



Quarterly Performance Report » Q2 2017

A Note from the Executive Director

The second quarter of 2017 saw a great deal of movement in NEEA's emerging technology pipeline. On May 17, the Regional Portfolio Advisory Committee (RPAC) added two promising technologies - low-e storm windows and electric split-system water heaters - to NEEA's portfolio. Low-e storm windows will be integrated into the existing Window Attachments program and split-system water heaters to the Heat Pump Water Heater program. Adding these technologies to existing programs allows the alliance to gain efficiencies, leverage shared opportunities, and more effectively reach the target markets. Also in Q2, RPAC voted to advance the Commercial Code Enhancement program into Market Development. The alliance now has a total of 16 Market Transformation programs in its portfolio.

NEEA's Board and staff continued to develop a framework for NEEA's 2020-2024 Strategic Plan. A Board workshop was held on August 25, in Seattle, WA. Thank you to all who took the time to participate. NEEA's Board will vote on the draft Strategic Plan at the December 2017 Annual Meeting.

Q2 Market Transformation Highlights:

- 94% of program milestones are on-track and NEEA is forecasting to meet its 2017 energy savings targets
- Sales of heat pump water heaters continue to grow, increasing 48 percent from this time last year
- Nationwide Marketing joined the Retail Product Portfolio program. Representing independent retailers in the U.S., Nationwide has about 100 member locations in the Northwest

A handwritten signature in black ink, reading "Susan E. Stratton".

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	1349		
		Pipeline health (aMW)	1000	975		
		Program advancement (aMW)	175	210		
	Goal 2: Create Market Conditions for Efficiency	Program milestones on-track	90%	94% (pg. 3)		
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CO-CREATED ENERGY SAVINGS (aMW) <i>(Updated in Q1 and Q3)</i>	Current Business Plan Investments (2015-19)	1-yr Forecast (2017)	10	13 (pg. 3)		
		5-yr Forecast (2015-2019)	75	65-75		
		10-yr Forecast (2015-2024)	180	190		
	All Investments (1997-today)	1-yr Forecast (2017)	35	37		
		5-yr Forecast (2015-2019)	150	184		
		● = Within 20% of target ● = Within 1% of target or better ● = More than 20% below target				
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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)	\$8.8	\$9.0	\$8.6
	Annual Expenses (\$M)		\$35.3	\$35.0	\$16.7	
	Business Admin Expenses (%)		<13%	12.6%	12.1%	
	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 Health and Scanning Portfolio Health: Pipeline metrics dipped slightly (<5%) below target in Q2. NEEA staff are working with the Regional Emerging Technology Advisory Committee to identify new scanning opportunities.

● Co-Created Energy Savings: Some risk of not meeting 5-year business plan goal for current investments, although high range of forecast is within target. Forecast will be updated in Q3, 2017.

● Annual Expenses: YTD electric investment is 94% of the approved 2017 Operations Plan YTD budget. See page 6 for details.

● Employee Retention: Rolling 12-month retention rate was 91%, the highest in 2.5 years.

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 the market 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 - % of total budget dedicated to business administration, including executive office, overhead, shared expenses, etc. 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	2017 aMW forecast	% of total 2017 aMW forecast	Annual program milestones on track (Q1/Q2)	1-yr aMW forecast* status (Q1/Q2)	5-yr aMW forecast* status (Q1/Q2)
Standards not associated with programs	3.6	27%			
Ductless Heat Pumps	2.6	20%			
Heat Pump Water Heaters	2.3	17%			
Reduced Wattage Lamp Replacement	1.0	8%			
Codes not associated with programs	0.9	7%			
Next Step Homes	0.8	6%			
Certified Refrigeration Energy Specialist	0.7	5%			
Super-Efficient Dryers	0.5	4%			
Retail Product Portfolio	0.5	4%			N/A
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
Commercial 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	13.2	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
- Energy savings forecast is unchanged from Q2; will be updated in Q3 2017
- More information about individual program milestones is available in the 'Market Execution Report' presented in the September 14 Board Packet, which can be found at neea.org/get-involved/calendar

*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: Investigated and subsequently advanced two emerging technologies – low-e storm windows and split-system water heaters – into NEEA's portfolio. Both technologies will be incorporated into existing alliance programs to create efficiencies, leverage shared opportunities, and more effectively reach the target markets.



Testing and validating new technologies – Published a case study of dynamic glass demonstrating the viability of this emerging technology. Dynamic glass is glazing that adapts to changing natural light to lower glare and solar gain. Most panels are also double pane providing high insulation benefits. Study is available at neea.org.



Increasing visibility of the region's energy efficiency pipeline - Populated new Regional Emerging Technology Database with over 70 technologies. This shared database, which lives on Conduit, provides the first comprehensive view of emerging technology efforts across the region and will reduce regional emerging technology development costs by avoiding redundancies.

STRATEGIC GOAL 2 » Create Market Conditions for Efficiency



Increasing funder support for residential new construction efficiency – Supported launch of Snohomish PUD's new Performance Path program. Snohomish is the first utility to create a residential new construction program leveraging BPA's Performance Path program and NEEA's guidelines for modeling energy savings. NEEA staff will be providing outreach to utilities for the remainder of 2017 to plan additional Performance Path programs.



Accelerating market adoption of heat pump water heaters – Achieved YTD sales of almost 5,000 highly-efficient (Tier 3) units through Rheem, A. O. Smith and Bradford White markdowns and promotions. This is an increase of 48 percent from 2016 sales.



Increasing industrial facility energy efficiency - Captured an estimated 750,000 kWh of annual energy savings at refrigeration facilities across the Northwest through Certified Refrigeration Energy Specialist (CRES) training. CRES activity at one plant uncovered an opportunity for operational efficiency that was subsequently rolled out to 79 facilities worldwide, 46 in the Northwest.



Electric Quarterly Highlights

Delivering Regional Value



Leveraging market relationships -

Initiated a partnership between Whirlpool, retailer Albert Lee and Puget Sound Area utilities to pilot a promotion of super-efficient dryers. Findings from the pilot, which will test strategies for driving consumer demand, will be applied to future manufacturer and retail promotions across the region. For information, contact: kstuart@neea.org



Delivering training to support industrial energy efficiency -

Conducted Industrial Technical Trainings in Tacoma, WA, Missoula, MT, Richland, WA and Wenatchee, WA. Over 70 people participated in the trainings, which had an overall satisfaction rate of 98 percent.



Using data to drive results – Conducted new, detailed analysis of existing Residential Building Stock Assessment metered household data. Unlocking this data has saved the region tens of thousands of dollars in contracting expenses while supporting quicker data-driven decision making for the End Use Load Research Project. Results are available at: <https://conduitnw.org/Pages/File.aspx?rid=4066>



Influencing progressively efficient codes -

Submitted residential and commercial energy code proposals for the State of Oregon. The residential code was a collaborative effort between NEEA, the State Building Codes Division and the Oregon Homebuilders Association. The new code offers an approximate 8% improvement over current code.



Increasing the availability of efficient consumer products across the region –

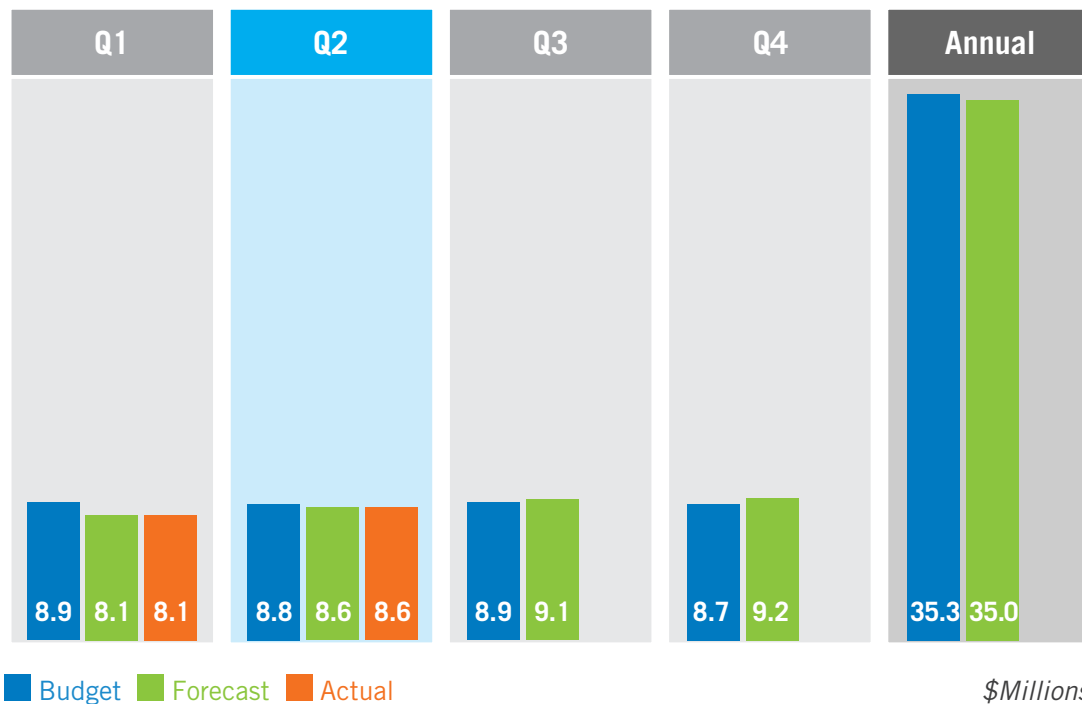
Added Nationwide Marketing to the Retail Product Portfolio program to help ensure efficient consumer products are available through independent retailers. Nationwide is the largest buying and marketing group for independent retailers in the U.S. and has about 100 member locations in the Northwest. Nationwide members are geographically diverse, vary in size and serve a broad spectrum of customers.



Need to Know: Electric Investment

YTD Electric Investment = \$16.7 Million

Actual YTD electric investment is 94% of the approved 2017 Operations Plan YTD budget. Key variances are due to fewer than anticipated TV incentives (Retail Product Portfolio), delayed or cancelled pilots (Luminaire Level Lighting Controls, Window Attachments), and fewer than expected Manufactured Homes demonstration projects. This budget shortfall was somewhat offset by heat pump water heater sales and manufacturer/ retail incentives, which continue to exceeded expectations. Full year electric forecast is tracking to a one percent variance against the approved 2017 Operations Plan budget.



YTD Key Budget Variances:

+	-
• \$731K - HPWH incentives	• (\$354K) - Retail Product Portfolio program incentives
	• (\$298K) - Window Attachments strategy shift
	• (\$292K) - Luminaire Level Lighting Controls delayed pilots
	• (\$167K) - Manufactured Homes demonstration pilots

YTD Electric Expense Detail:

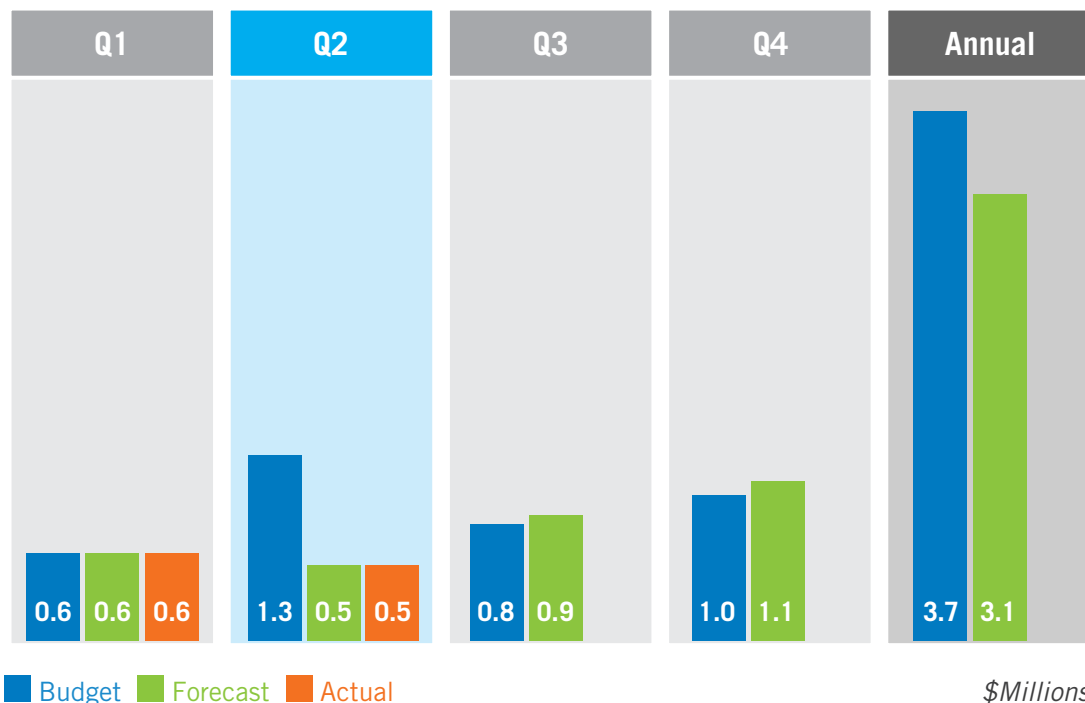
	60% (\$10.0M) Total Direct Program Expenses
	33% (\$5.5M) Total Salaries and Benefits
	7% (\$1.2M) Total General and Administration



Need to Know: Natural Gas Investment

YTD Natural Gas Investment = \$1.1 Million

YTD natural gas investment is 60% of the approved 2017 Operations Plan YTD budget. Variance is due to contracting delays for gas heat pump water heaters. Full year natural gas forecast is 84% of the annual budget.



YTD Key Budget Variances:

+	-
<ul style="list-style-type: none"> \$92K - Greater manufacturer interest in combination systems 	<ul style="list-style-type: none"> (\$465K) - Gas-fired heat pump water heaters delayed expenses
	<ul style="list-style-type: none"> (\$90K) - Deferred heat pump water heater market research

Quarterly Natural Gas Highlights:

- Working with manufacturers** - Engaged several new partners, including industry-leading HVAC equipment and water heater manufacturers to accelerate development of efficient gas technologies.
- Testing and vetting gas rooftop HVAC systems** - Completed field test of four condensing rooftop units to verify energy savings potential and product reliability
- Developing and assessing gas heat pump technology** - Launched collaboration with Intellichoice Energy and Oak Ridge National Labs to accelerate residential gas heat pump design and testing

YTD Natural Gas Expense Detail:

- 43% (\$0.5M)**
Total Direct Program Expenses
- 37% (\$0.4M)**
Total Salaries and Benefits
- 20% (\$0.2M)**
Total General and Administration

TOGETHER We Are Transforming the Northwest



Questions about this report may be addressed to:

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