sold in pairs), and consumer preferences for top- vs. front-loading products. Findings are expected in Q4 2018 and will inform the business case for potentially expanding the alliance's Super Efficient Dryers program to include clothes washing machines.



Influencing Progressively Effective Energy Codes - Continued to support the development of Washington's 2018 Commercial Energy Code. Between June and August, NEEA staff participated in eight all-day meetings organized by the Washington Building Energy Codes Technical Advisory Group (TAG) to review all 171 proposals (42 of which were submitted by NEEA staff and its contractors).



Increasing awareness and availability of NEEM+ manufactured Homes - Finalized agreement with Kit Homes to upgrade all of its homes currently in production (approx. 65) to NEEM+ through the end of 2018. In addition to helping Kit Homes refine its manufacturing process, this upgrade will result in greater retailer awareness of NEEM+ and opportunities to engage home buyers for future testimonials and billing data. NEEM program staff visited 18 manufactured home retailers in WA, OR and MT in Q3 to distribute NEEM+ information and introduce an enhanced NEEM website.



2020-2024 Business Planning (2020-2024):

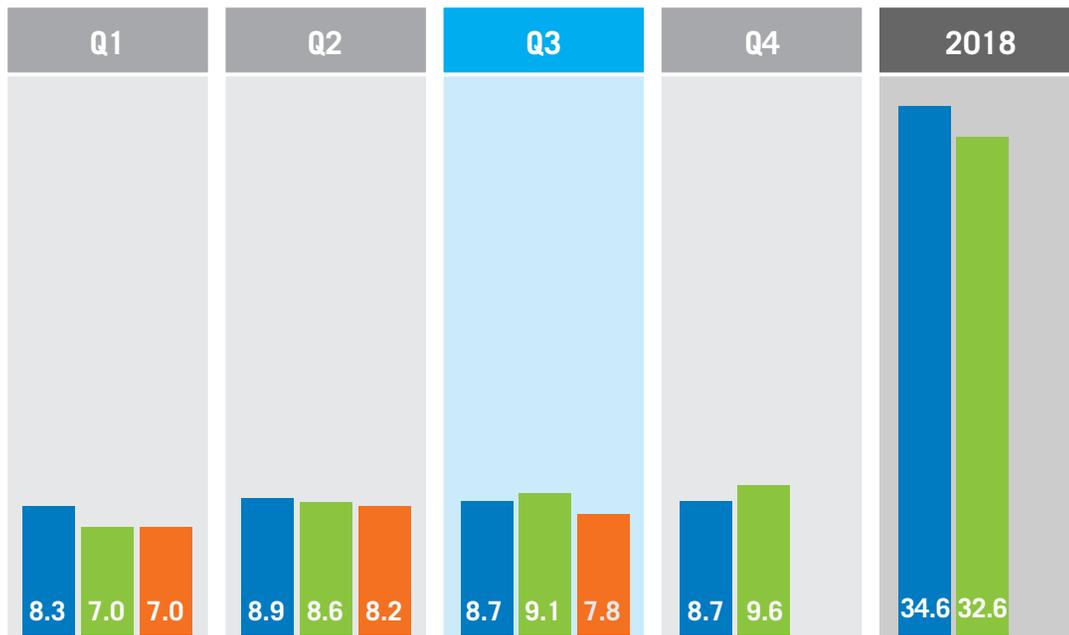
- Posted draft 2020-2024 Business Plan on Conduit for public review and comment between September 20 and October 12. In addition, board members and NEEA staff presented the plan to over 300 stakeholders at in-person meetings and webinars.
- The draft Business Plan received 657 views, 226 downloads, and nine completed feedback forms within the comment period, which staff compiled and presented to the board for consideration.



Need to Know: Electric Investment

YTD Electric Investment = \$23.0 Million

YTD electric investment was 89% of the approved Operations Plan budget. Variance is largely due to: cancellation of a retail pilot for Super-Efficient Dryers; a change to the Commercial Building Stock Assessment timeline that pushed some activities to later in the year and 2019; delays in planned code compliance study in Oregon, resulting in delays in a similar study in Washington; and, a shift in the ductless heat pump program strategy that resulted in reprioritization of some activities. The full year forecast is \$32.6 million, approximately \$2 million less than the approved 2018 Operations Plan budget.



Budget Forecast Actual

\$Millions

YTD Key Budget Variances:

+	-
	• (\$495K) - Super Efficient Dryers cancelled pilot and research
	• (\$477K) - Commercial Building Stock Assessment change in timeline
	• (\$360K) - Delays in OR and WA code compliance studies
	• (\$328K) - Ductless Heat Pump strategy shift

YTD Electric Expense Detail:



58% (\$13.3M)

Total Direct Program Expenses



36% (\$8.3M)

Total Salaries and Benefits



6% (\$1.4M)

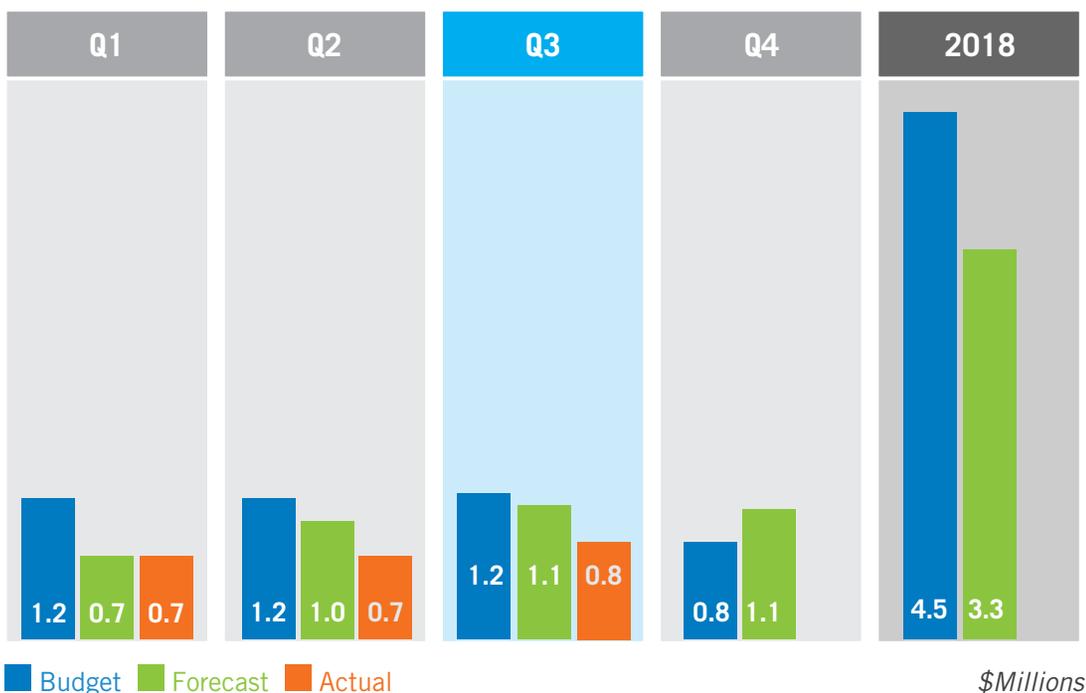
Total General and Administrative



Need to Know: Natural Gas Investment

YTD Natural Gas Investment = \$2.3 Million

YTD natural gas investment was 62% of the approved Operations Plan budget. Variance is primarily due to delays in the condensing rooftop unit field trial and product launch delays for combination space and water heating units and ENERGY STAR non-plugin gas water heaters. The full year forecast is 75% of the approved 2018 Operations Plan budget.



YTD Key Budget Variances:

+	-
	<ul style="list-style-type: none"> • (\$422K) - Non-plugin ENERGY STAR gas water heater delayed
	<ul style="list-style-type: none"> • (\$249K) - Condensing gas rooftop unit field trial activities pushed to Q4
	<ul style="list-style-type: none"> • (\$276K) - Combi Unit product delays

Quarterly Natural Gas Highlights:



Efficient Gas Water Heaters - Launched evaluation of opportunities to remove or reduce installation barriers, including condensate drainage requirements and ducting complexities, leveraging lessons learned from the electric heat pump water heater program.



Combination Space and Water Heating Systems - Concluded study to reduce the weight, cost and complexity of one type of gas combi unit. The findings, which include overall weight reductions of 13% and cost reductions of up to 15%, will be incorporated into DOE-funded commercialization efforts involving a major HVAC manufacturer.



Condensing HVAC Rooftop Unit Pilot - Installed and commissioned condensing RTUs on commercial buildings in Bend, OR and Post Falls, ID. Pilot results will provide energy savings and product performance data for utility programs and inform future market channel development work.

YTD Natural Gas Expense Detail:



49% (\$1.11M)
Total Direct Program Expenses



24% (\$0.55M)
Total Salaries and Benefits



26% (\$0.60M)
Total General and Administrative

TOGETHER We Are Transforming the Northwest



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All NEEA quarterly performance reports are available on neea.org.