

This Energy Trust quarterly report covers the period April 1, 2008 through June 30, 2008, the second quarter of the year (Q2). The report addresses progress toward 2008 and 2012 energy efficiency and renewable energy generation goals and includes corresponding revenue and expenditure information. The number of completed projects and incentives paid during the quarter are included, along with other quarterly activity highlights.

## **I. QUARTERLY HIGHLIGHTS**

### **I. General**

- While the trend for expenditures in energy efficiency programs continues to remain below budget for the quarter, savings forecasts indicate that we will exceed our best case goals in both electric and gas measures for 2008.
- With the opening of Goodnoe Hills, the forecast for the renewable energy programs also show results above best case, with expenditures below plan.
- Electric efficiency projects completed during the quarter are expected to save 6.0 average megawatts—a 40% increase over Q1 and a 25% increase over Q2 2007. The strong quarterly results are all the more remarkable considering overall electric efficiency expenditures for the quarter were 26% under budget. Electric energy savings in the quarter represent 17% of the 2008 year-end best case goal of 36 average megawatts and 22% of the conservative case goal of 27 average megawatts.
- Since March 1, 2002, Energy Trust electric efficiency programs have cumulatively saved 170 average megawatts. When savings from self-directed industrial projects are added, the total represents 63% of Energy Trust's 2012 goal. This is equivalent to the annual electric consumption of about 150,000 average Oregon homes.
- Therm savings for the quarter increased 42% over Q1 and represented a 30% increase over Q2 2007. Gas efficiency projects completed during the quarter are expected to save 559,928 annual therms. Gas expenditures for the second quarter were 2% over budget, a disproportionately small amount considering the savings achieved.
- Gas efficiency programs in the quarter represent 32% of the conservative 2008 goal of 1.7 million annual therms and 24% of the best case goal of 2.3 million annual therms.
- Since gas programs began in 2003, cumulative savings of 7.7 million annual therms have been realized, accounting for 37% of the current 2012 goal. This is equivalent to heating almost 15,000 homes with gas.
- Public purpose revenues were \$18.8 million for the quarter, \$701,241 (4%) more than budgeted. Total quarterly expenditures were \$14.2 million, 65% of budget. Much of the spending variance can be attributed to unexpected delays in several large renewable energy and Production Efficiency projects.
- In the four months since the Corvallis Energy Challenge launched on Mar. 1, 2008, 693 sites have been served—more than double the number served during the same period in 2007. Incentives increased three-fold, electric savings increased six-fold and gas savings increased 1.5 times. These results reflect the 445 Home Energy Reviews, accompanied by direct install of CFLs and water-saving devices, done this year compared to 88 during the same period in 2007. To date there has been no significant increase in measures installed, the ultimate test of the efficacy of the community energy approach.

## 2. Commercial efficiency programs

- During the second quarter, energy efficiency measures were installed in 277 commercial buildings—nearly 100 more than in Q1. The average incentive payment per site was \$4,280. Of the total, 223 buildings received electric efficiency measures, 47 buildings received gas efficiency measures, and 7 buildings saved both gas and electricity.
- A total of 55 highly efficient new commercial buildings were completed this quarter, compared to 78 in Q1 and 48 in Q2 2007. The average incentive payment per site was \$21,574.
- Accomplishments for the New Buildings program are running ahead of performance in 2007: the program achieved 48% of the 2008 conservative electric goal and 62% of the conservative gas goal by end of Q2, compared to 37% and 48%, respectively, in 2007.
- The Existing Buildings program rolled out a target market initiative for auto services, including auto dealers. The effort has been well received by the Oregon Automobile Dealers Association.
- Existing Buildings program staff participated in a meeting convened by US EPA/US DOE on proposed ENERGY STAR<sup>®</sup> specifications for large servers in data centers.
- The Existing Buildings program continues developing new target market initiatives for computing/IT, groceries, municipalities and building operations and maintenance.
- New Buildings incentives were added for Energy and Atmosphere Credit 3: Enhanced Commissioning and Credit 5: Monitoring and Verification under the Leadership in Energy and Environmental Design (LEED) New Construction track.
- Using funding from Energy Trust, the Northwest Energy Efficiency Alliance (NEEA) continued supporting Legacy Health System's efforts to reduce energy use by 30% through a focus on procurement, financial decision making and facility operations.
- NEEA supported a decision by Oregon Health and Sciences University to create an energy management plan to reduce annual consumption by 15%.
- NEEA worked with Lamb's Thriftway supermarket chain in the Portland area to optimize refrigeration systems in three stores, with three more in the queue; and assisted Roth IGA in starting to track energy usage.
- NEEA provided Oregon Integrated Design Lab modeling support to designers working on the new state psychiatric hospital, data analysis for the OHSU South Waterfront Master Plan, and support for several other state, community and K-12 schools.

## 3. Industrial efficiency programs

- Electric energy-saving projects were completed at 92 manufacturing firms—up from 50 in Q1 and 44 in Q2 2007. The average incentive payment per site was approximately \$6,149.
- An RFP for medium to large facility size program delivery contractors for the 2009-2011 period was issued. In September, the board will be asked to approve selected contractors, corresponding budgets and goals.
- Staff participated in the ongoing NW Compressed Air Task Force working group, managing a regionally funded compressed air market assessment for the small system market. The results will be used to guide a regional approach to program and measure design for the <75hp market.
- Outreach efforts were expanded to the NW High Performance Enterprise Consortium, a collaborative member group of lean manufacturing organizations and to agriculture-related organizations including Oregon Dairy Farmers, US Dept of Agriculture, Klamath Soil and Water Conservation District, and National Resources Conservation Service.
- Incentives for custom non lighting projects were increased for industrial facilities and municipal projects such as water and wastewater treatment projects.
- The first 3 day "blitz" pilot program was completed at a Safeway distribution center with a high refrigeration load. Low- and no-cost measures implemented in this first push saved 7% of the energy load. This distribution warehouse will continue to work with our engineering consultants

throughout the next year to maintain savings initiated during the blitz and to implement additional low and no cost measure suggestions identified during the event.

- Using funding from Energy Trust, the Northwest Energy Efficiency Alliance supported Sabroso, an Oregon food processor, in establishing an energy board. The board is planning an energy summit to facilitate sharing best practices among company facilities.
- NEEA supported Georgia Pacific Camas (Pacific Power Oregon customer) in working toward a 10% reduction in energy expenses.

#### 4. Residential efficiency programs

- Energy Trust completed 1,756 Home Energy Reviews during the second quarter, compared to 1,039 in Q1. Through Home Energy Reviews, State Home Oil Weatherization program self-audit fulfillments, retail sales, fundraiser promotions and other activities, 310,796 packages of compact fluorescent light bulbs were provided during the quarter.
- Energy efficient measures were installed in 2,150 single-family homes, 1,876 multifamily units and 310 manufactured homes. The total, 4,336 units, is about even with Q1 activity yet represents a 15% increase over Q2 2007. Of these, 2,664 homes received electric efficiency measures and 1,665 received gas efficiency measures, with 7 sites saving both gas and electricity.
- Energy Trust incentives helped fund the construction of over 231 efficient new homes, compared to 255 in Q1 and 292 in Q2 2007. Of these, 68 have electricity-saving measures, 44 have gas-saving measures (plus CFLs installed at the time of the Home Energy Review), and 119 have both other electricity- and gas-saving measures. Incentives helped purchase 36 electrically-heated and 7 gas-heated new efficient manufactured homes.
- During the second quarter, Energy Trust incentives helped fund the purchase of 5,939 energy efficient clothes washers, more than double the volume in Q1 and a 25% increase over Q2 2007. The washers were installed in 2,808 homes with electric hot water and 3,131 homes with gas hot water.
- Solar water heating systems were installed in 26 homes with electric hot water and 23 homes with gas hot water. This total of 49 exceeded the 32 installed in Q1 and equaled the 48 installed in Q2 2007.
- Conservation Services Group, the program management contractor for the Existing Homes program, exceeded the greatest number of home energy reviews (HERs) completed in a single month twice in Q2 with 600 HERs in April and 603 HERs in June.
- Single family homes received 18% more incentives for insulation measures in Q2 compared to the second quarter of last year, resulting in 27% greater kWh savings and 6% greater therm savings. Also, Pacific Power customers received almost double the amount of incentives compared to the second quarter of last year.
- Existing Homes program launched a solar home energy review pilot of 75 homes in the Portland area with the goal to accelerate consumers' decisions to purchase solar energy systems. In May, 25 solar hot water systems and six solar pool heating systems were processed.
- Existing Homes program selected and entered negotiations with a bank to co-market and offer subsidized loans to help homeowners invest in energy efficiency and solar measures.
- Under New Homes and Products program, contracts, amendments and agreements have been signed with Portland Energy Conservation Inc. (PECI) and JACO Environmental to provide pickup and recycling of refrigerators beginning July 1<sup>st</sup>. Customers will receive a \$30 incentive and free pick-up for recycling old, working refrigerators.
- A new Realtor category was added to the Trade Ally Network. Realtor Trade Allies will be certified by Earth Advantage and receive additional training on Energy Trust program offerings.
- New Homes and Products program is moving forward to integrate an Energy Performance Score feature for new homes into its marketing, program design and incentive structure. The

Energy Performance Score will give residential customers a score for their home based on energy usage, integrating Home Energy Rating System (HERS) technology.

- NEEA provided training to building officials, builders and trades people on the new Oregon residential code.
- NEEA finalized the 2009 Northwest ENERGY STAR Home Builder Option Package (BOP), providing flexibility with four prescriptive paths that build upon the new 2008 Oregon residential building code.
- NEEA created a regional marketing strategy for the Portland/Vancouver market, inviting builders to be partners and emphasizing consumer needs.
- NEEA selected Earth Advantage to conduct Northwest ENERGY STAR Homes realtor training.

## **5. Renewable energy programs**

- 13 commercial solar electric systems were installed in the second quarter, equal to Q1 and exceeding the 10 installed in Q2 2007. In addition, solar electric systems were installed on 48 homes during the quarter—more than double the number in Q1 and exceeding the 43 installed in Q2 2007. Only two other quarters (Q3 and Q4, 2007) topped this number of installations.
- The City of Portland's Columbia Boulevard Waste Water Treatment Plant's 1.7 MW biogas cogeneration project was dedicated at a ribbon cutting event June 19.
- The Open Solicitation program approved an incentive for a 5 kW hydroelectric project for the City of West Linn.
- The Open Solicitation program launched a new initiative to help municipalities in the PGE service territory apply to the State of Oregon's Renewable Energy Feasibility Fund. Five cities submitted applications for studies of hydroelectric projects within their water systems.
- The Open Solicitation program approved cost-share funding for hydro feasibility studies for the City of Gresham and two ranches in Eastern Oregon, provided technical assistance to Oregon Institute of Technology in developing a geothermal electric project proposal, and provided assistance to four private landowners examining the possibility of installing microhydro projects.
- Energy Trust sponsored and participated in the 3rd annual NW Solar Expo, consisting of a sold-out professional training conference and a consumer expo with more than 4,000 in attendance.
- The Solar program presented the Energy Trust Green Future Award to the City of Portland's Office of Sustainable Development (OSD) in recognition of its success increasing the number of solar installations in Portland. In 2007 OSD tracked 110 solar installations, 10 more than its goal of 100.
- The Solar Now! awareness campaign was launched in coordination with Solar Oregon, City of Portland OSD and Oregon Department of Energy, jointly producing a brochure, Web site ([solarnoworegon.org](http://solarnoworegon.org)) and customer service hotline.
- The first incentive in the small wind program has been paid for a 10kW turbine near McMinnville.
- Installation of a small wind turbine at Hood River High School is underway.

## **6. Revenues and expenditures**

- \$18.8 million in public purpose funds were received during the quarter, with expenditures at \$14.2 million.
- A total of \$6.5 million in incentives was paid.

## **7. OPUC performance measures**

- Following are the most recent performance measures established by the Oregon Public Utility Commission for Energy Trust.

Category	Measures
Energy Efficiency	At least 20 aMW computed on 3-year rolling average Levelized cost of not more than two cents per kWh
Natural Gas	700,000 therms computed on 3-year rolling average Levelized cost of not more than 40 cents per annual therm
Renewable Energy	At least 15aMW At least 9 aMW from projects in utility Integrated Resource Plans At least 3 aMW from a variety of small-scale projects Both computed on 3-year rolling average
Financial Integrity	Unqualified financial audit
Administrative & Program Support Costs	Keep below 11% of revenues
Customer Satisfaction	Demonstrate reasonable customer satisfaction rates through program evaluation customer surveys; report complaint statistics
Benefit/Cost Ratios	Compare to ratios from 2006 reported in #8 below

**8. Benefit-cost ratios for 2007 (year-end data)**

Program	Utility system benefit-cost ratio	Societal benefit-cost ratio
1. Existing Homes	2.7	1.5
2. New Homes and Products	2.8	2.6
3. Existing Buildings	4.3	1.4
4. New Buildings	6.4	2.8
5. Production Efficiency	7.7	3.0
6. NW Energy Efficiency Alliance	12	4.0

**II. TABLES**

**I. Revenues**

Source	Actual revenues received Q2	Budgeted revenues Q2
Portland General Electric	\$8,624,918	\$8,630,534
Pacific Power	\$7,155,835	\$6,981,262
NW Natural	\$2,776,239	\$2,283,671
Cascade Natural Gas	\$247,378	\$207,662
Avista	\$0	\$0
Total	\$18,804,370	\$18,103,130

**2. Expenditures**

Type	Actual Expenditures Q2	Budgeted Expenditures Q2
Energy Efficiency programs	\$12,161,411	\$15,651,450
Renewable Energy programs	\$1,398,056	\$5,476,189
Administration	\$672,555	\$826,210
Total	\$14,232,022	\$21,953,849

**3. Incentives Paid**

Quarter	Energy Efficiency				Renewable Energy		Total	
	PGE	Pacific Power	NW Natural	Cascade Natural Gas	Avista	PGE		Pacific Power
Q1	\$1,451,477	\$1,024,918	\$1,190,165	\$52,291	\$7,253	\$177,071	\$150,094	\$4,053,269
Q2	\$2,646,973	\$1,544,148	\$1,430,709	\$69,591	\$12,407	\$267,066	\$495,270	\$6,466,164
Q3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Q4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$4,098,450	\$2,569,066	\$2,620,874	\$121,882	\$19,660	\$444,137	\$645,364	\$10,519,433

**4. Savings and Generation**

**Electric efficiency savings.** In the second quarter of 2008, energy efficiency programs saved 6.0 average megawatts, representing 17% of the 2008 year-end best case goal of 36 average megawatts and 22% of the conservative case goal of 27 average megawatts. Since March 1, 2002, these programs have cumulatively saved 170 average megawatts. When savings from self-directed industrial projects are added, the total represents 63% of Energy Trust’s 2012 goal.

Electric Efficiency Savings Q2 2008	PGE aMW	Pacific Power aMW	Total Savings aMW	Expenses	mil \$ / aMW	Levelized Cost/kWh
Commercial	1.43	0.69	2.12	3,728,476	\$1.8	2.0 ¢
Industrial	0.64	0.45	1.1	1,711,865	\$1.6	2.7 ¢
Residential	1.6	1.14	2.8	4,450,387	\$1.6	2.5 ¢
Total Energy Efficiency programs	3.7	2.3	6.0	9,890,728	\$1.7	2.3 ¢

**Gas efficiency savings.** In the second quarter of 2008, efficiency programs saved 559,928 annual therms of natural gas, representing 32% of the conservative goal 2008 goal of 1.7 million annual therms and 24% of the best case goal of 2.3 million annual therms. Since gas programs began in 2003, cumulative savings of 7.7 million annual therms have been realized, accounting for 37% of the current 2012 goal.

Gas Efficiency Savings Q2 2008	NWN Therms	Cascade Natural Gas	Avista	Total Savings Therms	Expenses	\$ / Therm	Levelized Cost/ Therm
Commercial	268,250	11,948	0	280,198	853,486	\$3.0	21 ¢
Industrial	273	0	0	273	9,916	\$36	316 ¢
Residential	260,756	16,131	2,570	279,457	2,029,865	\$7.3	49 ¢
Total Energy Efficiency Programs	529,279	28,079	2,570	559,928	2,893,267	\$5.2	35 ¢

**Renewable energy generation.**

Renewable Energy Generation Q2 2008	PGE aMW	Pacific Power aMW	Total Generation aMW	Q2 2008 Expenses	mil \$ / aMW	Levelized Cost/kWh
Biopower	0.00	1.22	1.22	396,416	\$0.32	0 ¢
Open Solicitation	0.00	0.00	0.00	190,675	n/a	n/a
Solar Electric Program	0.02	0.02	0.04	724,100	\$18	31 ¢
Utility Scale	0.00	0.00	0.00	17,918	n/a	n/a
Wind Program	0.00	0.00	0.00	118,918	n/a	n/a
Total Renewable Programs	0.02	1.24	1.26	1,448,027	\$1	18 ¢

**5. Projects completed this quarter**

	Total	Electric-only	Gas-only	Both
<b>ENERGY EFFICIENCY</b>				
<b>Commercial projects</b>				
Existing buildings retrofitted	277	223	47	7
Efficient new buildings constructed	55	41	7	7
Solar water heating commercial installations	3	0	3	0
<b>Industrial projects</b>	92	91	1	0
<b>Residential projects</b>				
ENERGY STAR new homes constructed	231	68	44	119
ENERGY STAR new homes enhanced	142	1	105	36
Efficient new manufactured homes purchased	43	36	4	3
Home energy reviews conducted	1,756	376	104	1,276
Single family homes retrofitted	2,150	684	1,466	0
Manufactured homes retrofitted	310	295	15	0
Multifamily units retrofitted	1,874	1,685	184	5
New multifamily units enhanced	2	0	0	2
Residential solar water heating installations	49	26	23	0
ENERGY STAR clothes washer rebates	5,939	2,808	352	2,779
CFL packages sold/provided	310,796	310,796	0	0
<b>RENEWABLE ENERGY INSTALLATIONS</b>				
Biopower project installations	0	0	0	0
Open solicitation project installations	0	0	0	0
Solar electric residential installations	48	48	0	0
Solar electric commercial installations	13	13	0	0
Utility scale project installations	0	0	0	0
Wind project installations	0	0	0	0
<b>TOTAL RENEWABLES</b>	61	61	0	0

Table 5 and corresponding information in the narrative refer to numbers of efficiency and renewable energy projects. 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.
- 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.

**Added Costs from Utility SB838 Expenditures**

	Quarter Expenditures	YTD Expenditures	YTD \$M /Amw*	YTD Levelized Cost*
PGE	\$0	\$0	n/a	n/a
PacifiCorp	\$39,792	\$39,792	1.6	0.01 ¢
Total	\$39,792	\$39,792	1.6	0.01 ¢

\* Reflects incremental increase in costs derived from expenditures incurred by Pacific Power under terms of the agreement described in SB 838.

**See appendix I for report on Pacific Power's SB 838 activities**



## Appendix I – SB 838 Report for Q2 2008

### I. Pacific Power

#### **SB 838 General**

- Pacific Power's liaison to Energy Trust, Kari Greer, started June 2. Kari has worked for Pacific Power for 12 years and brings a strong background in utility customer service.
- Participated in the Energy Performance Certificate review meeting with Earth Advantage and Energy Trust
- Briefed Pacific Power internal audiences on Energy Trust programs and customer outreach campaigns
- Developing additional outreach opportunities with Medford trade allies and the Pacific Power regional community manager
- Participated in the Northwest Energy Efficiency Taskforce (NEET) process convened by Bonneville Power Administration.
- Met with the BEST (Businesses for an Environmentally Stable Tomorrow) Business Center
- Met with Portland General Electric's liaison, Joe Barra, to coordinate joint PGE/Energy Trust activities.

#### **SB838 Commercial efficiency programs**

- Published print ads promoting Energy Trust's commercial customer incentives in the Cascade Business News and the business section of the Medford Mail Tribune.
- 1,500 new Oregon business customer *Welcome Aboard* kits were delivered highlighting available services and options, including information on energy efficiency and directing customers to Energy Trust call center and web site.
- The spring *Energy Insights* newsletter, delivered to 800 Oregon community leaders and managed commercial/industrial accounts, featured a southern Oregon dairy farm case study including participation in Energy Trust's programs and energy savings achieved. Customers were directed to Energy Trust's call center and web site.
- The spring *Energy Connections* newsletter, delivered to 7,300 Oregon mid-size business and government customers, featured two articles and one sporting arena case study that included information on reducing carbon footprint through energy efficiency, lowering energy bills through efficient equipment upgrades and a the specifics of a lighting retrofit project.

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

- Early June, a Pacific Power internal email "hot topic" was sent to all Oregon corporate account managers regarding Energy Trust's boost to industrial energy efficiency incentives who in turn forwarded to all their managed industrial account contacts.
- In April, a letter and handout were mailed to nearly 1,000 Oregon irrigators in the Klamath Basin to encourage them to take part in Energy Trust energy efficiency programs. Klamath Basin farmers interested in available programs and incentives were asked to call RHT Energy Solutions or visit the Energy Trust Web site's agricultural information page.

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

- Pacific Power's Customer and Community Communications group created a multi-media advertising campaign. The "Feel Good" TV, radio and print campaign began in early June and will continue through mid-July in Southern Oregon, promoting the incentives and programs with Energy Trust of Oregon.

- Approximately 18,000 Oregon new residential customer *Welcome Aboard* kits were delivered highlighting available services and options, including Energy Trust of Oregon energy efficiency programs.
- Energy Trust's CFL promotion was mentioned in *April Voices*, our residential customers newsletter reaching over 500,000 Oregon customers.
- The May issue of *Voices* promoted summer cooling tips, Energy Trusts heat pump incentive as well as their web site for more program information.
- Radio spot focusing on summer energy efficiency programs to help manage cooling related increases to customer bills. The spot mentions the benefits of ENERGY STAR appliances and encourages customers to visit the Energy Trust web site.
- Energy Trust heat pump insert was delivered to 430,000 customers in Oregon in their May billing statements.
- ENERGY STAR New Homes residential insert was inserted to 430,000 Oregon customers in the June billing statement.
- The Web site [www.pacificpower.net](http://www.pacificpower.net) continued to be updated with new program information and links to the Energy Trust web site. A quick link, [www.pacificpower.net/saveenergy](http://www.pacificpower.net/saveenergy), was also established to link directly to Energy Trust's site.

## II. PGE

As PGE received approval for 838 efforts late in Q2, the utility's first report on its SB 838 activities will be included in the Q3 2008 report.