Quarter Four 2013 Report to the Oregon Public Utility Commission & Energy Trust Board of Directors

ENERGY TRUST OF OREGON

FEBRUARY 28, 2014

This report covers activity between October 1 and December 31, 2013

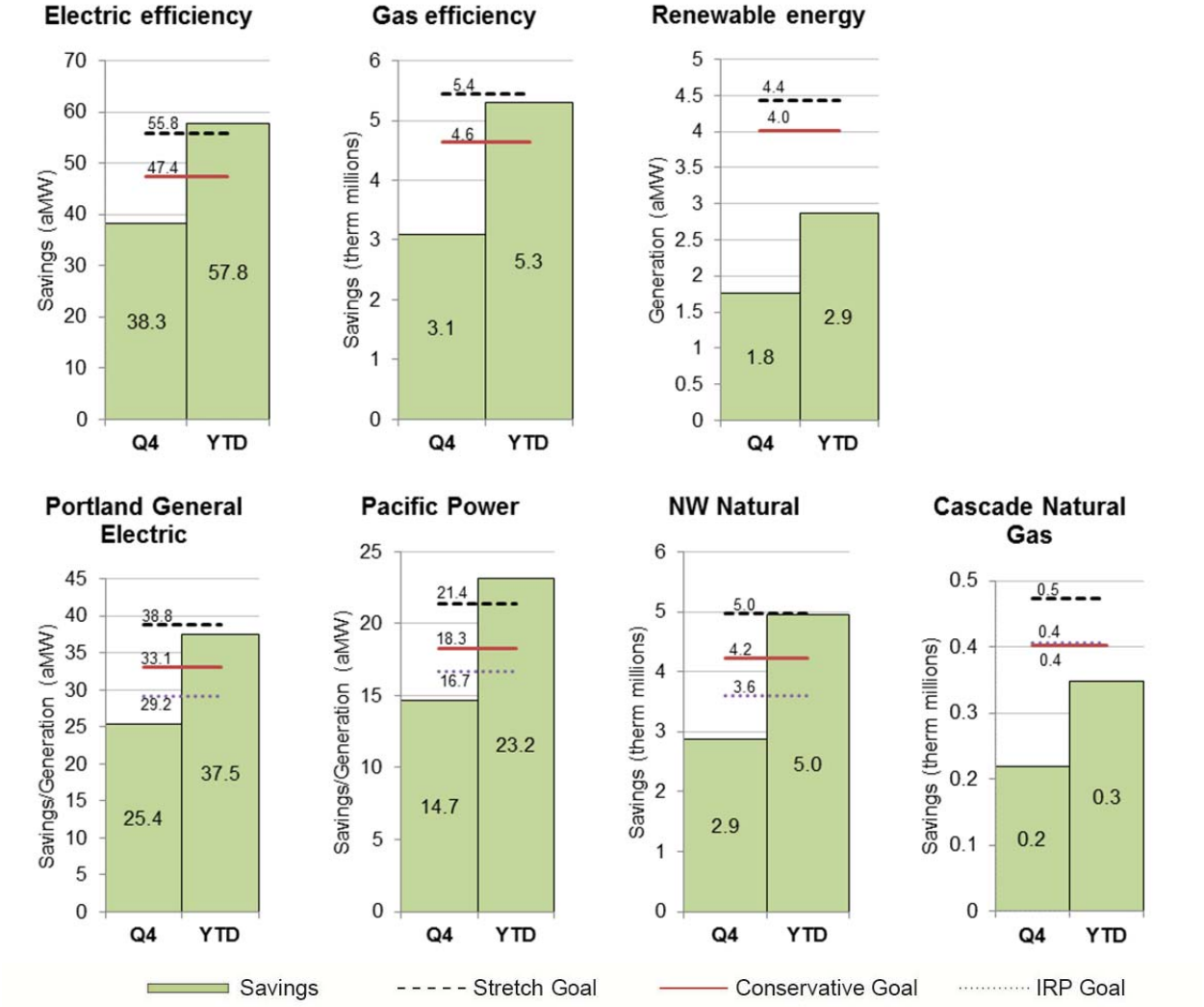
Energy Trust of Oregon
421 SW Oak St., Suite 300, Portland, OR 97204
1.866.368.7878 503.546.6862 fax
energytrust.org

Energy Trust of Oregon

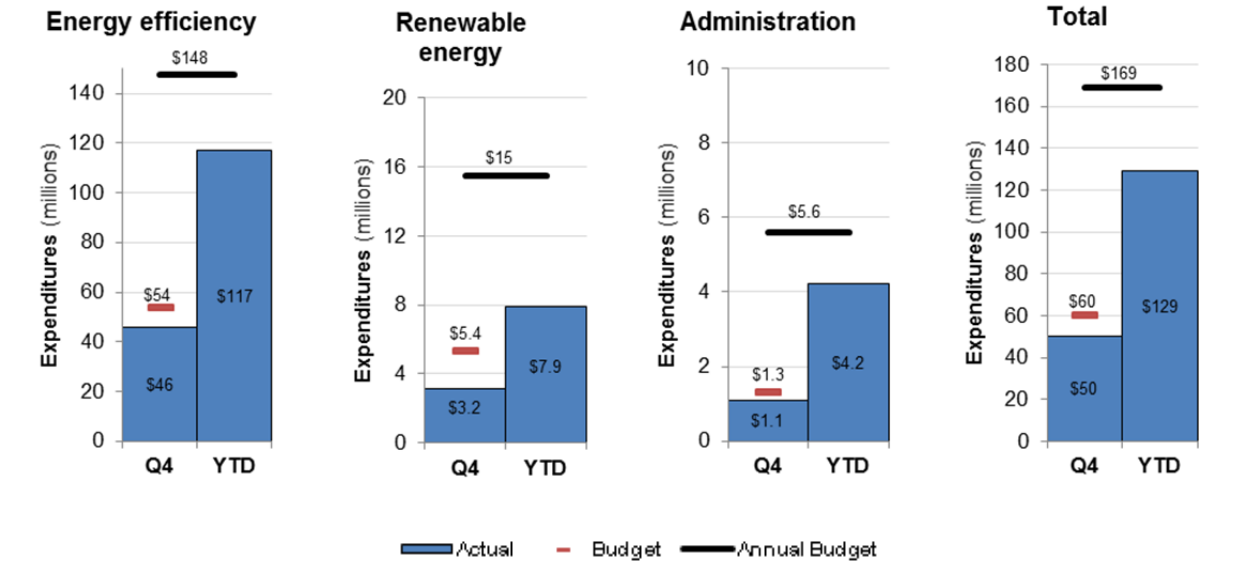
Table of Contents

I. Q4 2013 ACTIVITY AT A GLANCE

Savings and generation



Expenditures



Residential activity in Q4 2013

New homes and major remodels	**910**
New manufactured homes	37
Weatherization retrofits	**3,227**
Single-family site-built	2,793
Mobile	434
Home Energy Reviews*	**587**
Total Sites	**4,724**
Heating systems	**2,471**
Water heaters	**345**
Solar	20
High-efficiency products	**5,950**
Washing machines	4,676
Refrigerators & freezers	1,274
High-efficiency lighting**	**1,074,387**
Refrigerators, freezers recycled	**4,851**
Energy Saver Kits sent	**7,964**
Total Other Activity	**21,581**

*Includes in-home reviews only; Home Energy Reviews are also available online and by phone

**Lighting excluded from totals

Commercial activity in Q4 2013

New Buildings sites served[1]	**131**
Whole building approaches	23
Packaged solutions for market segments	12
Standard/system-based approaches	96
Existing Buildings sites served[1]	**1,469**
Operations and maintenance	82
Custom[2]	134
Lighting	732
Prescriptive/standard[3]	440
Existing multifamily sites served	**706**
Solar water heating sites served	**6**
Sites with technical assistance	**295**

[1]New Buildings and Existing Buildings total sites served may include sites that participated in more than one program track

[2]The most common custom improvements are building controls and HVAC

[3]The most common prescriptive/standard improvements are foodservice and grocery equipment

Industrial/agricultural activity in Q4 2013

Projects	**472**
Custom[1]	77
Strategic Energy Management[2]	22
Lighting	151
Streamlined industrial[3]	222
SEM participating companies	**27**
Studies	**36**

[1]The most common custom improvements are compressed air system and process upgrades

[2]Savings from no-cost or low-cost operational steps (i.e., turning off equipment when not in use) identified through trainings in SEM approaches

[3]The streamlined industrial and agricultural initiative, formerly the small industrial initiative, delivers savings from irrigation measures, small compressed air, variable frequency drives and other prescriptive and calculated measures

Renewable energy activity in Q4 2013

Biopower projects	**1**
Solar electric installations	**364**
Residential	351
Commercial	13
Other renewable projects	**2**
Wind projects	1
Hydropower projects	1
Geothermal projects	--
Total	**367**

Trade ally activity in Q4 2013

Regional trade ally roundtable meetings	**5**
Attendance	115
Trainings provided	**25**
Trade allies added to network	**67**
Trade allies accessing business development funds	**91**

Other activity in Q4 2013

Calls	**7,260**
Website visits	**208,219**
info@energytrust.org inquiries	**490**
Customer complaints	**4**
News stories in print, broadcast	**88**

II. HIGHLIGHTS OF Q4 ACTIVITIES

A. Savings[1,2], generation and general highlights

Summary

- **With a strong finish in the last quarter of the year, Energy Trust exceeded annual targets for three out of four utilities**, achieving the year-end forecast reported at the close of quarter three.
- **The majority of annual savings were achieved in Q4 as Energy Trust used year-end strategies to drive activity and results** in all territories. Examples include bonus incentives for Existing Homes and Existing Buildings, expanded outreach to Existing Buildings and Production Efficiency customers, greater promotion of residential Energy Saver Kits and an incentive increase for commercial solar customers.
- **Savings in Cascade Natural Gas territory achieved 86 percent of Integrated Resource Plan target and fell short of annual conservative goal**. A relatively small annual budget and associated savings can be significantly impacted when a few large projects are canceled or delayed to subsequent years. This was the case for Cascade Natural Gas territory where a few commercial and industrial projects did not complete in 2013. To manage this dynamic, Energy Trust and Cascade Natural Gas adjusted how savings are forecasted and budgeted, and planned to utilize reserves for large projects in 2014.
- **The renewable energy sector achieved substantial generation from JC-Biomethane,** a biogas plant that began generating energy from anaerobic digestion of post-consumer commercial food waste in Q4. The residential solar electric market was strong through Q4, and the pipeline of 2014 commercial projects has been reestablished as a result of an incentive increase implemented in Q4.
- **Energy savings for 2013 were achieved at lower-than-budgeted cost**. Expenditures for 2013 were below budget—by 20 percent for electric spending and 23 percent for gas spending. This reflects the relatively high proportion of savings derived from lower-cost strategies, including behavior-based savings such as industrial Strategic Energy Management. Analysis to explain budget underspending is in progress. Preliminary indicators suggest that new data center construction, a very large industrial project, increased savings from behavioral strategies and high Northwest Energy Efficiency Alliance activity provided very cost-effective savings.
- **Larger-than-expected carryover of funds into 2014** is due to a number of factors: lower-cost acquisition of savings as noted above, deferral of some large efficiency and renewable projects and related incentive expenditures into 2014, less activity for residential and commercial gas measures related to longer customer investment payback time caused by low gas prices, less activity budgeted in commercial solar and lower-than-anticipated operational costs, according to initial observations.
- **Energy Trust's diverse portfolio of programs and savings strategies is a strength** that helps the organization adjust to variable market conditions and meet goals, even when some programs encounter challenges. Achievements in Q4 were largely led by New Homes and Products, New

[1]This document reports net savings, which are adjusted gross savings based on results of current and past evaluations.
[2]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, 2013, may be different than previously reported as a result of applying updated evaluation factors to Energy Trust funded program savings and generation in Oregon through the annual true up process. The full True Up 2013 Report is available online at www.energytrust.org/reports.

Buildings and data center construction, lighting, multifamily and a very large industrial project. These successes balanced other programs impacted by low natural gas costs, making it more difficult to attract and complete energy-efficiency projects, and unfavorable market fundamentals for the renewable energy sector.

- **Accomplishments detailed in this report include**:
    - Direct installation of energy-saving products contributed to strong savings from the multifamily initiative.
    - Economic growth and rebounds in new construction bolstered New Buildings savings and led to high project enrollments in 2013, and the program acquired a large volume of highly cost-effective savings through large data centers.
    - Increased construction of energy-efficient new homes and new lighting products led to savings in New Homes and Products, which exceeded stretch goals for three utilities.
    - Strategic Energy Management continued to grow as a cost-effective source of industrial savings, complemented by a very large industrial project in PGE territory.
    - The renewable energy sector and Existing Buildings program developed robust pipelines for 2014.
    - Existing Buildings and New Buildings programs served 186 schools—more than twice the number served in 2012—and 2013 audits led to projects identified for 2014.
- **A variety of factors challenged savings and generation results**, including:
    - Existing Homes saw a decrease in weatherization projects due to fewer and more restrictive measures. Measure restrictions are due to a complex mix of low natural gas costs and lower measure savings realization informed by recent evaluations.
    - The Existing Buildings program achieved fewer savings than expected due to difficulty recruiting commercial SEM participants and low natural gas prices, which made it difficult to attract and complete energy-efficiency projects by reducing the customer's potential cost-savings.
    - Several Existing Buildings projects were cancelled or delayed and a large Production Efficiency project moved to 2014, significantly impacting savings in Cascade Natural Gas territory.
    - Ongoing market challenges, including the loss of Oregon Business Energy Tax Credits and challenging market fundamentals, made it difficult for commercial solar and renewable energy programs to attract and install custom projects.

Quarterly progress to goals

- **Electric efficiency improvements completed during Q4** are expected to save 38.3 average megawatts, aMW, of electricity, about 81 percent of the 2013 electric conservative goal and 69 percent of the 2013 electric stretch goal of 56 aMW. Q4 2013 electric savings are approximately 22 percent higher than savings in Q4 2012, achieved through greater savings from data center construction, a very large and low-cost industrial project, lighting and market transformation that helped meet the increased annual goal.
- **Gas efficiency improvements completed during Q4** are expected to save 3.1 million annual therms of natural gas[3], about 67 percent of the 2013 gas conservative goal and 57 percent of the 2013 stretch goal of 5.4 million annual therms. Q4 2013 gas savings are approximately 7 percent lower than savings in Q4 2012. Gas savings were impacted by a wide variety of factors, including

[3]The gas savings do not include NW Natural results in Washington. These results are reported in Appendix 6.

delay of several large projects, cancellation of one large project, and low natural gas prices lengthening payback time for projects and making the financial case for energy-efficiency projects less compelling for customers, as mentioned above.

- **Renewable energy systems installed during Q4** are expected to generate 1.8 aMW of electricity, 44 percent of the 2013 renewable energy conservative goal of 4.0 aMW. Q4 renewable generation activity is 45 percent lower than activity in Q4 2012. The decrease is addressed in section 2F.

Preliminary 2013 annual results

- **Energy Trust achieved 57.8 aMW and 5.3 million annual therms** in energy efficiency savings in 2013, according to preliminary annual results.
- **Preliminary results show that Energy Trust achieved** 104 percent of the electric efficiency stretch goal of 56 aMW and 97 percent of the gas stretch goal of 5.4 million annual therms.
- **According to preliminary annual results, Energy Trust achieved** 99 percent of PGE stretch efficiency goal, 113 percent of Pacific Power stretch efficiency goal, 100 percent[4] of NW Natural stretch goal and 73 percent of Cascade Natural Gas stretch goal. Savings results significantly surpassed IRP targets for three utilities and achieved 86 percent of IRP target for Cascade Natural Gas.
- **Energy Trust achieved 2.87 aMW of renewable energy generation**, or 72 percent of Energy Trust's conservative goal of 4.0 aMW, according to preliminary annual results.
- **Preliminary annual results show that progress to utility-specific goals by sector include** the following. Please see sections 2C, 2D, 2E and 2F for detailed explanations.
    - The commercial sector exceeded stretch goals in Pacific Power and NW Natural territories, approached stretch goal in PGE territory and fell short of conservative goal in Cascade Natural Gas territory.
    - The industrial and agricultural sector exceeded stretch goal in PGE territory, approached stretch goal in NW Natural territory and fell short of conservative goals in Pacific Power and Cascade Natural Gas territories.
    - The residential sector exceeded conservative goals for three out of four utility territories, and achieved 99 percent of conservative goal in PGE territory.
    - The renewable energy sector fell short of conservative goals in PGE and Pacific Power territories largely due to projects delayed to 2014.

Highlights

- **Energy Trust board of directors approved the 2014 annual budget and 2014-15 action plan** on December 13, following incorporation of feedback received from outreach to advisory councils, the Oregon Public Utility Commission, utilities, stakeholders and the public through multiple public meetings and a webinar.
- **Work continued in Q4 to enable internal access to utility data** for program planning, marketing and evaluation purposes. Staff implemented a targeted marketing effort for potential commercial solar customers and tracked results in Energy Trust's Customer Relationship Management system using utility data.
- **Staff presented a draft evaluation to the Board Evaluation Committee and stakeholders** on costs and savings of three tracks within the Existing Homes program. The evaluation will be

[4]Achieved 99.7 percent of stretch goal, rounded to 100 percent per Energy Trust reporting convention

complete in Q1 2014, informing the July report due to the OPUC proposing approaches to address cost-effectiveness challenges for measures and programs.

- **Production Efficiency completed a transition to new Custom Track Program Delivery Contractors** and assigned territories based on regional presence. Production Efficiency Custom Track provides a comprehensive approach to one-of-a-kind process efficiency projects, including replacement, retrofit and operations and maintenance projects.
- **This report addresses OPUC requests** regarding deep retrofit projects in commercial and residential sectors, computer system upgrades and lender ally promotions. Find more information in sections 2C, 2E and 4D.

B. Revenues and expenditures

- **Overall public purpose revenue plus incremental electric revenue** from SB 838 totaled $36.6 million for Q4 2013. Revenue received in Q4 was approximately 11 percent less than budgeted. Overall annual revenue was very close to budgeted revenue. Revenue projections are estimates provided by utilities; typically, actual revenues vary by a few percentage points from budgeted revenue.
- **Q4 expenditures totaled $50.3 million**, of which $33.9 million or 67 percent was for incentives. As a percentage of expenditures for the quarter, Q4 2013 incentives paid were roughly on par with incentives paid in Q4 2012.
- **Q4 electric efficiency expenditures** were 13 percent under budget.
- **Q4 gas efficiency expenditures** were 19 percent under budget.
- **Q4 renewable energy expenditures** were 41 percent under budget.
- **As noted above, analysis is underway to explain budget underspending** and lower-than-expected savings costs.

C. Commercial sector highlights

- **The commercial sector, comprising the Existing Buildings program, New Buildings program and multifamily initiative**, exceeded stretch goals in Pacific Power and NW Natural territories, approached stretch goal in Portland General Electric territory and fell short of conservative goal in Cascade Natural Gas territory, according to preliminary annual results.
- **Approximately two-thirds of the sector's annual savings were realized** from projects that closed in Q4, including substantial savings from a large New Buildings data center project.
- **The New Buildings program and multifamily initiative reported strong activity** due to economic recovery and increased installation of energy-saving products for multifamily customers, respectively. The Existing Buildings program achieved fewer savings than expected due to enrollment challenges for Strategic Energy Management, fewer recipients of Builder Operator Certification scholarships, project delays and cancellation of a large project in Cascade Natural Gas territory.
- **The sector distributed a draft request for proposals for a Pay for Performance pilot** soliciting stakeholder input in preparation for a public hearing in Q1 2014. The Pay for Performance pilot will determine if paying incentives for capital and operations and maintenance improvements over a multiyear period will help contractors close projects and generate additional energy savings and more comprehensive projects.
- **Existing Buildings and New Buildings programs served 186 schools throughout the state**, in coordination with the Oregon Department of Energy, and supported 11 school districts in 2013 through Cool Schools, providing audits and project assistance. Staff coordinated with the

department to refine the program and make process improvements, resulting in a robust pipeline of schools projects for 2014.

- **The sector completed 13 deep retrofit[5] projects** out of 53 identified as renovations. The 13 projects completed upgrades to at least two major building systems.

Existing Buildings

- **Existing Buildings exceeded stretch goal in NW Natural territory**, met conservative goals in PGE and Pacific Power territories and fell short of conservative goal in Cascade Natural Gas territory, according to preliminary annual results. The program completed the year with a strong 2014 project pipeline in all utility territories.
- **Factors impacting program savings included:**
    - One large project was cancelled and several large custom projects delayed to 2014 in Cascade Natural Gas territory.
    - The low cost of natural gas made it difficult to attract and complete energy-efficiency projects by reducing the customer's potential cost-savings from energy-efficiency projects.
    - While still primary sources of savings, commercial SEM and Building Operator Certification contributed less than expected to gas and electric savings due to challenges recruiting new customers and scholarship recipients, respectively. The program refined strategies for engaging early executive sponsorship to facilitate SEM project completions in 2014.
    - The program's shift away from supporting rooftop HVAC unit tune-ups in Q3 continued to impact savings through year-end.
- **Lighting projects and discounted computer equipment supported electric savings**.
- **LEDs contributed a greater portion of lighting savings** than in previous years. Staff anticipates that LED projects will continue to increase as a portion of overall savings. A market test to encourage small commercial customers to purchase reduced-price LEDs at distributor-hosted events resulted in approximately 600,000 kilowatt hours of savings.
- **The program achieved 6 million kWh of savings through utility-owned and operated streetlight** improvements in PGE territory.
- **Some custom projects were expedited from a Q4 bonus** of $0.05 per kWh and $0.50 per therm.
- **Existing Buildings increased gas savings from prescriptive projects** through direct mail promotion of kitchen equipment, and encouraged 2013 completion of in-progress projects through outreach efforts.
- **The program recruited and enrolled 24 new trade ally contractors**—16 HVAC contractors plus eight roofing and insulation contractors to support gas savings.
- **Existing Buildings outreach representatives in Southern and Northeastern Oregon** continued to provide customer service, identify project opportunities and serve schools in coordination with the Oregon Department of Energy.

[5]Based on a working definition of commercial deep retrofits developed for the purpose of OPUC reporting, deep retrofit projects typically achieve approximate savings of 40 percent beyond market average by following a number of pathways. A project must be a major renovation of an existing commercial building and receive incentives for one of the following: market solutions package, Leadership in Energy and Environmental Design achieving a 25 percent reduction for Energy and Atmosphere credit 1 points, Path to Net Zero or upgrades to at least two major building systems (such as HVAC, lighting or shell measures). The building can be large or small and the project can be simple or complex, applying multiple system-level upgrades or more holistic, customized energy-efficiency strategies.

- **Multifamily reached stretch goals in gas utility territories**, achieved conservative goal in Pacific Power territory and fell short of conservative goal in PGE territory, according to preliminary annual results. In PGE territory, custom projects were delayed to 2014, and fewer-than-expected quick-turn and prescriptive projects were completed.
- **Direct installation of energy-saving products comprised the majority of multifamily** gas and electric savings, bringing in more savings than anticipated in Q4. Common-area lighting provided significant electric savings, and custom and prescriptive projects such as energy-efficient windows and insulation contributed a large portion of gas savings.
- **Multifamily success in targeted market segments**—apartments, campus living facilities, assisted living facilities and affordable housing—resulted from midstream buy-down promotions for highly efficient equipment, promotion of common-area and outdoor lighting and integration of water-efficiency benefits into outreach materials and efforts. In addition, staff cultivated relationships with a diverse set of building owners and tenants.
- **Multifamily began serving individual condominium unit owners** with more than 70 walkthroughs, outreach to homeowners association presidents and managers and promotion through newsletters and door hangers.
- **MPower Oregon, a pilot using a utility on-bill repayment mechanism** to serve renters in affordable housing developments, engaged the first four projects expected to complete in 2014.
- **Multifamily incentives outpaced savings in Cascade Natural Gas and NW Natural** territories due to investment in custom studies that built the pipeline of projects for 2014 and beyond.

New Buildings

- **Fueled by new construction and economic recovery, New Buildings exceeded stretch** goals for three utilities, and achieved 99 percent of stretch goal in NW Natural territory, according to preliminary annual results. Completion of a large project constituted the majority of savings achieved in Q4.
- **A large data center in Pacific Power territory constituted a majority of savings** in Q4. Data centers continue to be the top source of program savings, accounting for 71 percent of total electric savings in Q4. Though they deliver low-cost savings, data centers introduce program management and budget challenges due to unpredictable timing and the high volume of savings achieved by each project, which greatly impacts total program savings.
- **Offerings contributing substantial gas savings include prescriptive projects like HVAC**, whole-building analysis and market solutions. Beyond data centers, prescriptive projects were a large source of electric savings.
- **The program enrolled 422 projects in 2013, the highest amount in any single year**, bolstered by increased building activity due to economic recovery.
- **The market solutions offering exceeded expectations by enrolling 70 projects** and closing 14 projects in 2013. Of these projects, 11 closed in Q4. A marketing campaign supported the offering in Q4 with print and web advertising, signage at construction sites and window clings at completed sites. The market solutions offering features packages of energy-efficiency measures tailored for multifamily, grocery, restaurant, office, retail and schools.
- **New Buildings saw continued interest in a new solar ready offering** encouraging builders to incorporate solar into building design to support future solar installations. In Q4, two projects closed and one new project enrolled, bringing the total number of projects enrolled to 13 in 2013.
- **New Buildings continued to see a high volume of multifamily**, **office and retail projects.** Grocery projects decreased in volume yet continue to be a high source of savings.

D. Industry and agriculture sector highlights

Production Efficiency

- **Preliminary annual results show the Production Efficiency program exceeded stretch goal** in Portland General Electric territory, approached stretch goal in NW Natural territory and fell short of conservative goals in Pacific Power and Cascade Natural Gas territories. Total 2013 gas savings was 46 percent higher than 2012 due to a few custom projects in NW Natural territory that closed in the first half of 2013.
- **Nearly one-half of the program's electric savings in Q4 came from custom projects**. A very large custom project in PGE territory achieved more savings than anticipated, helping balance out low electric savings from lighting projects.
- **Trade-ally driven projects at small and large industrial sites, including calculated and prescriptive** offerings, comprised more than 60 percent of gas savings in Q4. These streamlined offerings continue to emerge as a growing source of gas savings. The program produced a case study about high-speed doors for refrigerated warehouses to support diversification of streamlined projects beyond small compressed air and irrigation.
- **Strategic Energy Management continued to grow as a source of savings**, contributing 38 percent of gas savings and 32 percent of electric savings in 2013.
- **Activity in Eastern Oregon plateaued due to continued economic recession**, impacting savings for Pacific Power and Cascade Natural Gas territories. Relatively few projects comprise Production Efficiency savings in Cascade Natural Gas territory—six projects were completed in 2013. To minimize uncertainty, Energy Trust and Cascade Natural Gas adjusted how savings are forecasted and budgeted, and planned to utilize reserves for large projects in 2014.
- **In Q4, staff completed transition to new Custom Track Program Delivery Contractors** and reassigned territories to better support customers. Custom Track provides a comprehensive approach to one-of-a-kind process efficiency projects, including replacement, retrofit and operations and maintenance projects. Staff ensured a smooth transition by calling 115 active participants affected by the transition and coordinating more than 160 meetings with customers and their new and former PDCs.
- **More than 50 customers attended the fourth Breakfast for Champions**, a biannual meeting for industrial customers pursuing SEM. Consistent attendance indicates high engagement of Production Efficiency customers.
- **Production Efficiency offered a 10 percent bonus incentive** to customers participating in Northwest Energy Efficiency Alliance's Industrial Facility Site Assessment, resulting in 13 Energy Trust customers participating in the NEEA project. The Industrial Facility Site Assessment will characterize energy use at manufacturing facilities across the region and benchmark energy use against regional and national metrics to help inform the energy-efficiency resource potential for the Pacific Northwest's industrial sector.

E. Residential sector highlights

- **The residential sector, comprised of Existing Homes and New Homes and Products** programs, exceeded conservative goals for three out of four utility territories, and achieved 99 percent of conservative goal in PGE territory, according to preliminary annual results. One-half of 2013 gas and electric savings were achieved in Q4.
- **Increased volume and efficiency of new home construction bolstered gas and electric** savings for the sector. Strong performance in New Homes and Products, as well as market

transformation savings through energy-efficient TVs from NEEA, balanced savings acquisition challenges in Existing Homes.

- **Electric savings were driven by new general purpose compact fluorescent light bulbs and** LED lighting products in Q4, and gas savings were impacted by increased Opower persistence savings in NW Natural territory.
- **In Ontario and Baker City areas, 200 Cascade Natural Gas customers** received Carry Home the Savings Kits through community action agencies in this gas-only territory. The kits included efficient showerheads and faucet aerators.

Existing Homes

- **Preliminary annual results indicate that Existing Homes met conservative goal** in NW Natural territory, and fell short of conservative goals in the other utility territories. Cancellation of a large project in Sunriver reduced savings results in Cascade Natural Gas.
- **Opower persistence savings contributed to savings** in PGE and NW Natural territories. Opower persistence efforts with PGE and NW Natural customers concluded in 2013, and Opower for Pacific Power customers with high energy use continues in 2014.
- **To diversify savings sources in 2013, the program planned to limit savings from Energy Saver Kits** to not more than 35 percent of overall savings and shift savings to other measures. Existing Homes did not achieve a commensurate increase in savings from other measures. A Q4 promotion of kits to help achieve annual savings goals resulted in 11,000 customers ordering kits, and kits accounted for slightly less than 30 percent and 50 percent of gas and electric savings, respectively, in Q4. In 2014, staff will strategically promote kits throughout the year to meet goals while ensuring balanced savings from a variety of measures.
- **A year-end bonus in Q4 resulted in 234 weatherization and gas hearth** installations. Gas hearth installations resulting from the year-end bonus comprised nearly 25 percent of gas savings in Q4, and the gas hearth bonus was extended for the full heating season. Efficient windows and ceiling insulation comprised one-fifth of gas savings in Q4.
- **In 2013, the program achieved fewer-than-expected savings through weatherization** projects, particularly in the Home Performance with ENERGY STAR® and Clean Energy Works tracks. Approximately 20 percent fewer projects were completed in 2013 than 2012. Removal of the diagnostic duct sealing measure and stricter floor and ceiling insulation requirements necessary to meet cost-effectiveness criteria dampened overall weatherization activity.
- **Clean Energy Works received 1,142 applications and completed 256 projects** in Q4, with 1,927 additional projects in process as of the end of the quarter.[6] These projects have access to financing to complete whole-home energy-efficiency improvement projects utilizing standard Existing Homes incentives and installed by Home Performance with ENERGY STAR trade allies. Fewer-than-expected Clean Energy Works projects with fewer qualifying measures were completed in Q4.
- **Savings from mobile homes were about 50 percent of expectations**. The program experienced saturation in urban mobile home parks, with fewer trade ally installations of energy-saving projects in mobile homes. Goals for 2014 were adjusted and plans made to promote mobile home ductless heat pump installations.

[6]"In process" refers to Clean Energy Works homes that completed a Home Performance test-in audit but had not closed as of December 31, 2013. There is a lag between the time Clean Energy Works records a completed project and when Energy Trust enters the project into its data tracking system. Clean Energy Works project counts may include activity outside Energy Trust territory.

- **In 2013, the program experienced an increase in heat pump water heaters, ductless heat pumps** and customer-installed weatherization projects. More than one-fifth of electric savings came from more than 700 ductless heat pump installations. A Q3 collaboration with George Morlan Plumbing Supply resulted in installation of 51 gas water heaters in Q4.
- **Existing Homes promoted Energy Saver Kits through school curriculum** with Community Action Partnership of Oregon, encouraging fifth graders in 23 classrooms to save energy at home and prompting parents to order Energy Saver Kits. Three percent of parents ordered kits, resulting in fewer savings than anticipated, and the program is pursuing other approaches to promote kits in schools.
- **In Q4, Energy Trust completed 444 residential deep retrofits.**[7] Energy Trust defines deep retrofits as achieving a 20 percent or greater reduction in heating load through two or more weatherization or heating measures installed at one time. Many additional customers achieve whole-home savings through installation of a series of single measures over a period of months or years.
- **In Q4, the program completed a pilot resulting in 177 Nest thermostats installed** in homes of PGE customers. Results of the pilot will be available after a years' worth of billing data can be analyzed.

New Homes and Products

- **The New Homes and Products program exceeded stretch goals in three utility territories** and reached stretch in Portland General Electric territory, according to preliminary annual results.
- **In Q4, activity increased across all measure categories**, including EPS™ rated homes, air sealing projects, refrigerator and freezer recycling, lighting, appliances, Carry Home the Savings kit redemption and new manufactured homes. Lighting and refrigerator and freezer recycling provided core sources of electric savings, and new homes construction constituted the majority of gas savings.
- **New lighting measures in Q3 and Q4 bolstered electric savings**, including general purpose and specialty CFLs and LEDs. The program expanded discounted lighting products available in stores through new retailers and prominent product placement and promotions. To target new builders, the program collaborated with Evergreen Consulting to reduce retail prices for LEDs available to consumers at distributors and showrooms.
- **New home construction activity continued to increase in Q4, helping boost gas savings**. Average gas savings per home increased by 10 percent while more new homes were found to use gas as a primary heat source than in previous years. New construction also afforded opportunities for increased market transformation savings.
- **The program rated 218 homes with EPS in Q4, exceeding the 2013 goal** by 40 percent. Ads promoting awareness of EPS ran in Portland and Bend areas in Q4, and 48 percent of all homes in 2013 Oregon green and solar home tours were rated with EPS.
- **Customers donated more than $30,000 in refrigerator recycling incentives** to Oregon Food Bank in 2013, providing approximately 95,000 meals for Oregonians in need. The option to donate was extended through 2014.

[7]Consistent with the definition developed in Q1 for the purpose of OPUC reporting, deep retrofits are defined as energy-efficiency actions in existing homes that include two or more shell or heating measures installed at the same time, and achieve a 20 percent or greater reduction in estimated heating load.

- **Through ongoing collaboration, Portland Water Bureau distributed 300 showerheads** on behalf of the program in Q4. This is part of a continued strategy to distribute energy-efficient products in coordination with municipalities interested in promoting and acquiring water savings.

F. Renewable energy highlights

- **The renewable energy sector, comprised of Solar Electric, Biopower and Other Renewables** programs, reached 72 percent of its conservative generation goal due to challenging market conditions and project delays, according to preliminary annual results. More than 60 percent of 2013 generation was achieved in Q4.
- **Q4 generation was from the JC-Biomethane biogas project and standard solar** installations.
- **Ongoing market challenges, including the loss of Oregon Business Energy Tax Credits** and challenging market fundamentals, made it difficult for commercial solar and renewable energy custom projects to complete. Commercial operation of several large custom projects—both solar and non-solar—was moved from 2013 to 2014.
- **Project pipelines are strong for all technologies in 2014**, a particularly positive outlook for the Solar program, which worked with a reduced 2013 pipeline from the discontinuation of Oregon Business Energy Tax Credits in 2012. The Solar pipeline for 2014 has been reestablished due to increased Energy Trust incentives for standard commercial projects, targeted trade ally outreach and committed funding for two large-scale solar projects to help utilities achieve the state's Solar Capacity Standard. In addition, the board approved funding for seven non-solar projects expected to achieve commercial operation in 2014 and 2015, including two biomass projects, four hydropower projects and one wind project.

Solar Electric

- **The Solar program achieved 0.72 aMW of new generation in 2013**, 98 percent of conservative goal and 109 percent of the OPUC performance benchmark, according to preliminary annual results.
- **Q4 was the strongest quarter in 2013 for the Solar program**, reflecting increased incentives and trade ally outreach. The program paid $1.8 million in incentives for 365 solar systems generating 0.27 aMW of new capacity in Q4. This is 26 percent more projects and 9 percent more capacity than installed in Q4 2012.
- **New solar electric reservations increased in 2013**, with funds reserved for 11 percent more capacity than in 2012. The program will start 2014 with 80 percent more reserved capacity in the pipeline than at the start of 2013. Residential projects made up 70 percent of the new reserved capacity.
- **The residential solar electric market was strong in 2013**. Residential installations made up 75 percent of the new generation installed in Q4 and for 2013 overall. In contrast, residential installations comprised one-half of new generation in 2012.
- **The commercial solar market remained below forecast** with 12 new reservations and 13 projects installed in Q4, bringing the total annual commercial installations to 43. Although less than forecast, Q4 was the strongest quarter in 2013 for new commercial installation, benefited by a Q2 incentive increase.
- **The program released an additional incentive increase** in Q4 for Portland General Electric commercial customers, and results will be available in 2014.
- **Third-party owned residential systems continued to grow**, representing 64 percent of new residential generation and almost one-half of the overall generation installed through the Solar

program in 2013. This ownership model allows customers to install solar with little or no upfront costs. Third-party residential providers are predominantly located in the Portland area, and have lower market share in Pacific Power territory (approximately 30 percent).

- **Residential solar installations were strong in Central Oregon, Southern Oregon** and the Southern Willamette Valley in Q4. Growth in Pacific Power territory was driven by lower installation costs compared to the Portland area.
- **Program staff attended a kickoff meeting for the Northwest Solar Communities project**. This cross-state collaborative effort between Oregon and Washington received a $1.6 million grant from the federal Sunshot Initiative to help make solar installations simpler, faster and more cost-effective by addressing barriers and the non-hardware "soft" costs of solar.

Biopower

- **Preliminary results show that Biopower approached its conservative goal of 2.3 aMW**, generating 2.1 aMW.
- **JC-Biomethane began generating energy from anaerobic digestion of post-consumer** commercial food waste in Q4, representing one-half of the renewable sector's annual generation. Energy Trust presented incentives to the Junction City plant at an open house in Q4 that showcased innovation and promoted Energy Trust support for biogas projects.
- **Completion of two biopower projects was delayed** from 2013 to 2014.
- **The program committed $3.3 million in project funding** to two biopower projects.
- **The program developed case studies** featuring completed biopower projects for use in outreach.

Other Renewables

- **Other Renewables fell short of conservative goal of 0.9 aMW**. The shortfall is attributed to completion of Oregon Institute of Technology geothermal project shifting to 2014. It is expected to produce 0.87 aMW.
- **The program committed $1.7 million in project funding** to three hydropower projects.
- **The program committed $109,000 in project development assistance to four projects** in Q4—two geothermal projects, one wind project and one hydropower project. In 2013, the program committed $382,000 in project development assistance to 12 projects across a range of technologies. The majority (98 percent) of those dollars were committed in Pacific Power territory.
- **Staff issued a request for proposals for project installation incentives** and project development assistance in Q4. The program is evaluating two applications for project development assistance, and received no applications for installation incentives.
- **In 2014, the program will cultivate projects that can be successful in current market** conditions, characterized by low avoided costs and few federal and state tax credits. Successful projects can maximize a resource (high capacity factor), offset retail rates by using power onsite, achieve additional non-energy benefits such as waste disposal and water savings, and leverage other funding sources, such as federal and state grants.
- **The program collaborated with Farmers' Conservation Alliance to engage irrigation** districts to build a hydropower pipeline.

III. TABLES[8]

A. Revenues

Source	Q4 Actual Revenues Received	Q4 Budgeted Revenues
Portland General Electric	$ 8,121,342	$ 7,924,859
PGE Incremental	$ 11,463,283	$ 13,570,039
Pacific Power	$ 6,131,615	$ 6,572,927
Pacific Power Incremental	$ 5,909,175	$ 6,720,337
Cascade Natural Gas	$ 827,560	$ 780,950
NW Natural	$ 3,545,366	$ 3,710,082
NW Natural Industrial DSM	$ 575,946	$ 1,594,055
Total	**$ 36,574,286**	**$ 40,873,249**

Incremental revenues are those authorized under SB 838 to support capturing additional cost-effective electric efficiency savings above the amount supported by funding through SB 1149.

B. Expenditures

Type	Q4 Actual Expenditures	Q4 Budgeted Expenditures
Energy Efficiency Programs	$ 46,014,161	$ 53,675,770
Renewable Energy Programs	$ 3,164,856	$ 5,362,753
Administration	$ 1,105,789	$ 1,328,293
Total	**$ 50,284,805**	**$ 60,366,815**

Source	Q4 Actual Expenditures	Q4 Budgeted Expenditures
Portland General Electric	$ 27,839,612	$ 32,258,307
Pacific Power	$ 14,902,374	$ 18,830,043
Cascade Natural Gas	$ 584,618	$ 890,722
NW Natural	$ 6,026,331	$ 7,214,397
NW Natural Industrial DSM	$ 931,871	$ 1,173,347
Total	**$ 50,284,805**	**$ 60,366,815**

[8]Columns may not total due to rounding.

C. Incentives paid

	Energy Efficiency				Renewable Energy		Total
Quar-ter	PGE	Pacific Power	NW Natural	Cascade Natural Gas	PGE	Pacific Power	
Q1	$ 4,101,652	$ 1,433,889	$ 964,458	$ 57,157	$ 476,302	$ 252,458	$ 7,285,916
Q2	$ 5,538,043	$ 3,568,819	$ 2,412,322	$ 120,252	$ 592,955	$ 673,506	$ 12,905,897
Q3	$ 5,986,467	$ 3,748,265	$ 1,890,320	$ 133,226	$ 729,026	$ 675,469	$ 13,162,775
Q4	$ 17,503,491	$ 8,740,818	$ 4,646,527	$ 359,627	$ 1,725,530	$ 912,873	$ 33,888,866
Total	**$ 33,129,654**	**$ 17,491,792**	**$ 9,913,627**	**$ 670,262**	**$ 3,523,813**	**$ 2,514,306**	**$ 67,243,453**

D. Savings and generation

Q4 Electric Efficiency Savings	PGE aMW	Pacific Power aMW	Total Savings aMW	Expenses
Commercial	7.8	8.3	16.1	$ 18,834,650
Industrial	10.4	2.9	13.2	$ 10,987,883
Residential	5.6	3.4	9.0	$ 9,682,557
Total Electric Efficiency Programs	**23.8**	**14.6**	**38.3**	**$ 39,505,090**

Q4 Gas Efficiency Savings	NW Natural Therms	Cascade Natural Gas Therms	Total Savings Therms	Expenses
Commercial	1,429,524	115,949	1,545,473	$ 2,942,655
Industrial	416,633	49,707	466,339	$ 839,788
Residential	1,023,000	53,839	1,076,839	$ 3,760,378
Total Gas Efficiency Programs	**2,869,157**	**219,495**	**3,088,652**	**$ 7,542,820**

Q4 Renewable Energy Generation	PGE aMW	Pacific Power aMW	Generation aMW	Expenses
Biopower	1.4	0.0	1.4	$ 683,948
Other Renewable Programs	0.01	0.01	0.02	$ 371,562
Solar Electric Program	0.16	0.14	0.30	$ 2,181,386
Total Renewable Programs	**1.61**	**0.15**	**1.76**	**$ 3,236,896**

E. Progress toward annual efficiency goals

	YTD Expenditures	YTD Savings	YTD levelized cost	Energy Trust Annual Goal		
					Goal	% Achieved YTD
Electric	$100,190,523	57.8 aMW	2.4 ¢	Conservative	47.39 aMW	122%
				Stretch	55.75 aMW	104%
Natural Gas	$20,751,735	5,309,550 therms	33.3 ¢	Conservative	4,631,127 therms	115%
				Stretch	5,448,385 therms	97%

	YTD Expenditures	YTD Savings	YTD Levelized Cost	Energy Trust Annual Goal			Annual IRP Goal	
					Goal	% Achieved	Goal	% Achieved
Portland General Electric	$63,088,023	35.62 aMW	2.5 ¢	Conservative	30.67 aMW	116%	29.22 aMW	122%
				Stretch	36.08 aMW	99%		
Pacific Power	$37,102,500	22.19 aMW	2.3 ¢	Conservative	16.72 aMW	133%	16.7 aMW	133%
				Stretch	19.68 aMW	113%		
NW Natural	$19,388,796	4,962,459 therms	33.5 ¢	Conservative	4,228,797 therms	117%	3,593,679 therms	138%
				Stretch	4,975,055 therms	100%*		
Cascade Natural Gas	$1,362,939	347,091 therms	31.1 ¢	Conservative	402,331 therms	86%	405,844 therms	86%
				Stretch	473,330 therms	73%		

*Achieved 99.7 percent of stretch goal, rounded to 100 percent per Energy Trust reporting convention

F. Incremental utility SB 838 expenditures[9]

Utility	2013 Q4 SB 838 Expenditures	YTD SB 838 Expenditures
Portland General Electric	$138,459	$772,207
Pacific Power	$285,103	$889,795
Total	**$423,562**	**$1,662,002**

[9]Reflects expenditures by Pacific Power and PGE in support of utility activities described in SB 838. See Appendix 4 for reports from these utilities on their SB 838 activities during the quarter.

IV. PROGRAM AND OPERATIONS DETAIL

A. Q4 revenues and expenditures

- Received $36.6 million in public purpose and incremental SB 838 revenues, which is approximately 11 percent less than the $40.9 million budgeted. Overall annual revenue was very close to budgeted revenue. Revenue projections are estimates provided by utilities; typically, actual revenues vary by a few percentage points from budgeted revenues.
- Spent $50.3 million in Q4, which is 17 percent below the $60.4 million budget.
- Incentives paid totaled $33.9 million, which was 67 percent of total expenditures.
- Total electric expenditures (efficiency and renewable energy) were 16 percent under budget for Q4.
- Gas efficiency expenditures were 19 percent under budget for Q4.

B. Energy efficiency programs[10,11]

1. Total energy efficiency Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	38.34 aMW	57.8 aMW	Conservative	47.39 aMW	122%	2.4 ¢
			Stretch	55.75 aMW	104%	
Gas	3,088,652 annual therms	5,309,550 annual therms	Conservative	4,631,127 annual therms	115%	33.3 ¢
			Stretch	5,448,385 annual therms	97%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 39,505,090	$ 6,119,437	13.4%	$ 100,190,523	$ 25,613,985	20.4%
Gas	$ 7,542,820	$ 1,735,646	18.7%	$ 20,751,735	$ 6,249,949	23.1%
Total	**$ 47,047,909**	**$ 7,855,082**	**14.3%**	**$ 120,942,258**	**$ 31,863,933**	**20.9%**

[10]Levelized cost YTD is per kilowatt hour for electric and per annual therm for gas.
[11]Variance is expressed in total dollars *below* budget or (total dollars) *above* budget.

2. Existing Buildings Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	8.43 aMW	13.42 aMW	Conservative	13.13 aMW	102.2%	3.1 ¢
			Stretch	15.45 aMW	86.9%	
Gas	1,282,564 annual therms	1,687,502 annual therms	Conservative	1,444,984 annual therms	116.8%	28.5 ¢
			Stretch	1,699,981 annual therms	99.3%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 14,258,066	$ (725,480)	-5.4%	$ 29,609,837	$ 6,296,801	17.5%
Gas	$ 2,335,421	$ 296,347	11.3%	$ 4,894,329	$ 1,836,098	27.3%
Total	**$ 16,593,487**	**$ (429,134)**	**-2.7%**	**$ 34,504,166**	**$ 8,132,899**	**19.1%**

3. New Buildings Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	6.98 aMW	9.92 aMW	Conservative	4.86 aMW	204.1%	1.4 ¢
			Stretch	5.72 aMW	173.5%	
Gas	262,910 annual therms	493,083 annual therms	Conservative	393,405 annual therms	125.3%	18.3 ¢
			Stretch	462,829 annual therms	106.5%	

Includes gas market transformation savings associated with changes to the 2010 commercial code.

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 3,915,560	$ 1,264,704	24.4%	$ 11,527,632	$ 5,258,808	31.3%
Gas	$ 607,233	$ (153,230)	-33.8%	$ 1,175,641	$ 97,774	7.7%
Total	**$ 4,522,794**	**$ 1,111,474**	**19.7%**	**$ 12,703,273**	**$ 5,356,583**	**29.7%**

- In Q4, New Buildings spending was higher than anticipated because several large gas projects closed in Q4, rather than in Q3 as expected.

4. Production Efficiency Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	13.19 aMW	16.83 aMW	Conservative	13.83 aMW	121.7%	2.0 ¢
			Stretch	16.27 aMW	103.4%	
Gas	466,339 annual therms	1,049,445 annual therms	Conservative	971,159 annual therms	108.1%	23.4 ¢
			Stretch	1,142,540 annual therms	91.9%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 10,706,359	$ 4,347,671	28.9%	$ 23,823,642	$ 7,091,222	22.9%
Gas	$ 839,788	$ 583,452	41.0%	$ 2,484,023	$ 805,312	24.5%
Total	**$ 11,546,146**	**$ 4,931,123**	**29.9%**	**$ 26,307,665**	**$ 7,896,534**	**23.1%**

- Production Efficiency electric spending in Q4 was less than expected primarily due to underachievement in Pacific Power territory. In addition, the program had fewer, higher-cost capital projects in PGE territory and greater low-cost savings from Strategic Energy Management and a very large project.
- Gas underspending in Q4 was primarily due to significant underachievement in Cascade Natural Gas territory and a few large projects in NW Natural territory delayed to 2014.

5. Existing Homes Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	2.45 aMW	4.12 aMW	Conservative	5.23 aMW	78.9%	3.8 ¢
			Stretch	6.15 aMW	67.0%	
Gas	645,204 annual therms	1,057,255 annual therms	Conservative	1,073,250 annual therms	98.5%	64.2 ¢
			Stretch	1,262,647 annual therms	83.7%	

Includes gas market transformation savings from high-efficiency gas furnaces.

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 3,439,708	$ 1,455,436	29.7%	$ 11,942,417	$ 4,068,606	25.4%
Gas	$ 2,440,920	$ 1,241,265	33.7%	$ 7,908,297	$ 3,464,215	30.5%
Total	**$ 5,880,628**	**$ 2,696,700**	**31.4%**	**$ 19,850,713**	**$ 7,532,821**	**27.5%**

- Existing Homes Q4 electric spending was impacted by low project volume for mobile homes and significantly fewer HVAC equipment installations than budgeted. Incentive spending did not increase as much as expected at the start of the quarter.

- Low gas spending was due to completion of fewer weatherization projects. More projects than expected did not qualify for incentives, largely due to changes that made insulation measure rqeuirements more stringent.

6. New Homes and Products Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	3.15 aMW	6.96 aMW	Conservative	5.66 aMW	122.9%	3.4 ¢
			Stretch	6.66 aMW	104.5%	
Gas	431,635 annual therms	1,022,265 annual therms	Conservative	748,330 annual therms	136.6%	29.2 ¢
			Stretch	880,388 annual therms	116.1%	

*****Includes gas market transformation savings associated with the 2008 and 2011 residential code changes.

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 5,058,634	$ (965,077)	-23.6%	$ 14,688,360	$ 1,995,876	12.0%
Gas	$ 1,319,458	$ (232,188)	-21.4%	$ 4,289,445	$ 46,550	1.1%
Total	**$ 6,378,092**	**$ (1,197,265)**	**-23.1%**	**$ 18,977,805**	**$ 2,042,425**	**9.7%**

7. Northwest Energy Efficiency Alliance Q4 2013 savings and expenditures

	Q4 Savings	YTD Savings		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	4.15 aMW	6.55 aMW	Conservative	4.68 aMW	139.9%	2.0 ¢
			Stretch	5.51 aMW	118.9%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 2,126,763	$ 742,183	25.9%	$ 8,598,636	$ 902,672	9.5%

- Underspending in Q4 is balanced by overspending in quarters one through three. By year-end, expenditures more closely aligned with budget.

C. Renewable energy programs[12]

1. Total renewable energy Q4 2013 generation and expenditures

	Q4 Generation	YTD Generation		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	1.76 aMW	2.87 aMW	Conservative	4.01 aMW	71.5%	2.7 ¢
			Stretch	4.43 aMW	64.7%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 3,236,896	$ 2,226,928	40.8%	$ 8,187,156	$ 7,779,951	48.7%

2. Solar Electric Q4 2013 generation and expenditures

	Q4 Generation	YTD Generation		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	0.3 aMW	0.72 aMW	Conservative	0.73 aMW	98.8%	7.2 ¢
			Stretch	1.12 aMW	64.5%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 2,181,386	$ 1,262,424	36.7%	$ 5,563,351	$ 3,906,835	41.3%

- A large custom solar project expected to close in Q4 was delayed until 2014.

3. Biopower Q4 2013 generation and expenditures

	Q4 Generation	YTD Generation		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	1.44 aMW	2.13 aMW	Conservative	2.32 aMW	91.7%	0.7 ¢
			Stretch	2.32 aMW	91.7%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 683,948	$ 430,618	38.6%	$ 1,545,733	$ 1,367,871	46.9%

- Payments for two biopower projects were delayed because projects did not meet targets in Q4. The projects are expected to reach targets and receive incentives in 2014. Construction of a third biopower project was delayed until 2014.

[12]Variance is expressed in total dollars *below* budget or (total dollars) *above* budget.

4. Other Renewable Energy Q4 2013 generation and expenditures

	Q4 Generation	YTD Generation		Annual Goal		Levelized Cost YTD
				Goal	% Achieved YTD	
Electric	0.02 aMW	0.02 aMW	Conservative	0.96 aMW	2.1%	52.7 ¢
			Stretch	0.99 aMW	2.0%	

	Q4 Expenditures	Variance from Q4 Budget		YTD Expenditures	Variance from YTD Budget	
Electric	$ 371,562	$ 533,885	59.0%	$ 1,078,072	$ 2,505,246	69.9%

- The program underspent in Q4 because of low demand for project development assistance incentives and a slower-than-expected market for small wind projects.

D. Highlights of internal operations

1. Communications, Customer Service and Trade Ally Network

- **Received 7,260 calls to the main hotline in Q4**, compared to 8,383 in Q4 2012. Residential inquiries continued to dominate calls to the Energy Trust hotline. Reduction in calls appears to be a steady trend, as customers increasingly choose online communications. In addition, more customers call individual program hotlines directly once they are engaged with Energy Trust.
- **Received and responded to 490 inquiries via info@energytrust.org in Q4**, compared to 449 in Q4 2012. The most common requests were for information about residential cash incentives and solar.
- **Received four customer complaints in Q4 that were escalated**. All complaints have been resolved.
- **Received 208,219 website visits in Q4**, compared to 168,046 in Q4 2012. Much of the increase is attributable to year-end marketing efforts, including advertising EPS for Existing Homes, promotion of refrigerator and freezer recycling and a New Buildings market solutions campaign. Staff observed a 21 percent increase in visits to web pages for commercial programs, particularly incentive pages for multifamily and New Buildings.
- **Enhanced Energy Trust website with improved Program Delivery Contractor Finder** for industrial and agricultural customers and new campaign landing pages to support promotion of Existing Homes year-end bonus incentives.
- **Garnered 88 news stories about Energy Trust in print and broadcast** with a media value of $28,000—what it would have cost to purchase the equivalent advertising space and air time—as a result of media outreach and responses to reporter inquiries.
- **Completed eight press releases in Q4**, featuring fall insulation bonuses for homeowners, opening of the JC-Biomethane plant and celebrating the first, 1,000th, 2,000th, 3,000th, 4,000th and 5,000th homes to install solar with help from Energy Trust.
- **Met with 115 trade allies at roundtables in Bend, Eugene, Klamath Falls, Medford** and Portland. Presentations included an overview of 2014 budget themes and goals, a summary of trade ally survey results and an update on natural gas incentives and cost-effectiveness issues. Guest speakers included representatives from General Electric, First Security Bank, the Home Performance Guild of Oregon and the Home Builders Association of Metropolitan Portland.

- **Provided opportunities for trade allies to connect with lender allies**. Commercial lender ally TIP Capital delivered live webinars for trade allies and First Security Bank of Washington provided content for Energy Trust's monthly trade ally newsletter.
- **Staff presented to more than 200 real estate agents** about Energy Trust residential offerings, including EPS, and how to become a real estate trade ally.

2. **IT**
   - **Processed 31,529 customer requests for Energy Trust services and products**, including 21,726 submitted through web applications. Energy Trust received almost twice as many customer requests as in Q3 2013, attributed to high activity in Q4 driven by year-end bonus and marketing efforts.
   - **In Q4, continued investment in foundational improvements to IT systems** to accommodate future program needs and reduce future costs of integrating functionality, including:
     - **Completed first stage of project to replace or improve FastTrack**—Energy Trust's current measure and project tracking system—with a more flexible and efficient tool. The first stage of the project included analysis, assessment and determination to replace current FastTrack functionality with Microsoft Dynamics Customer Relationship Management, CRM, which is already in use to track current, past and potential customers.
     - **Began expanding capacity of database servers** and upgrading development and test database servers to the latest version of Microsoft Dynamics SQL Server.
     - **Enhanced functionality to identify duplicate CRM records** and improve the ability of systems to automate creation of customer records.
     - **Continued to improve Energy Trust's capacity to integrate its IT systems** with Program Management Contractor systems to facilitate efficient performance and collaboration. Improvements included prevention of duplicate project records and increased speed and quality of integrations.
     - **Improved validation process for transfer of data from Existing Buildings PMCs** to Energy Trust systems.
     - **Added user dashboard functionality to CRM system** to allow users to efficiently view, prioritize and manage their work.
     - **Developed a secure interface to allow Production Efficiency** Program Delivery Contractors to enter project data directly into Energy Trust systems.
     - **Added new custom allocations feature to FastTrack** to provide needed functionality within system to track custom allocations.
   - **To support data sharing requirements, improved automated process** for importing customer and usage data from Pacific Power, NW Natural and Cascade Natural Gas into Energy Trust data systems.
   - **Updated web forms with year-end bonus incentive features** and 2014 measure changes.

3. **Planning and Evaluation**
   - **Created 261 new energy-efficiency measures and revised 113 measures**.
   - **Completed one evaluation and market study**, Energy Trust Commercial Strategic Energy Management Pilot, and posted it on the Energy Trust website.

- **Provided support to NW Natural for development of its 2014 Integrated Resource Plan**, including energy resource deployment plans indicating availability of cost-effective efficiency resources through 2023.
- **Coordinated with utility and OPUC staff to update electric avoided costs** for Energy Trust cost-effectiveness tools and align the full avoided value with utility IRP assumptions.
- **To address cost-effectiveness challenges**, Energy Trust participated in an International Energy Association roundtable discussion on incorporation of non-energy benefits in cost-effectiveness analysis, and presented Energy Trust's cost-effectiveness review methodology for measures and programs at the Home Performance Conference of Oregon.
- The U.S. Department of Energy recognized Energy Trust as one of 18 LED Lighting Facts partners for efforts to assure and improve the quality of LED lighting products.

Appendix 1: GEOGRAPHIC DISTRIBUTION OF SITES SERVED; CUSTOMER SATISFACTION

1. Energy Trust sites served by region in Q4 2013

	Commercial	Industrial	Residential	Total
Central Oregon	116	28	1,233	1,377
Eastern Oregon	46	23	198	267
North Coast	61	2	352	415
Portland Metro & Hood River	1,547	202	15,581	17,330
Southern Oregon	180	62	2,724	2,966
Willamette Valley	370	123	4,675	5,168
Total	**2,320**	**440**	**24,763**	**27,523**

2. Customer satisfaction

From the beginning of October through the middle of November 2013, Energy Trust delivered a short telephone survey to 800 randomly selected participants in five programs who completed projects between July and September 2013. Below are results from surveys of these customers.

The survey asked participants about overall satisfaction with Energy Trust. Satisfaction rates for Q3 remained consistent with past quarters. Participants in the Existing Buildings, Solar and Production Efficiency programs were also asked about satisfaction with program representatives.[13]

Q3 2013 Results

Program	Respondent Count	Percent Satisfied Overall	Percent Satisfied with Program Representative
Existing Buildings, including multifamily	61	89 percent	92 percent
Production Efficiency	41	100 percent	100 percent
New Homes and Products[14]	210	95 percent	N/A
Existing Homes	457	88 percent	N/A
Solar[15]	31	97 percent	N/A[16]

New Buildings projects often involve numerous market actors (architect, engineer, developer, owner and more) at different project stages, so it is difficult to reach a project representative who is able to respond to questions about satisfaction. As of Q2 2012, New Buildings participant satisfaction is obtained through annual program process evaluations. In the 2012 process evaluation, 14 project owners surveyed indicated both overall satisfaction and satisfaction with program representatives to be 100 percent.

[13]Since residential customers have varying degrees of interaction with program representatives (many may not have any interaction), and because it is not possible to identify customers who did have interaction to survey, residential customers are not questioned on this topic.

[14]Only Products customers were surveyed. Energy Trust does not track purchasers of new homes.

[15]Customers that installed solar using a third party are not surveyed.

[16]Only commercial solar customers are surveyed about satisfaction with program representatives. In Q3 2013, two commercial solar customers were surveyed; one was highly satisfied with their interaction with program representatives and the other said the question was not applicable to them.

Appendix 2: OPUC 2013 PERFORMANCE MEASURES AND 2012 BENEFIT/COST RATIOS

1. OPUC 2013 Performance Measures

Following are the 2013 performance measures established by the OPUC for Energy Trust. Comparison of 2013 performance against these measures will be reported in the 2013 annual report.

Category	Measures
Electric Efficiency	• Obtain at least 47 aMW in 2013 • Levelized cost not to exceed 3.9 cents/kWh
Natural Gas Efficiency	• Obtain at least 4.6 million annual therms in 2013 • Levelized cost not to exceed 57 cents/therm
Renewable Energy	• For project and market development assistance, report annual results, including number of projects supported, milestones met and documentation of results from market and technology perspective • For standard, net-metered projects, including solar and small wind, obtain at least 0.66 aMW in installed generation • For non-solar custom projects, the three-year rolling average incentive is not to exceed $40/allocated MWh • For innovative and custom solar projects, report sources of funding for projects and the selection criteria
Financial Integrity	• Receive an unqualified financial opinion from an independent auditor on annual financial statements
Administrative/Program Support Costs	• Keep below 9 percent of annual revenues
Customer Satisfaction	• Demonstrate greater than 85 percent satisfaction rates for: - Interaction with program representatives - Overall satisfaction
Benefit/Cost Ratios	• Report both utility system and societal perspective • Report significant mid-year changes as necessary in quarterly reports

2. Benefit/Cost ratios for 2012[17]

The following benefit/cost ratios were calculated for and published in Energy Trust's 2012 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 2013.

Program	Combined Utility System Benefit/Cost Ratio	Combined Societal Benefit/Cost Ratio
New Homes and Products	1.8	2.0
Existing Homes	2.2	1.8
Existing Buildings	2.4	1.7
New Buildings	3.5	2.5
Production Efficiency	3.0	2.0
Northwest Energy Efficiency Alliance	3.7	1.2

[17] 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.

Appendix 3: CUMULATIVE AND TOTAL ANNUAL RESULTS

- **Including Q4 2013 results, total annual savings of 436 aMW** have been realized since electric efficiency programs began in 2002, accounting for 91 percent of Energy Trust's 2010-2014 goal of 479 aMW. This is equivalent to the annual electric consumption of approximately 338,232 average Oregon homes. This total includes 22 aMW of savings from self-direct customers.
- **Including Q4 2013 results, total annual savings of 33.1 million annual therms** have been realized since gas efficiency programs began in 2003, accounting for 95 percent of the 2010-2014 goal of 34.7 million annual therms. This is equivalent to providing gas heat to approximately 65,189 homes for a year.
- **Including Q4 2013 results, total annual renewable energy generation of 112 aMW** has been installed since 2002, accounting for 91 percent of the 2010-2014 goal of 124 aMW of installed generation. This is equivalent to powering approximately 87,099 average Oregon homes for a year.

Appendix 4: Q4 2013 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. Portland General Electric SB 838 energy Efficiency Activities and Results Q4 2013

PGE Commercial and Residential SB838 Efforts

Introduction

PGE collaborates with Energy Trust to utilize SB838 funding for residential and small to mid-sized commercial energy efficiency marketing and outreach activity.

PGE marketing and outreach plans are created based on market conditions, Energy Trust program goals and projected results. PGE focuses on promoting Energy Trust programs to customers based on potential for its customers to participate in the programs and when PGE is an appropriate and effective communication channel. Ongoing meetings between PGE and Energy Trust guide the direction of marketing activity to meet changing market conditions.

Summary of SB838 Activities

PGE utilizes many communication channels and approaches. Some activities can be directly identified as driving customer participation in Energy Trust programs. All activity is designed to also increase general awareness of Energy Trust programs. Specific promotions are often developed based on lessons learned from the outcome of previous promotions. Promotions are evaluated based on metrics appropriate for the specific promotion. Other activities are related to awareness of specific Energy Trust programs and are tracked via impressions. PGE also considers timing of communications based on quantity of content that specific customers receive on specific promotions.

PGE also uses its existing residential and commercial newsletters to enhance SB838 activities without directly utilizing SB838 funds.

Q4 Residential Activity Summary

PGE's residential customer newsletter, *Update*, is sent monthly to approximately 600,000 customers with their PGE bills. PGE's residential e-newsletter, *Home Connection*, is sent monthly to about 385,000 customers. In October, Energy Trust insulation bonus incentives were covered in *Update* and *Home Connection*. An email for Energy Saver Kits from Energy Trust was sent to 280,000 residential customers in December.

Awareness is a key metric for SB838 activity and is measured by impressions. Impressions are based on the mention of Energy Trust program multiplied by volume of the communication channel.

Impressions	Q1 Impressions	Q2 Impressions	Q3 Impressions	Q4 Impressions	YTD Impressions	2013 Goal	Channels
Residential	2.6 million	3.9 million	3 million	**3.2 million**	12.7 million	7 million	Newsletters, bill inserts, email and direct mail

Customers call PGE for help with energy usage and we send them to Energy Trust program management contractors when appropriate.

PGE Call Center Activity	Q1 Call transfers to Energy Trust	Q2 Call transfers to Energy Trust	Q3 Call transfers to Energy Trust	Q4 Call transfers to Energy Trust	YTD Call center activity
Transfers to Appliance Program (PECI)	23	23	28	**18**	92
Transfers to CLEAResult	93	46	77	**115**	331
Customers calling about OPOWER	114	83	77	**71**	345

2013 Energy Trust Residential Program Participation*

	Q1	Q2	Q3	Q4	YTD
PGE customers who received Energy Saver Kits from Energy Trust	1,660	1,073	761	**6,304**	9,798
PGE customers who participated in Energy Trust Refrigerator Recycling Program	1,698	2,519	3,119	**3,097**	10,433
PGE customers who received Energy Trust water heater incentive	43	132	178	**51**	404
PGE customers who received Energy Trust heat pump water heater incentive	5	31	26	**39**	101
PGE customers who participated in Energy Trust Savings Within Reach Program	22	60	27	**77**	186
CFLs provided by Energy Trust distributed at PGE community offices	5,000	5,520	14,984	**4,750**	30,254
Showerheads provided by Energy Trust distributed at PGE community offices	0	3,995	3,995	**3,995**	11,985

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

Heat Pump Quality Assurance and Vendor Management

- In the 4th quarter, PGE continued heat pump quality insurance installation inspections for PGE-Approved contractors and in working with Energy Trust and CLEAResult, we also began inspecting installations by other contractors. Inspections are focused on ducted heat pumps due to the potential for poor installation practices to result in systems that perform below rated efficiency. The deficiencies the inspectors identify in the field are communicated to Approved Contractors, requiring the contractor to address what our inspectors are not able to correct in the field and to educate their staff which reduces the likelihood of the errors occurring again. Should deficiencies of non-PGE Approved Contractors be found, the results will be given to CLEAResult. There were no deficiencies observed for non-PGE Approved contractors. Due to the small number of non-PGE approved contractor installations that PGE inspected, it was not possible to form any trends or opinions on these installations.

Key Objectives	Q1 Activity	Q2 Activity	Q3 Activity	Q4 Activity	YTD Activity
Heat hump installations as reported by PGE approved Contractors	315*	354*	616	**719**	2,004
Inspections of heat pump installations	75**	149**	92	**135**	451
Failed installations	12**	7**	2	**8**	29

*****Numbers revised to reflect installation documentation received date rather than installation date

**Numbers revised to reflect actual quarterly activity

Q4 Commercial Activity Summary

PGE utilizes its business newsletters to promote Energy Trust programs to business customers. PGE's business newsletter, *Energize*, is sent quarterly to 75,000 customers in their bills. PGE's business e-newsletter, *Business Connection*, is sent bi-monthly to 15,000 business customers. Success is measured in part by number of impressions, a proxy for awareness.

Activity	Channels	Q1 Impressions	Q2 Impressions	Q3 Impressions	Q4 Impressions	YTD Impressions	2013 Goal
Commercial	Newsletters, direct mail and email	231,042	285,555	294,500	**153,950**	965,047	900,000

In October, PGE launched an "In Your Neighborhood" campaign including a direct mail to 10,315 customers. The campaign highlighted LED benefits for business customers as well as offering free in-person consultations from the PGE outreach team while the specialists are in the business' neighborhood. Additionally, the campaign offered the first 30 customers to respond a free LED bulb redeemable at their consultation. The free LED offer was a new approach which was a result of collaboration between Energy Trust and PGE. Articles about LEDs and Energy Trust incentives for businesses also appeared in *Business Connection*.

PGE's key marketing metric is customer requests for energy efficiency consultations. Consultations lead to qualified leads to the Energy Trust.

Commercial Energy Efficiency Requests for Consultations**:**

Q1	Q2	Q3	Q4	YTD	2013 Goal
152	280	523	**180**	1,135	800

SB838 Commercial Energy Efficiency Outreach

PGE Outreach Specialists engage and facilitate customer participation in Energy Trust programs. The primary results are qualified leads to the Energy Trust. Another important metric is increased awareness of Energy Trust and their programs. The outreach team utilizes a variety of tactics to engage customers in Energy Trust programs. Qualified leads were generated from but not limited to the following activities:

- On-site consultations (customer preference based on PGE surveys)
- Chamber, Business and Trade Association presentations
- Phone consultations
- Targeted outbound customer calls
- Response to canvassing (summer-hire and outreach rep driven)
- Response to business marketing (i.e. Save More, Matter More, direct mail, etc.)
- Response to customer emails (energy.efficiency@pgn.com)
- Customer calls to PGE Tualatin Contact Center and transferred to PGE Outreach Specialists
- Business alliances (i.e. City of Portland BEST program, Clackamas County Office of Sustainable Development, etc.)
- Customer follow-up after PGE Training and Education classes
- Leveraging internal networks (i.e. Key Customer Managers, Governmental Affairs representatives, Service and Design Consultants, Green Mountain Energy, etc.)

Key Objectives	Q1 Results	Q2 Results	Q3 Results	Q4 Results	YTD Results	2013 Goals
Increased participation-qualified leads delivered to Energy Trust	119	96	106	**159**	480	540
Increased awareness of Energy Trust programs - outreach presentations and networking	13	8	17	**9**	47	40
Increased awareness of Energy Trust programs-number of customers contacted by • On-site Consultations • Outreach Presentations • Phone • Email • Summer Hire Canvassers	500	572	5,249	**7,124**	13,445	6,000

Q4 Outreach Presentations, Networking, Trade Associations and Events
These activities elevate Energy Trust program awareness and engage customers in identifying potential energy saving opportunities.

Date	Organization Name
10/2/2013	Art Institute of Portland
10/2/2013	PGE T&E Demand Response Seminar
10/10/2013	NAO
10/13/2013	ORLA Annual Convention
10/22/2013	T&E Seminar: Energy Expert
10/23/2013	NSBA
11/6/2013	PGE Training & Ed Electrical Safety Awareness Seminar
11/7/2013	T & E Seminar - WTC
11/14/2013	PGE Training & Ed Energy Monitor Workshop

2. Pacific Power SB 838 energy Efficiency Activities and Results Q4 2013

Pacific Power utilized several approaches to support and deliver energy efficiency communications, advertising and outreach to residential and small- and mid-size commercial customers.[18]

In the media

TV - Bend, Medford, Eugene and Albany/Corvallis DMAs, Portland Cable

- **Q1**
  - "Motel"
  - "Little Hero"
  - "Porch Light"
  - "Small Changes"
  - "Sweet Savings"
- **Q2**
  - "Contractor-ETO" / Energy Trust
  - "Cookies" / Energy Trust
  - "Motel" / Energy Trust
  - "Little Hero" / Energy Trust
  - "Porch Light" / Energy Trust
  - "Remodel your energy bill" /Energy Trust
  - "Small Changes"
- **Q3**
  - "Contractor" / Energy Trust
  - "Cookies" / Energy Trust
  - "Motel" / Energy Trust
  - "Little Hero" / Energy Trust
  - "Porch Light" / Energy Trust
  - "Small Changes" / Energy Trust
- **Q4**
  - "Contractor" / Energy Trust
  - "Motel" / Energy Trust
  - "Little Hero" / Energy Trust
  - "Porch Light" / Energy Trust
  - "Remodel your energy bill" /Energy Trust

Radio – Bend, Eugene and Medford DMAs

- **Q1**
  - "Jess Conserve Energy Answers"
  - "Teamwork" / Energy Trust, Trailblazers
  - "Phil Answers – Energy Efficiency"
  - "Lori Answers – Energy Efficiency"
- **Q2**
  - "ETO Home Energy Review" / Energy Trust
- **Q3**
  - "Home review song" / Energy Trust
  - "Upgrade song" / Energy Trust
- **Q4**
  - "Home review song" / Energy Trust
  - "Upgrade song" / Energy Trust
  - "Lighting song"/Energy Trust
  - "Teamwork" / Energy Trust, Trailblazers

[18] Some activities are funded outside of SB 838 funds.

Print

- **Q1**
  - "Grants Pass Chamber Directory" ad
  - "Medford Chamber Membership Guide" ad / Energy Trust
  - "Pendleton Chamber Economic Outlook Luncheon" ad / Energy Trust
  - "Cottage Grove Community Guidebook" ad
- **Q2**
  - "Home Energy Review" ad / Energy Trust
  - "City of Bend energy efficiency project" / Energy Trust
  - "Corvallis Knights Baseball" ad
  - "Takena Kiwanis Track Meet" ad
  - "Deschutes Library energy efficiency project" ad / Energy Trust
  - "Boys & Girls Club of Greater Santiam"
  - "Boys & Girls Club of Albany"
  - "Upper Rogue Independent Destination magazine" ad
- **Q3**
  - "Oregon Jamboree" ad
  - "Ross Ragland Theater" ad
  - "Polk County Festival" ad
  - "Outlet house/lighting" ad / Energy Trust
  - "City of Bend" / Energy Trust
  - "Historic Preservation & Energy Efficiency" ad
  - "Lebanon Chamber directory" ad
- **Q4**
  - "City of Bend" / Energy Trust
  - "Historic Preservation & Energy Efficiency" ad
  - "Outlet house/lighting" ad / Energy Trust

Outdoor

- **Q1**
- **Q2**
  - "Outlet House Poster"
  - "Outlet House Bulletin"
- **Q3**
- **Q4**

In customer bills

***Voices* residential newsletter**

- **Q1**
  - Resolve to get the most for your money
  - Just a few dollars powers your day
  - Save with cash back incentives / Energy Trust
  - Spruce up your savings / Energy Trust
  - Efficient new homes / Energy Trust
- **Q2**
  - Respect goes a long way / Energy Trust
  - Free Energy Saver Kit / Energy Trust
- **Q3**
  - Stay cool with an extra $140 per year / Energy Trust
  - Be a smart homebuyer / Energy Trust
  - One cool move gets you $40 / Energy Trust
  - Weatherize and save / Energy Trust
- **Q4**
  - Bright savings for your home / Energy Trust
  - Keep your holidays bright

Bill inserts

- **Q1**
  - The weather outside is frightful, but the cash incentives are delightful / Energy Trust
  - How comfortable are you with saving money? / Energy Trust
  - Keeping you informed: Changes to how Pacific Power shares information with Energy Trust of Oregon / Energy Trust
- **Q2**
  - "***watts***up" / Energy Trust
- **Q3**
  - "Now you can bathe in the sun's warmth " / Energy Trust
  - "Warm up to savings this fall" / Energy Trust
- **Q4**
  - "***watts***up" / Energy Trust

Outbound Envelope

- **Q1**
- **Q2**
  - "Be ***watt***smart – save energy and money"
- **Q3**
- **Q4**

In the mail

Direct mail

- **Q1**
- **Q2**
  - Clean Energy Works Oregon letters
    - Central Oregon, Southern Oregon, Portland, Marion & Polk Counties
  - Be ***watt***smart Workshop invitations / Energy Trust
    - Bend & Redmond, Dallas, Grants Pass & Medford, Klamath Falls, Stayton
- **Q3**
  - Personal Energy Reports
  - Personal Energy Report welcome insert
  - Lighten up with LEDs invitations
    - Bend, Redmond, Grants Pass, Medford
- **Q4**

On the web

Voices **residential e-newsletter**

- **Q1**
  - Just a few dollars powers your day
  - Save with cash-back incentives / Energy Trust
  - Spruce up your savings / Energy Trust
  - Efficient new homes / Energy Trust
- **Q2**
  - Ready, set, save this summer / Energy Trust
  - Respect goes a long way
  - Fill a fridge by recycling yours / Energy Trust
- **Q3**
  - Cool ways to beat the heat / Energy Trust
  - Be a smart homebuyer / Energy Trust
- **Q4**
  - Cool ways to beat the heat / Energy Trust
  - Be a smart homebuyer / Energy Trust

***Energy Connections* mid-size business e-newsletter**

- **Q1**
  - Energy-Saving Resolutions for 2013
  - The Impact of Federal Lighting Legislation on Your Facility
  - Conducting Your Own Energy Audit
  - LEDs Add Shine to Auto Dealership / Energy Trust
  - Advanced Power Strips: A Smarter Way to Save
  - Spring Clean Your Facility
- **Q2**
  - Ask an Expert: Improving HVAC System Performance
  - Save Now: Eight ***watt***smart Ways to Reduce Energy Use
  - Five Steps to Saving Energy this Summer
  - Learn the ABCs of LEDs
  - City Lights Up Big Savings / Energy Trust
  - Lighting Retrofits: Comparing T8 and T5 Fluorescent Lamps
  - Heats Up on Cooling System Upgrades
- **Q3**
  - Lower Your Cooling Costs: Five Effective Strategies
  - Preventive Maintenance Checklist for Air Conditioning Systems
  - Stay Cool and Save at Home This Summer
  - Circulating Fans Save Energy
  - ENERGY STAR: Resources for Your Business
  - The Latest in Lighting Technologies and Trends
  - Be ***Watt***smart with Building Maintenance
  - Medical Lab Puts Energy Use to the Test
- **Q4**
  - Newer Generation T8 Lamps Focus on Efficiency and Performance
  - Easy and Affordable Energy Management Technology
  - Ten Ways to Improve Heating System Performance
  - Improve Your Heating System Efficiency
  - Compare the Energy Costs of Holiday Lighting
  - Getting it Right: Your Next Energy Upgrade
  - Ask an Expert: Temperature Setback Energy Savings
  - Making Energy Efficiency a Key Ingredient

***Energy Update* managed accounts and opinion leaders e-newsletter**

- **Q1**
  - The Impact of Federal Lighting Legislation on Your Facility
  - Minimizing Heat Loss: Warehouse Facilities
  - Controlling Energy Costs in Manufacturing Facilities
  - Advanced Power Strips: A Smarter Way to Save
  - Powerful Data for Managing Energy Use
  - Spring Clean Your Facility
  - Ask an Expert: Trends in Lighting Controls
- **Q2**
  - Ask an Expert: Improving HVAC System Performance
  - Benchmarking Helps Save Energy, Study Shows
  - Stay Cool with HVAC Economizers
  - Learn the ABCs of LEDs
  - Stepping Up to the Plate: Baseball Clubs Go Green
  - Lighting Retrofits: Comparing T8 and T5 Fluorescent Lamps
- **Q3**
  - Energy Management Systems: Putting You in Control
  - HVAC Systems: Saving Energy at the Zone Level
  - Go With the Flow: Circulating Fans Save Energy
  - The Latest in Lighting Technologies and Trends
  - HVAC Upgrades: Be Sure Your System Measures Up

- Wireless Technology Improves the Efficiency of Pneumatic Thermostats

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

- **Q1**
  - Electricity: What's ahead for customers
  - Cabinet maker cuts energy waste / Energy Trust
- **Q2**
  - Balancing energy needs with the environment
  - Energy efficiency powers Oregon sawmill
- **Q3**
  - Harry & David order up savings / Energy Trust
  - Save on cooling system upgrades / Energy Trust
- **Q4**
  - Oregon sawmill reaps energy cost savings / Energy Trust
  - Historic preservation can be ***watt***smart / Energy Trust

Direct email

- **Q1**
- **Q2**
  - Be ***watt***smart Workshop invitations
    - Bend, Redmond, Dallas, Grants Pass & Medford, Klamath Falls, Stayton
- **Q3**
  - Lighten up with LEDs invitations
    - Bend, Redmond, Grants Pass, Medford, Pendleton, Albany, Corvallis

Online Media

- **Q1**
- **Q2**
  - "Home Energy Review" / Energy Trust
  - "ETO Block" / Energy Trust
- **Q3**
  - "ETO Block/outlet house" / Energy Trust
  - "Energy Savers Kit / Energy Trust
  - "Home Energy Review" / Energy Trust
- **Q4**
  - "ETO Block" / Energy Trust
  - ETO Energy Saver Kit (300x250)

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

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

Support materials

Fact Sheets, Flyers, Brochures and More

- **Q1**
- **Q2**
  - "Oregon Conservation Report" / Energy Trust
  - "Summer ***watt***smart handout" / Energy Trust
- **Q3**
  - "Summer ***watt***smart handout" / Energy Trust
- **Q4**
  - "Winter ***watt***smart handout" / Energy Trust

Outreach

Chambers of Commerce, Business and Community outreach: Q1 – Q4
Pacific Power continues to host and participate in 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. These presentations focus on small- to mid-size commercial customers and how they can improve energy efficiency. Energy efficiency presentations and event participation occurred in Albany, Astoria, Bend, Coos Bay (2), Corvallis (3), Cottage Grove (2), Grants Pass (3), Independence, Junction City, Klamath Falls, Lebanon, McMinnville, Medford (6), Pendleton (2), Portland (3), Redmond (2), Roseburg (3), Seaside, Sprague River, Stayton, Wallowa, Warrenton (2), and Wolf Creek, 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:

- An 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: Q1 – Q4
Pacific Power produced and delivered another successful round of Be ***watt***smart Workshops. The workshops were targeted to Clean Energy Works Oregon eligible homeowners to educate them on how to manage energy use and improve energy efficiency. Additional residential customer outreach was performed throughout Oregon through local events. Locations included Albany, Bend, Dallas, Grants Pass, Klamath Falls (2), Medford, Portland (2), Redmond, and Stayton, Oregon. Sessions were presented by Pacific Power.

Mass Media[19]

	2013 – Impressions (Q1-Q4)
TV	23,745,513
Radio	2,151,719
Print	979,752
Outdoor	5,851,466
Digital	9,533,130
TOTAL	42,261,580

[19] SB 838 funded mass media only

Outreach

Locations	Chambers of Commerce, business / community groups / conferences (2013)	Be ***watt***smart / HEIQ / other residential (2013)	TOTAL (Q1-Q4)
Albany	10	450	460
Astoria	200		200
Bend	10	39	49
Coos Bay	60		60
Corvallis	859		859
Cottage Grove	320		320
Dallas		36	36
Grants Pass	155	85	240
Independence	30		30
Junction City	30		30
Klamath Falls	12	650	662
Lebanon	50	1,000	1,050
McMinnville	30		30
Medford	178	85	263
Pendleton	180		180
Portland	383	4,500	4,883
Redmond	308	39	347
Roseburg	38		38
Seaside	35		35
Sprague River	30		30
Stayton	317	25	342
Wallowa	15		15
Warrenton	100		100
Wolf Creek	17		17
TOTAL	3,367	6,909	10,276

“Warm Leads” / Customer Response

	2013 (Q1-Q4)
“Warm Leads” provided to ETO	444
Consultations	904

Other Energy Efficiency Coordination / Support

- Internal Pacific Power support for ETO programs
- Weekly / Monthly / Quarterly ETO coordination meetings
- ETO Conservation Advisory Council
- EEAST implementation
- On-Bill Financing support
- CEWO implementation, contracting, support
- ETO / Utility Data Transfer coordination
- Opower pilot
- 1aMW / Self Direct reconciliation
- Lloyd EcoDistrict

Appendix 5: NEEA QUARTERLY PERFORMANCE REPORT FOR ENERGY TRUST OF OREGON

Fourth Quarter 2013

OVERVIEW

The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization working in collaboration with Energy Trust of Oregon, the Bonneville Power Administration, and more than 100 public and private Northwest utilities to accelerate energy efficiency to meet the future energy needs of the Northwest. NEEA is a voluntarily funded organization with a five-year budget commitment from its funders. With these mobilized partnerships, NEEA is able to scan the market to identify emerging energy-efficient technologies, services and practices to create the market conditions to accelerate and sustain their market adoption on behalf of 13 million energy consumers. As a regional collaborative, NEEA mitigates risk to individual utilities and public benefits administrators by identifying economies of scale, aggregating resources and sharing and synthesizing knowledge.

Energy Trust of Oregon (Energy Trust) is one of NEEA's key funders and expects to invest slightly more than $37 million to support NEEA from 2010-2014. This report summarizes NEEA's 2013 fourth quarter value delivery to Energy Trust based on its operations plan. For additional information about NEEA's unique value to the region, history, structure and recent initiatives, please visit www.neea.org.

FILLING THE ENERGY EFFICIENCY 'PIPELINE' WITH ENERGY TRUST

NEEA's top focus, as prioritized by its stakeholders, is to scan the market for emerging energy-efficient technologies, services and practices. In partnership with its funders, NEEA has now identified and is investigating more than 18 different opportunities that may have broad benefits for Energy Trust and the region. These projects currently represent a 20-year savings potential to the region of more than 1700 average megawatts (aMW) through increased efficiencies in the residential, commercial and industrial/agriculture sectors, with savings locked in through codes and standards efforts.

Fourth Quarter Emerging Technologies Highlights

Unsolicited Proposals – Continued to investigate two unsolicited proposals related to 1) assessment of advanced commercial building energy and, 2) an energy reporting taxonomy for discussing energy savings devices. Through continued research and testing, NEEA will determine if these opportunities have the potential for significant energy savings for the region. NEEA reviews all unsolicited proposals of new technology and services and conducts rigorous testing to determine viability in the Northwest market. Once assessed, NEEA provides stringent specifications for upstream manufacturers and market actors and works with its funding partners to help generate demand of these technologies.

Solid-State Street Lights with Controls – Discontinued NEEA's Solid-State Street Lights with Controls initiative due to uncertainty around a regional role to transform the market. In Q3 and Q4, NEEA requested advice through its commercial advisory committee (CAC) and regional portfolio advisory committee (RPAC) to determine if the initiative was appropriate for NEEA's portfolio. At the meetings, which included advisors from Energy Trust, participants raised questions about the initiative's energy savings opportunities and overlapping local energy efficiency program efforts in this area. NEEA is responding by discontinuing regional efforts in this market. Advisory members did acknowledge that the learnings to date and market characterization from NEEA would be valuable to individual utilities and public benefits administrators that are already implementing Solid-State Street Lighting programs.

Luminaire-Level Lighting Controls (LLLC) – Completed and published a proof-of-concept test for the Enlighted brand lighting controls, the first identified product that meets LLLC criteria. The study revealed that LLLC technology with dimming ballast can deliver significant savings (30-60%) to commercial facilities at a relatively low cost. The study also identified the opportunity for improved LLLC specifications. NEEA's continued assessment of this emerging technology establishes product reliability and functionality, mitigating risk prior to a broad market release. NEEA also accelerated research on the

rapidly evolving controls market in Q4, including the determination of a naturally-occurring baseline, a characterization of the market and the identification of non-energy benefits. This foundational research will inform effective intervention strategies for future use by Energy Trust and across the region.

Heat Pump Water Heaters (HPWHs) – Conducted and published results from a laboratory test to assess the cold climate performance of manufacturer Sanden's CO2 integrated HPWH to verify Northern Climate installation feasibility. While not currently available in the US, the testing shows that, with some adaptation, this technology innovation holds great promise for energy savings in the Northwest's cooler climates (down to 5 degrees F).

UPDATE ON 2015-2019 STRATEGIC AND BUSINESS PLANNING

In 2013, NEEA and its regional partners developed the building blocks for activities for the next five years based on a generally agreed to Strategic Plan and Business Plan. The Strategic Plan includes two draft goals (pending Board approval). Those two draft goals are:

1. Fill the Energy Efficiency Pipeline with new Products, Services and Practices
2. Create Market Conditions that will accelerate and sustain the market adoption of emerging energy efficiency products, services, and practices.

NEEA and its Board are continuing discussions regarding NEEA's role in the evolving energy efficiency landscape and its potential pursuit of several strategic markets. Before the Board adopts the Strategic and Business Plans, NEEA will provide a final opportunity for the public to comment via ConduitNW.org and directly to NEEA staff. This feedback will be shared with the Board of Directors for consideration.

NEEA's draft Business Plan identifies opportunities around a new Market Strategy component, with the goal of targeting key markets identified as large savings potential for regional focus. These markets align closely with the 20-year savings potential identified in the Sixth Power Plan. Through early coordination on these regional strategies, NEEA's efforts may deliver increased value to the region by improved regional coordination. The final five-year budget for 2015-2019 is pending Board approval.

ACCELERATING MARKET ADOPTION WITH ENERGY TRUST

NEEA intervenes in markets to remove barriers to the market adoption of energy-efficient products, services and practices. In partnership with Energy Trust and its other funders, NEEA designs and executes strategic market interventions to create lasting change and deliver long-term savings to the region.

NEEA currently has 19 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

Northwest ENERGY STAR Homes (NWESH) – The NWESH program is accelerating market capacity for new residential construction and preparing the market for advanced energy codes by providing technical training and support for market actors serving Energy Trust territory.

- Increased the market's capacity for transformation by partnering with Energy Trust to provide training opportunities for approximately 130 builders, contractors and verifiers in Energy Trust territory in 2013. In-person and webinar trainings included: Axis Database training, Energy Efficiency for Real Estate Professionals, Green Homes Trends and Appraisal Methodologies, Northwest ENERGY STAR Homes 101 and more. Training strengthens market actor's ability to build, sell, appraise and verify energy-efficient new construction homes.
- Continued collaboration with Energy Trust New Homes and Architectural Energy Corporation on behalf of the region to develop a Northwest version of their REM/Rate new home modeling software. The software, which analyzes residential energy use, will provide greater flexibility to Northwest

builders to become Northwest ENERGY STAR Homes (NWESH) compliant and support NEEA's transition of the NWESH program to the market.

As a result of these and other market transformation activities, 323 homes have been certified as Northwest ENERGY STAR Homes in Energy Trust territory since the beginning of 2013.

NEEA is leveraging the NWESH program to solidify market partners and regional infrastructure to transition into a pilot stage for a new, advanced home specification. The new specification is designed to provide a pathway for advanced new construction practices and technologies and accelerate new code adoption. The program is supporting New Tradition Homes, a builder in Energy Trust territory, by delivering metering equipment and verifying installation. Test projects across Energy Trust territory and the region aim to generate consumer and builder awareness for advanced building practices and new technologies while promoting builders who go above and beyond ENERGY STAR.
Heat Pump Water Heaters (HPWH) – In 2013, NEEA transitioned this project to market development, an achievement marked by four years of regional coordination to bolster manufacturer and supply chain investments, and remove barriers to product awareness. The transition to market development includes objectives around completing Savings Validation and Unit Energy Savings with the Regional Technical Forum, working upstream with manufacturers to execute promotions and supporting utilities to increase consumer awareness. Additional highlights include:

- Led efforts to update the Northern Climate Specification for HPWHs, enabling manufacturers to evolve their products and ensure the technology meets the needs of homeowners in cooler, northern climates, thereby increasing performance, efficiency and energy savings.
- Built market capacity and raised awareness about HPWHs in Energy Trust territory by delivering 21 Smart Water Heat orientations to contractors and performing 262 retail and wholesale support visits to educate sales associates. To motivate supply chain and overcome cost barriers, the Smart Water Heat regional program offers Tier-2 consumer rebates, which 152 Energy Trust consumers took advantage of in 2013.

Ductless Heat Pumps (DHP) – NEEA is creating the market conditions to help accelerate the market adoption of DHPs in Energy Trust territory by working upstream to strengthen relationships with manufacturers and retailers and by removing barriers to adoption through increased consumer awareness and availability.

- Improved access to information and user-experience for consumers researching DHPs by revamping the GoingDuctless website with input from utility partners. Upgrades include enhanced contractor finder capabilities to better promote contractors across a diverse utility territory, and more easily show all project-oriented contractors. By improving the ease with which consumers can research product information, contractors and resources, NEEA and the region are promoting the uptake of DHP technology across the Northwest.
- Leveraged NEEA's relationships with regional DHP installers, distributors and national manufacturers to execute a lead generation program in the Corvallis/Albany area with Energy Trust, Consumers Power Inc., The Resource Innovation Group and The Heat Pump Store (THPS). The program developed and facilitated the delivery of approximately 11,000 direct mail pieces, 400 flyers and 650 door hangers to address lack of consumer awareness of the product, generate demand and provide quality leads. As a result of these activities, THPS reports a total of 84 leads and 51 installations from June 12 to November 1; a 61% conversion rate (20 installs are in Energy Trust territory).

As a result of these and other efforts, 1,035 DHP installations were achieved in Energy Trust territory in 2013.

Fourth Quarter Commercial/Industrial Highlights

Commercial Real Estate – Continued partnership with Energy Trust, the City of Portland, Clark Public Utilities, Building Owners and Managers Association (BOMA) and Portland Development Commission to implement the 2013 "Kilowatt Crackdown" competition. Office efficiency competitions serve to increase

market knowledge of the value of energy management in the commercial real estate industry and help building managers and operators build their capacity to identify and implement best practices. The "Kilowatt Crackdown" leverages the competition framework to "prime" the market for continued participation in local programs. In Q4, the program engaged commercial building managers and operators from 77 building teams, representing 15.5 million square feet of commercial office space, to successfully complete monthly benchmarking, implement recommendations, follow through on committed action plans, and provided coaching visits and ENERGY STAR® certifications to stimulate adoption of energy efficiency best practices.

Healthcare – In 2013, NEEA formed a Healthcare Utility Working Group, with representatives from Energy Trust and other Northwest utilities, to advise NEEA on the Healthcare initiative exit and transition activities. In the fourth quarter of 2013, NEEA continued to coordinate with the working group on the disposition (repurposing and repackaging) of the BetterBricks Healthcare SEM tools and materials.

Building Operator Certification (BOC) – Through the Building Operator Certification Expansion initiative NEEA provides skill enhancement training in Energy Trust territory to improve building energy performance through operation and maintenance best practices for HVAC, lighting, and controls systems. In 2013, to address barriers to education and training NEEA registered 80 operators in BOC courses serving Energy Trust territory. NEEA also conducted four BOC technical webinars serving 381 operators with continuing education in energy efficiency and two free information webcasts serving 25 Energy Trust customers. The BOC Expansion initiative is designed to foster a more robust market through increased education, training and technical expertise in Energy Trust territory to ensure accurate installation of energy-efficient technologies.

Existing Building Renewal (EBR) – In the fourth quarter of 2013, the Existing Building Renewal program delivered the final proposal and owner presentation for a deep energy retrofit demonstration project in Energy Trust territory. Final owner approval of the proposed retrofit is pending, but if approved the demonstration project will establish approaches and tools to support implementation of deep energy retrofit projects in commercial buildings 20,000 square feet or greater. The EBR program is developing tools to overcome market barriers associated with implementing deep energy retrofits, such as cost and financing, perceived lack of economic value and market capability. By providing building owners and investors with a comprehensive business case for deep energy retrofits NEEA and its partners are creating a pathway to comprehensive deep energy retrofits in Energy Trust territory and around the Northwest.

Commercial Lighting – To build awareness among trade allies and market actors, NEEA continued to host an e-learning platform for commercial lighting trade allies, and continued support for the Northwest Trade Ally website. These activities provide commercial lighting market actors with the tools and knowledge necessary to further integrate efficient lighting solutions into their own business models, and increase adoption and use of Energy Trust lighting programs.

Industrial Refrigeration Operator Certification – In November of 2013, NEEA debuted the Certified Refrigeration Energy Specialist (CRES) program and exam at the Refrigerating Engineers & Technicians Association (RETA) National Conference in Bellevue, Washington. To support operators and technicians prepare for the CRES exam NEEA held three two-day review courses, to facilitate access to education. The certification also requires operators to build knowledge and skills through hands-on training by performing and documenting no-cost and low-cost activities for energy-efficient operation. Eight participants serving Energy Trust territory took NEEA's Review Course and sat for the exam with four participants passing. Activity documentation to date estimates CRES program applicants are achieving 2-10 percent energy savings.

Small/Medium Industrial (SMI) (Discontinuing) – In 2013, stakeholders provided input that informed NEEA's decision to discontinue the Small/Medium Industrial initiative, as it was determined that NEEA's role in SMI Strategic Energy Management (SEM) would be more beneficial were it focused on building regional SEM capability and infrastructure. NEEA is leveraging its SMI experiences in this new role by integrating knowledge gained into industrial SEM strategy, leading the Northwest Industrial SEM Collaborative, measuring market adoption, creating market awareness and knowledge, and developing tools and technologies for use by the region. Demonstration projects aimed at developing and testing

approaches to build market capacity for SEM in the Northwest's small- and medium-sized industrial facilities concluded in Q4.

Food Processing – In the fourth quarter, four food processing facilities in Energy Trust territory continued to implement self-sustaining energy management systems, thereby increasing adoption of energy efficiency and persistence of savings in the region. NEEA is working to transition out of this market in 2014 and is completing the direct facility engagement and preparing for the final hand-off to local programs.

Fourth Quarter Codes and Standards Highlights

On behalf of the region, NEEA works at state and national levels to influence the adoption of increasingly stringent building energy codes and federal appliance and equipment standards. Working with its partners, NEEA gives the Northwest a voice in codes and standards processes and is often the only efficiency organization directly representing utilities in these forums. NEEA also conducts and shares critical research in support of codes and standards work.

Codes Highlights

NEEA continued collaboration with Energy Trust and the Oregon Homebuilders Association (OHBA) to craft a joint proposal for the 2014 residential energy code. A joint vision will increase predictability over the next 10-15 years as to how the residential market will move over this period and help NEEA and Energy Trust ensure future energy savings.

Standards Highlights

Participated in a broad range of national standards rulemakings in 2013 to advance more stringent federal appliance and equipment standards in support of the region's energy efficiency goals. Rulemakings include: updating the Residential Water Heater Test Procedure; a Proposed Rule for Large Electric Motor Efficiency Standards; a Proposed Rule for Residential Furnace Fans; a Final Rule for certain Alternative Energy Determination Methods (AEDMs) for rating and certifying commercial air conditioning, heating, water heating and refrigeration systems; and a Framework document to begin the rulemaking process for General Service Lamps. The energy savings from several of these rulemakings will be substantial for the region, with the potential for savings in 2014.

DELIVERING ON REGIONAL ADVANTAGE WITH ENERGY TRUST

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 uses its unique role as a regional organization to leverage resources across the Northwest to accelerate energy efficiency. In 2013, NEEA continued conducting market research, and facilitating regional collaboration and information sharing on behalf of the region.

Fourth Quarter Highlights

- Continued to partner with Energy Trust and utilities across the Northwest to influence manufacturers to produce, and retailers to stock and sell the most-efficient televisions available. By pooling resources, coordinating market interventions and negotiating as a region, NEEA and its partners have had a measurable and lasting impact on the television market and achieved greater energy savings for Energy Trust consumers. As of Q4, NEEA conducted 967 store visits in Energy Trust territory to raise awareness of most-efficient televisions among retail sales associates. As a result of these activities, 30 percent of televisions on display at participating retailers in Energy Trust territory currently qualify as most-efficient.
- Coordinated HPWH promotion with General Electric (GE) to sell HPWHs through all distribution channels (retailers, distributors, and contractors). GE leveraged NEEA's Smart Water Heat platform, developed in collaboration with the region, to work with local utilities and ensure a consistent promotional platform across the Northwest. The successful promotion, the first with a manufacturer, resulted in a 350 percent increase in HPWH sales for GE over the same period in 2012.

- Began the Industrial Facility Site Assessment (IFSA), the first study of its kind on the Northwest industrial sector. The IFSA will provide valuable information on industrial building energy-use characteristics to support power planning for Energy Trust. NEEA enlisted feedback from Energy Trust and other stakeholders to shape process and engagement and is targeting report release in 2014. In Q4, NEEA also continued its work on the Commercial Building Stock Assessment (CBSA). The CBSA, scheduled for release mid-2014, will provide a robust database of commercial building energy use characteristics and support regional power planning, inform conservation targets and help identify conservation program opportunities for Energy Trust and utilities in the Northwest.

- Published nine independent market research and evaluation reports in Q4 to validate and evaluate NEEA's market transformation work (http://neea.org/resource-center):
    - Northwest Heat Pump Water Heater Market Test Assessment
    - Understanding the Importance of Energy Efficiency in the Home Purchase Process
    - 80 PLUS Market Progress Evaluation Report #5
    - Variable Rate Rooftop Unit Test
    - Emerging Technology Dryer Testing
    - Laboratory Assessment of Sanden GES-15QTA Heat Pump Water Heater
    - Heat Pump Water Heater Field Study Report
    - Energy Baseline Methodologies for Industrial Facilities
    - Inventory of Commercial Energy Management and Information Systems for M&V Applications

For additional information, NEEA's 2013 Quarterly Performance Reports and the 2012 Annual Report are available online.

Please contact Lindsey Clark, Communications Coordinator at lclark@neea.org, with any questions or comments.

Appendix 6: Q4 2013 REPORT FOR NW NATURAL WASHINGTON ACTIVITIES

October 1 through December 31, 2013

This Energy Trust of Oregon quarterly report covers the period October 1, 2013, through December 31, 2013. This report addresses progress toward 2013 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 2014.

I. PROGRAM SUMMARY

A. General

- **Energy Trust saved 131,512 annual therms in Q4 2013**—including 18,808 annual therms in Existing Homes, 30,008 annual therms in New Homes and Products and 82,696 annual therms in Existing Buildings.
- **In 2013, Energy Trust saved 221,172 annual therms**, meeting the 2013 conservative goal of 220,421 therms.

B. Washington Utilities and Transportation Commission Performance Metrics

The table below compares quarterly results to 2013 program goals, as established in NW Natural's Energy Efficiency Plan for Washington (updated December 2012).

Metrics	Goal	2013 Total YTD	Q1 Results	Q2 Results	Q3 Results	Q4 Results
Therms Saved	220,421 – 259,319	221,172	20,626	40,948	28,087	131,512
Total Program Costs	$1,430,092 – $1,613,437	$1,170,602	$190,711	$291,420	$240,649	$447,821
Average Levelized Cost Per Measure	Less than $0.65	$0.420	$0.826	$0.573	$0.648	$0.268
Dollars Spent Per Therm Saved	Less than $6.50	$5.29	$9.25	$7.12	$8.57	$3.41
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 year-end metrics is provided in Section III.

II. QUARTERLY RESULTS

A. Expenditures[20]

		Actual Expenditures Q4	Budgeted Expenditures Q4	Variance
Commercial Programs	Existing Buildings	$ 204,110	$ 224,037	$ 19,927
	Subtotal	$ 204,110	$ 224,037	$ 19,927
Residential Programs	Existing Homes	$ 83,628	$ 155,850	$ 72,222
	New Homes	$ 150,376	$ 87,374	$ (63,003)
	Subtotal	$ 234,004	$ 243,224	$ 9,219
Administration		$ 9,706	$ 11,351	$ 1,645
TOTAL		$ 447,821	$ 478,612	$ 30,791

- As anticipated, actual expenditures increased significantly in Q4 compared with other quarters.
- In Q4, New Homes expenses were higher than expected due to the large volume of incentive payments for ENERGY STAR® Builder Option Package homes.
- A Q4 Existing Homes bonus offer resulted in increased weatherization projects and hearth installations. The program also saw strong demand for furnaces.
- The Existing Buildings program initiated an end-of-year bonus for custom path projects, increasing the incentive from $1 to $1.50 per therm. Additionally, the program implemented a targeted marketing campaign to promote gas fryer incentives to foodservice establishments. Both of these efforts resulted in improved activity in Q4; however, two custom path projects projected to complete in 2013 will now complete in 2014.

B. Incentives paid

		Actual Incentives Q4
Commercial Programs	Existing Buildings	$ 128,255
	Subtotal	$ 128,255
Residential Programs	Existing Homes	$ 46,346
	New Homes	$ 117,102
	Subtotal	$ 163,448
TOTAL		$ 291,703

- Of total 2013 incentives paid, 58 percent were paid during Q4, which is consistent with incentives paid in Q4 2012. High incentives paid in Q4 are attributed to seasonal bonuses and increased Program Management Contractor delivery hours to expedite completion of in-progress projects in 2013.

[20] Variance is expressed in total dollars *below* budget or (total dollars) *above* budget.

C. Savings

		Therms Saved Q4	$/Therm	Levelized Cost/Therm
Commercial Programs	Existing Buildings	82,696	$ 2.53	20.3 ¢
	Subtotal	82,696	$ 2.53	20.3 ¢
Residential Programs	Existing Homes	18,808	$ 4.50	34.4 ¢
	New Homes	30,008	$ 5.14	39.8 ¢
	Subtotal	48,816	$ 4.89	37.7 ¢
TOTAL		131,512	$ 3.41	26.9 ¢

- Levelized cost was lower in Q4 than in previous quarters, which can be attributed to lower PMC management costs and greater uptake of program incentives.

III. Q4 / PRELIMINARY 2013 ANNUAL RESULTS

A. Activity—Sites served

	Q1	Q2	Q3	Q4	Total
Existing Commercial					
School/college retrofits	0	3	0	4	**7**
Other commercial retrofits	1	19	13	22	**55**
Studies	0	2	1	3	**6**
Existing Homes					
Weatherization (insulation, air/duct sealing and windows)	11	33	32	51	**127**
Gas hearths	9	26	8	43	**86**
Gas furnaces	21	35	28	100	**184**
Water heaters	4	6	6	23	**39**
Home Energy Reviews	11	14	21	25	**71**
New Homes					
Builder Option Packages	5	55	16	155	**231**
Clothes washers	159	124	140	423	**846**

B. Revenues

Source	Actual Revenue YTD	Budgeted Revenue YTD
NW Natural	$ 1,291,102	$ 1,291,102

C. Expenditures[21]

		Actual Expenditures YTD	Budgeted expenditures YTD	Variance
Commercial Programs	Existing Buildings	$ 475,643	$ 630,877	$ 155,235
	Subtotal	$ 475,643	$ 630,877	$ 155,235
Residential Programs	Existing Homes	$ 340,831	$ 456,436	$ 115,605
	New Homes	$ 315,772	$ 331,005	$ 15,233
	Subtotal	$ 656,603	$ 787,441	$ 130,838
Administration		$ 38,356	$ 51,174	$ 12,818
Total		$ 1,170,602	$ 1,469,492	$ 298,890

- The favorable spending variance in Existing Buidlings reflects success in acquiring savings at a lower cost than budgeted.
- The Existing Homes variance is indicative of fewer incentives paid than budgeted. As planned, Existing Homes reduced the percentage of savings from installation of energy-saving products—faucet aerators and showerheads—in its portfolio, but did not achieve a commensurate increase in savings from other measures.

D. Incentives paid

		Actual Incentives YTD
Commercial Programs	Existing Buildings	$ 218,066
	Subtotal	$ 218,066
Residential Programs	Existing Homes	$ 103,337
	New Homes	$ 183,381
	Subtotal	$ 286,718
TOTAL		$ 504,784

- Incentives paid account for roughly 51 percent of program expenses in 2013, when total program expense is adjusted down by 15 percent to account for costs that a utility-delivered program would recover through rates.

[21] Variance is expressed in total dollars *below* budget or (total dollars) *above* budget.

E. Savings

		Therms saved YTD	Annual Goal (conservative)	% Achieved YTD	$/therm	Levelized Cost/therm
Commercial Programs	Existing Buildings	132,308	127,500	104%	$ 3.72	30.5 ¢
	Subtotal	132,308	127,500	104%	$ 3.72	30.5 ¢
Residential Programs	Existing Homes	40,238	56,409	71%	$ 8.76	65.3 ¢
	New Homes	48,626	36,513	133%	$ 6.71	52.7 ¢
	Subtotal	88,864	92,921	96%	$ 7.64	58.5 ¢
Total		221,172	220,421	100%	$ 5.29	42.2 ¢

- The New Homes program showed strong performance in Q4, helping the residential sector achieve conservative goal.
- Performance for the quarter and the year remained well within the cost-effectiveness metrics outlined in NW Natural's Energy Efficiency Plan.
- Further detail and analysis of each program's achievements will be included in the forthcoming annual report.

F. Clark Public Utilities—rooftop HVAC unit tune-ups[22, 23]

	Q4	2013
Revenue		
Expenses	$ 7,712	$ 25,800
Incentives	$ 5,670	$ 16,065
Savings (kWh)	54,548	168,912
Levelized Cost Per kWh		2.4 ¢

[22]Electric savings in this table reflect an adjustment upward to account for reduced transmission and distribution line losses resulting from the savings.
[22]2013 RTU budget consisted of $50,000 in carryover funding from 2012.