



Quarterly Performance Report » Q1 2018

A Note from the Executive Director

The first quarter of 2018 saw some important milestones for the alliance. In February, the Regional Portfolio Advisory Committee unanimously agreed to add the Extended Motor Products Program (XMP) to the alliance's portfolio. XMP will leverage NEEA's previous investments in a distributor platform and its mid-stream relationships to increase the market adoption of energy-efficient industrial pumps. The program represents between 60-95 aMW of Total Regional Savings potential for the region. In March, NEEA published the findings of the second Residential Building Stock Assessment (RBSA II). Results will support utilities integrated resource plans and serve as the basis for many of the region's energy calculation and modeling efforts. Finally, in late March NEEA staff finalized the 2017 energy savings estimate. I'm proud to report that the alliance met all of its annual energy savings targets.

On behalf of NEEA staff, I'd like to thank NEEA's former Board Chair, John Francisco, who left the Board in March. Cory Scott of Pacific Power will serve as NEEA's interim Board Chair until the Board confirms a new chair at its meeting in June. Many thanks to John and Cory for dedicating your time and talents to furthering NEEA's mission and vision.

A handwritten signature in black ink, reading "Susan E. Stratton". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Susan E. Stratton
Executive Director



Electric Quarterly Performance Scorecard

		Target	Forecast/ Actual	Status Q4/ Q1		
STRATEGIC GOALS <i>(Updated quarterly)</i>	Goal 1: Fill the Energy Efficiency Pipeline	Scanning Portfolio Health (aMW)	1400	1300		
		Pipeline Health (aMW)	1000	1435		
		Program Advancement (aMW)	175	200		
	Goal 2: Create Market Conditions for Efficiency	Annual Program Milestones On-Track	90%	94% (pg. 3)		
		Target	Forecast	Status Q3/ Q1		
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	60-65		
		10-yr Forecast (2015-2024)	180	180-210		
	All Investments (1997-today)	1-yr Forecast (2018)	34	36		
		5-yr Forecast (2015-2019)	150	180-195		
= Within 20% of target = Within 1% of target or better = More than 20% below target						
		Budget	Forecast	Actual ⁱ	Status Q1	
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)	\$8.3	\$8.3	\$7.0	
		Annual Expenses (\$M)	\$34.6	\$34.6	\$7.0	
		Business Admin Expenses (%)	<13%	10%	11%	
	Staffing	Employee Retention % (12-month)	>90%	N/A	91%	
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 below target, but within acceptable range.
- Current Investments (2015-2019):** Estimate for 5-year energy savings from current investments is currently 10-15 percent below target (see pg. 3 for more detail).
- All Investments (1997-2019):** Estimates for annual (2018) and 5-year energy savings from All Investments are on-track.
- Finance:** Q1 electric investment was 84 percent of the approved 2018 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.

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. Does not include program administration expenses.

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	1-yr aMW forecast* status	5-yr aMW forecast* status (Q3/Q1)
Standards not associated with programs	4.2	28%			
Ductless Heat Pumps	3.4	23%			
Heat Pump Water Heaters	2.3	15%			
Codes not associated with programs	1.5	10%			
Next Step Homes/ Efficient Homes	1.5	10%			
Super-Efficient Dryers	0.8	5%			
Reduced Wattage Lamp Replacement	0.6	5%			
Retail Product Portfolio	0.5	3%			
Certified Refrigeration Energy Specialist	0.1	0.5%			
Luminaire Level Lighting Controls	0.1	0.5%			
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
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	15.0	100%			

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

Need to Know

- 94% of annual program milestones are on track
- Despite estimated savings shortfalls in a few programs, most notably Reduced Wattage Lamp Replacement, NEEA expects its estimated 2018 targets will be met. This is largely due to market changes for ductless heat pumps and commercial codes.
- Estimates for 5-year business plan energy savings are currently 15-20% below target due to savings shortfalls in the consumer products and commercial lighting markets.
- More information about individual program milestones is available in the Q1 Market Execution Report, which is available 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: Added Extended Motor Products (XMP) to NEEA's electric portfolio following a unanimous vote by the Regional Portfolio Advisory Committee. XMP will accelerate the adoption of energy-efficient motor driven pumps by removing market barriers and leveraging assets and distributor relationships established through the alliance's Reduced Wattage Lamp Replacement program.

Testing and Validating Emerging Technologies: Completed an 18-month study to evaluate viability of DIY ductless heat pump units for future utility programs. Four field-test installations revealed good product functionality and no leaking of refrigerant lines. More information is available at: <http://neea.adobeconnect.com/psohqns99325/>



For the latest information about alliance emerging technology activities, see NEEA's quarterly Emerging Technology report, available at: <https://neea.org/resources/emerging-technology-report-q2-2018>

STRATEGIC GOAL 2 » Create Market Conditions for Efficiency



Bringing clarity to window attachments market:

Leveraged NEEA's market research to influence the development of the Attachments Energy Rating Council (AERC)'s certification and labeling standards for low-e storm windows. Certification provides guidance for manufacturers, while labeling helps customers differentiate between higher and lower-efficiency products. AERC began accepting manufacturer applications in March, 2018.



Working with supply chain to advance heat pump water heater adoption:

- Met with installers to gain a better understanding of their barriers, generate market solutions and hear their feedback on program support
- Completed 59 retail training visits at Lowe's and The Home Depot locations throughout the region to communicate the benefits of HPWHs and collect store-level intelligence on product stocking



Electric Quarterly Highlights

Delivering Regional Value



Delivering Tailored Training

Resources: Customized the SEM Hub online training platform to allow NEEA funders to deliver Strategic Energy Management courses specifically tailored to the needs of their customers. NEEA staff worked with Puget Sound Energy and Energy Trust of Oregon to develop this functionality, which can be made available to all NEEA funders.



Providing critical market data:

Launched analysis of sales data to inform the next ENERGY STAR specification for air cleaners. Environmental Protection Agency staff requested NEEA support because data collected through the Retail Product Portfolio (RPP) program is the most complete and detailed currently available. Influencing a more stringent specification will deliver greater energy savings to the region from more efficient air cleaners.



Facilitating Regional

Collaboration: Supported a regional workgroup of lighting managers to create a Good-Better-Best LED retrofit guide for customers and trade allies. The guide, which was developed to help consumers make informed decisions about lighting retrofit options, can be downloaded from the NW Lighting Network and is also available to Northwest utilities to post on their websites.



Characterizing Northwest Residential Building Stock: Published the second comprehensive Residential Building Stock Assessment (RBSA), a broad, regional study that characterizes the building stock within three housing types: single-family homes, manufactured homes, and multifamily buildings. The RBSA supports utility staff to plan, manage and measure efficiency programs. It also assists regional planners as they update their models and assumptions with information about the equipment (e.g. lighting, insulation, electronics, etc.) found in Northwest homes. The RBSA database and final reports are available at: neea.org/data/residential-building-stock-assessment.



Planning for the Next Business Cycle (2020-2024):

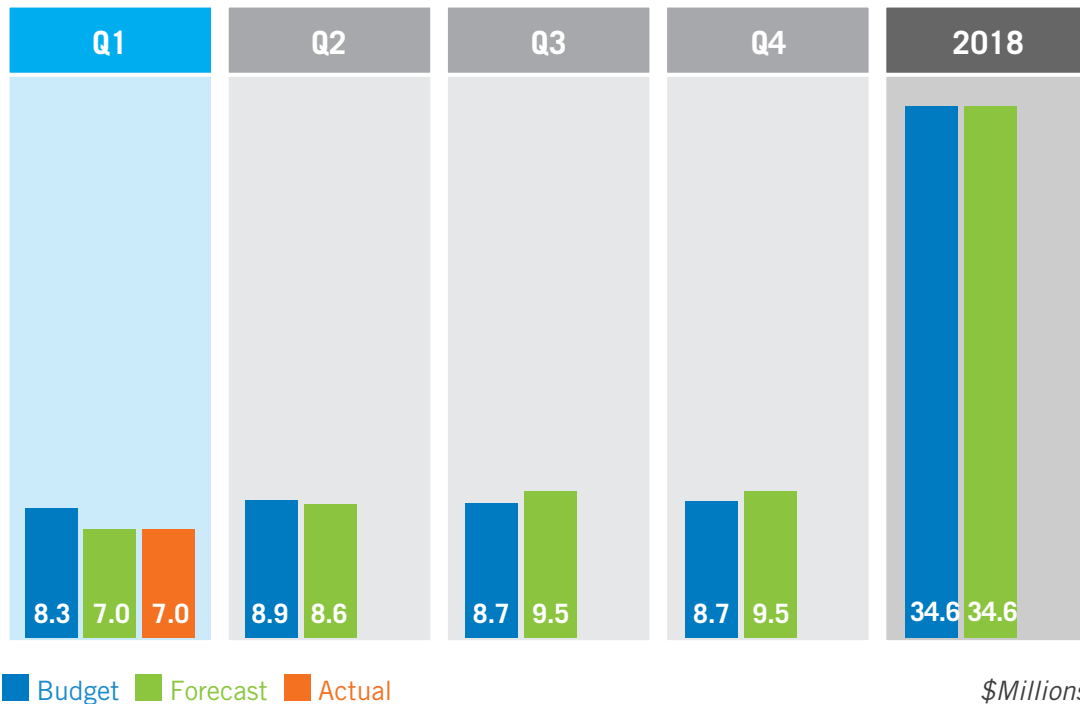
- **Strategic Planning Committee** - Supporting NEEA's Board to refine the draft Strategic Plan (including Boundary Conditions and Key Definitions) for public input via Conduit
- **Business Planning Committee** - Kicked off Business Planning process in Q1; draft Business Plan will be presented for Board discussion in June, with regional outreach planned for the Fall



Need to Know: Electric Investment

YTD Electric Investment = \$7.0 Million

YTD electric investment was 84% of the approved Q1 Operations Plan budget. Variance is primarily due to: a change to the Commercial Building Stock Assessment timeline that pushed some activities to Q2 2018; delayed distributor incentive agreements for Heat Pump Water Heaters; reprioritization of Ductless Heat Pump program activities, and; a strategic decision in the Luminaire Level Lighting Controls program to delay some market implementation activity until after the Scale-Up Approval milestone vote, currently scheduled for early 2019.



YTD Key Budget Variances:

+	-
	<ul style="list-style-type: none"> • (\$298K) - Commercial Building Stock Assessment change in timeline
	<ul style="list-style-type: none"> • (\$261K) - Heat Pump Water Heaters contracting delays
	<ul style="list-style-type: none"> • (\$136K) - Ductless Heat Pump reprioritization of work
	<ul style="list-style-type: none"> • (\$89K) - Luminaire Level Lighting Controls delay in market activity until after Scale-up vote

YTD Electric Expense Detail:

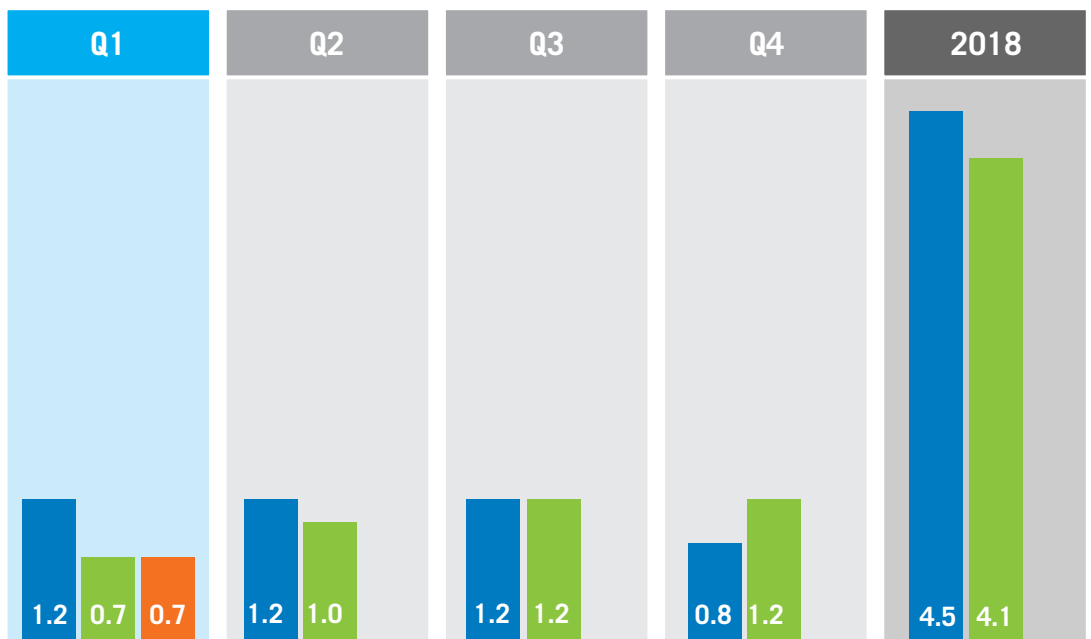
- 55% (\$3.7M)**
Total Direct Program Expenses
- 38% (\$2.7M)**
Total Salaries and Benefits
- 6% (\$0.4M)**
Total General and Administrative



Need to Know: Natural Gas Investment

YTD Natural Gas Investment = \$ 0.7 Million

Year to date natural gas investment was 57% of the approved YTD Operations Plan budget. Variance is primarily due a delay in the site selection and equipment purchasing for a condensing gas rooftop unit field trial until to later in the year.



Budget Forecast Actual \$Millions

YTD Key Budget Variances:

+	-
	<ul style="list-style-type: none"> • (\$258K) - Site recruitment and equipment purchasing for Condensing RTU field trial delayed until later in the year
	<ul style="list-style-type: none"> • (\$89K) - Planned activities to increase adoption of non-plug-in ENERGY STAR gas water heaters postponed due to product delays
	<ul style="list-style-type: none"> • (\$62K) - Negotiated better pricing for HVAC/ Plumbing installer market research; shifted other research to later in the year

Quarterly Natural Gas Highlights:



Efficient Gas Water Heaters - Assessed opportunities to remove installation barriers for gas heat pump water heater in partnership with the Gas Technology Institute. Outcomes will be shared with manufacturers to inform further product development efforts.



Combi Systems - Launched effort to reduce the weight, cost and complexity of gas sorption combination space and water heat system. Findings will be leveraged to bolster and accelerate efforts to commercialize the technology.



Condensing Rooftop Units - Delivered three in-person HVAC industry trainings to over 85 attendees to gauge interest in condensing rooftop units, share best practice recommendations, and identify sites for upcoming pilot projects.

YTD Natural Gas Expense Detail:



46% (\$0.32M) Total Direct Program Expenses



26% (\$0.18M) Total Salaries and Benefits



29% (\$0.20M) Total General and Administrative

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.