# **Energy Trust of Oregon Q1 2011 Report to the Oregon Public Utility Commission**

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#### I. Q1 2011 ACTIVITY AT A GLANCE

#### Residential activity in Q1 2011

New homes	215
New manufactured homes	(27)
Weatherization retrofits	2,490
Single-family site-built	(1,751)
Manufactured or mobile	(739)
Solar electric installations	174
Home Energy Reviews	1,506
TOTAL SITES	4,385
Heating systems	1,136
Water heaters	502
Solar	(20)
High efficiency products	8,797
Washing machines	(4,491)
Dishwashers	(223)
Refrigerators	(4,083)
High efficiency lighting*	253,115
Refrigerators, freezers recycled	4,626
Energy Saver Kits sent	
TOTAL OTHER ACTIVITY	15,061

<sup>\*</sup> Lighting excluded from totals

#### Commercial activity in Q1 2011

High-efficiency new buildings	45
Solar	27
Solar water heating installations	(1)
Solar electric installations	(26)
Retrofits	428
Institution/government	(2)
Lodging	(17)
Multifamily buildings	(72)
Offices	(67)
Restaurants	(37)
Retail	(59)
School/college	(21)
Other commercial	(225)
Studies	76
TOTAL	576

#### Industrial/agricultural activity in Q1 2011

Upgrade projects	100
Studies	31
TOTAL	131

#### Renewable energy activity in Q1 2011

Biopower projects	
Solar electric installations	200
Residential	(174)
Commercial	(26)
Other renewables	4
Wind projects	(4)
Hydro projects	
Geothermal projects	
TOTAL	204

#### Other activity in Q1 2011

Calls	12,024
Website visits	125,750
info@energytrust.org inquiries	424
Customer complaints	6
Trade ally roundtable meetings	4
(attendance)	(200)
News stories in print, broadcast	146

#### II. HIGHLIGHTS OF Q1 ACTIVITIES

#### A. Savings and generation

#### Quarter

- Electric efficiency projects completed during Q1 are expected to save 4.7 average megawatts, about 13 percent of the 2011 electric conservative goal and 11 percent of the 2011 electric stretch goal of 44 average megawatts. Q1 electric savings are down five percent from Q1 2010.1
- Gas efficiency projects completed during Q1 are expected to save 597,966 annual therms<sup>2</sup>, about 14 percent of the 2011 gas conservative goal and 12 percent of the 2011 stretch goal of 5.2 million annual therms. Q1 gas savings are 10 percent below Q1 2010.
- Renewable energy projects completed during Q1 are expected to generate 0.3 average megawatts, about 8 percent of the 2011 renewables conservative goal. Q1 generation is up 11 percent from Q1 2010, reflecting several large solar commercial projects that came on line during the quarter.

#### Cumulative

- Including Q1 2011 results, electric efficiency programs have cumulatively saved 259 average megawatts since March 1, 2002. When savings from self-directed industrial projects are added, the total represents 58 percent of Energy Trust's 2014 goal of 479 average megawatts. This is equivalent to the annual electric consumption of approximately 216,547 average Oregon homes.
- Including Q1 2011 results, cumulative savings of 18.4 million annual therms have been realized since gas programs began in 2003, accounting for 53 percent of the 2014 goal of 34.7 million annual therms. This is equivalent to providing gas heat to approximately 36.246 homes.
- Since March 1, 2002, renewable energy efforts have helped develop projects with generation totaling 103 average megawatts, accounting for 83 percent of the 2014 goal of 124 average megawatts. This is equivalent to powering approximately 80,000 average Oregon homes.

#### B. Revenues and expenditures

- Overall public purpose revenue plus incremental electric revenue from SB 838 totaled \$40.4 million for Q1 2011, approximately three percent above budgeted revenues.
- Energy Trust Q1 expenditures totaled \$23.2 million, of which \$10.0 million or 43 percent was for incentives.
- Q1 electric efficiency expenditures were 17 percent under budget for the quarter, which falls within the normal range of variance and is not unusual for Q1.
- Q1 gas efficiency expenditures for the quarter were 24 percent under budget for the quarter. Underspending is due to a misleading forecast of expenditure allocations over the year based on outdated historical patterns. Expenditures are expected to accelerate through the remainder of the year to more closely match the annual budget.

<sup>&</sup>lt;sup>1</sup> Comparisons to Q1 2010 savings and generation reflect values modified by the 2011 true-up exercise, which was completed in March 2011. The values may differ from those published in the Q1 2010 report.

The gas savings do not include NW Natural results in Washington. These results are reported in appendix 6.

#### C. Appendices

- Appendix 1 presents results of energy efficiency activities funded by the NW Natural Industrial Demand-side Management Program (see page 11).
- Appendix 2 presents Oregon Public Utility Commission's performance measures for Energy Trust and benefit/cost ratios from Energy Trust's 2010 annual report (see page 12).
- Appendix 3 includes reports from Pacific Power and Portland General Electric on Q1 2011 utility activities supported by SB 838 funding, providing additional support for electric efficiency acquisition beyond amounts collected through the public purpose charge (see page 13).
- Appendix 4 summarizes Northwest Energy Efficiency Alliance Q1 2011 market transformation activities in Portland General Electric and Pacific Power Oregon service territories, funded by Energy Trust (see page 17).
- Appendix 5 shows a geographic distribution of Home Energy Reviews conducted in Q1 2011, and customer satisfaction results from Q4 2010 (see page 20).
- Appendix 6 provides the Q1 2011 report on Energy Trust activities serving NW Natural customers in Washington (see page 21).

#### D. Commercial sector highlights

- Existing Buildings appears to be on target to reach annual electric and gas goals. While
  optimistic about reaching electric goals, New Buildings set an aggressive gas savings
  goal for 2011 and currently is behind plan. To recover, the program is targeting markets
  with high gas savings potential, including restaurants and small commercial buildings,
  while working to maximize gas savings from projects already in progress.
- Both programs continue to focus on working with customers to support long-term energy planning, offering energy efficiency measures that meet the needs of customers of all sizes, and supporting the transition to new energy codes, including the 2010 Oregon Building Code and 2012 federal lighting standards.
- Existing Buildings' pipeline of known projects is stronger than it has been since 2006 for every utility service territory. The program delivery structure is organized to serve more than a dozen vertical industry sectors, including grocery, office, higher education, data centers and big box retail.
- The incentive bonus for T12 to T8 conversions has been continued in order to educate the market and further shape market transformation before federal standards bar manufacture of T-12s after July 2012.
- Energy savings from multifamily retrofits has increased compared to previous years in all
  utility service territories. Outreach and marketing focus on managers and owners of
  properties with 50 units or more, as well as regional distributors of appliances and
  lighting. A custom path has been added for large-scale low-income and affordable
  housing projects.
- Having focused in 2010 on building a robust pipeline, New Buildings is beginning to see results, primarily in project commitments for completion later in the year. The program enrolled 106 projects in Q1, more than its one-per-day goal.
- The 2010 Oregon Energy Efficiency Specialty Code, in effect since Q3 2010, increases baseline efficiency requirements by approximately 15 percent, with an 11 percent increase in the electric baseline. New Buildings projects permitted under the 2010 code

are enrolling and may account for about 20 percent of 2011 program savings. Due to the code change, Energy Trust also will claim some savings from market transformation.

#### E. Industry and agricultural sector highlights

- The Production Efficiency program appears to be on target to achieve its electric stretch goal. Natural gas savings improved over 2010 and will need more activity to reach stretch goals.
- The NW Natural industrial demand-side management pilot ended in February with a determination that Energy Trust had achieved significant and highly cost-effective gas savings from eligible customers on firm and interruptible rate schedules. Under a new contract with NW Natural, these customers will continue to be served through Energy Trust's standard industrial and commercial programs. With this addition, essentially all NW Natural customers in Oregon are eligible for Energy Trust incentives excepting large users who purchase natural gas from a third party supplier.
- New industrial custom gas incentives that took effect on January 1, 2011, include an increase from \$1/therm to \$1.50/therm for first-year savings acquired.
- Energy Trust rolled out a suite of enhanced technical services in February 2011. The services focus on strategic energy management, equipment upgrades and operations improvement, such as coaching for refrigeration operators, retro-commissioning of HVAC systems, boiler tune-ups and more.
- The 2011 90x90 offer launched in March, with final enrollments required by June 30. The
  offer pays up to 90 percent of costs for projects enrolled within 90 days of receiving
  Energy Trust's recommendation.

#### F. Residential sector highlights

- Residential programs' Q1 2011 progress toward annual conservative electric goals is on par with Q1 2010. Existing Homes gas savings for Q1 2011 lag behind Q1, when savings from gas furnaces installed late in 2009 continued to be logged. Both programs—Existing Homes and New Homes and Products—expect to meet 2011 annual goals.
- Gas hearths were the third largest Existing Homes therm-savings measure in Q1, next to ceiling and floor insulation. The 295 hearths installed represented 12 percent of therm savings for the quarter and exceeded, by six hearths, the number installed during all of 2010.
- Q1 electric savings from retrofits of existing mobile homes have increased by 1.35 average megawatts, or 265 percent, compared to Q1 2010, reflecting a shift to a more targeted focus within this market.
- During Q1 New Homes helped 135 Oregon homes—10 percent of all homes constructed during the quarter—meet Northwest ENERGY STAR<sup>®</sup> standards and obtain an Energy Performance Score (EPS). The quarterly total represents 15 percent of the program's annual stretch goal for EPS homes. An increase in incentive amount paid per home suggests builders are increasing the level of efficiency in program homes compared to 2010.
- New Homes also offers incentives for high efficiency measures in new homes that do not incorporate the full package required to meet ENERGY STAR standards and obtain an EPS. First quarter savings from these measures equals 36 percent of the annual stretch goal, principally in the PGE and NW Natural service territories.

- Energy savings associated with web applications for products incentives increased by 88 percent over Q1 2010—3,536 web applications in Q1 2011 compared to 1,878 in Q1 2010.
- Annual retail lighting sales for 2011 are forecast to exceed stretch goals by 3.5 million kilowatt hours, primarily as a result of an expanded mix of retailers.
- With more intensive marketing, the products program is starting to see an increase in electric savings from rural markets.
- New Homes program outreach staff and verifiers were trained on construction standards homebuilders must meet to be eligible for Energy Trust's solar-ready homes incentive.
- The first round of Personal Energy Reports was sent through OPower to 60,000 PGE and NW Natural customers beginning January 26, 2011. Fewer than 100 customers opted out. The second mailing is scheduled for May.
- This year's Better Living Show, March 25-27, attracted 16,000 attendees, compared to 15,000 in 2010. For the first time Energy Trust tracked volunteer interactions with attendees and documented over 1,000 consumer conversations about Energy Trust residential incentives and services. The Energy Trust booth housed interactive displays on specialty lighting, weatherization, solar, refrigerator recycling, and a video on the Energy Performance Score for new homes. Displays will be reused at other events.
- Clean Energy Works Oregon began accepting applications via its new website, <u>www.cleanenergyworksoregon.org</u>, on March 15 and received over 600 applications in the first two weeks. Meanwhile the Portland pilot had completed 492 homes by the end of March, with an additional 186 homes in process. Originally planned for 500 homes, the pilot remained open while Clean Energy Works Oregon prepared for its broader launch.

#### G. Renewable energy highlights

- Renewable energy programs remain hopeful regarding 2011 year-end conservative goals. Uncertainty over the Oregon Business Energy Tax Credit continues to cause project cancellations and delays.
- Energy Trust entered into a memorandum of understanding with Oregon Department of Energy, Oregon Department of Forestry and Business Oregon to support the state's Forest Products Energy Project, which provides development assistance to help forest products companies utilize biomass energy. Energy Trust recruits projects and provides technical assistance for both efficiency and renewable energy solutions.
- Energy Trust collaborated with Bonneville Environmental Foundation and several other
  organizations to commission a white paper by The Climate Trust, "Growing Oregon's
  Biogas Industry: A Review of Oregon's Biogas Potential and Benefits." The paper
  articulates the benefits of developing a biogas industry in Oregon, identifies barriers to
  development and recommends policies to accelerate industry development.
- The Biopower program is negotiating a funding agreement for a wastewater methane generator and is engaged with several other projects for 2011.
- At the request of Deschutes County, staff provided testimony to the planning commission recommending modifications to make the county's small wind ordinance more supportive of wind development.
- The small wind incentive application form was revised to incorporate a new methodology for calculating wind speed and energy output and a drop-down list of eligible systems

- and incentive calculations. The changes improve accuracy of data and make completion easier and faster for users.
- Staff created new, more extensive application forms for hydro, geothermal, and community wind projects to help staff compare project opportunities across technologies.
- A feasibility study for a proposed hydroelectric project located on the North Unit Irrigation
  District main canal in Madras was completed. The project appears feasible and
  proponents are exploring next steps.
- Four small wind projects in PGE service territory, totaling 75 kW capacity, were completed and began generation.
- Alternative financing options for residential solar electric, including leases and power purchase agreements, have surfaced in the Oregon market and are being supported by the Solar Electric program.
- Solar Beaverton launched a community bulk-purchase initiative for solar energy systems, and Pendleton launched a second phase of its Solarize initiative with city-funded zerointerest loans.
- A ribbon-cutting ceremony celebrated completion of the 92 kW solar electric system at Cherrywood Village Retirement Community in Portland.

#### III. TABLES

#### A. Revenues

Source	Q1	1 Actual Revenues Received	Q1 Budgeted Revenues
Portland General Electric	\$	10,211,374	\$ 10,187,316
PGE Incremental	\$	8,139,213	\$ 7,975,042
Pacific Power	\$	6,638,814	\$ 6,686,696
PAC Incremental	\$	6,369,353	\$ 5,699,647
Cascade Natural Gas	\$	359,864	\$ 593,265
NW Natural	\$	8,418,708	\$ 7,715,940
NW Natural Industrial DSM	\$	291,670	\$ 399,399
Total	\$	40,428,996	\$ 39,257,306

#### B. Expenditures

Туре	Q1 Actual Expenditures			Q1 Budgeted Expenditures
Energy Efficiency Programs	\$	19,209,946	\$	23,542,335
Renewable Energy Programs	\$	3,016,150	\$	5,132,322
Administration	\$	952,972	\$	1,330,266
Total	\$	23,179,069	\$	30,004,922

#### C. Incentives paid

		Energy E	le Energy				
Quarter	PGE	Pacific Power	NW Natural	Cascade Natural Gas	Pacific PGE Power		Total
Q1	\$ 3,073,777	\$ 2,737,905	\$ 1,540,658	\$ 140,451	\$ 1,991,309	\$ 479,574	\$ 9,963,675
Q2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Q3	\$	\$ -	\$	\$	\$	\$ -	\$ -
Q4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 3,073,777	\$ 2,737,905	\$ 1,540,658	\$ 140,451	\$ 1,991,309	\$ 479,574	\$ 9,963,675

#### D. Savings and generation

Electric Efficiency Savings	PGE aMW	Pacific Power aMW	Total Savings aMW	Expenses
Commercial	0.7	0.8	1.5	\$ 4,906,333
Industrial	0.4	0.4	0.7	\$ 3,484,708
Residential	1.4	1.1	2.5	\$ 7,518,432
Total Electric Efficiency Programs	2.4	2.3	4.7	\$ 15,909,473

Gas Efficiency Savings	NW Natural therms	Cascade Natural Gas therms	Total Savings therms	Expenses
Commercial	130,318	15,943	146,261	\$ 1,323,261
Industrial	88,895	4,391	93,286	\$ 279,229
Residential	322,506	35,913	358,419	\$ 2,521,634
Total Gas Efficiency Programs	541,719	56,247	597,966	\$ 4,124,124

Renewable Energy Generation	PGE aMW	Pacific Power aMW	Total Savings aMW	Expenses
Biopower	0.0	0.0	0.0	\$ 114,524
Other Renewable Programs	0.0	0.0	0.0	\$ 415,315
Solar Electric Program	0.2	0.1	0.3	\$ 2,615,633
Total Renewable Programs	0.2	0.1	0.3	\$ 3,145,472

#### E. Progress toward goals by utility

		YTD	Energy Trust Annual Stretch Goal		Annual IRP Goal		
	Q1 Savings	Savings	Goal	% Achieved YTD	Goal	% Achieved YTD	
Portland General Electric	2.4 aMW	2.4 aMW	29.2 aMW	8%	31.3 aMW	8%	
Pacific Power	2.3 aMW	2.3 aMW	15.2 aMW	15%	15.3 aMW	15%	
NW Natural	541,719 annual therms	541,719 annual therms	4,702,348 annual therms	12%	3,537,116 annual therms	15%	
Cascade Natural Gas	56,247 annual therms	56,247 annual therms	477,791 annual therms	12%	391,754 annual therms	14%	

#### F. Incremental utility SB 838 expenditures

Utility	Q1 2011 SB 838 expenditures
Portland General Electric	\$ 119,551
Pacific Power	\$ 77,327
Total	\$ 196,878

<sup>\*</sup> 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 NW NATURAL INDUSTRIAL DEMAND-SIDE MANAGEMENT PROGRAM RESULTS

Table 1. 2011 Q1 savings and expenditures

	Q1 annual therms saved	Q1	expenditures	YTD annual therms saved	YTD	expenditures
Existing Buildings	0	\$	16,327	0	\$	16,327
Production Efficiency	1,996	\$	144,700	1,996	\$	144,700
Total	1,996	\$	161,027	1,996	\$	161,027

#### Appendix 2 OPUC PERFORMANCE MEASURES AND 2010 BENEFIT/COST RATIOS

#### **OPUC** performance measures

Following are the most recent performance measures established by OPUC for Energy Trust. Comparison of 2011 performance against these measures, or revised measures developed by OPUC, will be reported in the 2011 annual report.

Category	Measures
Energy Efficiency	Obtain at least 31 aMW computed on a three-year rolling average
	<ul> <li>Levelized cost not to exceed 3.5 cents/kWh</li> </ul>
Natural Gas	<ul> <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> <li>Achieve at least 3 aMW from small-scale projects, computed on a three-year rolling average</li> </ul>
Financial Integrity	Receive an unqualified financial opinion from an independent auditor on annual financial statements
Administrative/Program Support Costs	Keep below 11 percent of annual revenue
Customer Satisfaction	Demonstrate reasonable rates
Benefit/Cost Ratios	Report both utility system and societal perspective on an annual basis
Incremental Electric Efficiency Funding	<ul> <li>Report annually energy savings achieved as a result of SB 838</li> </ul>

Benefit/cost ratios for 2010 (will be updated for 2011 in the 2011 annual report)<sup>3</sup>

Program	Combined Utility System Benefit/Cost Ratio	Combined Societal Benefit/Cost Ratio
New Homes and Products	2.1	2.1
Existing Homes	2.6	2.8
Existing Buildings	3.8	2.1
New Buildings	3.8	2.8
Production Efficiency	4.1	2.8
NW Energy Efficiency Alliance	4.7	1.6

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<sup>&</sup>lt;sup>3</sup> By law, Oregon public purpose funds may be invested only in cost-effective energy-efficiency measures—that is, efficiency measures must cost less than acquiring the energy from conventional sources.

#### Appendix 3 Q1 2011 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.

 Pacific Power SB 838 Energy Efficiency Activities and Results Q1 2011 (for submission with Energy Trust Quarterly Report)

#### SB 838 General

- Pacific Power's Energy Trust liaison participated in the Oregon Public Utility Commission's start up process to review the current performance measures for the Energy Trust of Oregon.
- Pacific Power's Energy Trust liaison lead and coordinated significant efforts throughout the
  first quarter of 2011 on continued EEAST implementation. This included several meetings at
  the Oregon Public Utility Commission as well as with other utilities. Work included Pacific
  Power position and comments preparation for the OPUC's public meeting on EEAST pilot
  continuation and position and comments preparation for the OPUC's stakeholder workshop
  on EEAST statutory language recommendations.
- Pacific Power's Energy Trust liaison attended the Utility Stakeholder meetings.

#### SB838 Commercial efficiency programs

- Pacific Power's Energy Trust liaison participated in reviewing the Energy Trust 2011 communications plan for commercial customers.
- Pacific Power's Energy Trust liaison continued the final stages of coordinating efforts for a new series of nine small to mid-size commercial energy efficiency conferences in Albany, Astoria, Cottage Grove, Coos Bay, Grants Pass, Klamath Falls, Medford, Pendleton, and Roseburg, Oregon. Pacific Power is collaborating with Energy Trust, Oregon Department of Energy, Oregon Main Street, and USDA. The conferences are located in Oregon Main Street communities and will focus on lighting and rooftop tune-up opportunities offered by Energy Trust as well as no cost/low cost alternatives. Sessions are scheduled for the last week in May.
- Pacific Power's Energy Trust liaison kicked off an additional coordinating effort to offer indepth energy efficiency training opportunities to public buildings and K-12 schools throughout Oregon. Pacific Power is collaborating with Energy Trust and Oregon Department of Energy. These sessions will be offered as a "Summer School" throughout August in six locations around Oregon.
- The winter edition of Energy Insights included two articles focusing on energy efficiency for non-residential customers. The first article highlighted a refrigeration controls project that is expected to save 452,412 kilowatt-hours of energy per year or \$22,675 in annual utility costs. Energy Trust provided an incentive of \$73,241 towards the total project cost of \$149,013. A second article focused on 'Green' tech to help reduce energy use including network-based power management software enables administrators to remotely enforce power-off policies. Customers were pointed to Energy Trust for available incentives prior to purchasing software.

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.

#### SB 838 Residential efficiency programs

- Pacific Power's Energy Trust liaison participated in reviewing the Energy Trust 2011 communications plan for residential customers.
- A bill insert was sent to all Oregon residential customers highlighting Energy Trust's \$150 Home Comfort Bonus when customers seal air leaks and insulate attics, walls and floors.
- 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.
- The January/February Voices residential newsletter featured an article on Energy Trust's free Niagara showerhead offer. The article focused on save up to 2,300 gallons of water a year and reduce water heating costs –by switching to new, efficient 1.75 gpm showerheads.
- The March Voices residential newsletter featured an article on Energy Trust's \$50 incentive for their refrigerator recycling program.

#### Portland General Electric SB 838 Energy Efficiency Activities and Results Q1 2011 (for submission with Energy Trust Quarterly Report)

#### Residential

PGE's residential customer newsletter, Update, is sent monthly to 625,000 customers in their PGE bills. January's edition featured a Marathon water heater promotion and mentioned Energy Trust incentives. February's edition featured Energy Trust's Existing Homes program incentives, and a back cover story on Kill A Watt® energy monitors provided by the Energy Trust. The March edition of Update featured the Energy Trust's appliance incentives.

In January, PGE bills also contained an insert for Marathon water heaters. February's bill featured a brochure summarizing all Energy Trust residential programs.

PGE's residential e-newsletter, Home Connection, is sent monthly to about 280,000 customers. In January, Home Connection featured instructions on how customers can turn down their water heaters to save energy. In February, Home Connection featured Marathon water heaters and the Energy Trust's Refrigerator Recycling program. In March, Home Connection featured energy-smart shopping tips for appliances and mentioned appliance incentives provided by the Energy Trust. 2,284 customers clicked on the March Home Connection Appliances story for more information

PGE is participating with Energy Trust and Northwest Natural in an OPower pilot. The inaugural Personal Energy Reports accompanied by an introductory letter were mailed in January. Unfortunately, a glitch in the file provided by NW Natural caused a small number of reports to be mailed to the incorrect recipient. PGE worked collaboratively with all parties to find a resolution.

#### Measurable Results

- 3,202 PGE customers have participated in the Energy Trust's Refrigerator Recycling program in the first quarter of 2011
- 79 PGE customers have participated in the Marathon water heater promotion
- 255 free showerheads have been installed by PGE's plumber network when on residential jobs in PGE's service territory.
- ETO Transfers: Appliance Program (PECI): 65, Warm Program (CSG): 152, OPower: 38

#### SB838 Commercial Energy Efficiency Outreach

Key Objectives	Results 01/01/2011 to 03/31/2011
Increased Awareness of Energy Trust	34
Programs - Outreach Presentations and	
Networking	
Increased Participation-Qualified Leads	98
delivered to Energy Trust	
Increased Awareness of Energy Trust	1236
Programs-Number of Customers Contacted by	
Phone	
Email	
<ul> <li>On-site Consultations</li> </ul>	
<ul> <li>Outreach Presentations</li> </ul>	

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

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

**Keizer Greeters** 

Tigard Chamber

Yamhill Economic Development, McMinnville

Woodburn Chamber Greeter

Sandy Chamber

Yamhill Economic Development, Newberg

Wilsonville Chamber

Woodburn Economic Forum

**SEDCOR** 

**Chehalem Greeters** 

**Good Morning Damascus** 

Salem Chamber Business Women's Group

PBA Forum

Art Institute of Portland

Chemeketa Small Business Owners

Go Downtown, Salem Association

Clackamas County

Molalla Chamber

Salem Chamber

Oregon City, State of the City

Happy Valley Business Alliance

Keizer Sustainability Summit

Tualatin Valley Water District

Oregon Department of Transportation Training Center

Hillsboro/Beaverton Business Connection

Salem Commercial Brokerage-Coldwell Banker

Westside Economic Alliance

Metropolitan Business Association

**Tualatin Chamber** 

#### Appendix 4 NEEA Q1 2011 SUMMARY REPORT FOR ENERGY TRUST OF OREGON



# **NEEA Quarterly Performance Report for Energy Trust of Oregon**

First Quarter 2011

#### Major shifts in programs

 NEEA's New Construction initiative is no longer a distinct, fully-funded initiative as a result of the redesign of NEEA's commercial sector. However NEEA will provide modest support through the University of Oregon Energy Studies in Buildings Laboratory (ESBL) contract to projects that meet 2030 Challenge targets or aim for Net-Zero. ESBL continues to provide limited technical assistance to several New Construction projects.

#### **New initiatives**

- NEEA Regional Portfolio Advisory Committee (RPAC) approved NEEA's Commercial Lighting Solutions initiative concept. NEEA staff met with Energy Trust lighting trade allies to introduce the proposed comprehensive retrofit approach and is working with Energy Trust program, evaluation and planning staff to develop comprehensive lighting initiative pilot criteria, trainings, incentives and targets.
- RPAC approved NEEA's Existing Building Renewal initiative concept. Staff have defined the main elements of the initiative and drafted a "logic model." The initiative will significantly benefit customers within Energy Trust's service territory by offering a roadmap and integrated technical packages with the potential to result in 35% increased efficiency. NEEA is evaluating multiple approaches to shorten timelines and reduce costs of deep energy renovations for large and for mainstream office markets. Initiative leads are also investigating use of a tool from the New Buildings Institute to conduct preliminary assessments of candidates for deep energy renovations.
- Collaborated with Rocky Mountain Institute on a market financial strategies workshop; with Pacific Northwest National Labs on development of Advanced Energy Guides for Existing Offices; and with New Buildings Institute on a survey and case studies of deep energy renovation.
- **NEEA Agriculture initiative will begin in Q2.** NEEA has initiated a market characterization study and completed milestone documentation to ensure intervention strategies and outcomes complement stakeholder plans. This will benefit rural areas of Energy Trust territory.
- Facilitating work of the Regional Marketing Coordinating Council to develop common messaging and a marketing toolkit for utilities in the region to adopt, as appropriate.
- Initiated work on a Regional Coordination Potential Assessment to define and prioritize specific opportunities for regional collaboration.

#### **Innovation**

- Collaborated with Energy Trust to create and deliver energy code training curricula for commercial contractors (as opposed to architects and engineers). This audience is responsible for meeting many code requirements in small- and medium-sized buildings in Oregon and has been historically underserved with code training. NEEA supported delivery of three trainings with more scheduled.
- Participating in four commercial and two residential federal standards rulemakings.
- Oregon Reach Code Committee completed Oregon's first commercial "reach" code. The Oregon Building Codes Board will hear the code May 11. NEEA staff is participating in development of a residential reach code.
- Carbon4Square competition exceeded NEEA's recruitment target by 70%, with 85 commercial
  properties registered. Initiated by NEEA and presented by Building Owners and Managers
  Association Portland with additional partners, this first-time Portland competition will successfully
  incent commercial real estate building owners and managers to increase energy efficiency of
  operations through a friendly challenge similar to the successful "Kilowatt Crackdown" competitions.
- Collaborating with Energy Trust to launch a Commercial Lighting Solutions pilot in Q2 with top lighting trade allies. The pilot will provide intensive training within office and retail market projects within Energy Trust services areas.
- Sponsored the innovative American Institute of Architects +2030 Professional Series launched by AIA Portland in January and created by AIA Seattle. NEEA was a founding partner in development of the series.
- In close partnership with Energy Trust, engaged the Oregon Manufacturing Extension Partnership to integrate Strategic Energy Management into its service offering. NEEA also worked with the Oregon Association of Nurseries to develop its Energy Reduction Roadmap for adoption in Q2, which will become part of a larger sustainability plan to help manage member initiatives statewide over the next decade.
- To further increase consumer awareness of the "super-efficient" televisions, through its consumer electronics initiative, NEEA labeled 3,045 energy-efficient televisions "Most Efficient" and engaged with over 900 sales associates. To date, participating retailers reported ~33% of their TV sales meet or exceed ENERGY STAR version 5. To support consumer awareness in Energy Trust service territory, NEEA tested television PSAs in the Bend and Portland media market.
- Began working with Energy Trust and Earth Advantage on the new ENERGY STAR Homes specification to go into effect in Oregon January, 2012. NEAA has initiated upstream appraiser "roundtables" to develop tactics to assist the home appraisal industry with assessment of energy efficiency features.
- To fill the energy-efficiency "pipeline," NEEA identifies, develops and helps commercialize
  energy-efficient emerging technologies for wider market adoption. NEEA provides a mechanism
  for the region to invest in emerging technologies in a way that minimizes risk to any single funder and
  maximizes potential benefits. Twenty-two NEEA projects are underway with an estimated savings
  potential of 300 aMW by 2030. In Q1, NEEA:
  - Confirmed high performance of cold-climate ductless heat pumps in environments well below zero degrees through field testing—suggesting promising use in Oregon's colder climate zones
  - Completed lab testing of first cold-climate heat pump water heater, which indicated that the
    unit should be capable of both efficient performance and occupant comfort in any installation
    in Oregon and the region.
  - Completed high-performance residential windows market assessment, which shows significant potential for new market transformation effort targeting performance levels approximately 20% higher than current ENERGY STAR products.

- Identified new opportunities in industrial refrigeration and possible new technology opportunities in both dairy and irrigation market segments through an Agricultural Market Assessment.
- Worked with Energy Trust on a demonstration of new lighting control system for commercial buildings that promises significant savings (up to 40%), installable by average electrical contractor.
- Initiated demonstration project for second-generation hybrid, evaporatively-cooled rooftop HVAC units.

#### **Major market trends**

- Increased investment in "quality" office properties. Several of NEEA's market partners, institutional owners, and private investors have begun ramping up investment activity, seeking to purchase Class-A, marquis office buildings. Energy efficiency is increasingly examined as one indicator of "quality." This trend has positive implications for NEEA's market transformation efforts in two ways. First, the due diligence portion of the purchase of a commercial building is an ideal time to insert Strategic Energy Management Plan principles into the building's life cycle and enhance energy performance levels. Second, as more buildings begin to change owners, expectations on energy performance and increased asset value can catalyze further activity in sustainability and energy efficiency in building operations.
- Major shift toward high performance, integrated design as a result of the BetterBricks initiative, according to "NEEA 2010 BetterBricks Market Progress Evaluation Report #5" published by third-party evaluator.
- Growing demand for energy code training. With Oregon Building Codes Division, NEEA delivered
  energy code trainings to design and construction professionals within Energy Trust service territory,
  including those at Consulting Specification Institute and Chemeketa Community College.

Questions or comments? Contact Aaron Cohen, Corporate Communications, (503) 688-5480, <a href="mailto:acohen@neea.org">acohen@neea.org</a>

### Appendix 5 GEOGRAPHIC DISTRIBUTION OF HOME ENERGY REVIEWS; CUSTOMER SATISFACTION

#### 1. Home Energy Reviews in Q1 2011

Service Region	Q1 2011	Q1 2010
1 - North Coast (Astoria)	25	23
2 - South Coast (Coos Bay, North Bend)	7	19
3 - Portland Metro	974	1,066
4 - Mid-Willamette (Salem, Dallas)	159	167
5 - Southern Willamette (Eugene, Corvallis, Albany)	119	98
6 - Southern (Medford, Roseburg, Grants Pass)	75	54
7 - Columbia Basin (Hood River, The Dalles)	6	11
8 - Central (Bend, Redmond, Prineville)	121	85
9 - Klamath Basin (Klamath Falls, Lakeview)	19	11
10 - Northeast (Pendleton, Enterprise)	0*	11
11 - Eastern (Baker City, Ontario, Vale)	0*	3
Total	1,505	1,548

<sup>\*</sup>Thirty-two Home Energy Reviews in region 10 and 10 in region 11 were conducted in Q1 2011 but are being reported in Q2.

#### 2. Customer satisfaction Q4 2010

Energy Trust delivered a short telephone survey to 951 participants in six programs during Q4 2010 in order to measure customer satisfaction. Below are results from this most recent quarterly survey.

Program	Respondent count	Percent satisfied
Existing Buildings and Multifamily (OR only)	88	97%
New Buildings	17	86%
Production Efficiency	61	93%
New Homes and Products (products only for Q4)	207	92%
Existing Homes (OR only)	516	92%
Solar	62	95%

#### Appendix 6 Q1 2011 REPORT FOR NW NATURAL WASHINGTON ACTIVITIES

## **Quarter One 2011 NW Natural Washington Pilot Report to NW Natural**

January 1, 2011 through March 31, 2011

This Energy Trust of Oregon quarterly report covers the period January 1, 2011 through March 31, 2011. This report addresses progress toward 2011 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, along with highlights of program activity.

#### I. QUARTERLY HIGHLIGHTS

#### A. General

- Q1 performance was consistent with Q1 of the pilot year, bringing in 10,100 annual therms saved in Existing Homes, 3,600 annual therms saved in New Homes and 2,428 annual therms saved in Existing Buildings, with the existing buildings pipeline at 30,000 therms at the end of Q1.
- All programs achieved 100 percent quality compliance on incentive processing, which is a measure of customer service, documentation processing and timeliness of incentive disbursements.

#### **B.** Commercial Efficiency Programs

- Commercial projects completed in Q1 resulted in 2,428 annual therms saved. Projects are expected to ramp up in Q2, as the heating season concludes, consistent with 2010 program performance.
- The Q1 strategy focused heavily on outreach to Washington-based trade allies and fostering relationships with various retirement communities and hospitals to build the project pipeline, which was approximately 30,000 therms at the conclusion of Q1.
- At the beginning of Q1, the program launched a custom track incentive to attract projects not served by the regular prescriptive offerings. The custom program will be closely monitored and adjusted, as needed, to ensure the intended effectiveness.
- An ozone laundry system webinar offered during Q1 experienced sold-out attendance.
   Attendees included managers of nursing homes, hotels and fitness centers. The program will track how this event translates into project implementation later in 2011.

#### C. Residential Efficiency Programs

#### Existing Homes

- Eighty-three Home Energy Reviews were completed during Q1. The 10,100 annual therms saved exceeded the forecast by more than 25 percent.
- Since the program began, 14 residential participants installed at least one weatherization or equipment measure as a result of having a Home Energy Review; eight of those participants finished their projects during Q1. On average, 33 percent of Oregon homes receiving a Home Energy Review implement an incentivized measure (gas and/or electric) within 24 months.

- Therm savings have been proportionately driven through HVAC, hot water and weatherization measures during Q1. Within these product classes, gas furnaces, showerheads and ceiling insulation measures have contributed 60 percent of total year-todate savings.
- The program hired a new, dedicated regional representative to engage more effectively with the SW Washington community in trade ally recruitment and collaboration with key partners, including Clark PUD, Clark County and other members of the Clark County Energy Efficiency Services Group.
- The program continued planning the Q2 rollout of the pilot Duct Repair & Sealing prescriptive
  incentive, to match the successful ongoing Oregon pilot. The pilot hopes to increase trade
  ally participation by obviating the need for costly diagnostic equipment and is also expected
  to help leverage additional gas weatherization savings.

#### New Homes

- Forty new homes meeting Northwest ENERGY STAR<sup>®</sup> standards were completed in Q1; this
  individual measure is on pace to exceed its conservative goal.
- While tankless hot water heaters did not achieve expected therm savings in Q1, the program
  is continuing to work with water heater distributors in the area to educate them about the
  offered incentives, as well as investigating the possibility of dealers providing a matching
  incentive.

#### D. Trade Ally Network

- Of the 138 trade allies serving Washington, 46 are Washington-based trade allies. The two
  most recent trade ally roundtable sessions were held near the Portland International Airport
  to accommodate SW Washington trade allies. The upcoming Q2 roundtables will feature a
  separate break-out session for Washington-based contractors.
- Fourteen Home Performance contractors work in Washington; two of which have offices in Vancouver. They conduct more in-depth energy audits of homes, resulting in increased measure suggestions from the contractor.

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

The table below compares 2011 program goals, as established in NW Natural's Energy Efficiency Plan for Washington (updated December 2010) with quarterly results.

Metrics	Goal	Total	Q1 Results	Q2 Results	Q3 Results	Q4 Results
Therms Saved	159,000-187,000		16,128			
Total Program Costs	\$1,212,000 – \$1,380,616		\$251,312			
Average Levelized Cost Per Measure	Not to Exceed \$0.65		\$.785			
Dollars Spent Per Therm Saved	Less Than \$7		\$11.88			
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 further explains progress toward the year-end metrics is provided in section III.

#### **II. QUARTERLY RESULTS**

#### A. Expenditures

	Actual expenditures Q1	Budgeted expenditures Q1	Variance
Existing Buildings	\$ 64,664	\$ 81,518	\$ 16,854
Existing Homes	\$ 81,095	\$ 135,267	\$ 54,172
New Homes	\$ 45,861	\$ 52,117	\$ 6,256
TOTAL	\$ 191,619	\$ 268,901	\$ 77,282

With the hiring of the full-time Existing Homes regional representative, actual expenditures will significantly increase in future quarters. The favorable variances here also can be attributed to timing and will reduce in future quarters.

#### B. Incentives paid

	Actual Incentives Q1
Existing Buildings	\$ 4,140
Existing Homes	\$ 31,553
New Homes	\$ 24,000
TOTAL	\$ 59,693

The project pipeline in the Existing Buildings program is expected to produce many completed projects as the heating season concludes in Q2. As therm savings and incentive payouts significantly increase, the related \$/therm and levelized cost metrics below will be trued up.

#### C. Savings

	Therms saved Q1	\$/therm		Levelized Cost/therm
Existing Buildings	2,428	\$	26.63	154.2¢
Existing Homes	10,100	\$	8.03	57.6 ¢
New Homes	3,600	\$	12.74	79.8 ¢
TOTAL	16,128	\$	11.88	78.5 ¢

#### III. YEAR-TO-DATE RESULTS

#### A. Activity

	Q1	Q2	Q3	Q4
Existing Commercial	1			
School/college retrofits				
Other commercial retrofits	(1)			
Studies				
Existing Homes	137			
Weatherization (insulation, air- and duct-sealing)	(3)			
Furnaces	(40)			
Water heaters	(11)			
Home Energy Reviews	(83)			
New Homes	40			
TOTAL	178			

#### **B.** Expenditures

	Actual expenditures YTD	Budgeted expenditures YTD	Variance
Existing Buildings	\$ 64,664	\$ 81,518	\$ 16,854
Existing Homes	\$ 81,095	\$ 135,267	\$ 54,172
New Homes	\$ 45,861	\$ 52,117	\$ 6,256
TOTAL	\$ 191,619	\$ 268,901	\$ 77,282

#### C. Incentives paid

	Actual incentives YTD
Existing Buildings	\$ 4,140
Existing Homes	\$ 31,553
New Homes	\$ 24,000
TOTAL	\$ 59,693

#### D. Savings

	Therms saved YTD	Annual Goal (conservative)	% Achieved YTD	\$/therm	Levelized Cost/therm
Existing Buildings	2,428	89,250	3%	\$ 26.63	154.2¢
Existing Homes	10,100	54,106	19%	\$ 8.03	57.6 ¢
New Homes	3,600	15,895	23%	\$ 12.74	79.8¢
TOTAL	16,128	159,251	10%	\$ 11.88	78.5 ¢

#### **APPENDIX**

#### Results from October 1 - December 31, 2010

Energy Trust began providing energy efficiency services to NW Natural customers in Washington on a pilot basis on October 1, 2009. In accordance with the Washington Utility and Transportation Commission's approval of NW Natural's petition for Reconsideration of Order No. 04 in UG-080546, Energy Trust continued administering the program after the pilot period ended on September 30, 2010. Since NW Natural's Energy Efficiency Plan establishes that reporting would be done on a calendar year basis after the pilot period ended, the EEAG agreed that Energy Trust would report results from October 1-December 31, 2010, in its Q1 2011 report. Reporting in 2011 will follow the calendar year cycle.

	Expenditures		Savings	Levelized Cost/therm
Existing Buildings	\$	55,919	8,418	58.9 ¢
Existing Homes	\$	94,408	22,845	29.7 ¢
New Homes	\$	51,059	5,400	59.2 ¢
TOTAL	\$	201,386	36,663	39.8 ¢