

# Q1 2017 REPORT ON ACTIVITIES FOR NW NATURAL IN WASHINGTON

January 1, 2017 through March 31, 2017

This quarterly report covers the period January 1 through March 31, 2017, and addresses progress toward 2017 goals for the NW Natural energy-efficiency program in Washington. It includes information on expenditures, gas savings, projects completed and incentives paid during the quarter and year to date.

## I. PROGRAM SUMMARY

### A. General

- **Energy Trust completed Q1 with a strong pipeline of projects expected to lead to savings by year-end**, including Existing Buildings custom projects, homes rated with the energy performance score EPS™, gas furnaces, water heaters and gas hearths.
- **Gas efficiency measures installed in Q1 2017 by NW Natural's Washington customers saved 74,794 annual therms of natural gas**—including 51,517 annual therms in Existing Buildings, 12,778 annual therms in Existing Homes and 10,499 annual therms in New Homes and Products.
- **Q1 2017 savings were approximately 26 percent of the 2017 annual performance metric** of 282,539 annual therms in NW Natural's 2017 Energy Efficiency Plan submitted to the Washington Utilities and Transportation Commission. This exceeds typical quarter one performance of achieving 10 percent of goal as indicated in the 2017 Energy Efficiency Plan. On average, 10 percent of annual energy savings are achieved in Q1, 10 percent in Q2, 25 percent in Q3 and 55 percent in Q4.
- **Savings achieved in Q1 2017 were over 200 percent higher than Q1 2016 savings**, due to strong new homes EPS participation and the commercial program recognizing three gas-fired condensing boilers.

### B. Commercial sector highlights

#### *Existing Buildings*

- **Existing Buildings saved 51,517 annual therms in Q1** through gas-fired condensing boilers and a dishwasher.
- **In Q1, Existing Buildings achieved 33 percent of its annual goal**, compared to about 5 percent in the same quarter last year. The program has a strong pipeline of prospective and committed projects expected to complete in 2017.
- **The program worked closely with K-12 schools on building upgrades**, including with architects to identify new projects early in the planning process.
- **The program provided showerheads and faucet aerators for installation** at assisted living facilities, hospitals and fitness centers in Q1 as part of an outreach strategy to engage new customers.
- **Based on early indicators, the Existing Buildings program expects to meet its goal without year-end bonus** incentives. Not providing bonuses will help stretch the incentive budget to accomplish more projects.
- **Existing Buildings hosted a Winter Trade Ally Event**, with training, program updates and recognition for top-performing trade allies.

- **The program has been working on developing several new offerings for introduction to the market in Q3**, including offerings for multifamily customers. Potential new upgrades include cooler doors; manufacturer-installed rooftop demand control ventilation on new rooftop units; multifamily HVAC water heating condensing boilers; faucet aerators, showerheads and shower wands for multifamily applications; and multifamily condensing gas tankless water heaters for multifamily buildings.

### C. Residential sector highlights

- **The residential sector saved 23,277 annual therms in Q1, 18 percent of its annual goal**, primarily through gas furnaces, gas hearths, smart thermostats, EPS homes and showerheads.
- **The residential sector annual goal is lower than the sector's 2016 savings** achieved because New Homes savings are expected to decrease due to a code change. A greater portion of residential savings are expected from Existing Homes in 2017.

#### *Existing Homes*

- **Existing Homes saved 12,778 annual therms in Q1, 19 percent of its annual goal**, primarily through gas furnaces, gas hearths with electric ignition, smart thermostats and weatherization.
- **Existing Homes planned a marketing campaign to promote Energy Saver Kits in Q2**. The campaign is expected to boost savings from these very cost-effective offerings.
- **The program offered a \$100 bonus for gas hearths**, available from January 1 to March 31. Results are expected in Q2.
- **Existing Homes developed a new downstream incentive offering for gas tankless water heaters** to launch in Q3.
- **The program has been making preparations to shift tank water heating incentives from downstream to midstream**. In Q1, Existing Homes finalized and approved measure design and began enrollment and outreach to midstream partners. Midstream incentives are provided to distributors and retailers, with savings passed onto customers. Downstream incentives are provided directly to customers.

#### *New Homes and Products*

- **New Homes and Products saved 10,499 annual therms in Q1, 18 percent of its annual goal**, with 7,764 therms from New Homes and 2,735 therms from showerheads sold at retail.
- **Early results indicate strong builder participation with EPS**. However, savings are lower in Q1 2017 than Q1 2016 due to a recent code change.
- **New Homes recognized 88 EPS homes in Q1**, with an average of 19 percent improvement above code.
- **The program identified improvements to the field quality assurance processes**, including a formalized reporting process, quarterly targets for the inspections to reduce end-of-year inspections, and development of a site inspection guide.
- **The program continued to attend monthly Building Industry Association of Clark County Green Building Council meetings** in Q1. Topics included planning a sustainability dinner and developing a strategic plan.
- **New Homes conducted outreach to builders Lennar NW, Adair Homes and Quail Homes**. The program met with Lennar NW at its Vancouver office to establish a relationship with this high-

volume trade ally builder. The program also met with Adair to increase participation, which has been limited in the past.

- **In addition, the program collaborated with NW Natural to engage with Manor Homes**, a high-volume builder in Washington with historically low participation in EPS.
- **The program continued to offer discounted showerheads at retail stores** through collaboration with Bonneville Power Administration Simple Steps, Smart Savings™. This effort yielded 2,735 therms from showerheads.

#### **D. Program evaluations**

- There were no evaluations in progress in Q1 2017.

## E. Washington Utilities and Transportation Commission performance metrics<sup>1,2</sup>

The table below compares quarterly results to 2017 goals, as established in NW Natural's Energy Efficiency Plan for Washington (filed December 2016).

### 2017 results compared to goals

Metrics	Goal	2017 YTD	Q1 results	Q2 results	Q3 results	Q4 results
Therms Saved	240,158 - 282,539	74,794	74,794			
Total Program Costs	\$1,678,902 - \$1,975,211	\$442,268	\$442,268			
Average Levelized Cost Per Measure	Less than \$0.65	\$0.40	\$0.40			
Dollars Spent Per Therm Saved	Less than \$6.50	\$5.91	\$5.91			
Utility Costs at Portfolio Level	Greater than 1.0	Reported annually	Reported annually			

- This table does not include savings goal or budget associated with NW Natural's Washington Low-Income Energy Efficiency program delivery.
- Energy Trust allocated budget to NEEA for gas market transformation activities, which is not included in this table.

### 2016 results compared to goals for reference

Metrics	Goal	2016 YTD	Q1 results	Q2 results	Q3 results	Q4 results
Therms Saved	223,706 - 263,184	330,866	24,195	48,227	73,153	185,291
Total Program Costs	\$1,441,218 - \$1,695,551	\$1,818,821	\$261,402	\$331,106	\$466,681	\$759,633
Average Levelized Cost Per Measure	Less than \$0.65	\$0.41	\$0.81	\$0.54	\$0.44	\$0.31
Dollars Spent Per Therm Saved	Less than \$6.50	\$5.50	\$10.80	\$6.87	\$6.38	\$4.10
Utility Costs at Portfolio Level	Greater than 1.0	1.53	Reported annually	Reported annually	Reported annually	Reported annually

<sup>1</sup> Achievement of metrics were calculated excluding spending on NEEA gas efforts in Washington.

<sup>2</sup> Total program costs exclude NEEA and Washington Low Income.

**2016 Utility Cost and Total Resource Cost benefit cost ratios by program<sup>3</sup>**

<b>Program</b>	<b>Utility Cost Test benefit/cost ratio</b>	<b>Total Resource Cost Test benefit/cost ratio</b>
Existing Buildings	1.18	2.16
Existing Homes	1.43	1.34
New Homes and Products	2.02	0.69
<b>Total NW Natural Washington portfolio</b>	<b>1.61</b>	<b>0.99</b>

**2016 Total Utility Cost and Total Resource Cost benefit cost ratios**

<b>Program</b>	<b>Utility Cost Test benefit/cost ratio</b>	<b>Total Resource Cost Test benefit/cost ratio</b>
NW Natural Washington Portfolio	1.61	0.99
NW Natural Washington Low Income	0.89	0.74
<b>Total</b>	<b>1.58</b>	<b>0.99</b>

<sup>3</sup> While Energy Trust is required to report the Total Resource Cost benefit cost ratio, it is not included as a performance metric for utility costs at the portfolio level.

## II. QUARTERLY RESULTS

### A. Expenditures

		Actual expenditures Q1	Budgeted expenditures Q1	Variance
Commercial programs	Existing Buildings	\$ 233,166	\$ 130,278	\$ (102,888)
	NEEA commercial	\$ 3,838	\$ 6,327	\$ 2,490
	<b>Commercial total</b>	<b>\$ 237,004</b>	<b>\$ 136,606</b>	<b>\$ (100,398)</b>
Residential programs	Existing Homes	\$ 75,991	\$ 99,019	\$ 23,028
	New Homes and Products	\$ 110,281	\$ 97,907	\$ (12,374)
	NEEA residential	\$ 15,421	\$ 19,180	\$ 3,759
	<b>Residential total</b>	<b>\$ 201,693</b>	<b>\$ 216,106</b>	<b>\$ 14,413</b>
Administration	Existing Buildings administration	\$ 12,691	\$ 8,543	\$ (4,148)
	Existing Homes administration	\$ 4,136	\$ 5,392	\$ 1,256
	New Homes/Products administration	\$ 6,002	\$ 5,975	\$ (27)
	NEEA administration	\$ 1,048	\$ 1,094	\$ 46
	<b>Administration total</b>	<b>\$ 23,878</b>	<b>\$ 21,004</b>	<b>\$ (2,874)</b>
	<b>Total expenditures</b>	<b>\$ 462,575</b>	<b>\$ 373,716</b>	<b>\$ (88,859)</b>

Energy Trust allocated budget to NEEA for gas market transformation activities in 2017.

### B. Incentives paid<sup>4</sup>

		Q1 actual incentives	Actual expenditures	Percent incentives/expenditures
Commercial programs	Existing Buildings	\$ 159,565	\$ 245,857	65%
	<b>Commercial total</b>	<b>\$ 159,565</b>	<b>\$ 245,857</b>	<b>65%</b>
Residential programs	Existing Homes	\$ 28,531	\$ 80,128	36%
	New Homes and Products	\$ 50,548	\$ 116,283	43%
	<b>Residential total</b>	<b>\$ 79,079</b>	<b>\$ 196,411</b>	<b>40%</b>
	<b>Total incentives</b>	<b>\$ 238,644</b>	<b>\$ 442,268</b>	<b>54%</b>

### C. Savings

		Therms saved Q1	Annual goal	Percent achieved YTD	\$/therm	Levelized cost/therm
Commercial programs	Existing Buildings	51,517	156,525	33%	\$ 4.77	\$ 0.31
	<b>Commercial total</b>	<b>51,517</b>	<b>156,525</b>	<b>33%</b>	<b>\$ 4.77</b>	<b>\$ 0.31</b>
Residential programs	Existing Homes	12,778	68,253	19%	\$ 6.27	\$ 0.50
	New Homes and Products	10,499	57,761	18%	\$ 11.08	\$ 0.76
	<b>Residential total</b>	<b>23,277</b>	<b>126,014</b>	<b>18%</b>	<b>\$ 8.44</b>	<b>\$ 0.62</b>
	<b>Total savings</b>	<b>74,794</b>	<b>282,539</b>	<b>26%</b>	<b>\$ 5.91</b>	<b>\$ 0.40</b>

Energy trust allocated budget to NEEA for gas market transformation activities in 2017. While there were no associated savings in Q1, savings are expected in subsequent years.

<sup>4</sup> NEEA expenditures excluded per NW Natural Washington's Energy Efficiency Plan.

### III YEAR-TO-DATE RESULTS

#### A. Activity highlights—sites served

	Q1	Q2	Q3	Q4	Total
<b>Existing Commercial</b>					
Boiler	3				3
Commercial laundry washer	-				-
Commercial tankless water heater	-				-
Condensing tank water heater	-				-
Dishwasher	1				1
Gas convection oven	-				-
Gas combination oven	-				-
Gas fryer	-				-
Gas griddle	-				-
High-efficiency condensing furnace	-				-
High-efficiency condensing unit heater	-				-
Custom	-				-
Pipe insulation	-				-
Roof insulation	-				-
Studies	3				3
Wall insulation	-				-
<b>Existing Homes</b>					
Weatherization (insulation, air and duct sealing and windows)	22				22
Gas hearths	9				9
Energy Saver Kits	14				14
LivingWise Kits distributed through schools	-				-
Smart thermostats	54				54
Gas furnaces	65				65
Water heaters	1				1
Online Home Energy Reviews	64				64
<b>New Homes and Products</b>					
Clothes washers	-				-
New EPS homes	88				88

#### B. Revenue

Source	Actual revenue	Budgeted revenue
NW Natural \$	544,100 \$	544,100

## C. Expenditures

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- **Incentives paid account for approximately 63 percent of year-to-date program expenses**, when total program expense is adjusted down by 15 percent to account for costs that a utility-delivered program would recover through rates.

## E. Savings

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