

**Quarter Four 2009 Report to the  
Oregon Public Utility Commission**

October 1, 2009, through December 31, 2009

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This Energy Trust of Oregon quarterly report covers the period 10/1/09 through 12/31/09, the fourth quarter of 2009 (Q4). The report presents activity, revenue and expenditure information for the quarter along with progress toward 2009 and 2012 energy saving and renewable energy generation goals.<sup>1</sup> Appendix 1 includes utility reports on SB 838 spending, Appendix 2 displays Home Energy Reviews conducted during the quarter by region within the state, and Appendix 3 provides a report on Energy Trust's first three months of activity serving NW Natural customers in Washington.

## **I. HIGHLIGHTS**

### **1. General**

- Including the preliminary 2009 results, electric efficiency programs have cumulatively saved 222 average megawatts since March 1, 2002. When savings from self-directed industrial projects are added, the total represents 80 percent of Energy Trust's initial 2012 goal of 300 average megawatts. This is equivalent to the annual electric consumption of about 187,000 average Oregon homes.
- Including the preliminary 2009 results, cumulative savings of 12.2 million annual therms have been realized since gas programs began in 2003, accounting for 58 percent of the current 2012 goal of 21 million annual therms. This is equivalent to providing gas heat to about 24,000 homes.
- Since March 1, 2002, renewable energy programs have helped develop projects with generation totaling almost 100 average megawatts. This is equivalent to powering about 77,000 average Oregon homes.
- Electric efficiency expenditures for Q4 were 24 percent under budget, reflecting the impact of delays and cancellations of large projects in the existing commercial and industrial sectors.
- Electric efficiency projects completed during Q4 will save 15.7 average megawatts.
- Gas efficiency spending for Q4 tracked 1.8 percent behind plan, primarily a result of lags in NW Natural industrial project completion dates, with projects carrying forward to early 2010.
- Gas efficiency projects completed during Q4 are expected to save 1.3 million annual therms.
- Renewable energy projects completed during Q4 are expected to generate 0.5 average megawatts annually, stemming mostly from solar.
- NW Natural filed a tariff and received approval from Oregon Public Utility Commission to increase its funding for Energy Trust programs sufficient to meet Integrated Resource Plan goals for 2010 and cover additional spending in 2009. The action increased NW Natural's public purpose charge (Energy Trust's share) from 1.25 percent to 4.16 percent and is forecast to produce \$26.8 million in additional revenues to Energy Trust between Nov. 1, 2009, and December 31, 2010.
- Both Pacific Power and Portland General Electric secured OPUC approval to increase funding through SB 838 to support achievement of higher IRP goals for 2010-11. Pacific Power's increase provides \$19.6 million to Energy Trust for 2010, representing an additional

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<sup>1</sup> In December 2009, Energy Trust's Board of Directors adopted a new strategic plan with goals for 2014. Beginning first quarter 2010, we will report progress toward those goals.

public purpose charge of two percent. PGE's tariff provides \$20.5 million to Energy Trust, representing an additional public purpose charge of 1.6 percent, through June 2010. PGE expects to file another tariff for the July-December period.

- Energy Trust staff plans to work with Cascade Natural Gas on an IRP-related tariff in spring 2010.
- Overall public purpose revenue plus incremental revenue from SB 838 totaled \$21.4 million for Q4, one-half million dollars less than budgeted, reflecting lower energy demand and use due to the economy.
- Total Energy Trust expenditures for Q4 equaled \$36.1 million, of which \$25.1 million was for incentives. As measured by expenditures, 37 percent of activity for the year took place in Q4.
- On October 1, 2009, with approval by the Washington Utilities and Transportation Commission, Energy Trust launched a one-year pilot to serve more than 60,000 NW Natural residential and commercial customers located in Southwest Washington. See Appendix 3 for a report on the first quarter of activity.
- Energy Trust continued its support for the Clean Energy Works Portland pilot, which aims to provide up-front funding and utility bill payback for 500 homes by fall 2010. The first 23 homes in the pilot had been completed at year's end. The pilot's second phase launched in December, targeting 270 Home Performance assessments and 200 completed home upgrades by spring. The pilot is funded by federal recovery act monies and qualifies as a pilot under EEAST legislation (Energy Efficiency and Sustainable Technology, HB 2626). The pilot is led by the City of Portland.
- Based on Clean Energy Works Portland, Energy Trust supported a collaboration by the city and state on a \$75 million proposal for additional federal recovery act funds to support a metro-area and statewide scale-up called Clean Energy Works Oregon. Announcement of funding awards is expected by mid March 2010.
- Energy Trust continued to expand its outreach to local communities statewide, supporting south-central Oregon, Wallowa County and other communities applying for or planning expenditures of federal recovery act energy funds.
- Energy Trust staff met with representatives of the Corvallis Environmental Center on a possible EEAST<sup>2</sup> commercial pilot in Corvallis. In Portland and Pendleton, Energy Trust staff assisted community leaders in planning community solar projects based on the successful Solarize Portland model.

## 2. Commercial Efficiency

- Energy efficiency measures were installed in 713 existing commercial buildings during Q4, a growth of 19 percent compared to Q4 2008. The average incentive payment per site was \$8,240. Of the total, 543 buildings received electric efficiency measures, 79 buildings received gas efficiency measures and 91 buildings saved both gas and electricity.
- This quarter, 107 efficient new commercial buildings were completed, compared to 177 in Q4 2008. Average incentive payment per site this quarter was \$15,705, down from \$16,994 in Q4 2008. The overall number of projects completed this year was 211, compared to 272

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<sup>2</sup> Energy Efficiency and Sustainable Technology act, HB 2626, adopted by the 2009 Oregon Legislature, calls for pilots of approaches that offer loans covering upfront costs of energy efficiency upgrades in homes and small businesses with payback on utility bills or property taxes.

buildings served in 2008. Offices and K-12 schools accounted for 64 of the projects completed in 2009.

- New Buildings program and Earth Advantage Institute launched a pilot that will bring energy efficiency and third-party green building certification to the small commercial construction market. The pilot provides a prescriptive measure package that can be completed separately or as the energy component of the Earth Advantage Commercial Green Building Rating System.
- New Buildings program finalized the Path to Net Zero pilot offerings with the release of the program requirements, incentive levels for commissioning, and monitoring and reporting.
- NEEA<sup>3</sup> reported the number of participants in the Building Owners and Managers Association (BOMA) Portland's 2009 Office Energy Showdown increased 30 percent over 2008, adding nearly four million square feet of office space to the competition. The grand prize winner, Melvin Mark Companies, raised or maintained its ENERGY STAR® rating for every property, collectively reducing annual energy use by more than 1.5 million kWh.
- NEEA reports that Legacy Health System is on track to meet its Strategic Energy Management Plan target of 10 percent energy reduction and is integrating the plan into its overarching sustainability efforts.
- NEEA presented an aggressive set of code change proposals that significantly influenced development of the 2010 non-residential Oregon energy code.
- NEEA developed a productive relationship with the Oregon Building Codes Division, which is taking on the energy code role that the Oregon Department of Energy played in prior years.

### 3. Industrial Efficiency

- Electric efficiency projects were completed at 246 manufacturing firms in Q4, up 75 percent over Q3 2009 and a 37 percent increase over Q4 2008.
- The average incentive payment per site for Q4 was approximately \$21,265.
- The program successfully identified opportunities and analyzed savings for 16 potential projects and committed 2010 funds for 11 projects in the NW Natural industrial pilot, representing more than 500,000 therms of savings.
- NEEA reported completion of four projects at three food processing facilities in Energy Trust territory. An independent third-party evaluator reviewed and validated these projects, which collectively account for 1,626,954 kWh in savings.
- NEEA continued to support participation by eight industrial facilities in Energy Trust territory in the Continuous Energy Improvement energy management program (CEI).

### 4. Residential Efficiency

- During Q4, Energy Trust completed 2,387 Home Energy Reviews, up 17 percent over Q3 2009 and a 15 percent increase over Q4 2008.
- Savings for Q4 from measures installed during Home Energy Review increased by 215 percent over Q4 2008. This increase in savings reflects doubling the number of home energy advisors over the past year.

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<sup>3</sup> NEEA, or Northwest Energy Efficiency Alliance, receives funding from Energy Trust and reports quarterly on its activities within Energy Trust territory.

- Through SHOW<sup>4</sup> self-audit fulfillments, retail sales, fundraiser promotions and other activities, 255,639 compact fluorescent light bulbs were provided by Energy Trust during Q4, in addition to those installed during Energy Trust Home Energy Reviews.
- In addition to compact fluorescent light bulbs, energy efficiency measures were installed in 10,535 single-family homes, 5,691 multifamily units and 451 manufactured homes. Of these, 8,524 homes received electric efficiency measures and 7,160 received gas efficiency measures, with 998 sites saving both gas and electricity.
- During Q4, Energy Trust incentives supported construction of 136 efficient new homes, down from 406 in Q3 2009 and 303 in Q4 2008.
- Of the Energy Trust new homes this quarter, 51 have electricity-saving measures, 11 have gas-saving measures and 74 have both electricity-saving and gas-saving measures.
- With the help of Energy Trust incentives, 76 electrically-heated and 12 gas-heated new efficient manufactured homes were sold in Q4.
- During Q4, Energy Trust incentives helped fund the purchase of 15,071 energy-efficient clothes washers, refrigerators and freezers, and the pickup and recycling of 6,727 old refrigerators and freezers.
- During Q4, solar water heating systems were installed in 30 homes with electric water heating and 19 homes with gas water heating.
- For Q4, NEEA reported Northwest ENERGY STAR certification of 82 homes in Energy Trust territory, for a 12.9 percent year-to-date market share for Oregon. The 2009 “Be an ENERGY STAR” campaign in Portland concluded with the give-away of a 2010 Prius.
- During the quarter NEEA continued its Northwest Ductless Heat Pump pilot.

## 5. Renewable Energy Programs

- Solarize Portland, the popular neighborhood-driven bulk purchase of solar electric systems in Southeast Portland, completed 40 installations before year-end out of 120 total systems expected, with the balance to be installed in Q1 2010.
- The Solarize effort expanded in December when Portland’s Northeast Coalition of Neighborhoods and the City of Pendleton both issued RFPs soliciting contractor bids for further Solarize bulk purchases and program delivery approaches.
- In response to declining system costs and increasing demand, Energy Trust decreased its residential and commercial solar electric incentives by approximately \$0.50/watt in November.
- Staff participated in OPUC rulemaking workshops to develop Oregon’s new feed-in tariff and provided input to a new committee convened by Oregon Building Codes Division to develop a statewide building code for solar electric systems.
- Biopower staff completed planning and budget development of an Energy Management Systems Training program managed by Association of Clean Water Agencies and co-funded by EPA Region 10, Bonneville Power Administration and participating wastewater treatment plants. The training, to begin in spring 2010, will provide wastewater treatment plants with a systems management approach to implementing energy efficiency and renewable energy generation at their facilities.
- Six feasibility studies were completed for members of the Northwest Dairy Association, analyzing the feasibility of investing in biogas plants at dairies in Oregon. A summary report,

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<sup>4</sup> The State Home Oil Weatherization program operated by Oregon Department of Energy.

completed for release in Q1 2010, documents opportunities and barriers to developing biogas plants at Oregon dairies.

- An incentive of \$225,000 was provided to Farmers Irrigation District for a piping project that increased the output of one of its existing hydro facilities. During its first year of operation, the project produced 1.7 million kWh of electricity, nearly four times what was expected.
- Four hydro feasibility studies were completed during Q4.
- A set of guidebooks on federal and state hydroelectric permitting were completed this quarter, addressing a major project barrier. The guidebooks drew the positive attention of a Federal Energy Regulatory Commission (FERC) commissioner who requested copies.
- Three small wind systems were installed during the quarter, two at commercial locations and one at a residential location. In addition, applications for two commercial and three residential small wind systems were received and approved.

**6. Revenues and Expenditures**

- \$21.4 million in public purpose and incremental revenues were received during Q4, with expenditures at \$36.1 million.
- A total of \$25.1 million in incentives was paid.

**7. OPUC Performance Measures**

- Following are the most recent performance measures established by OPUC for Energy Trust. Comparison of performance against these measures for 2009 will be reported in the 2009 annual report.

Category	Measures
Energy Efficiency	<ul style="list-style-type: none"> <li>• Obtain at least 31 aMW computed on a three-year rolling average</li> <li>• Levelized cost not to exceed 3.5 cents/kWh</li> </ul>
Natural Gas	<ul style="list-style-type: none"> <li>• Obtain at least 1.8 million annual therms computed on a three-year rolling average</li> <li>• Levelized cost not to exceed 60 cents/therm</li> </ul>
Renewable Energy	<ul style="list-style-type: none"> <li>• Achieve at least 3 aMW from small-scale projects, computed on a three-year rolling average</li> </ul>
Financial Integrity	<ul style="list-style-type: none"> <li>• Receive an unqualified financial opinion from an independent auditor on annual financial statements</li> </ul>
Administrative/Program Support Costs	<ul style="list-style-type: none"> <li>• Keep below 11 percent of annual revenue</li> </ul>
Customer Satisfaction	<ul style="list-style-type: none"> <li>• Achieve reasonable rates</li> </ul>
Benefit/Cost Ratios	<ul style="list-style-type: none"> <li>• Report both utility system and societal perspective on an annual basis</li> </ul>
Incremental Electric Efficiency Funding	<ul style="list-style-type: none"> <li>• Report annually energy savings achieved as a result of SB 838</li> </ul>

**8. Benefit-cost ratios for 2008** (will be updated for 2009 in the 2009 annual report)

Program	Utility system benefit-cost ratio	Societal benefit-cost ratio
1. Existing Homes	2.6	1.4
2. New Homes and Products	2.4	1.7
3. Existing Buildings	3.3	1.5
4. New Buildings	3.3	3.1
5. Production Efficiency	4.1	1.9
6. NW Energy Efficiency Alliance	12.2	4.1

**II. TABLES**

**1. Revenues**

Source	Actual revenues received Q4	Budgeted revenues Q4
Portland General Electric	\$8,044,323	\$9,414,372
Pacific Power	\$4,914,358	\$5,268,884
PGE Incremental	\$3,092,299	\$3,350,134
Pacific Power Incremental	\$1,756,296	\$1,975,827
Cascade Natural Gas	\$208,624	\$193,383
NW Natural	\$3,132,165	\$1,367,279
NW Natural Incremental/Industrial	\$225,000	\$225,000
<b>Total</b>	<b>\$21,373,066</b>	<b>\$21,794,879</b>

**2. Expenditures**

Type	Actual Expenditures Q4	Budgeted Expenditures Q4
Energy Efficiency programs	\$29,939,425	\$37,797,906
Renewable Energy programs	\$5,192,958	\$19,321,049
Administration	\$982,549	\$1,410,103
<b>Total</b>	<b>\$36,114,932</b>	<b>\$58,529,058</b>

**3. Incentives Paid**

Quarter	Energy Efficiency					Renewable Energy		Total
	PGE	Pacific Power	NW Natural	Cascade Natural Gas	Avista	PGE	Pacific Power	
Q1	\$2,179,158	\$1,144,836	\$1,372,914	\$125,265	\$8,134	\$1,778,071	\$348,870	\$6,957,248
Q2	\$3,830,710	\$1,759,482	\$2,105,995	\$93,043	\$5,187	\$607,074	\$1,342,110	\$9,743,601
Q3	\$4,273,485	\$3,038,442	\$2,005,720	\$92,284	\$8,194	\$914,053	\$1,065,719	\$11,414,354
Q4	\$10,552,296	\$6,747,752	\$2,933,890	\$326,380	\$624	\$2,633,181	\$1,875,280	\$25,114,711
<b>Total</b>	<b>\$20,835,649</b>	<b>\$12,690,512</b>	<b>\$8,418,519</b>	<b>\$636,972</b>	<b>\$22,139</b>	<b>\$5,932,379</b>	<b>\$4,631,979</b>	<b>\$53,229,914</b>

**4. Savings and Generation**

**Electric efficiency savings.** In Q4 2009, energy efficiency programs saved 15.7 average megawatts, representing 41 percent of the 2009 stretch goal of 39 average megawatts and 54 percent of the conservative case goal of 29 average megawatts. Since March 1, 2002, these programs have cumulatively saved 222 average megawatts. When savings from self-directed industrial projects are added, the total represents 80 percent of Energy Trust’s 2012 goal.

Electric Efficiency Savings	PGE aMW	Pacific Power aMW	Total Savings aMW	Expenses	mil \$ / aMW	Levelized Cost/kWh
Commercial	4.65	1.88	6.53	\$10,499,308	\$1.6	1.8 ¢
Industrial	2.49	2.48	4.97	\$6,655,714	\$1.3	2.0 ¢
Residential	2.63	1.61	4.24	\$7,890,267	\$1.9	2.6 ¢
Total Energy Efficiency programs	9.77	5.97	15.74	\$25,045,289	\$1.6	2.1 ¢

**Gas efficiency savings.** In Q4 2009, gas efficiency programs saved 1.3 million annual therms of natural gas, representing 42 percent of the 2009 best case goal of 3.2 million annual therms and 56 percent of the conservative case goal of 2.4 million annual therms. Since gas programs began in 2003, cumulative savings of 12.2 million annual therms have been realized, accounting for 58 percent of the current 2012 goal.

Gas Efficiency Savings	NW Natural Therms	Cascade Natural Gas	Avista	Total Savings Therms	Expenses	\$ / Therm	Levelized Cost/Therm
Commercial	751,508	35,941	0	787,449	\$2,836,097	\$3.6	29 ¢
Industrial	70,914	45,637	0	116,551	\$263,544	\$2.3	21 ¢
Residential	353,415	89,246	107	442,768	\$2,626,385	\$5.9	43 ¢
Total Energy Efficiency	1,175,837	170,824	107	1,346,768	\$5,726,026	\$4.3	33 ¢

**Renewable energy generation.** In Q4 2009, renewable energy programs brought on-line small-scale projects generating a total of 0.5 average megawatts annually. Since March 1, 2002, these programs have cumulatively saved almost 100 average megawatts.

Renewable Energy Generation	PGE aMW	Pacific Power aMW	Total Generation aMW	Expenses	mil \$ / aMW	Levelized Cost/kWh
Biopower	0.000	0.000	0.000	\$ 338,275	n/a	n/a
Open Solicitation	0.000	0.150	0.150	\$ 492,833	\$3.3	3.0 ¢
Solar Electric Program	0.210	0.130	0.340	\$ 4,344,279	\$12.8	12.0 ¢
Utility Scale	0.000	0.000	0.000	\$ (1,750)	n/a	n/a
Wind Program	0.010	0.000	0.010	\$ 169,980	\$17.0	24.8 ¢
Total Renewable Programs	0.220	0.280	0.500	\$ 5,343,617	\$10.7	10.0 ¢

**5. Projects completed this quarter<sup>5</sup>**

	Total	Electric-only	Gas-only	Both
<b>ENERGY EFFICIENCY</b>				
<b>Commercial projects</b>				
Existing buildings retrofitted	713	543	79	91
Efficient new buildings constructed	107	64	25	18
Solar water heating commercial installations	17	10	7	0
Subtotal Commercial	837	617	111	109
<b>Industrial projects</b>				
Subtotal Industrial	246	232	12	2
<b>Residential projects</b>				
ENERGY STAR new homes constructed	136	51	11	74
Efficient new manufactured homes purchased	88	76	5	7
Home energy reviews conducted	2,387	562	78	1,747
Single family homes retrofitted	10,535	2,560	7,050	925
Manufactured homes retrofitted	451	408	15	28
Multifamily units retrofitted	5,691	5,556	92	43
New multifamily units enhanced	70	65	3	2
Residential solar water heating installations	50	30	19	1
ENERGY STAR appliance rebates	15,071	10,372	481	4,218
Subtotal Residential	34,479	19,680	7,754	7,045
<b>TOTAL EFFICIENCY</b>	<b>35,562</b>	<b>20,529</b>	<b>7,877</b>	<b>7,156</b>
<b>RENEWABLE ENERGY INSTALLATIONS</b>				
Biopower project installations	0	0	0	0
Open solicitation project installations	2	2	0	0
Solar electric residential installations	183	183	0	0
Solar electric commercial installations	47	47	0	0
Wind project installations	3	3	0	0
<b>TOTAL RENEWABLES</b>	<b>235</b>	<b>235</b>	<b>0</b>	<b>0</b>
<b>TOTAL EFFICIENCY &amp; RENEWABLES</b>	<b>35,797</b>	<b>20,764</b>	<b>7,877</b>	<b>7,156</b>

<sup>5</sup> We define “projects” to be completed installations or services at one location with certain exceptions:

- A Home Energy Review, with CFL installation, counts as one project. If that home subsequently installs one or more measures, this installation counts as a separate project.
- See Appendix 2 for a geographical breakdown of Home Energy Reviews.
- Each apartment unit treated counts as one project.
- Each manufactured home counts as one project.
- Measures installed in separate facilities within a large industrial complex count as separate projects.
- Project totals do not include 255,639 CFL packages sold/provided nor 6,727 old refrigerators/freezers recycled during the quarter.



**6. Added Costs from Utility SB 838 Expenditures**

	Quarter 4 Expenditures	YTD Expenditures	YTD \$/aMW*	YTD Levelized Cost*
PGE	\$113,332	\$394,554	\$0.03	0.04 ¢
PAC	\$104,624	\$424,676	\$0.06	0.09 ¢
Total	\$217,956	\$819,230	\$0.04	0.06 ¢

\* Reflects incremental increase in costs derived from expenditures incurred by Pacific Power and PGE under terms of the agreement described in SB 838. See Appendix 1 for a report from these utilities on their SB 838 activities during the quarter.

**Appendix 1 – SB 838 Report for Q4 2009<sup>6</sup>****i. Pacific Power****SB 838 General**

- Pacific Power's Energy Trust liaison continued to attend and lead Pacific Power's participation in several ARRA competitive EECBG grant applications and activities. Moving beyond Clean Energy Works Portland, rural areas in Oregon that will see their own benefits are City of Astoria, South Central Oregon Economic Development District (Klamath and Lake counties), Hood River County and North East Oregon Economic Development District (Wallowa County).
- Pacific Power's Energy Trust liaison participated in reviewing the Energy Trust 2010 communications plan.

**SB 838 Commercial efficiency programs**

- Pacific Power's Energy Trust liaison coordinated with Pacific Power Economic Development Manager and the Clackamas County Main Street program coordinator on energy efficiency ideas to borrow and implement with Pacific Power's Oregon Main Street participants.
- Pacific Power's Energy Trust liaison staffed a Pacific Power booth at the annual League of Oregon Cities meeting in Portland. Information was provided on Energy Trust opportunities for government facilities.
- Pacific Power's Energy Trust liaison delivered the second series of three small to mid-size commercial energy efficiency conferences in Pendleton, Albany and Seaside, Oregon. Pacific Power collaborated with Energy Trust, Oregon Department of Energy, USDA, Business Oregon and Northwest Energy Efficiency Institute, who were tasked with providing material and delivering the breakout session presentations. The agendas included:
  - Breakfast
  - General Session
  - First Breakout series (customers selected one)
    1. Commercial Buildings
    2. Multifamily Properties
    3. Tax Credits, Loans and Grants
  - Second Breakout series (customers selected one)
    1. Restaurant/Hospitality
    2. Production Efficiency
    3. Tax Credits, Loans and Grants
- On the whole, the participant feedback was excellent and aligned well with comments from the first three conferences, held in second quarter. Results from more than 220 surveys:
  - Email played the most significant factor in getting the word out about the breakfasts, and mailed invitations were a valuable tool as well. 8.1 percent of participants said they heard about the event through a "referral," indicating that emails and invitations were likely reviewed and then forwarded to another interested customer, thereby increasing the impression rate.

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<sup>6</sup> Reports on utility activity supported by SB 838 funds are prepared by the utilities and submitted for inclusion in Energy Trust quarterly reports.

- Most customers (81.5 percent) attended to learn about energy efficiency, while 32 percent indicated they were also interested in professional growth and development. This underscores that customers are definitely interested in energy efficiency, and want to know how to reduce energy bills, as well see energy efficiency as a way to “go green.”
- Most customers (99.5 percent) were satisfied or very satisfied with the new online registration process, 65.4 percent of those were very satisfied.
- Most customers (95.1 percent) were satisfied or very satisfied with the materials provided at the conference; however only 34.1 percent were very satisfied. Comments from attendees indicate they would have appreciated having print outs of the presentations in addition to the material provided in the folders.
- Nearly all customers (99.5 percent) were satisfied or very satisfied with the speakers/presenters at the conference, with 38.7 percent being very satisfied. While this is still an excellent review, some of those who marked “satisfied” may have done so due to time constraints in the breakout sessions and perceived limited availability in answering all questions.
- Nearly all customers (94.9 percent) thought the length of the conference was “just right” while 5.1 percent indicated it was “too short.” Again, this shows customers are interested in the topics provided and want to be able to participate/learn more.
- At future events, customers indicated they would like to see more case studies and hands-on opportunities, such as total process overview and project management: audit > paperwork > project start > completion > closing paperwork. They would also like more information on renewable energy options.
- Customers liked the speakers, content and the concise timing of the event. Additionally, they appreciated the breakout format because it kept them interested and engaged.
- Customer feedback on items that can be improved were mostly logistical in nature. Some of the conference rooms were a little too tight and/or too warm. However, the most interesting thing customers frequently mentioned as an improvement is the opportunity to attend more sessions or making the whole conference longer so they can participate/learn more.
- Outreach for all six of the Energy Savings Answers breakfasts included:
  - Email campaign to more than 3,900 commercial emails, including those registered through Pacific Power’s website, emails provided by or delivered by local chambers of commerce, emails delivered by local economic development boards and emails obtained through the public domain.
  - Mailed more than 4,600 invitations to all small to mid-size commercial customers.
  - Called nearly 1,000 small to mid-size commercial customers utilizing Portland customer call center resources.
  - Other outreach activities included flyers handed out by the regional community managers at their regular meetings (economic development councils, boards, rotaries, etc). Additionally, USDA field representatives handed out flyers at their regional functions.
- Welcome Aboard kits continued to be mailed to all new commercial customers. The kit contains information on Energy Trust programs and incentives to help customers invest in energy efficiency.
- The winter *Energy Connections* newsletter to mid-size business and government customers featured an energy efficiency business case for America’s Best Value Inn in Roseburg. The owners installed 60 new in-room package terminal heat pumps, replacing their old

baseboard heaters. The inn received an Energy Trust incentive of \$5,500 on their new units, and they're on track to save more than 52,600 kWh of electricity annually.

### **SB 838 Industrial efficiency programs**

- The fall issue of *Energy Insights*, the newsletter for community leaders and managed commercial/industrial accounts, featured a case study for Alcan Cable. The cable manufacturer took part in a compressed air challenge—a hands-on work session co-sponsored by Pacific Power, Energy Trust and the Industrial Efficiency Alliance. Through the challenge, the company installed new air compressors. The project received an incentive of \$89,551 from Energy Trust and is saving Alcan Cable 447,755 kWh of electricity each year for a projected annual cost savings of \$19,876.

### **SB 838 Residential efficiency programs**

- Pacific Power's Energy Trust liaison continued to attend and lead Pacific Power's participation in Clean Energy Works Portland (on-bill financing) pilot kick off and planning meetings. The pilot targets 500 homes in the Portland area with energy efficiency measures that can be paid back through the customer's monthly utility bill.
- Pacific Power's Energy Trust liaison facilitated Pacific Power successful execution of an on-bill financing agreement with the City of Portland and ShoreBank Enterprise Cascadia. The agreement is a part of the Clean Energy Works Portland pilot and outlines how Pacific Power, the City of Portland and ShoreBank Enterprise Cascadia enroll Pacific Power customers, share customer data, collect and remit on-bill loan payments, and provide outreach to engage customers.
- Pacific Power's Energy Trust liaison collaborated with the City of Astoria, South Central Oregon Economic Development District (Klamath and Lake counties), Hood River County, and North East Oregon Economic Development District (Wallowa County) in applying for direct and sub- Energy Efficiency and Conservation Block Grant funds available through ARRA. All districts have indicated they would like to take part in Pacific Power's on-bill financing mechanism for energy efficiency retrofits. Hood River County is planning on doing loan repayments via the tax bill, but would still like to keep the on-bill financing option open with Pacific Power.
- Throughout October, November and December, Pacific Power's Energy Trust liaison and Energy Trust delivered 15 Home Energy I.Q. workshops in Cottage Grove, Albany (2), Portland, Bend, Klamath Falls, Hood River, Pendleton, Enterprise, Medford, Grants Pass, Roseburg, Coos Bay, Lincoln City and Warrenton, Oregon. The workshops were developed to help residential customers develop a deeper understanding of home energy use, the effects of appliances and systems on energy bills and how changing simple behaviors can reduce energy consumptions and carbon footprints. Outreach was done through localized emails and notices on both the Pacific Power and Energy Trust websites. Approximately 300 customers registered to attend.
- Energy Trust heat pump insert was delivered to 430,000 customers in Oregon in their October billing statements.
- Welcome Aboard kits continued to be mailed to all new residential customers. The kit contains information on how Energy Trust helps Pacific Power customers manage their energy costs and benefit from renewable energy.

- October *Voices* residential newsletter featured an article on winter energy efficiency tips, including adding insulation to ceilings or attic, walls and floors and air sealing with incentives and rebates from Energy Trust to help offset the cost of the project, making it a more affordable investment. A second article in the same newsletter asked customers to consider switching from incandescent bulbs to ENERGY STAR compact fluorescent light bulbs with the help of pricing discounts to retailers provided by Energy Trust.
- November/December *Voices* residential newsletter featured an article on understanding and reducing home energy losses through Energy Trust's Home Performance with ENERGY STAR assessment, a free Home Energy Review and the Online Home Energy Analyzer.

## ii. PGE

### **SB 838 General**

- PGE staff provided feedback to a Research in Action report for Energy Trust that analyzed utility spending on SB 838.
- PGE staff participated in joint meetings with Energy Trust to assess funding needs in 2010 and 2011, leading to new filings for Schedule 109 and 110, PGE's SB 838 tariffs.
- PGE representatives attended Energy Trust's Conservation Advisory Council meetings in October and November.

### **SB 838 Commercial efficiency programs**

- PGE conducted a survey of business customers that showed that 60 percent of PGE business customers surveyed were aware of Energy Trust.
- 2009 "Save More, Matter More™" (SMMM) campaign launched September 1 and closed December 31. Small and medium business customers were invited to make a pledge on the PGE website and were entered to win one of five \$3,000 lighting retrofits. Improvements to the campaign this year included adding two outreach letters from Carol Dillin, PGE vice president of customers and economic development, and Margie Harris, Energy Trust executive director, the Energy Trust self-assessment form added to the SMMM web pages, and a residential "spot the sticker" campaign.
- Fewer businesses pledged than in 2008, possibly because of the campaign focus on pledging projects, as opposed to making any change, including behavioral activities. Quality of pledges (from a project point of view) do seem to be higher. One hundred seventy-three businesses made a pledge during the campaign and so far 17 qualified leads have been turned over to Energy Trust. A survey of pledging customers and of 2008 pledging companies that did not pledge in 2009 is planned for early 2010.
- *Business Connection*, PGE's email newsletter to small and medium size business customers, featured Fletchco Properties, a "Save More Matter More" pledging company, and its Energy Trust lighting retrofit project in October, and energy efficiency classes including one for multifamily property managers held in November. The November issue promoted the "Save More Matter More" campaign, and the December issue provided a case study of 2008 "Save More, Matter More" lighting retrofit winner Valley View Kennels.
- *Energize*, PGE's quarterly bill insert newsletter for small and medium customers, featured Anytime Fitness, a 2008 "Save More, Matter More" pledging company and its lighting retrofit project. The newsletter also featured Energy Trust incentives for commercial applications.

- *Power Report*, PGE's quarterly email newsletter to key customers, featured energy efficiency classes, information on PGE's Integrated Resource Plan and information on LED streetlights as an emerging technology.
- PGE held a seminar for multifamily property managers on opportunities in energy efficiency in November, with 23 attendees. Kevin Tippit of CSG, Energy Trust's multifamily program manager, presented.
- PGE worked with Energy Trust to jointly present a customer breakfast forum in Salem November 11. Energy Trust recruited Salem-area business customers who had previously worked with Energy Trust; PGE supplemented with other Salem-area businesses. Margie Harris and Carol Dillin spoke to the assembled businesses, and representatives from PGE and Energy Trust held break-out sessions after the breakfast to provide customers specific information on energy efficiency and on-site renewable energy opportunities. Forty customers were in attendance and reviewed the event favorably. PGE and Energy Trust are planning five to seven similar efforts in 2010.
- Seven field project lead generation presentations were made to chambers and business associations, including Hillsdale Business & Professional Association, Cornelius Chamber, Wilsonville Chamber, Woodburn Chamber, Salem Hispanic Chamber, Tualatin Chamber and Chehalem Valley Chamber, with these results:
  - 291 attended the 7 Field Project Lead Generation Presentations.
  - 538 customers learned of the opportunity to participate in Energy Trust programs.
  - 62 qualified project leads to Energy Trust contractors and trade allies.
- Staff met with Greg Stiles, Energy Trust business sector manager, and Susan Jowaiszas, Energy Trust commercial marketing manager, to discuss the Existing Building program, project leads and outreach.
- Staff met with Susan Jowaiszas, Energy Trust business marketing manager, and Sheelagh Bandettini, PGE Corporate Communications, to discuss and coordinate the Salem joint outreach breakfast held November 11, 2009.
- Staff maintained monthly phone and email contact with Energy Trust program management contractors (Lockheed Martin, CSG) to discuss customers and project leads.
- Staff coordinated, attended and/or conducted scheduled meetings with internal PGE departments with direct customer access to maximize resources and customer exposure to Energy Trust programs.

### **SB 838 Industrial efficiency programs**

- The "Save More, Matter More" campaign was open to all business customers, including industrial customers.

### **SB 838 Residential efficiency programs**

- PGE's fall energy efficiency advertising to residential customers featured tips on programmable thermostats, turning off electronics when not in use, CFLs and low-flow showerheads.
- Starting in October, and supported by radio advertising, residential customers were encouraged to look for "Save More, Matter More" stickers at participating businesses. When they provided location information on their sighting to PGE, they were entered to win one of four energy efficient refrigerators courtesy of Energy Trust. Each fridge came with a \$250 gift certificate for New Seasons groceries.

- *Update*, PGE's residential newsletter, featured the Save More, Matter More "Spot the Sticker" campaign in October. The November *Update* described low cost/no cost tips to save energy and manage bills, including setting thermostats, CFLs, water heater settings, and caulking/weatherstripping. The December *Update* featured winners in PGE's CFL-only lighting fixture sweepstakes from Rejuvenation Houseparts and reported that showerheads sold and installed during PGE's August promotion were now saving 36,600 gallons of hot water per day.
- In November, PGE promoted Energy Trust's refrigerator recycling initiative with a residential bill insert. Energy Trust reported the number of refrigerators recycled ramped up compared to previous months to almost 500 per week in November, and averaged slightly higher in the first three weeks of December. As of the third week in December, 76 percent of all refrigerators being recycled by the program were from PGE customers.
- *Home Connection*, PGE's email residential newsletter, covered the "Spot the Sticker" campaign and a case study of a residential heat pump installation. November *Home Connection* featured low cost/no cost efficiency measures, a Spot the Sticker winner—extolling his new, efficient and much quieter refrigerator—and the Energy Trust refrigerator recycling initiative. December *Home Connection* described energy efficient lighting choices.
- PGE featured a high efficiency heat pump sweepstakes on its website in November, which received 3,000 entries and resulted in 524 leads sent to PGE-approved contractors.
- PGE sent 4,700 letters to all-electric customers promoting Energy Trust's end of year "Act Now" promotion, which offered a \$100 bonus incentive for PGE customers who completed a qualifying measure by December 31. Energy Trust had previously sent a letter to previous Home Energy Solutions participants. Overall, the promotion resulted in about 75 submissions for the "Act Now" bonus incentive.
- Staff attended a kickoff meeting for the OPOWER effort, which sends letters to residential customers comparing their energy consumption to nearby homes of similar size. Full-scale planning of the OPOWER pilot will begin in early 2010.
- Staff from PGE and Energy Trust continued work on the City of Portland/Homebuilders Association pilot of efficient and affordable new homes.
- Staff began developing marketing materials in support of Energy Trust's moderate income initiative, "Savings within Reach," scheduled to launch in 2010. At Energy Trust's request, PGE is delaying support until further notice.
- PGE continued to support Energy Trust and Clean Energy Works Portland. PGE's contract and operating agreements with the City of Portland and ShoreBank Enterprise Cascadia are now both signed by all parties, and PGE will assist with outreach to electrically-heated homes in late January.

**Appendix 2 – Geographic Breakdown of Home Energy Reviews in Q4**

Service region	HERS completed
1 – North Coast (Astoria)	46
2 – South Coast (Coos Bay, North Bend)	15
3 – Portland Metro	1,616
4 – Mid-Willamette Valley (Salem, Dallas)	203
5 – Southern Willamette (Eugene, Corvallis, Albany)	161
6 – Southern (Medford, Roseburg, Grants Pass)	145
7 – Columbia Basin (Hood River, The Dalles)	16
8 – Central (Bend, Redmond, Prineville)	173
9 – Klamath Basin (Klamath Falls, Lakeview)	9
10 – Northeastern Oregon (Pendleton, LaGrande)	27
11 – Eastern Oregon (Baker City, Ontario, Vale)	14
Total	2,425



## **Appendix 3 – NW Natural Washington**

### **Quarter One 2009-2010 NW Natural Washington Pilot Report to NW Natural**

This Energy Trust quarterly report covers the period 10/1/09 through 12/31/09, the first quarter of the NW Natural Washington Pilot program year. This report addresses progress toward goals for the pilot year of the NW Natural energy efficiency program in Washington. It includes information on revenue and expenditures, number of completed projects and incentives paid during the quarter, along with highlights of program activity.

#### **I. QUARTERLY HIGHLIGHTS**

##### **1. General**

- First quarter activities aimed to lay the foundation for steady growth of gas savings by creating awareness of services and incentives.
- New Washington-based trade allies were enrolled and trained, for a total of 68 Washington-based contractors.
- Through advertising and story placement, local media outlets helped promote Home Energy Reviews and cash incentives available to upgrade homes and businesses.
- Contact was made with SW Washington utilities and governments regarding collaboration with the pilot and utilizing the incentives available.
- In collaboration with Clark Public Utility District (PUD), Clark County and the City of Vancouver, Energy Trust began working to leverage American Recovery and Reinvestment Act 2009 (ARRA) funds, specifically targeting the Hazel Dell and Fourth Plain neighborhoods. This collaboration will lead to cooperative initiatives and outreach promoting energy efficiency programs across SW Washington in quarter two of the program year and beyond.

##### **2. Commercial Efficiency Programs**

- First quarter activities focused on outreach and project identification at a time when businesses are building budgets for the coming year. While no incentives were paid out during the first quarter, Energy Trust ramped up its outreach to trade allies, equipment dealers and distributors, and key customer accounts, readying for delivery of projects in second quarter.
- Historical trends show business customers and K-12 schools are more likely to retrofit heating equipment in the spring and summer months when they can shut down boilers without disrupting business. Experience of energy efficiency programs locally and nationally support a forecast of realizing most savings in the third and fourth quarter of the program year.
- The program has met with enthusiastic response from the foodservice sector, K-12 schools planning to replace old boiler systems, and larger commercial customers including local government offices and healthcare market sectors. This interest is expected to generate projects in the third and fourth quarters of the program year.
- Commercial customers of NW Natural in SW Washington received an informational bill insert in October at program launch. Most customer communications following the bill insert have

taken place directly with the potential participants leading to collaboration between Energy Trust and customers in planning future projects.

### **3. Residential Efficiency Programs**

- First quarter has seen steady growth in Home Energy Reviews (HER) and measure installs. Residential sector activity is on a path to exceed expectations for number of projects completed by the end of the pilot year or sooner.
- 56 residential customers received Home Energy Reviews in the first quarter, with none of the participants implementing an incentivized measure resulting from a Home Energy Review in the quarter. Traditionally 30 percent of Home Energy Reviews result in implementation of an incentivized measure within 24 months of the review.
- Residential customers of NW Natural in SW Washington received a bill insert in their November billing statements. In November representatives from NW Natural and Energy Trust represented the pilot on the Handy Randy Radio Show on a local radio station. All of these efforts have led to an increase in overall pilot visibility and participation.
- Residential offerings are limited to existing homes until the new construction market conditions improve. A new construction program will be offered when Clark County has two consecutive quarters with more than 200 new home starts. During the first quarter of the program Clark County had 205 new home starts. If new home starts continue at this pace, we will be implementing new offerings for this sector during the third quarter.

### **4. Trade Ally Network**

- The Trade Ally Network in SW Washington has seen promising growth. Of the 129 trade allies that enrolled and began serving SW Washington customers, 68 are based in Washington and the program is continuing to enroll new Washington-based trade allies.
- Energy Trust recruited and trained new trade allies that are serving the Washington marketplace, contacting prospective participants and enrolling new projects. A particular focus on plumbing contractors aims to support installation of high efficiency tankless and condensing tank hot water heaters primarily for small business customers.
- There has been rapid growth in the number of trade allies committed to serving Washington customers. A drive to add trade allies in SW Washington is focused on weatherization and water heating contractors that serve residential customers.

### **5. Revenues and Expenditures**

- \$456,000 in public purpose and incremental revenues were received during the quarter, with expenditures of \$53,000.
- A total of \$18,000 in incentives was paid during the quarter.

### **6. W-UTC Performance Metrics**

The table below compares the first year goals, as established in NW Natural's Energy Efficiency Plan, with first quarter results;

First Year Goals	First Quarter Results
97,500 – 130,000 therms saved	7,811 therms saved
\$780,000 to \$1, 040,000 total program costs	\$52,571 spend by end of first quarter
Average levelized cost per measure not to exceed \$0.65	\$0.48 average levelized cost per measure
Spend less than \$8 per therm saved	Average cost per therm saved is \$6
At least 60 percent of dollars spent are paid out in incentives	42 percent*
Total Resource Cost (TRC) and Utility Costs (UC) at portfolio level are greater than 1.0	Reported Annually

\*Percent of incentives is calculated using the adjusted program expenditures, where total program expenditures are adjusted down by 15% to account for costs that a utility delivered program would be recovering through base rates.

Additional information that further explains progress toward the year-end metrics is provided in the tables included in sections II and III.

**II. QUARTERLY RESULTS**

**1. Revenues**

Source	Actual revenues received Q1	Budgeted revenues Q1
NWN WA	\$455,566	\$200,000

**2. Expenditures**

Type	Actual Expenditures Q1	Budgeted Expenditures Q1
Programs	\$50,581	\$182,279
Administration	\$1,990	\$6,550
<b>Total</b>	<b>\$52,571</b>	<b>\$188,829</b>

**3. Incentives paid**

	Q1	Q2	Q3	Q4	Total
<b>NWN WA</b>	\$18,950	\$0	\$0	\$0	\$18,950

Program	Total Program Expenditures	Adjusted Program Expenditures*	Incentives	% Incentives
<b>Total</b>	<b>\$52,571</b>	<b>\$44,685</b>	<b>\$18,950</b>	<b>42%</b>

\*Percent of incentives is calculated using the adjusted program expenditures, where total program expenditures are adjusted down by 15% to account for costs that a utility delivered program would be recovering through base rates.

**4. Savings and generation**

**Quarterly Table**

Gas Efficiency Savings	NWN WA Therms	Expenses	\$ / Therm	Levelized Cost/Therm
Commercial	0	\$13,056	n/a	n/a
Residential	7,811	\$39,515	\$5.1	36 ¢
Total	7,811	\$52,571	\$6.7	48 ¢

**5. Projects completed this quarter**

	Q1	Q2	Q3	Q4
<b>Commercial projects</b>				
Existing buildings retrofitted	0			
Subtotal Commercial	0			
<b>Residential projects</b>				
Home energy reviews conducted	56			
Single family homes retrofitted	80			
Subtotal Residential	136			
<b>TOTAL ACTIVITY</b>	136			

**III. YEAR TO DATE RESULTS**

**Savings**

	Quarter Savings	Annual Savings Year-to-date	Annual Goal (Conservative)		YTD Levelized Cost	
			Goal	% Achieved YTD	Actual YTD	Action Plan (Conservative)
Gas	7,811 annual therms	7,811 annual therms	97,500 annual therms	8%	48 ¢	65 ¢

**Expenditures**

	Quarter Expenditures	Variance from Quarter Budget		YTD Expenditures	Variance from YTD Budget *		YTD \$/Ann Therm
Gas	\$52,571	\$136,259	72.2%	\$52,571	\$136,259	72.2%	\$6.73

**Variances**

- The variance in expenditures is reflective of typical program ramp up. Incentive payments were limited in Q1 as the focus of the program was to get information into the marketplace, develop relationships with key stakeholders, and initiate planning for future projects. The program expects incentive activity to increase over the next three quarters as the market becomes more informed about the efficiency opportunities and associated incentive offerings.

\* Variance is expressed in total dollars *below* budget, or (total dollars) *above* budget.