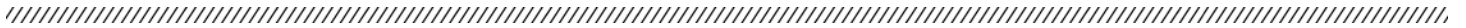
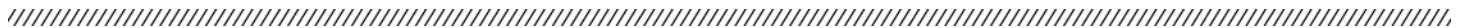


# Quarter Four 2012 Report to the Oregon Public Utility Commission



**ENERGY TRUST OF OREGON**  
**FEBRUARY 28, 2013**

This report covers activity between October 1 and December 31, 2012



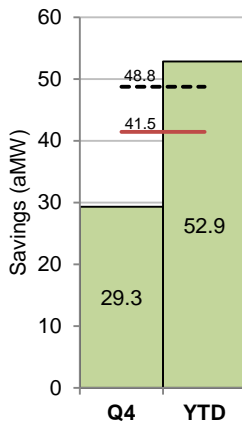
**Energy Trust of Oregon**  
421 SW Oak St., Suite 300, Portland, OR 97204  
1.866.368.7878 503.546.6862 fax  
[energytrust.org](http://energytrust.org)



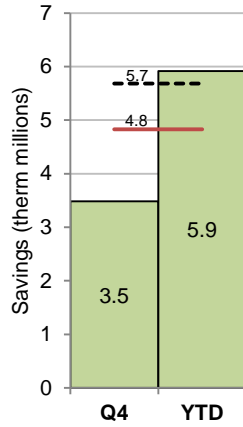
# I. Q4 2012 ACTIVITY AT A GLANCE

## Savings and generation

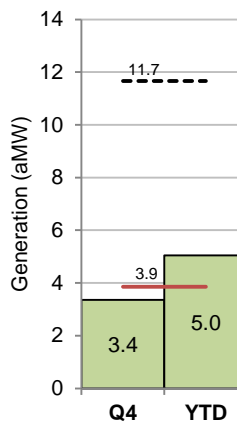
**Electric efficiency**



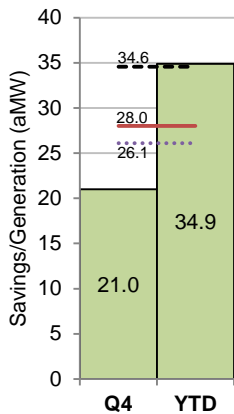
**Gas efficiency**



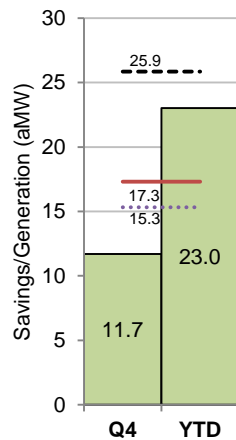
**Renewable energy**



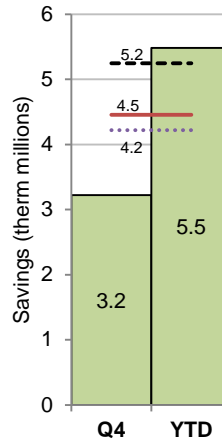
**Portland General Electric**



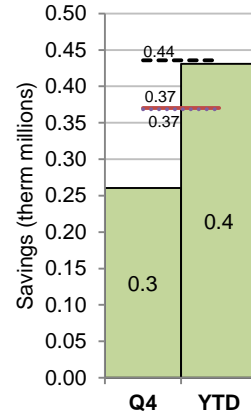
**Pacific Power**



**NW Natural**



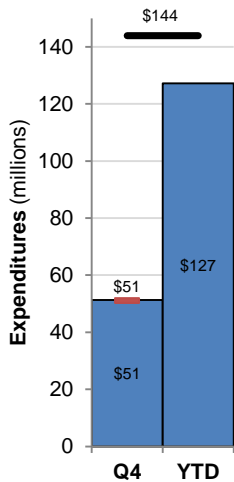
**Cascade Natural Gas**



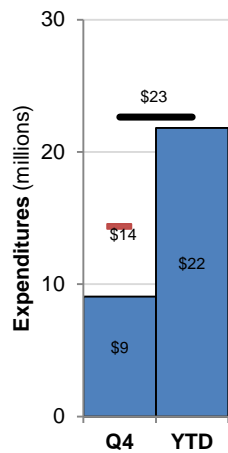
■ Savings/Generation    - - - - Stretch goal    — Conservative goal    ..... IRP goal

## Expenditures

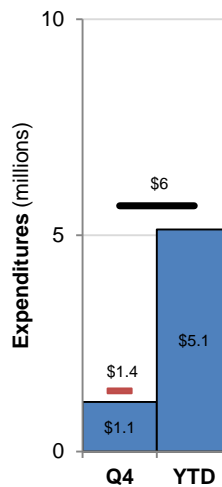
**Energy efficiency**



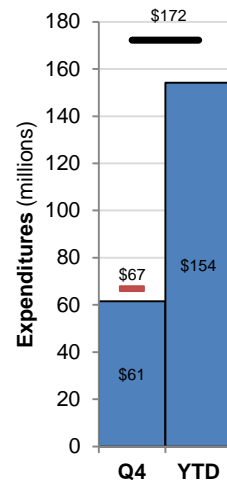
**Renewable energy**



**Administration**



**Total**



■ Actual    — Quarterly Budget    — Annual Budget

### Residential activity in Q4 2012

<b>New homes and major remodels</b>	<b>826</b>
New manufactured homes	61
<b>Weatherization retrofits</b>	<b>3,754</b>
Single-family site-built	3,083
Mobile	671
<b>Solar electric installations</b>	<b>254</b>
<b>Home Energy Reviews</b>	<b>1,001</b>
<b>Total Sites</b>	<b>5,835</b>
<b>Heating systems</b>	<b>1,918</b>
<b>Water heaters</b>	<b>367</b>
Solar	20
<b>High-efficiency products</b>	<b>6,997</b>
Washing machines	5,069
Refrigerators & freezers	1,928
<b>High-efficiency lighting*</b>	<b>322,878</b>
<b>Refrigerators, freezers recycled</b>	<b>5,961</b>
<b>Energy Saver Kits sent</b>	<b>26,691</b>
<b>Total Other Activity</b>	<b>41,934</b>

\* Lighting excluded from totals

### Commercial activity in Q4 2012

<b>New Buildings sites served</b>	<b>251</b>
New construction	141
Major renovation	64
Tenant improvement	54
<b>Existing Buildings sites served</b>	<b>1,515</b>
Operations and maintenance	219
Custom <sup>1</sup>	159
Lighting	771
Prescriptive/standard <sup>2</sup>	366
<b>Existing multifamily sites served</b>	<b>537</b>
<b>Solar water heating sites served</b>	<b>4</b>
<b>Sites with technical assistance</b>	<b>300</b>

<sup>1</sup>The most common custom improvements are building controls and HVAC

<sup>2</sup> The most common prescriptive/standard improvements are foodservice and grocery equipment

### Industrial/Agricultural activity in Q4 2012

<b>Projects with savings</b>	<b>413</b>
Custom capital <sup>1</sup>	66
Custom O+M <sup>2</sup>	13
Strategic Energy Management (SEM) <sup>3</sup>	21
Industrial lighting	134
Small industrial <sup>4</sup>	72
Prescriptive <sup>5</sup>	107
<b>Number of SEM participating companies</b>	<b>50</b>
<b>Studies</b>	<b>23</b>

<sup>1</sup> Top actions are compressed air system improvements, process upgrades

<sup>2</sup> Equipment modifications to improve efficiency

<sup>3</sup> Savings from no-cost or low-cost operational steps (i.e., turning off equipment when not in use) identified through trainings in SEM approaches/disciplines

<sup>4</sup> Targets users with gas or electric costs under \$25,000/year; top improvements are irrigation system improvements, compressed air system improvements, HVAC

<sup>5</sup> Top improvements are sprinklers, replacement gaskets, nozzles

### Renewable energy activity in Q4 2012

<b>Biopower projects</b>	<b>4</b>
<b>Solar electric installations</b>	<b>291</b>
Residential	254
Commercial	37
<b>Other renewable projects</b>	<b>2</b>
Wind projects	1
Hydropower projects	1
Geothermal projects	--
<b>Total</b>	<b>297</b>

### Other activity in Q4 2012

<b>Calls</b>	<b>8,383</b>
<b>Website visits</b>	<b>168,046</b>
<b>info@energytrust.org inquiries</b>	<b>449</b>
<b>Customer complaints</b>	<b>1</b>
<b>Trade ally roundtable meetings</b>	<b>5</b>
Attendance	250
<b>News stories in print, broadcast</b>	<b>151</b>

## II. HIGHLIGHTS OF Q4 ACTIVITIES

### A. Savings<sup>1,2</sup>, generation and general highlights

#### *Quarter 4*

- **Electric efficiency projects completed during Q4** are expected to save 29.3 average megawatts (aMW) of electricity, about 71 percent of the 2012 electric conservative goal and 60 percent of the 2012 electric stretch goal of 49 aMW. Q4 2012 electric savings are approximately 24 percent greater than Q4 savings in 2011.
- **Gas efficiency projects completed during Q4** are expected to save 3.5 million annual therms of natural gas<sup>3</sup>, about 72 percent of the 2012 gas conservative goal and 61 percent of the 2012 stretch goal of 5.7 million annual therms. Q4 savings are 35 percent greater than in Q4 2011.
- **Renewable energy projects completed during Q4** are expected to generate 3.4 aMW of electricity, which is 87 percent of the 2012 renewable energy conservative goal of 3.9 aMW. Q4 renewable generation activity is more than four times the activity in Q4 2011.
- **Significant program transition activities took place in Q4**, after the Energy Trust Board of Directors awarded the Program Management Contract for Existing Buildings to ICF International and the contract for Existing Homes to Fluid. The transition between the incumbents and new Program Management Contractors will be complete in Q1 2013.
- **Solar reached 50 megawatts capacity in Q4**, complementing the Q3 milestone of 5,000 systems in place.
- **The Oregon Public Utility Commission approved a two-year exception to cost effectiveness requirements** as requested by Energy Trust for four New Buildings' gas and electric measures, residential solar water heating and multiple residential gas weatherization measures. Energy Trust also submitted a second request for an exception addressing New Homes, New Buildings and Existing Buildings programs and measures, and commercial solar water heating. That request is under consideration by the OPUC.
- **Regional outreach engaged customers, trade ally contractors, utility representatives** and other stakeholders with events in Astoria, Medford, Pendleton and Portland, and through an interactive timeline and video featuring the cumulative results and benefits of customer and Energy Trust investments over 10 years. Additional regional events and success story communications will continue in 2013 to generate customer awareness of energy efficiency and renewable energy opportunities and drive customer participation in programs and services.
- **Energy Trust completed new data sharing agreements in Q4** with PGE, Pacific Power, NW Natural and Cascade Natural Gas, allowing Energy Trust to better serve customers. Energy Trust and the utilities are developing implementation plans. Customer notification of the new rules will occur in Q1 2013. Data sharing is scheduled to begin in Q2 2013.

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<sup>1</sup>This document reports net savings, which are adjusted gross savings based upon results of current and past evaluations.

<sup>2</sup>This report includes the best available energy savings data as of the date of submission. Energy savings reported here for periods prior to January 1, 2012, may be different than previously reported as a result of applying updated evaluation factors to Energy Trust funded program savings in Oregon through our annual true up process. The full True Up 2012 Report is available online at [www.energytrust.org/library](http://www.energytrust.org/library).

<sup>3</sup>The gas savings do not include NW Natural results in Washington. These results are reported in Appendix 5.

- **Staff responses to OPUC 2013 budget and action plan comments** regarding computer system upgrades, “deep retrofit” pilot projects and lender ally promotions will be included as part of 2013 quarterly reports.

*Preliminary 2012 annual results*

- **Energy Trust achieved 52.9 aMW and 5.9 million annual therms** in energy efficiency savings in 2012, according to preliminary 2012 annual results.
- **Preliminary 2012 annual results exceeded efficiency stretch goals** for electric and gas savings, achieving 108 percent of the electric efficiency stretch goal of 49 aMW and 104 percent of the gas stretch goal of 5.7 million annual therms.
- **Savings results surpassed Integrated Resource Plan goals** for each of Energy Trust’s four affiliated utilities.
- **Energy Trust’s strong results for 2012 are particularly noteworthy** because it was a transition year for state business energy tax credits, and because project activity continued even after business incentives were restored to pre-bonus levels for those customers most impacted by the transition.
- **Efficiency goals for 2012 were achieved cost effectively.** Expenditures for 2012 were below budget—by 12 percent for electric spending and 10 percent for gas spending, reflecting the relatively high proportion of savings that came from lower cost strategies, such as operations and maintenance activity, strategic energy management and Energy Saver Kits.
- **Energy Trust achieved 5.05 aMW of renewable energy generation**, or 128 percent of Energy Trust’s conservative goal of 3.9 aMW.

*Preliminary cumulative results*

- **Including Q4 2012 results, electric efficiency programs have saved 368 aMW** since 2002, 77 percent of Energy Trust’s 2014 goal of 479 aMW. This is equivalent to the annual electric consumption of approximately 285,483 average Oregon homes for a year. This total includes 21 aMW of savings from self-direct customers.
- **Including Q4 2012 results, cumulative savings of 28.2 million annual therms** have been realized since gas programs began in 2003, accounting for 81 percent of the 2014 goal of 34.7 million annual therms. This is equivalent to providing gas heat to approximately 55,621 homes for a year.
- **Including Q4 2012 results, 110 aMW of renewable energy generation** has been installed since 2002, accounting for 88 percent of the 2014 goal of 124 aMW of installed generation. This is equivalent to powering approximately 84,904 average Oregon homes for a year.
- **Preliminary 2012 year-end results position Energy Trust to achieve 2014 strategic goals.** By achieving stretch goals for 2013 and projected stretch goals for 2014, Energy Trust will succeed in reaching the strategic plan goals for electric and gas efficiency savings.

## **B. Revenues and expenditures**

- **Overall public purpose revenue plus incremental electric revenue** from SB 838 totaled \$33.7 million for Q4 2012, approximately 8 percent less than budgeted revenues. Revenue projections are estimates provided by utilities; typically, actual revenues vary by a few

percentage points depending on factors like weather and rate filings that affect utility revenue collection. Annual revenues for 2012 were 6 percent below budget.

- **Q4 expenditures** totaled \$61.5 million, of which \$44.4 million or 72 percent was for incentives. Q4 2012 incentives paid are 7 percent higher than Q4 2011 incentives.
- **Q4 electric efficiency expenditures** were at budget for the quarter.
- **Q4 gas efficiency expenditures** for the quarter were 1 percent over budget.

## C. Appendices

- **Appendix 1** shows a geographic distribution of Home Energy Reviews conducted in Q4 2012 and the most recent customer satisfaction results (see page 16).
- **Appendix 2** presents Oregon Public Utility Commission 2012 performance measures for Energy Trust and benefit/cost ratios from Energy Trust's 2011 annual report (see page 17).
- **Appendix 3** includes reports from Pacific Power (page 18) and PGE (page 25) on Q4 2012 utility activities supported by their shares of SB 838 funding, providing additional support for electric efficiency acquisition above funds collected through the public purpose charge.
- **Appendix 4** includes a report from the Northwest Energy Efficiency Alliance on its Q4 2012 market transformation activities in PGE and Pacific Power Oregon service territories, funded by Energy Trust (see page 28).
- **Appendix 5** provides the Q4 2012 report on Energy Trust activities serving NW Natural customers in Washington (see page 33).

## D. Commercial sector highlights

- **Commercial sector savings met 2012 stretch savings goals for all utilities**, according to preliminary annual results, and achieved 120 percent of the electric stretch savings goal and 127 percent of the gas stretch savings goal. Q4 results produced 48 percent of commercial sector 2012 electric savings and 64 percent of gas savings.
- **Existing Building's Kick-Start bonus attracted 1,385 projects** in 2012, including 402 projects that closed in Q4, by offering a 20 percent bonus for projects enrolled by June 29, 2012. The bonus was designed to keep customers investing in energy-efficiency projects after state business energy tax credits were eliminated.
- **In response to Oregon's unprecedented growth in data centers** over the past several years—a trend that is expected to continue—New Buildings launched a data center offer that streamlines the process for obtaining incentives and meets the needs of projects ranging from office buildings using less than 10 kW to server “farms” drawing power in excess of 10 MW.
- **Existing Buildings supported Oregon's Cool Schools initiative**, in collaboration with the Oregon Department of Energy, providing schools with audits and project assistance. Energy Trust's engagement with the initiative resulted in eight completed school projects in 2012 and 14 projects in the pipeline for 2013.
- **Overall, commercial sector programs completed 90 K-12 schools in 2012**, and 33 additional schools are scheduled to complete in 2013.
- **Relationships with major multifamily property management companies**, along with direct-install measures, custom measures and incentives paid to distributors, resulted in historically high savings from multifamily projects with lower incentive spending in 2012.

- **Energy Trust continues engagement in MPower Oregon**, an on-bill financing pilot developed in collaboration with local, regional and national organizations. The first capital projects from this initiative are expected to begin during the second half of 2013.

#### *Existing Buildings*

- **The program met its 2012 electric stretch goal and exceeded its gas stretch goal** by 38 percent, according to preliminary 2012 annual results. Seventy-one percent of Existing Buildings' electric savings and 75 percent of its gas savings were logged in Q4.
- **The pipeline for 2013 is stronger than ever** before in the program's history, representing savings of 50 million kWh and 1.1 million annual therms. Energy Trust attributes the robust pipeline to the combined effect of expanded business development outreach and customers' growing confidence in a stabilizing economy.
- **Managing the transition to a new Program Management Contractor, ICF International**, was a major focus for Energy Trust in Q4. The transition between the incumbent and ICF will be complete by the end of Q1 2013.
- **In 2012, its first year, seven of the Commercial Strategic Energy Management pilot's** nine participating companies completed projects, achieving combined savings of 6 million kWh and 127,000 therms. These results represent an average of 5 percent electric savings and 7 percent gas savings from behavioral and operations improvements at each site. Commercial SEM results align well with SEM results in the industrial sector.
- **Other important contributions to 2012 Existing Buildings savings** came from the Building Operator Certification, the 80+ initiative providing incentives to computer manufacturers producing more energy-efficient models, three solar pool heating projects and three solar water heating projects.
- **Savings from retrofit of multifamily properties grew** in 2012. Compared to 2011, electric savings increased 33 percent and gas savings increased 106 percent.
- **High-performance showerheads and faucet aerators** were installed in more than 21,000 multifamily housing units and accounted for the majority of multifamily savings in 2012. Compared to 2011, the proportion of these installations declined, reflecting growth in custom track projects, common area lighting and distributor incentives to lower appliance retail prices.

#### *New Buildings*

- **New Buildings closed the year at or ahead of stretch goals**—190 percent of the program's 2012 stretch electric savings goal and 100 percent of its 2012 stretch gas savings goal—according to preliminary 2012 annual results. Twenty-one percent of New Buildings' electric savings and 43 percent of its gas savings came from projects completed in Q4.
- **The program closed 333 projects in 2012**, a 3 percent increase over 2011, and enrolled another 385 projects for future completion. More than one third of the 2012 projects, or 123 projects, were completed in Q4.
- **Data centers were a significant source of highly cost-effective savings in 2012** and are well represented in the pipeline for completion in future years.
- **Small buildings represent a relatively large portion of projects and savings**—85 percent of all projects in 2012 were small commercial buildings—accounting for 60 percent of electric savings and 54 percent of gas savings. Small commercial buildings are 50,000 square feet or

less in size; most of small commercial properties served by Energy Trust are less than 20,000 square feet.

- **Two projects from the 2009 Small Commercial Pilot completed in Q4**—one at Central Oregon Community College and one in the Portland area. Two additional pilot projects completed earlier in the year. Results from the pilot informed the development of new offers described below.
- **To better serve the most common types of small commercial buildings under 50,000 square feet**, the program developed and began offering market-specific packages with tiered incentives for restaurant, multifamily, office, school and retail buildings. The offers are comprehensive packages of measures with modeled savings that eliminate the need for more costly integrated design for small projects, which typically use a design-build approach.
- **The number of program allies has grown to 71 firms**, broadening the program reach to more easily serve new customers. Program allies include architects, engineers, green building consultants, developers and others.
- **New Buildings is helping prepare the market to meet more stringent requirements** of the Oregon Reach Code and future code upgrades through work with trade and program ally networks and organizations such as the American Institute of Architects, Cascadia Green Building Council and the Building Energy Simulation Forum (formerly the Building Simulation Users Group).

## E. Industry and Agriculture sector highlights

### *Production Efficiency*

- **Production Efficiency ended 2012 at 92 percent of its stretch electric savings goal** and 76 percent of its stretch gas savings goal, according to preliminary 2012 annual results. The final 2012 gas savings came in lower than expected because two large gas projects experienced construction delays in Q4 that pushed their completion into 2013.
- **Q4 results accounted for 78 percent of 2012 electric and 72 percent of gas savings.** Annual totals, according to preliminary results, were 14.5 aMW and 879,387 annual therms.
- **This year's volume of projects equaled last year's high volume, with 976 completed projects.** The continuing high volume of projects reflects the growing success, across all industrial markets, of readily available streamlined offers—quick and easy projects that trade allies can deliver.
- **The Kick-Start bonus served 372 projects in 2012** and produced 38 percent of annual program savings. The Kick-Start bonus provided a 20 percent higher incentive payment for customers who ordered equipment within 90 days of receiving project approval; it was intended to help participants most impacted by changes in the state Business Energy Tax Credit move quickly through the program.
- **Savings from Strategic Energy Management (SEM) offerings continue to grow**, accounting for 28 percent of annual electric savings and 9 percent of natural gas savings. SEM supports industrial managers in developing energy-saving goals, institutionalized practices and rigorous tracking and reporting systems to drive and sustain long-term energy savings.
- **The fifth cohort in the series of cohort-based Industrial Energy Improvement SEM offerings concluded in Q4.** Eight manufacturers, ranging from metal producers to wastewater treatment facilities, secured more than 16 million kWh and over 80,000 annual therms, equal to 13 percent of program electric savings and 9 percent of program gas savings.



- **The “Breakfast of Champions” in December drew the largest crowd** of the three meetings since the event was launched in 2011. Thirty-four SEM practitioners attended this third semi-annual industrial continuous improvement workshop.
- **The first 10 Scientific Irrigation Scheduling projects completed** in Q4, claiming more than 330,000 kWh of savings at sites in Clackamas, Jefferson, Klamath, Marion, Umatilla and Yamhill counties. Scientific Irrigation Scheduling allows a grower to fine-tune irrigation and reduce energy consumption by using soil monitors, weather station data and fine-tuned evaporation rates.

## F. Residential sector highlights

- **Residential sector savings exceeded its 2012 electric stretch savings goal** by 5 percent and met its gas savings goal, according to preliminary annual results.
- **In 2012 the program supported 1,320 highly efficient new homes with EPS™**, an energy performance score developed by Energy Trust—nearly double the program goal. Thirty-nine percent of these homes were submitted in Q4. The total number of EPS rated new homes since inception in 2009 now exceeds 3,000.
- **Solaire Homes built a residence with a best possible EPS of zero**, the lowest score the program has seen. The home is the first “net-zero energy” home to receive a New Homes incentive.
- **The introduction of LED retail lighting products in Q4 proved successful**, accounting for approximately 8 percent of 2012 annual results from retail lighting sales.
- **In 2012, six Personal Energy Reports were sent bimonthly to 60,000 residential customers** served by both PGE and NW Natural, completing the second year of this behavior change pilot. The reports provide data on the recipient's home and similar homes nearby, motivating recipients to take energy-saving actions. To date, the pilot has achieved over 17 million kWh and 344,000 therms in savings. A further test is planned in 2013 to assess the persistence of these savings over time and to expand the offering to targeted Pacific Power customers.

### *Existing Homes*

- **Existing Homes surpassed 2012 stretch savings goals for three utilities**—PGE, Pacific Power and NW Natural—and achieved 95 percent of stretch savings goal for Cascade Natural Gas, according to preliminary annual results.
- **Key single measures driving overall savings** were gas fireplaces, ENERGY STAR® gas tank water heaters and ductless heat pumps.
- **The transition to a new Program Management Contractor, Fluid**, was a major focus for Energy Trust in Q4. The transition between the incumbent and Fluid will be complete by the end of Q1 2013.
- **Energy Saver Kits, containing CFLs and water-saving devices, figured prominently**, as expected, in bringing in both gas and electric savings for Q4 2012. Kits produced 16.1 million kWh and 294,000 annual therms for the quarter—30 percent and 21 percent, respectively, of preliminary annual totals. Kits were ordered by nearly one in six of the 96,600 PGE customers receiving an email promotion on Cyber Monday, the online promotional shopping day after

Thanksgiving. Meanwhile, 9 percent of Energy Trust Products customers who received a Pacific Power direct mail offer ordered a kit, three times the expected rate.

- **Energy Trust supported energy-efficiency education in 331 Oregon schools** during Q4 through delivery of the LivingWise with Energy Trust curriculum, provided free to sixth-grade teachers. Using the curriculum, students study energy-efficiency opportunities and install CFLs and water-saving devices in their homes, with resulting energy savings.
- **Clean Energy Works Oregon activity continued to grow** with Energy Trust support, reporting 1,290 applications during Q4, 474 completed projects and 2,289 additional projects that were in process as of the end of the quarter.<sup>4</sup> These results exceed those in past years over the same period and continue to build on the strong foundation set by Energy Trust's development of a comprehensive whole-home approach to residential retrofits through Home Performance.

#### *New Homes and Products*

- **New Homes and Products achieved 80 percent and 91 percent**, respectively, of its 2012 electric and gas stretch savings goals, according to preliminary 2012 annual results. Over one-third of total savings booked in Q4.
- **The program supported construction of 520 highly efficient new homes with EPS** in Q4.
- **Increased activity in the housing market, along with a continued strong market share** of approximately 25 percent for EPS rated homes, were the main contributors to the success of New Homes in 2012.
- **Savings from efficient home products were lower than expected in 2012**, reflecting a slowdown in CFL retail sales and the conversion by a major retailer of specialty CFLs to LED lamps. While Energy Trust added a number of LEDs to the program, the volume of LED sales was lower than that of CFLs they replaced, as expected. Of the approximate 8.5 million kWh in Q4 savings from retail lighting, 8 percent came from LED products.
- **The 2012 air sealing pilot treated 340 homes, 212 of them in Q4.** The pilot is designed to work with insulation and drywall subcontractors to decrease the air leakage in homes that do not seek an EPS. Activity is expected to continue at this heightened level in 2013.

## **G. Renewable energy highlights**

- **The preliminary 2012 annual total of 5.05 aMW in new generation** exceeds the annual conservative goal by 28 percent. Renewable energy programs installed 3.4 aMW of generation in Q4.
- **A record 3.3 aMW of 2012 installed generation came from solar projects**—both from large scale installations with power purchased by utilities and from standard residential and commercial systems.
- **Programs utilized 76 percent of 2012 budgeted funds.** Pacific Power funds were almost entirely allocated. PGE funds were almost fully allocated in Solar and were underspent in

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<sup>4</sup>"In process" refers to Clean Energy Works Oregon homes that had completed a Home Performance test-in audit but had not closed as of December 31, 2012. There is a lag between the time Clean Energy Works Oregon records completed projects and when Energy Trust enters the project into its data tracking system. Clean Energy Works Oregon project counts may include activity outside Energy Trust territory.

Biomass and Other Renewables, as two biopower projects totaling 1.8 aMW shifted completion to 2013.

- **Responding to high demand for biopower, geothermal, hydropower and custom wind** incentives in Pacific Power territory, staff successfully implemented a competitive process for allocating 2012 funds from Pacific Power and will do so again in 2013.
- **The pipeline for 2013 is robust. Over 3 aMW** is expected from projects with previously dedicated incentive funds. The pipeline includes both projects that were delayed from 2012 as well as projects forecast to come on line in 2013.

#### *Solar Electric*

- **The standard Solar program installed 1,243 solar projects in 2012** (1.14 aMW). While this represents 79 fewer projects than in 2011, it shows an increase in generation of 0.13 aMW, despite a 45 percent average reduction in Energy Trust residential and commercial incentives. The great majority of solar installations were in residences.
- **Two large ground-mounted solar projects came online in Q4:** the 5.0 megawatt Outback project for PGE and the 2.0 megawatt Black Cap project for Pacific Power. A third project, the Oregon Department of Transportation's 1.8 MW Baldock project, was completed earlier in 2012 and serves PGE.
- **Promotional efforts for residential and commercial solar will continue in 2013** to maintain demand following the incentive reductions that occurred in 2012.
- **Solar electric system prices dropped substantially in the first half of 2012 and then stabilized.** The Q4 average price of \$4.96 per watt is down more than 20 percent from Q4 2011.
- **Staff prepared to launch the first competitive solicitation for larger-scale PGE solar** projects. The program has budgeted \$1 million for a request for proposals to be released in Q1 2013.

#### *Biopower*

- **Four biopower projects reached commercial operation in Q4**, totaling 1.32 aMW in generation, benefiting from Energy Trust incentives for development assistance and commercial operation:
  - **The cities of Medford and Pendleton installed new biogas power generation** at their wastewater treatment plants.
  - **An anaerobic digester, the Revolution Energy Solutions-Forest Glen Oaks project, began production** of biogas at a Willamette Valley dairy, the second biogas project in this area to come online in 2012.
  - **A demonstration of a wood waste gasifier, which creates synthetic gas** from biomass without combustion, was installed in Wallowa County, in combination with an organic Rankine cycle power generator.

#### *Other*

- **In Q4, Hood River's Farmers Irrigation District piped a section of its main canal**, adding hydroelectric capacity and returning water in stream for environmental benefit. This was an additional phase of a piping project underway for several years.

- **The Small Wind program underwent several significant changes** in 2012 designed to improve the ability to predict system performance and to encourage optimal siting of turbines. Outreach activities—on hold during the program revisions—restarted in Q4. Energy Trust wind seminars in Pendleton, Moro and Coos Bay attracted approximately 70 participants, a presentation at a Salem farm fair drew about 50 attendees, and others obtained information at an Energy Trust booth at a farm fair in Hermiston. Interest in the program is growing and stronger results are expected in 2013.
- **A small wind workshop in Coos Bay in Q4 attracted a strong turnout** of 25 attendees, several of whom identified potential projects.

### III. TABLES<sup>5</sup>

#### A. Revenues

Source	Q4 Actual Revenues Received	Q4 Budgeted Revenues
Portland General Electric	\$ 8,428,868	\$ 8,048,089
PGE Incremental	\$ 9,575,950	\$ 10,951,257
Pacific Power	\$ 5,868,083	\$ 6,892,730
Pacific Power Incremental	\$ 5,451,598	\$ 6,478,532
Cascade Natural Gas	\$ 319,124	\$ 1,130,045
NW Natural	\$ 2,968,465	\$ 2,929,203
NW Natural Industrial DSM*	\$ 1,076,344	
<b>Total</b>	<b>\$ 33,688,431</b>	<b>\$ 36,429,856</b>

\*No revenue for NW Natural Industrial DSM was budgeted for receipt in Q4. All funds needed for the year were budgeted to be received in the first two quarters of 2012.

#### B. Expenditures

Type	Q4 Actual Expenditures	Q4 Budgeted Expenditures
Energy Efficiency Programs	\$ 51,277,044	\$ 51,012,506
Renewable Energy Programs	\$ 9,073,186	\$ 14,352,295
Administration	\$ 1,146,327	\$ 1,394,439
<b>Total</b>	<b>\$ 61,496,557</b>	<b>\$ 66,759,240</b>

Source	Q4 Actual Expenditures	Q4 Budgeted Expenditures
Portland General Electric	\$ 35,739,470	\$ 38,262,019
Pacific Power	\$ 16,227,688	\$ 19,083,432
Cascade Natural Gas	\$ 1,018,076	\$ 879,676
NW Natural	\$ 7,398,908	\$ 7,237,673
NW Natural Industrial DSM	\$ 1,112,415	\$ 1,296,439
<b>Total</b>	<b>\$ 61,496,557</b>	<b>\$ 66,759,240</b>

<sup>5</sup>Columns may not total due to rounding.

### C. Incentives paid

Quarter	Energy Efficiency			Renewable Energy		Total	
	PGE	Pacific Power	NW Natural	Cascade Natural Gas	PGE		Pacific Power
Q1	\$ 4,157,072	\$ 3,968,024	\$ 1,680,134	\$ 102,078	\$ 3,879,801	\$ 1,172,015	\$ 14,959,123
Q2	\$ 6,555,714	\$ 4,272,000	\$ 2,580,331	\$ 129,716	\$ 2,431,195	\$ 1,042,570	\$ 17,011,526
Q3	\$ 6,211,712	\$ 2,969,153	\$ 2,296,724	\$ 158,309	\$ 1,884,030	\$ 833,089	\$ 14,353,018
Q4	\$19,702,000	\$ 9,509,360	\$ 5,922,672	\$ 682,248	\$ 6,518,700	\$ 2,096,974	\$ 44,431,955
Total	\$36,626,498	\$ 20,718,537	\$ 12,479,862	\$ 1,072,350	\$14,713,726	\$ 5,144,648	\$ 90,755,622

### D. Savings and generation

Q4 Electric Efficiency Savings	PGE aMW	Pacific Power aMW	Total Savings aMW	Expenses
Commercial	7.2	3.2	10.4	\$ 19,358,011
Industrial	6.9	4.2	11.1	\$ 12,992,726
Residential	5.1	2.8	7.9	\$ 10,364,871
<b>Total Electric Efficiency Programs</b>	19.1	10.2	29.3	\$ 42,715,608

Q4 Gas Efficiency Savings	NW Natural Therms	Cascade Natural Gas Therms	Total Savings Therms	Expenses
Commercial	1,438,624	93,322	1,531,946	\$ 3,788,494
Industrial	546,130	85,775	631,905	\$ 999,800
Residential	1,239,964	81,399	1,321,362	\$ 4,741,105
<b>Total Gas Efficiency Programs</b>	3,224,718	260,496	3,485,214	\$ 9,529,399

Q4 Renewable Energy Generation	PGE aMW	Pacific Power aMW	Total Generation aMW	Expenses
Biopower	0.3	0.8	1.2	\$ 875,624
Other Renewable Programs	0.0	0.0	0.0	\$ 601,661
Solar Electric Program	1.5	0.7	2.2	\$ 7,774,265
<b>Total Renewable Programs</b>	1.8	1.5	3.4	\$ 9,251,550

## E. Progress toward efficiency goals by utility

	YTD Expenditures	YTD Savings	YTD levelized cost	Energy Trust Annual Goal		
					Goal	% Achieved YTD
Electric	\$106,478,099	52.86 aMW	2.7 ¢	Conservative	41.45 aMW	128%
				Stretch	48.77 aMW	108%
Natural Gas	\$25,076,096	5,915,717 therms	37.3 ¢	Conservative	4,828,295 therms	123%
				Stretch	5,680,346 therms	104%

	YTD Expenditures	YTD Savings	YTD levelized cost	Energy Trust Annual Goal			Annual IRP Goal	
					Goal	% Achieved YTD	Goal	% Achieved YTD
Portland General Electric	\$66,325,264	32.23 aMW	2.8 ¢	Conservative	26.77 aMW	120%	26.11 aMW	123%
				Stretch	31.5 aMW	102%		
Pacific Power	\$40,152,835	20.63 aMW	2.6 ¢	Conservative	14.68 aMW	141%	15.33 aMW	135%
				Stretch	17.27 aMW	119%		
NW Natural	\$23,163,325	5,484,647 therms	37.1 ¢	Conservative	4,457,803 therms	123%	4,221,268 therms	130%
				Stretch	5,244,474 therms	105%		
Cascade Natural Gas	\$1,912,771	431,070 therms	38.8 ¢	Conservative	370,492 therms	116%	368,445 therms	117%
				Stretch	435,872 therms	99%		

## F. Incremental utility SB 838 expenditures<sup>6</sup>

Utility	Q4 2012 SB 838 Expenditures	YTD SB 838 Expenditures
Portland General Electric	\$ 162,274	\$ 598,244
Pacific Power	\$ 483,039	\$ 1,028,757
<b>Total</b>	<b>\$ 645,313</b>	<b>\$ 1,627,001</b>

<sup>6</sup>Reflects expenditures by Pacific Power and PGE in support of utility activities described in SB 838. See Appendix 3 for reports from these utilities on their SB 838 activities during the quarter.

## Appendix 1

### GEOGRAPHIC DISTRIBUTION OF HOME ENERGY REVIEWS; CUSTOMER SATISFACTION

#### 1. Home Energy Reviews in Q4 2012

Service Region	In-Home Reviews	Telephone Reviews	Online Reviews
1 - North Coast (Astoria, Seaside)	11	0	31
2 - South Coast (Coos Bay, North Bend)	14	0	31
3 - Portland Metro	593	15	1,391
4 - Mid-Willamette (Salem, Dallas)	85	1	245
5 - Southern Willamette (Eugene, Corvallis, Albany)	68	3	203
6 - Southern (Medford, Roseburg, Grants Pass)	95	0	233
7 - Columbia Basin (Hood River, The Dalles)	3	0	26
8 - Central (Bend, Redmond, Prineville)	82	1	194
9 - Klamath Basin (Klamath Falls, Lakeview)	1	0	51
10 - Northeast (Pendleton, Enterprise)	27	0	38
11 - Eastern (Baker City, Ontario, Vale)	5	0	9
<b>Total</b>	<b>1,001*</b>	<b>28**</b>	<b>2,535***</b>

\*Total includes 17 homes with missing or mistaken zip codes that did not map to any of the 11 regions.

\*\*Total includes eight homes with missing or mistaken zip codes that did not map to any of the 11 regions.

\*\*\*Total includes 83 homes that did not provide zip codes or for which zip codes did not map to any of the 11 regions.

#### 2. Customer satisfaction

From mid-August through mid-October 2012, Energy Trust delivered a short phone survey to 785 participants in five programs who completed projects in July through September 2012. Below are results from this most recent quarterly survey. Satisfaction rates this quarter have remained consistent with past quarters.

Program <sup>1</sup>	Respondent Count	Percent Satisfied
Existing Buildings	68	94%
Production Efficiency	52	92%
New Homes and Products <sup>2</sup>	165	95%
Existing Homes	451	91%
Solar	49	96%

<sup>1</sup>As of Q2 2012, Energy Trust reports customer satisfaction for New Buildings using annual program process evaluations. The Fast Feedback evaluation contacts a single representative for each project and is ill-suited for tracking satisfaction on New Buildings projects that may have many different market actors. New Buildings achieved 83 percent customer satisfaction in 2011.

<sup>2</sup>Only Home Products customers were surveyed. Energy Trust does not track purchasers of New Homes.



## Appendix 2

### OPUC 2012 PERFORMANCE MEASURES AND 2011 BENEFIT/COST RATIOS

Following are the 2012 performance measures established by the OPUC for Energy Trust. Comparison of 2012 performance against these measures will be reported in the 2012 annual report.

Category	Measures
Energy Efficiency	<ul style="list-style-type: none"> <li>Obtain at least 41 aMW in 2012</li> <li>Levelized cost not to exceed 4.4 cents/kWh</li> </ul>
Natural Gas	<ul style="list-style-type: none"> <li>Obtain at least 4.5 million annual therms in 2012</li> <li>Levelized cost not to exceed 52 cents/therm</li> </ul>
Renewable Energy	<i>No renewable energy metric for 2012<sup>7</sup></i>
Financial Integrity	<ul style="list-style-type: none"> <li>Receive an unqualified financial opinion from an independent auditor on annual financial statements</li> </ul>
Administrative/Program Support Costs	<ul style="list-style-type: none"> <li>Keep below 9 percent of annual revenues</li> </ul>
Customer Satisfaction	<ul style="list-style-type: none"> <li>Demonstrate greater than 85% satisfaction rates for:               <ul style="list-style-type: none"> <li>Interaction with program representatives</li> <li>Overall satisfaction</li> </ul> </li> </ul>
Benefit/Cost Ratios	<ul style="list-style-type: none"> <li>Report both utility system and societal perspective</li> <li>Report significant mid-year changes as necessary in quarterly reports</li> </ul>

#### Benefit/Cost ratios for 2011<sup>8</sup>

The following benefit/cost ratios were calculated for and published in Energy Trust's 2011 Annual Report to the OPUC, which requires their publication as one element of its performance oversight. OPUC also requires Energy Trust to report significant mid-year changes in quarterly reports. No significant changes were reported mid-year 2012.

Program	Combined Utility System Benefit/Cost Ratio	Combined Societal Benefit/Cost Ratio
New Homes and Products	1.8	2.2
Existing Homes	2.3	2.1
Existing Buildings	2.6	1.6
New Buildings	3.0	1.8
Production Efficiency	3.2	2.3
NW Energy Efficiency Alliance	3.9	1.3

<sup>7</sup>OPUC and Energy Trust staff have come to agreement on new performance measures for the renewable energy sector to be utilized in 2013. The commission is expected to formally approve those measures in March 2013.

<sup>8</sup>By law, Oregon public purpose funds may be invested only in cost-effective energy efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources. Recently OPUC has granted Energy Trust exceptions from this requirement for several specific measures for a limited time.

## Appendix 3

### Q4 2012 UTILITY ACTIVITIES SUPPORTED BY SB 838—AUTHORIZED FUNDING

*Per agreement with the OPUC, Pacific Power and Portland General Electric report their SB 838 program support activities in Energy Trust's quarterly and annual reports. Content and format were developed by the utilities, following a sector outline suggested by Energy Trust, and appear here as received.*

#### **1. Pacific Power SB 838 Energy Efficiency Activities and Results Q4 2012**

(for submission with Energy Trust Quarterly Report)

Pacific Power utilized several approaches to support and deliver energy efficiency communications, advertising and outreach to residential and small- and mid-size commercial customers.<sup>9</sup>

##### **Voices residential newsletter insert**

- **Q1**
  - Start the year right – save energy
  - Smart power strips
  - Hold on to your heat and stay warm / Energy Trust
  - Choosing a better bulb / Energy Trust
  - LED lighting
- **Q2**
  - Save with Earth Day actions / Energy Trust
  - Free Energy Saver Kit / Energy Trust
- **Q3**
  - Home is where the savings are / Energy Trust
  - Recycle your old fridge / Energy Trust
  - No money down energy upgrades / CEWO
  - One kilowatt-hour, so many possibilities
  - Weatherize your home / Energy Trust
- **Q4**
  - Be **watt**smart / Green Gifts
  - Enjoy the season in a new light / CFLs / Energy Trust

##### **Energy Connections commercial e-newsletter**

- **Q1**
  - Your Energy Plan for 2012
  - Save Now: Eight Low-Cost Ways to Reduce Energy Use
  - Fact or Fable? When a Device is Turned Off, It is Off
  - Be **watt**smart with Building Maintenance
  - Energy Management Systems: Putting You in Control
  - Common Energy Myths Exposed
  - Do You Have Energy Hogs in the Office?
  - Programmable Thermostats: An Affordable Way to Save Energy
  - Real Savings: Local Businesses Improve Lighting, Cut Costs
    - New lighting lifts fitness center / Energy Trust
    - Irrigation supplier pumps up savings, productivity / Energy Trust
  - Fact or Fable? Daylight Saving Time Saves Energy

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<sup>9</sup>Some activities are funded outside of SB 838 funds.

- **Q2**
  - Can Saving Energy Increase Worker Productivity?
  - Your Electric Bill: The Difference Between Demand and Usage
  - Ten Low-Cost Strategies to Reduce Your Energy Bill
  - Does Your Big Screen TV Equal Big Power Consumption?
  - Spring Air Conditioning Maintenance Tips for Businesses
  - LED Lighting: A Growing Bright Spot for Energy Savings / Energy Trust
  - Fact or Fable? Energy-Efficient Refrigerators Use Less Power Than a 100-Watt Bulb
  - Strategies to Reduce Demand Charges
  - Unloading Your Plug Load
  - Get Your House in Shape for Summer
  - TV Set-Top Boxes Get Poor Ratings in Energy Efficiency
  
- **Q3**
  - Preventive Maintenance Checklist for Air Conditioning Systems
  - Benefits of Motor Soft-Start Devices
  - Cut Energy Waste in the Office
  - How Do They Do That? Light-Emitting Diodes (LEDs)
  - While You're Away...
  - Your Electric Bill: The Difference Between Demand and Usage
  - Energy Efficiency: Your Competitive Edge
  - Lighting Controls: Technology Takes Flight at Local Airport
  
- **Q4**
  - Building Controls: Stay Tuned for Energy Savings
  - Ten Ways to Improve Heating System Performance
  - Employee Personal Appliances Erode Energy Efficiency Efforts
  - Compare the Energy Costs of Holiday Lighting
  - Annual Energy Reviews: Seven Things to Look For
  - Making the Business Case For Efficiency
  - Shrink Your Big Screen TV's Power Usage

***Energy Insights large C&I / communities newsletter***

- **Q1**
  - J&J Snack Foods enjoys savings / Energy Trust
  
- **Q2**
  - Helping customers save energy at home
  - Helping shape energy policy
  - Local mill cuts energy waste / Energy Trust
  
- **Q3**
  - Plan focuses on changing energy picture
  - Pacific Power executive visits historic Oregon company / Energy Trust
  - Energy Efficiency goes high tech / Energy Trust
  
- **Q4**
  - Dairy milks savings through energy efficiency / Energy Trust
  - Get your **wattsmart** open sign / Energy Trust

**Bill inserts**

- **Q1**
  - Resolve to save with energy-efficient improvements / Energy Trust
  - Stay comfortable and save energy with a new heat pump / Energy Trust
  - Make it your home. Get cash incentives for weatherization / Energy Trust

- **Q2**
  - Free Energy Saver Kit. Delivered to your front door. / Energy Trust
  - Be **watt**smart workshops
  - Summertime and the saving is easy
    - Free Energy Saver Kit / Energy Trust
    - Other cool resources / Energy Trust
    - Home Energy Review / Energy Trust
    - Get cash for your old fridge / Energy Trust
    - Energy-saving tips for summer efficiency / Energy Trust
- **Q3**
  - Turn Mr. Sunshine into Mr. Hot Water (solar thermal) / Energy Trust
  - Refrigerator Recycle / Energy Trust
- **Q4**
  - wattsup insert
  - Energy Trust Energy Saver Kit

**Direct mail**

- **Q1**
- **Q2**
  - Clean Energy Works Oregon – Southern Oregon
  - Clean Energy Works Oregon – Central Oregon
  - Be **watt**smart workshops
- **Q3**
  - Advanced Controls Heat Pump / Energy Trust
  - Solar Water Heater / Energy Trust
  - Clean Energy Works Oregon – Hood River
  - Clean Energy Works Oregon – Lane County
  - Clean Energy Works Oregon – Marion/Polk Counties
  - Clean Energy Works Oregon – Benton County
- **Q4**
  - Clean Energy Works Oregon – Klamath and Lake Counties
  - Energy Trust Ductless Heat Pump postcard

**Direct email**

- **Q1**
- **Q2**
  - Be **watt**smart workshops
- **Q3**
- **Q4**

**Mass media**

- **TV - Bend, Medford, Eugene and Albany/Corvallis DMAs**
  - **Q1**
    - “Bike shop”
    - “Cookies”
    - “Motel”
    - “Little Hero”
    - “Porch Light”
    - “Small Changes”
    - “Sweet Savings”

- “Remodel your energy bill”
- **Q2**
  - “Little Hero”
  - “Porch Light”
  - “Small Changes”
  - “Sweet Savings”
  - “Contractor” / Energy Trust
  - “Cookies” / Energy Trust
  - “Motel” / Energy Trust
  - “Home sweet home” / Energy Trust
  - “Porch Light” / Energy Trust
  - “Remodel your energy bill” / Energy Trust
  - “Washing machine” / Energy Trust
  - “Small changes” / Energy Trust
  - “Little hero” / Energy Trust
- **Q3**
  - “Contractor” / Energy Trust
  - “Cookies”
  - “Motel”
  - “Little hero”
  - “Porch Light”
  - “Remodel your energy bill” / Energy Trust
  - “Small changes”
- **Q4**
  - “Baker/Cake”
  - “Contractor-ETO”
  - “Cookies”
  - “Motel”
  - “Little Hero”
  - “Porch Light”
  - “Small Changes”
- **Radio – Bend, Eugene and Medford DMAs**
  - **Q1**
    - “Marty Home Improvement Answers”
    - “Phil Seal and Secure Answers”
    - “Lori Lightbulb Answers”
    - “Jess Conserve Energy Answers”
    - “Bob Energy Efficiency Answers”
    - “Home Energy Review” / Energy Trust
    - “Refrigerator recycling” / Energy Trust
    - “Upgrade incentives” / Energy Trust
  - **Q2**
    - “Bob Energy Efficiency Answers”
    - “Marty Home Improvement Answers”
    - “Home Energy Review” / Energy Trust
    - “Refrigerator recycling” / Energy Trust
    - “Upgrade incentives” / Energy Trust
  - **Q3**
    - “ETO Upgrade Song” / Energy Trust
  - **Q4**
    - “ETO Home Review Song (**wattsmart**)”
    - “Bob Answers – energy efficiency”
    - “Jess Answers – conserve energy”

- **Print**

- **Q1**

- “Outlets”
- “Monmouth-Independence Chamber of Commerce Chamber” directory ad
- “Deschutes Library Ad” / Energy Trust
- “Fishmarket” ad

- **Q2**

- “Deschutes Library Ad” / Energy Trust
- [“Stayton-Sublimity Chamber of Commerce, guide ad” / Energy Trust](#)
- “Medford Chamber of Commerce, business directory ad” / Energy Trust
- “Upper Rogue Independent Magazine”
- “American Legion Baseball” program ad

- **Q3**

- “Scandinavian Festival” program ad
- “Albany Chamber” directory ad
- “Creswell Chronicle” Fourth of July directory ad
- “Oregon Jamboree” program ad
- “Bohemia Mining Days” program ad
- “Lincoln City Chamber” ad
- “Lithia Motors” ad

- **Q4**

- “Lithia Motors” ad
- “Holiday Season” Cottage Grove Sentinel
- “New Year’s” Cottage Grove Sentinel
- “Holiday Season” Douglas County News

**Outdoor**

- **Q1**

- “Push down to save”

- **Q2**

- “Push down to save”

- **Q3**

- **Q4**

**Websites / Social Media** (continuous energy efficiency and Energy Trust content)

- pacificpower.net/wattsmart
- bewattsmart.com
- Pacific Power wattsmart Facebook page
- Twitter

**Call Center**

- **Q2**

- Be **watt**smart workshops – inbound

**Chambers of Commerce, Business and Community outreach: Q1 – Q4**

Pacific Power has hosted multiple energy efficiency focused meetings with business and community leaders across the state utilizing existing relationships with local Chambers of Commerce and economic development groups. The meetings follow on prior Power of Main Street energy efficiency events held throughout 2011. These presentations focused on small- to mid-size commercial customers, particularly those in leased spaces, and how they can improve energy efficiency. Energy efficiency presentations were delivered in Power of Main Street events were held in Astoria, Coos Bay, Dallas, Hood River, Klamath Falls, Lebanon, Lincoln City, Medford, Monmouth, Pendleton,

Portland, Redmond, Sweet Home and Umatilla, Oregon. The presentations highlighted Pacific Power's relationship with Energy Trust and available programs and incentives to save energy and money. Pacific Power also offered:

- A one hour on-site walk through with Pacific Power to document information about the customer's building and how they use energy. We reviewed lighting, office equipment, HVAC and foodservice equipment. Pacific Power also provided practical no cost/low cost ideas for saving energy and a review of which improvements were eligible for Energy Trust cash incentives. (Utilizing Energy Trust's "Do it yourself" energy audit)
- Additional support for on-site assistance from Energy Trust of Oregon and local contractors.
- Regular checkups with Pacific Power on recommended energy saving improvements.

### Be *watt*smart Workshops – Q2

Pacific Power produced and delivered a very successful second round of Be *watt*smart Workshops. The workshops were targeted to homeowners to educate them on how to manage energy use and improve energy efficiency. Locations included Medford, Grants Pass, Roseburg, Coos Bay, Corvallis, Portland, Seaside, Hood River, Bend, Redmond, Klamath Falls, Lakeview, Pendleton and Enterprise, Oregon. Sessions were presented by Pacific Power.

### Mass Media<sup>10</sup>

	2012 – Impressions (Q1 – Q4)
TV	60,743,800
Radio	4,343,000
Print	83,000
Digital	4,865,207
TOTAL	70,035,007

### Outreach

Locations	Chambers of Commerce, business / community groups (2012)	Be <i>watt</i> smart / other residential (2012)	TOTAL (Q1 – Q4)
Astoria	100	-	100
Bend	-	99**	99
Coos Bay	40	120*	160
Corvallis	150	120*	270
Dallas	45	-	45
Enterprise	-	17	17
Grants Pass	-	75* **	75
Hood River	20	30	50
Klamath Falls	125	80* **	205
Lakeview	-	29	29
Lebanon	65	1,000	1,065
Lincoln City	60	-	60
Medford	200	150* **	350
Monmouth	25	-	25
Pendleton	60	46	106
Portland	60	224* **	284
Redmond	25	498* **	523
Roseburg	-	88*	88
Salem	575	-	575
Seaside	-	34	34
Sweet Home	20	-	20

<sup>10</sup>SB 838 funded mass media only

Appendix 3: Q4 2012 UTILITY ACTIVITIES SUPPORTED BY SB 838-AUTHORIZED FUNDING: PACIFIC POWER

Umatilla	5	-	5
TOTAL	1,575	2,610	4,185

\*Sold out events

\*\* CEWO presentation provided

**“Warm Leads” / Customer Response**

	2012 (Q1 – Q4)
“Warm Leads” provided to ETO	128
Consultations	243
Energy Saver Kits	308*

\*Request for link

**Other Energy Efficiency Coordination / Support**

- Internal Pacific Power support for ETO programs
- Weekly / Monthly ETO coordination meetings
- ETO Conservation Advisory Council
- ETO / Utility Roundtable
- EEAST implementation
- On-Bill Financing support
- CEWO implementation, contracting, support
- “Cool Schools” coordination
- ETO / Utility Data Transfer coordination
- Fuel Switching docket
- EE PPA docket
- Opower pilot
- Schedule 297 tariff / agreement coordination
- 1aMW / Self Direct reconciliation
- Lloyd EcoDistrict
- Energy Conservation Charge filing / funding agreement



**2. Portland General Electric SB 838 Energy Efficiency Activities and Results Q4 2012** (for submission with Energy Trust Quarterly Report)

**Residential**

PGE sent emails to 200,075 residential customers to offer Energy Saver Kits provided by the Energy Trust in November. 16,858 kits were delivered to PGE residential customers during Q4.

A direct mail was sent to 106,249 residential customers offering special pricing for AirGenerate heat pump water heaters installed through PGE’s plumber network. A total of 111 customers installed had heat pump water heaters in Q4.

During Q4, PGE Community Offices gave away 7,500 free compact fluorescent light bulbs and 1,750 free showerheads to residential customers. PGE’s call center transferred 27 customers to ETO’s Appliance Program (PECI), 76 to CSG and 127 customers calling about OPOWER.

**2012 Energy Trust Program Participation\***

- 16,858 Energy Saver Kits have been sent to PGE residential customers
- 3,626 PGE customers participated in the Energy Trust’s Refrigerator Recycling program
- 226 customers received an Energy Trust electric resistance water heater incentive
- 174 (June - Dec) free showerheads have been installed by PGE’s Plumber Network plumbers when on residential jobs in PGE’s service territory through the Energy Trust Direct Install program (1,735 total showerheads have been installed in PGE service territory)
- 150 Savings Within Reach homes have been weatherized
- 37 window bonus incentives
- 19,750 CFL’s and 6,500 shower heads distributed through PGE Community
- 5,400 energy saving kits distributed through local energy assistance agencies
- 111 heat pump water heaters installed

\*Energy Trust provided information on participation among PGE customers. Weatherization measures are among electrically-heated homes.

**PGE-Approved Heat Pump Contractors**

With a goal of helping Trade Ally Contractors better align with Energy Trust’s new ductless heat pump program guidelines, PGE funded and facilitated two more trainings – two half day classes, one in Portland and one in Wilsonville – to teach the Approved Contractors how to condition larger homes using a maximum of two indoor ductless heat pump fan coil units (heads).

PGE continued heat pump quality insurance installation inspections among PGE-Approved contractors through Q4 of 2012. Deficiencies inspectors identify in the field are passed on to the Approved Contractors, requiring the contractor to fix what our inspectors are not able to correct in the field and to educate their staff to reduce the likelihood of the errors occurring again. There seemed to be an uptick in new install technicians amongst our most established Approved Contractors. Our quality insurance checks repeatedly found mis-programmed or missing outdoor temperature auxiliary heat lockout controls. These were field corrected where possible or corrected to our satisfaction by the installing contractor.

<b>Key Objectives</b>	<b>Results 10/01/2012 to 12/31/2012</b>
Heat Pump installations as reported by PGE Approved Contractors	357
Inspections of Heat Pump installations	63
Failed inspections	19

**Commercial**

PGE’s business newsletter Energize is sent quarterly to 76,000 customers in their bills. The fall edition of Energize featured a story about how smart strips create savings for businesses and another article on how “LEDs light the way to savings”. PGE’s business e-newsletter, Business Connection, is sent bi-monthly to 15,000 business customers. December Business Connection featured an article called “Smart strips=smart savings” as well as a story called “LEDs save 75% for retailer”.

A light emitting diode (LED) direct mail was sent out to approximately 8,000 general business customers in September that ran through October targeted at Restaurant/Lodging/Entertainment and Grocery/Retail. The mailing included a letter that describes the benefits of LEDs and explains how PGE can help customers choose the right LEDs in order to qualify for Energy Trust incentives. There was also a brochure included that included a customer story about a successful LED project installation with a tear off business reply card encouraging customers to return a form to request a free energy consultation. The promotion ended October 31, 2012. The direct mail resulted in 249 requests for consultations.

An “In Your Neighborhood” direct mail was sent out in the beginning of November to approximately 8,000 business customers in targeted zip codes. The letter described how PGE’s energy experts can meet the customer at their business and review their systems like lighting, HVAC and other equipment as well as help connect the customer with contractors and Energy Trust incentives. The focus was on offering on-site consultations while the PGE energy experts are in the “neighborhood” of the business versus phone or email consultations. This type of promotion has proven very successful in the past. The target was chosen by specific zip codes so that the energy expert team could maximize the on-site consultations. The direct mail resulted in 158 requests for consultations.

PGE continued utilizing the support of our contact center and outreach through Green Mountain Energy business reps and in addition, utilized summer canvassers.

<b>Campaign Activities</b>	<b>Requests for Consultations</b>
<b>Total for Campaigns (October – December)</b>	
LED Letter (9/18 – 10/31)	249
In Your Neighborhood Letter (11/1 - 12/15)	158

**SB838 Commercial Energy Efficiency Outreach**

<b>Key Objectives</b>	<b>Results 10/01/2012 to 12/31/2012</b>
Increased Awareness of Energy Trust Programs - Outreach Presentations and Networking	9
Increased Participation-Qualified Leads delivered to Energy Trust	120
Increased Awareness of Energy Trust Programs-Number of Customers Contacted by <ul style="list-style-type: none"> <li>• Phone</li> <li>• Email</li> <li>• On-site Consultations</li> <li>• Outreach Presentations</li> <li>• Summer Hire Canvassers</li> </ul>	746

**Outreach Presentations, Networking, Trade Associations and Events**

These activities elevate Energy Trust program awareness and engage customers in identifying potential energy saving opportunities.

NAO Diversity Event (PGE Sponsor)  
Tualatin Commercial Citizen Involvement Organization  
Beaverton Chamber  
Sherwood Chamber  
Metro Multifamily Housing Association – Luncheon  
Marion County Farm Bureau  
City of Hillsboro Sustainability  
Tualatin Chamber of Commerce  
Energy Trust / PECI HVAC controls codes training

## Appendix 4

### NEEA QUARTERLY PERFORMANCE REPORT FOR ENERGY TRUST



### NEEA Quarterly Performance Report for Energy Trust

Fourth Quarter 2012

#### OVERVIEW

The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization working to increase energy efficiency to meet the future energy needs of the Northwest. Working in partnership with funders, efficiency allies, and other strategic market partners, NEEA identifies barriers that impede market transformation, and then strategically intervenes to remove those barriers, create market demand and support the adoption of new standards to promote cost-effective energy efficiency on behalf of the entire Northwest.

Among the more than 100 Northwest utilities investing in NEEA, Energy Trust of Oregon is one of NEEA's top funders. Energy Trust expects to invest close to \$40 million to support NEEA from 2010-2014, more than 20 percent of NEEA's budget for the period. This report provides a summary of NEEA's fourth quarter 2012 activities delivering value to Energy Trust and its utility partners.

#### FILLING THE ENERGY EFFICIENCY 'PIPELINE' FOR ENERGY TRUST

NEEA's top focus, as prioritized by stakeholders, is to bring new energy-efficient technologies and practices to the market in order to increase the long-term potential of energy efficiency.

##### *Fourth Quarter Emerging Technologies and Practices Highlights:*

- Scanned the market for emerging technologies, identifying and advancing opportunities with significant savings potential including super-efficient dryers, advanced roof-top units, residential economizers, and industrial pumping. NEEA is actively investigating more than 18 emerging energy-efficient technologies that will have broad benefits for Energy Trust and its utility partners.
- Tested market intervention strategies and validated performance of heat pump water heaters (HPWHs) to prepare for full-scale market launch. Through real-world performance-testing, NEEA identified and addressed an electrical connection issue in one model and worked with that manufacturer to take corrective action. NEEA's market test of HPWHs has shown encouraging results: a coordinated retail promotion with Sears increased sales by 1,200 percent, while total sales associated with the initiative exceeded NEEA's annual goal by nearly 40 percent. In 2012, NEEA provided \$152,000 in HPWH rebates to consumers in Energy Trust territory, performed 354 retail and wholesale support visits to educate staff on HPWH technology, and performed 89 quality assurance inspections. Quality assurance inspections verify HPWH installation quality and eligibility, and support Energy Trust verification of rebate applications. NEEA also attended three Energy Trust Trade Ally Roundtables to educate the contractor network about the Smart Water Heat program and available rebates.
- Collaborated with Energy Trust in 2012 to complete 20 comprehensive lighting pilot projects. An evaluation of these and other pilot projects found increased efficiency opportunities (25-35 percent higher in many cases), and concluded that additional training

and investment for trade allies is necessary. NEEA is collaborating with Energy Trust staff and others, to develop a regional lighting strategy that will increase market capability to undertake comprehensive lighting retrofit projects in Energy Trust territory.

- Continued deep retrofit pilot project in Portland by completing initial Integrated Measures Package (IMP) and property assessment. The IMP is an integrated pre-analyzed set of technical building design, engineering and energy component parameters, which will greatly simplify and reduce the cost of designing integrated energy-efficient systems within a building. The pilot project, which NEEA identified in collaboration with Energy Trust, will demonstrate best practices, clarify business cases, and document case studies thereby accelerating market adoption of deep retrofits and increasing energy performance of the region's commercial real estate.
- Secured participation of builder New Tradition Homes in next step home test project to be built in Energy Trust territory. In 2013, NEEA will transition its Efficient Homes initiative to an advanced performance home specification by leveraging existing Northwest ENERGY STAR Homes infrastructure and existing market partners. The new specification will provide a pathway for advanced new construction practices and technologies and accelerate new code adoption. Test projects aim to generate consumer and builder awareness for advanced building practices and new technologies in addition to promoting builders who go above and beyond ENERGY STAR.

## ACCELERATING MARKET ADOPTION FOR ENERGY TRUST

NEEA leverages the power of the Northwest's 12 million energy customers to influence market partners, remove barriers, and build market capacity for energy efficiency. With support from funders like Energy Trust, NEEA designs and executes strategic market interventions to create lasting change and deliver long-term savings to the region. NEEA currently has 16 active market transformation initiatives in the residential, commercial, industrial and agricultural sectors. NEEA is also heavily involved in raising the bar for state energy codes and federal appliance standards.

### *Fourth Quarter Residential Sector Highlights:*

- Supported the acceleration and availability of ductless technology in Energy Trust territory by building infrastructure to support product delivery. In Q4, NEEA delivered presentations at the Energy Trust of Oregon Trade Ally roundtables in Portland, Bend and Medford to over 90 attendees. Over the course of 2012, NEEA recruited five new contractors to the Master Installer program in Energy Trust territory and performed seventeen site inspections to ensure quality installation and gauge customer satisfaction. As a result of these and other activities to accelerate market adoption of ductless heat pumps, there were 38 utility-incented ductless heat pump installations in Energy Trust territory in 2012.
- Expanded market capacity for Northwest ENERGY STAR Homes by collaborating with Energy Trust to provide training and other resources to builders, appraisers and market actors. In 2012, NEEA delivered training to more than 100 realtors, builders and HVAC contractors in Energy Trust territory to promote awareness of energy efficiency, and support implementation of Version 3 specifications for heating and cooling. NEEA also delivered two New Verifier trainings in Energy Trust territory in 2012 to support a strong verifier network in Oregon capable of driving the program and supporting transition to an Open Providership model. As a result of these and other program efforts, in Q4 state providers certified 166 homes in Energy Trust territory as Northwest ENERGY STAR Homes for a total of 856 certified homes in 2012.

- Accelerated market adoption and increased consumer awareness of energy-efficient televisions by conducting 587 store visits in Energy Trust territory, distributing 1,036 pieces of point-of-purchase materials and providing coaching to 458 sales associates. NEEA works with major retailers to sell and promote the most-efficient TVs through upstream retailer incentives, trainings, and marketing and field service support.

#### *Fourth Quarter Commercial Sector Highlights:*

- Registered more than 60 buildings in Energy Trust territory in the 2012-13 Kilowatt Crackdown. Held in partnership with Building Owners and Managers Association (BOMA) Oregon and the City of Portland, the objective of the Kilowatt Crackdown is to engage commercial office building owners and managers and demonstrate the competitive advantage of Strategic Energy Management.
- Coordinated with Energy Trust staff and contractors for Continuous Energy Improvement pilot program and “light touch” services at Legacy and Providence hospitals in the Portland metro market.
- Continued to provide support to the University of Oregon’s Energy Studies in Buildings Laboratory (ESBL) to further develop tools, research and education to improve building energy performance. The ESBL benefits Energy Trust by studying the marketplace to identify an array of potential gaps to energy efficiency and collaborating with manufacturers to design prototypes to address market barriers. These efforts ensure a continuous pipeline of energy-efficient improvements and promote a transformed market.

#### *Fourth Quarter Industrial/ Agriculture Sector Highlights:*

- Collaborated with Ag Gateway, a consortium of businesses within the agriculture industry, to initiate a major strategy to develop a common set of exchange standards incorporating irrigation water management data flow into an agreed upon industry-wide format. This strategy will benefit growers in Energy Trust territory by allowing them to eventually “plug n play” their irrigation control equipment to reduce water and energy use.
- Four food processing facilities in Energy Trust territory are implementing self-sustaining energy management systems, thereby increasing adoption of energy efficiency and persistence of savings in the region. NEEA promotes and encourages the adoption of Strategic Energy Management by providing tools and education to the industrial sector.

#### *Fourth Quarter Codes and Standards Highlights:*

- Supported the Oregon Home Builders Association to hire a Codes Director who is responsible for education and outreach to its members in Energy Trust territory.
- Delivered codes training to 72 builders and contractors in Energy Trust territory to support compliance with commercial and residential energy codes.
- Served as a technical expert as part of an annual strategy meeting for standards efficiency advocates in Washington D.C. to discuss the current status of all rulemakings as well as several issues impacting the U.S. Department of Energy’s standards program. NEEA will act as co-lead on a process to develop electric pump labeling schemes and standards. \

## DELIVERING ON REGIONAL ADVANTAGE

NEEA is the only alliance of public and private electric utilities with national and global upstream market partners that represents the entire four-state region in the Northwest. NEEA aggregates resources to develop economies of scale and mitigate risk to individual utilities.

### *Fourth Quarter Highlights:*

- Launched Commercial Building Stock Assessment (CBSA). The important market research report will directly support Energy Trust's program planning efforts, and will play an important role in informing the development of the 7th Northwest Power Plan. Visit [www.neea.org/cbsa](http://www.neea.org/cbsa) for more information. This effort is best led through NEEA as the regional collaborative.
- Released a comprehensive assessment of residential building stock characteristics in the Northwest. The goal of the residential building stock assessment (RBSA) is to provide regional organizations and utilities with baseline information for conservation planning, program design, and evaluation. To conduct the study, NEEA sampled 1,401 single-family homes, 321 manufactured homes, and 134 buildings across the region. Study variables included demographics, overall home characteristics, fuel choice, and energy use. Results from the single-family study (released in Q4 of 2012) reveal water and space heating program opportunities, with over 58 percent of water heaters in the region eight years or older and 13 percent of space heating coming from electric baseboards and plug-in devices. The findings of the RBSA will benefit Energy Trust's future planning efforts and provide a solid base for assessing energy savings on residential programs throughout its territory.
- Continued to support and improve Conduit (<http://conduitnw.org>) as an online tool for information-sharing, coordination and collaboration among energy efficiency stakeholders across the Northwest. Conduit now has over 1,700 energy efficiency stakeholders registered.
- Continued to promote the regional energy efficiency messaging platform and marketing toolkit, which was created in partnership with the Regional Marketing Coordinating Council including Energy Trust staff. The messaging platform and toolkit were designed to accelerate energy efficiency program implementation and support marketing and outreach efforts. By the end of 2012, the Toolkit Style Guide had been downloaded nearly 3000 times from the NEEA website by staff from about 50 utilities.
- Hosted and organized Efficiency Connections Northwest, the region's energy efficiency conference, and the only event developed by and for utility professionals from both public- and investor-owned utilities. Developed in partnership with regional utilities, the conference facilitates collaboration and sharing of information, experiences and best practices across the region. EFFICIENCY CONNECTIONS NORTHWEST 2012 was held in Spokane Washington, October 17-18, with seven registered attendees and three presenters from Energy Trust.
- Partnered with Energy Trust and other Northwest utilities to form the Northwest Regional Retail Collaborative to leverage the collective knowledge, marketplace relationships and market influence of the region. The objective of the Collaborative is to cultivate deeper and more strategic relationships with national retailers to influence the mix of energy-efficient technologies available within retail stores. The increased product selection, consumer knowledge and ability to capture more complete and verifiable data about consumer

purchases will benefit the Energy Trust by enabling its capacity to support and promote energy efficiency programs within its territory.

- Published four independent market research and evaluation reports to validate and evaluate NEEA's market transformation work:
  - [Existing Building Renewal/Commercial Real Estate Research: Market Characterization, Attitudes and Behavior of Owners and Service Providers](#)
  - [Direct Savings from 2011 Integrated Design Lab Projects](#)
  - [Residential Building Stock Assessment: Single-Family Characteristics and Energy Use](#)
  - [Northwest Ductless Heat Pump \(DHP\) Initiative: Market Progress Evaluation Report #2](#)

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## Appendix 5

### Q4 2012 REPORT FOR NW NATURAL WASHINGTON ACTIVITIES

October 1 through December 31, 2012

This Energy Trust of Oregon quarterly report covers the period October 1, 2012, through December 31, 2012. This report addresses progress toward 2012 goals for the NW Natural energy-efficiency program in Washington. It includes information on expenditures, therm savings, projects completed and incentives paid during the quarter and year to date. A more comprehensive annual report will be completed in April 2013.

#### I. PROGRAM SUMMARY

##### A. General

- Energy Trust saved 110,142 annual therms in Q4 2012—including 25,916 annual therms in Existing Homes, 20,888 annual therms in New Homes and Products and 63,338 annual therms in Existing Buildings.
- According to preliminary annual results, a strong Q4 performance enabled Energy Trust to end the year within its 2012 savings goal range while maintaining program cost-effectiveness.
- Total program spending, including incentives, delivery and administration, ended the year well within budget.

##### B. Washington Utilities and Transportation Commission Performance Metrics

The table below compares quarterly results to 2012 program goals, as established in NW Natural's Energy Efficiency Plan for Washington (updated December 2011).

Metrics	Goal	2012 Total	Q1 Results	Q2 Results	Q3 Results	Q4 Results
Therms Saved	212,550 – 250,000	213,486	47,496	36,173	19,675	110,142
Total Program Costs	\$1,431,460 – \$1,614,980	\$1,156,509	\$191,747	\$266,693	\$231,991	\$466,078
Average Levelized Cost Per Measure	Less Than \$0.65	\$0.482	\$0.336	\$0.594	\$0.945	\$0.417
Dollars Spent Per Therm Saved	Less Than \$6.50	\$5.42	\$4.04	\$7.37	\$11.86	\$4.23
Total Resource Cost and Utility Costs at Portfolio Level	Greater than 1.0	n/a	Reported Annually	Reported Annually	Reported Annually	Reported Annually

Additional information that explains progress toward the year-end metrics is provided in Section III.

## II. QUARTERLY RESULTS

### A. Expenditures<sup>11</sup>

		Actual Expenditures Q4	Budgeted Expenditures Q4	Variance
Commercial Programs	Existing Buildings	\$ 188,364	\$ 224,176	\$ 35,812
	<b>Subtotal</b>	\$ 188,364	\$ 224,176	\$ 35,812
Residential Programs	Existing Homes	\$ 151,945	\$ 177,285	\$ 25,340
	New Homes	\$ 116,973	\$ 81,461	\$ (35,512)
	<b>Subtotal</b>	\$ 268,918	\$ 258,746	\$ (10,172)
Administration		\$ 8,796	\$ 12,070	\$ 3,274
<b>TOTAL</b>		\$ 466,078	\$ 494,992	\$ 28,913

As anticipated, actual expenditures increased significantly in Q4 compared with other quarters. New Homes expenses were particularly high due to the large volume of incentive payments for ENERGY STAR® Builder Option Package homes.

### B. Incentives paid

		Actual Incentives Q4
Commercial Programs	Existing Buildings	\$ 140,445
	<b>Subtotal</b>	\$ 140,445
Residential Programs	Existing Homes	\$ 65,461
	New Homes	\$ 79,003
	<b>Subtotal</b>	\$ 144,464
<b>TOTAL</b>		\$ 284,909

Nearly 60 percent of total 2012 incentives were paid during Q4, driven in part by a high volume of commercial retrofit projects and the aforementioned ENERGY STAR homes activity.

### C. Savings

		Therms Saved Q4	\$/Therm	Levelized Cost/Therm
Commercial Programs	Existing Buildings	63,338	\$ 3.04	39.7 ¢
	<b>Subtotal</b>	63,338	\$ 3.04	39.7 ¢
Residential Programs	Existing Homes	25,916	\$ 5.94	47.0 ¢
	New Homes	20,888	\$ 5.72	45.0 ¢
	<b>Subtotal</b>	46,804	\$ 5.84	46.1 ¢
<b>TOTAL</b>		110,142	\$ 4.23	41.7 ¢

The Existing Buildings levelized cost/therm was higher than usual in Q4, reflecting the large number of commercial retrofit tune-ups for rooftop heating, cooling and ventilation equipment completed during the

<sup>11</sup>Variance is expressed in total dollars *below* budget or (total dollars) *above* budget.

quarter. These improvements have relatively short measure lives. Performance for the quarter and the year remained well within the cost-effectiveness metrics outlined in NW Natural's Energy Efficiency Plan.

### III. Q4 / PRELIMINARY 2012 ANNUAL RESULTS

#### A. Activity—Sites served

	Q1	Q2	Q3	Q4	Total
<b>Existing Commercial</b>					
School/college retrofits	4	3	--	2	<b>9</b>
Other commercial retrofits	2	1	6	43	<b>52</b>
Studies	--	--	--	--	<b>--</b>
<b>Existing Homes</b>					
Weatherization (insulation, air and duct sealing and windows)	27	43	35	74	<b>179</b>
Gas hearths	16	19	9	32	<b>76</b>
Gas furnaces	41	32	14	63	<b>150</b>
Water heaters	8	5	16	22	<b>51</b>
Home Energy Reviews	32	11	40	69	<b>152</b>
<b>New Homes</b>					
Builder Option Package	30	13	37	109	<b>189</b>
Clothes washers	139	151	156	196	<b>642</b>

#### B. Revenues

Source	Actual Revenue YTD	Budgeted Revenue YTD
NW Natural	\$ 1,261,914	\$ 1,261,914

#### C. Expenditures<sup>12</sup>

		Actual Expenditures YTD	Budgeted Expenditures YTD	Variance
<b>Commercial Programs</b>	Existing Buildings	\$ 401,357	\$ 599,880	\$ 198,523
	<b>Subtotal</b>	\$ 401,357	\$ 599,880	\$ 198,523
<b>Residential Programs</b>	Existing Homes	\$ 453,644	\$ 525,614	\$ 71,971
	New Homes	\$ 262,977	\$ 316,275	\$ 53,297
	<b>Subtotal</b>	\$ 716,621	\$ 841,889	\$ 125,268
<b>Administration</b>		\$ 38,530	\$ 49,187	\$ 10,657
<b>TOTAL</b>		\$ 1,156,509	\$ 1,490,957	\$ 334,448

The favorable spending variances in Existing Homes and New Homes reflect success in acquiring savings at a lower cost than budgeted. The favorable variance in the Existing Buildings program was driven in part by a shift in completion dates for three larger projects into 2013. As a result, these incentives will be paid in 2013.

<sup>12</sup>Variance is expressed in total dollars *below* budget or (total dollars) *above* budget.

**D. Incentives paid**

		Actual Incentives YTD
<b>Commercial Programs</b>	Existing Buildings	\$ 173,116
	<b>Subtotal</b>	\$ 173,116
<b>Residential Programs</b>	Existing Homes	\$ 162,801
	New Homes	\$ 147,609
	<b>Subtotal</b>	\$ 310,410
<b>TOTAL</b>		\$ 483,526

Incentives paid account for just under 50 percent of year-to-date program expense, 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**

		Therms Saved YTD	Annual Goal (Conservative)	% Achieved YTD	\$/Therm	Levelized Cost/Therm
<b>Commercial Programs</b>	Existing Buildings	107,764	121,678	89%	\$ 3.85	40.8 ¢
	<b>Subtotal</b>	107,764	121,678	89%	\$ 3.85	40.8 ¢
<b>Residential Programs</b>	Existing Homes	66,810	63,373	105%	\$ 7.02	55.6 ¢
	New Homes	38,912	29,645	131%	\$ 6.99	54.2 ¢
	<b>Subtotal</b>	105,723	93,018	114%	\$ 7.01	55.0 ¢
<b>TOTAL</b>		213,486	214,696	99%	\$ 5.42	48.2 ¢

The residential programs performed extremely well in 2012. Their achievements were offset in part by the Existing Buildings projects that shifted to completion in 2013. Predicting when savings will be recognized can be a challenge with larger custom commercial projects.

**F. Clark Public Utilities—rooftop HVAC unit tune-ups\*\***

	Q4	YTD
<b>Revenue</b>	\$ 120,213	\$ 123,728
<b>Expenses</b>	\$ 69,291	\$ 72,995
<b>Incentives</b>	\$ 53,865	\$ 55,440
<b>Savings (kWh)</b>	483,993	495,091
<b>Levelized Cost Per kWh</b>		2.3 ¢

\*\* Electric savings in this table reflect an adjustment upward to account for reduced transmission and distribution line losses resulting from the savings.