

## Q3 2017 REPORT ON ACTIVITIES FOR NW NATURAL IN WASHINGTON

July 1, 2017 through September 30, 2017

This quarterly report covers the period July 1 through September 30, 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 is on track to exceed NW Natural Washington gas savings goals** in 2017.
- **Savings and incentive spending were bolstered by new measures for new commercial construction**, which have contributed 65 percent of savings in the commercial portfolio year to date. Savings and spending were also supported by completion of a few large commercial projects, a robust residential new construction market, strong uptake of the residential gas furnace offering, participation by The Home Depot in the retail showerhead offering, increased promotion of Energy Saver Kits, and introduction of new offerings such as an incentive for midstream gas fireplace ignition.

#### B. Commercial sector highlights

- **In Q3, boilers, standard condensing tank water heaters and gas fryers contributed the majority of savings.**
- **Completion of several custom Existing Buildings projects have been delayed** until 2018.
- **Energy Trust launched new measures in Q3**, including new rooftop units with factory installed advance controls, multifamily faucet aerators, multifamily high-efficiency condensing boilers, multifamily showerheads and shower wands, and multifamily tankless water heaters.
- **A marketing campaign for standard gas measures started in Q3** and will continue through Q4.
- **Account managers are working to build the 2018 pipeline** of new construction projects and projects at schools using state bonds. Seven customers signed up for studies in Q3, which supports a strong pipeline of energy-saving projects expected to complete in 2018.

#### C. Residential sector highlights

- **The majority of residential sector savings were from showerheads, gas furnaces and EPS new home construction.**
- **Through Q3, the residential sector expects to achieve 169 percent of its annual savings goal.** Existing Homes contributed the majority of residential savings, making up 43 percent of the residential portfolio. Products constitutes 26 percent of residential savings and EPS whole homes is 31 percent.
- **Through Q3, the residential sector is forecasted to achieve 134 percent of its annual incentive budget** because incentive spending was much higher than anticipated. In Q3, Energy Trust developed scenarios to mitigate incentive spending if incentives exceed reserve funds on a Washington portfolio level. The program will continue to monitor the incentive forecast in Q4.

*Existing Homes*

- **Gas furnace savings continued to be the primary driver of Existing Homes savings**, comprising 22 percent of the program's savings through Q3.
- **A customer-facing tankless water heater incentive was launched** in Q3.
- **Energy Trust prepared to launch a midstream tank water heater incentive** at the distributor level in Q4. Midstream incentives are provided to distributors and retailers, with savings passed onto customers.
- **Energy Trust launched an email marketing campaign promoting smart thermostats to 338 NW Natural customers in Washington**, in partnership with the Portland Trail Blazers.

*New Homes and Products*

- **Strong residential new home construction in Clark County and Southwest Washington has led to greater than anticipated savings and incentive spending.** More new homes were built in Q3 than forecast. Those homes were built to be more efficient than expected, at an average of 17 percent more efficient than code built homes.
- **Energy Trust sponsored the Parade of Homes in Vancouver**, which showcased an EPS home built by Quail Homes. Program staff spoke with attendees about EPS and other Energy Trust offerings.
- **Energy Trust worked with Balanced Energy Solutions to conduct 11 quality assurance inspections** in Q3. No remediation was required.
- **Customers purchased more than 1,300 showerheads in Q3, compared to 140 in Q3 2016.** This is due to The Home Depot signing onto participate in the Bonneville Power Administration's Simple Steps, Smart Savings™ offering, through which Energy Trust claims savings.
- **Showerhead savings continued to outpace prior years.** In Q3 2016, 1,129 therms were recognized, compared to 10,944 therms comprising 16 percent of Q3 2017 savings. A Simple Steps, Smart Savings promotion in Q2 that bolstered sales at participating Fred Meyer and Lowes retailers in Q3.

**D. Program evaluations**

- No program evaluations were performed or completed in Q3.

## E. Washington Energy Efficiency Incentive Program performance metrics

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	282,539	227,449	74,794	82,776	69,878	
Total Program Costs	\$1,975,211	\$1,415,910	\$442,268	\$416,377	\$557,266	
Average Levelized Cost Per Measure	Less than \$0.65	\$0.45	\$0.40	\$0.41	\$0.56	
Utility Costs at Portfolio Level	Greater than 1.0	Reported annually	Reported annually	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.
- Northwest Energy Efficiency Alliance gas market transformation activities are 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
Utility Costs at Portfolio Level	Greater than 1.0	1.53	Reported annually	Reported annually	Reported annually	Reported annually

- NEEA gas market transformation activities are not included in this table.

**2016 Utility Cost and Total Resource Cost benefit cost ratios by program<sup>1</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>1</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 Q3	Budgeted expenditures Q3	Variance
Commercial programs	Existing Buildings	\$ 205,748	\$ 222,677	\$ 16,929
	Existing Buildings administration	\$ 9,893	\$ 8,464	\$ (1,429)
<b>Commercial total</b>		<b>\$ 215,641</b>	<b>\$ 231,142</b>	<b>\$ 15,501</b>
Residential programs	Existing Homes	\$ 149,744	\$ 112,618	\$ (37,126)
	Existing Homes administration	\$ 7,054	\$ 5,343	\$ (1,711)
	New Homes and Products	\$ 176,400	\$ 143,778	\$ (32,622)
	New Homes/Products administration	\$ 8,426	\$ 5,920	\$ (2,506)
<b>Residential total</b>		<b>\$ 341,625</b>	<b>\$ 267,659</b>	<b>\$ (73,965)</b>
NEEA	NEEA Commercial	\$ 788	\$ 6,902	\$ 6,114
	NEEA Residential	\$ 10,187	\$ 23,587	\$ 13,400
	NEEA administration	\$ 593	\$ 1,084	\$ 491
<b>NEEA total</b>		<b>\$ 11,568</b>	<b>\$ 31,573</b>	<b>\$ 20,005</b>
<b>Total expenditures</b>		<b>\$ 568,834</b>	<b>\$ 530,374</b>	<b>\$ (38,460)</b>

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

### B. Incentives paid<sup>2</sup>

		Q3 actual incentives	Actual expenditures	Percent incentives/expenditures
Commercial programs	Existing Buildings	\$ 103,008	\$ 215,641	48%
	<b>Commercial total</b>	<b>\$ 103,008</b>	<b>\$ 215,641</b>	<b>48%</b>
Residential programs	Existing Homes	\$ 59,669	\$ 156,798	38%
	New Homes and Products	\$ 92,755	\$ 184,827	50%
	<b>Residential total</b>	<b>\$ 152,424</b>	<b>\$ 341,625</b>	<b>45%</b>
<b>Total incentives</b>		<b>\$ 255,432</b>	<b>\$ 557,266</b>	<b>46%</b>

### C. Savings

		Therms saved Q3	Annual goal	Percent achieved Q3	Levelized cost/therm
Commercial programs	Existing Buildings	28,246	156,525	18%	\$ 0.52
	<b>Commercial total</b>	<b>28,246</b>	<b>156,525</b>	<b>18%</b>	<b>\$ 0.52</b>
Residential programs	Existing Homes	17,687	68,253	26%	\$ 0.64
	New Homes and Products	23,946	57,761	41%	\$ 0.56
	<b>Residential total</b>	<b>41,633</b>	<b>126,014</b>	<b>33%</b>	<b>\$ 0.62</b>
<b>Total savings</b>		<b>69,878</b>	<b>282,539</b>	<b>25%</b>	<b>\$ 0.56</b>

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

Quarterly, savings are anticipated as follows: Q1: 10%; Q2: 10%; Q3: 25%; and Q4: 55% of the annual total.

<sup>2</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>Commercial</b>					
Boiler	3	1	6		10
Commercial laundry washer	-	-	-		-
Commercial tankless water heater	-	-	-		-
Condensing tank water heater	-	4	2		6
Custom building controls	-	1	-		1
Dishwasher	1	-	-		1
Gas convection oven	-	-	1		1
Gas combination oven	-	-	-		-
Gas fryer	-	23	7		30
Gas griddle	-	-	-		-
High-efficiency condensing furnace	-	-	-		-
High-efficiency condensing unit heater	-	-	-		-
Custom	-	-	-		-
Pipe insulation	-	-	-		-
Roof insulation	-	-	1		1
Studies	3	1	7		11
Wall insulation	-	-	-		-
<b>Existing Homes</b>					
Weatherization (insulation, air and duct sealing and windows)	22	48	71		141
Gas hearths	9	28	10		47
Energy Saver Kits	14	64	39		117
Smart thermostats	54	59	60		173
Gas furnaces	65	118	137		320
Water heaters	1	1	2		4
Online Home Energy Reviews	64	50	39		153
<b>New Homes and Products</b>					
New EPS homes	88	180	157		425

#### B. Revenue

Source	Actual revenue	Budgeted revenue
NW Natural \$	2,020,834 \$	1,082,467

- Energy Trust requested that NW Natural distribute Q4 revenue during Q3 to ensure adequate funds were available to support programs that performed above budget. Q4 revenue was paid to Energy Trust in Q3, accounting for the \$938,367 overage.

### C. Expenditures

		Actual expenditures	Budgeted expenditures	Variance
Commercial programs	Existing Buildings	\$ 573,064	\$ 516,127	\$ (56,937)
	Existing Buildings administration	\$ 25,925	\$ 25,848	\$ (76)
	<b>Commercial total</b>	<b>\$ 598,988</b>	<b>\$ 541,975</b>	<b>\$ (57,013)</b>
Residential programs	Existing Homes	\$ 325,249	\$ 335,300	\$ 10,050
	Existing Homes administration	\$ 14,714	\$ 16,315	\$ 1,601
	New Homes and Products	\$ 456,316	\$ 352,146	\$ (104,169)
	New Homes/products administration	\$ 20,643	\$ 18,080	\$ (2,563)
	<b>Residential total</b>	<b>\$ 816,922</b>	<b>\$ 721,841</b>	<b>\$ (95,081)</b>
Administration	NEEA Commercial	\$ 12,921	\$ 22,138	\$ 9,217
	NEEA Residential	\$ 58,719	\$ 64,370	\$ 5,651
	NEEA administration	\$ 3,241	\$ 3,311	\$ 70
	<b>NEEA</b>	<b>74,881</b>	<b>89,819</b>	<b>14,938</b>
	<b>Total expenditures</b>	<b>\$ 1,490,791</b>	<b>\$ 1,353,635</b>	<b>\$ (137,156)</b>

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

### D. Incentives paid<sup>3</sup>

		Actual incentives	Actual expenditures	Percent incentives/ expenditures
Commercial programs	Existing Buildings	\$ 322,913	\$ 598,988	54%
	<b>Commercial total</b>	<b>\$ 322,913</b>	<b>\$ 598,988</b>	<b>54%</b>
Residential programs	Existing Homes	\$ 141,430	\$ 339,963	42%
	New Homes and Products	\$ 256,900	\$ 476,959	54%
	<b>Residential total</b>	<b>\$ 398,330</b>	<b>\$ 816,922</b>	<b>49%</b>
	<b>Total incentives</b>	<b>\$ 721,243</b>	<b>\$ 1,415,910</b>	<b>51%</b>

### E. Savings

		Therms saved YTD	Annual goal	Percent achieved YTD	Levelized cost/therm
Commercial programs	Existing Buildings	107,788	156,525	69%	\$ 0.39
	<b>Commercial total</b>	<b>107,788</b>	<b>156,525</b>	<b>69%</b>	<b>\$ 0.39</b>
Residential programs	Existing Homes	51,872	68,253	76%	\$ 0.50
	New Homes and Products	67,789	57,761	117%	\$ 0.51
	<b>Residential total</b>	<b>119,661</b>	<b>126,014</b>	<b>95%</b>	<b>\$ 0.51</b>
	<b>Total savings</b>	<b>227,449</b>	<b>282,539</b>	<b>81%</b>	<b>\$ 0.45</b>

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

<sup>3</sup> NEEA expenditures excluded per NW Natural Washington's Energy Efficiency Plan.