

Quarter One 2007 Report to the Oregon Public Utility Commission

January 1, 2007, through March 31, 2007

This Energy Trust quarterly report covers the period January 1, 2007, through March 31, 2007, the first quarter of the year (Q1). The report addresses progress toward 2007 and 2012 energy saving and renewable energy generation goals and includes corresponding costs. Also included is the number of completed projects this quarter, the amount of incentives paid during the quarter, year-to-date (YTD) cost-benefit ratios for the six largest Energy Trust programs and quarterly activity highlights.

I. QUARTERLY HIGHLIGHTS

I. General

- Approximately 12% of 2007 electric savings and 12% of gas savings were logged during the first quarter. Cumulatively, our programs have saved 126.6 average megawatts of electricity since inception.
- Preliminary gas savings for the quarter were 210,067 annual therms. To date, gas efficiency programs have saved 4.6 million annual therms of natural gas.
- Overall electric efficiency expenditures for the quarter were within 20.8% of budget. Projects completed during the quarter are expected to save 2.98 average megawatts at an estimated cost of 2.2¢ per kilowatt hour.¹
- Gas expenditures for Q1 exceeded budget by 4.9% for the quarter. Projects completed during the quarter are expected to save 210,067 annual therms at a cost of 47¢ per therm.¹
- Public purpose revenues were \$19,686,833 for the quarter, \$1,628,710 higher than projections. Total quarterly expenditures were \$7,993,990.

2. Residential efficiency programs

- During the first quarter Energy Trust incentives helped fund the purchase of 4,044 energy efficient clothes washers, installed in 1,778 homes with electric hot water and 2,266 homes with gas hot water. The premium efficiency clothes washer promotion is exceeding forecasted projection and continues to have support from all participating appliance retailers in Energy Trust territory.
- Energy efficient measures such as sealed ducts, insulation, high efficiency space heating equipment and energy efficient windows were installed in 1,539 single family homes, 442 multifamily units and 151 manufactured homes. Of these, 870 homes received electric efficiency measures and 1,236 received gas efficiency measures, with 26 sites saving both gas and electricity.
- Energy Trust incentives helped fund the construction of over 173 efficient new homes, 77 with electricity-saving measures, 10 with gas-saving measures, and 86 with both electricity- and gas-saving measures. Incentives helped purchase 30 electrically heated and 4 gas-heated new efficient manufactured homes.

¹ Levelized cost tends to be higher at the beginning of the year as we incur costs that do not yet have associated savings.

- Solar water heating systems were installed in 53 homes with electric hot water and 20 homes with gas hot water.
- The ENERGY STAR® Homes program has added a verifier oversight specialist to help transition away from program-funded in-house verifiers to a market-driven approach in which builders hire verifiers as they would any other subcontractor. The verifier oversight specialist will provide verifier trade allies with information, resources and support to help this market segment develop.
- Builders have expressed strong interest in newly offered incentives for ENERGY STAR condominium projects and in NW ENERGY STAR Plus homes. The ENERGY STAR Plus track assists builders in meeting higher efficiency standards that qualify for NW ENERGY STAR certification and an attractive federal tax credit not available to regular ENERGY STAR homes.
- The Lights for Learning CFL fundraiser has attracted over 20 schools, congregations and other organizations contacting in the quarter, with participating schools and congregations having earned \$2,708 by promoting CFLs.
- An existing heat pump commissioning pilot was launched with selected HVAC contractors. After 300 tune-ups, a billing analysis will be conducted to verify savings assumptions.
- Home Energy Reviewers participated in solar training and are now including an assessment of solar feasibility as part of every home energy review completed in the Home Energy Solutions program.
- On March 1, 2007, incentives for the existing home program changed and forms and web content was updated. Contractors participated in the process and support the new direction of paying insulation by the square footage installed instead of a flat rate. Incentives for tankless water heaters, gas fireplaces and an air sealing test were also added.

3. Commercial efficiency programs

- During the first quarter, high efficiency measures including energy efficient lights and HVAC equipment were installed in 130 commercial buildings, resulting in average incentive payments per site of \$1,697. Of this total, 72 buildings received electric efficiency measures, 48 buildings received gas efficiency measures, and 10 buildings saved both gas and electricity. Solar water heating systems were installed at two commercial sites.
- A total of 28 highly efficient new commercial buildings were completed this quarter, with an average incentive payment per site of \$4,034.
- In January, Energy Trust and Oregon Department of Energy hosted a direct digital control workshop for contractors to review how control projects are handled by Energy Trust and Oregon Department of Energy.
- The Energy Trust foodservice program received an ENERGY STAR Certificate of Recognition award.
- The New Buildings program released a new ENERGY STAR track to award incentives for buildings that achieve ENERGY STAR ratings of 75 or better. The new track is retroactive for buildings that completed construction and were occupied after January 1, 2005.
- A New Buildings Building Simulation Users' Group continues to attract a large contingent of analysts and engineers, providing an open forum to present and discuss ideas about energy analysis and modeling. To date, 93 people have asked to be included in the sessions.
- Energy Trust and NW Energy Efficiency Alliance (NEEA) staff will work with Legacy Emanuel Hospital to identify, pursue, and provide incentives for comprehensive energy management opportunities across the entire five-hospital system. This system-wide approach will maximize energy savings and minimize administration for both Legacy and Energy Trust.
- The NEEA Design and Construction team negotiated and developed a scope of work on a Post Occupancy Assessment of OHSU Center for Health and Healing, providing support to ZGF

Architects in conducting research on daylighting in hospital patient rooms. The study identified the most energy efficient options based on maximizing daylighting.

- NEEA Building Operations worked at the Oregon Health Sciences University to complete tune-up and diagnostic activities by Siemens in two buildings, identifying 67 opportunities and documenting \$18,000 per year of immediate savings.
- In partnership with ENERGY STAR, NEEA's BetterBricks program and Energy Trust, local education and training was provided to property owners, managers, and operators through Portland's Building Owners and Managers Association Energy Efficiency Program.

4. Industrial efficiency programs

- Electric energy-saving projects were completed at 43 manufacturing firms, with an average incentive payment per site of \$4,777.
- Incentive changes were made this quarter with custom incentives increasing from \$0.12/kWh to \$0.15/kWh and the minimum simple payback reset to 18 months. Lighting incentives increased consistent with the Existing Buildings program offering.
- A Small Industrial Initiative began in February focused first on dairies and horticulture nurseries, working with vendors and suppliers to identify market opportunities for efficiency services. Future focus will be on small manufacturing facilities.
- Norpac Foods extended their Continuous Energy Improvement program from one plant to all plants, companywide.
- Considerable marketing and outreach effort is underway to "fill the pipeline" for 2008 industrial projects.

5. Renewable energy programs

- Solar electric systems were installed in 37 homes and 10 commercial buildings during this quarter.
- Solar electric incentives for businesses were increased to support systems up to 50 kW in size in response to increasing interest in solar from the commercial sector.
- With support from Energy Trust and the City of Portland's Solar Now! Campaign, Solar Oregon conducted monthly Portland workshops to educate full-house audiences of over 100 attendees about solar energy options.
- Emerald PUD adopted Energy Trust's quality installation standards into its new solar electric incentive program design.
- The Biopower program signed agreements to share the cost of feasibility studies and related analyses with the City of Coos Bay to study biopower potential at its municipal wastewater treatment plant; with Clackamas County to study options for increasing power generation at the Kellogg or Tri City plant, or for power generation at a plant to be constructed in the future; and with Port of Morrow to study potential for bringing the dormant Heppner project back on line.
- The Biopower program signed a letter of intent with Warm Springs Biomass for a 15.8-MW woody biomass cogeneration project, and approved Energy Trust funding of the project within our utility Master Agreement.
- The Open Solicitation Program paid an incentive of \$186,910 for the 58 kW solar project on the new Oregon Health Sciences University River Campus building designed by Gerding Edlen.
- The Open Solicitation Program signed agreements to share the cost of hydropower feasibility studies with Hood River County and the Talent Irrigation District.
- In coordination with the Oregon Department of Energy, the town of Lakeview completed a hydropower feasibility study co-funded by Energy Trust. The study outlined five options for small hydropower projects and detailed the associated costs and potential energy savings for each. The town is reviewing the information and will make a decision on future action.

- A Letter of Intent was signed for the 10 MW Gordon Ridge community wind project in Sherman County.
- A team comprised of ODOE, the Community Renewable Energy Association and Tri-Axis Engineering proposed a project to the Bonneville Power Administration to develop a common monitoring and communications system for distributed energy resources. The proposal passed the initial screens and was accepted into the next round of funding competition.
- Staff continued contract negotiations with PGE on their proposed Biglow Canyon wind project.
- Pacific Power terminated negotiations with the developer for a second wind project to follow after the GoodNoe Hills projects and initiated conversations to bring another wind project to Energy Trust for funding before mid-year.

6. Revenues and expenditures

- \$19,686,833 in public purpose funds were received during the quarter, with expenditures at \$7,993,990.
- A total of \$2,681,237 in incentives was paid.

7. OPUC performance measures

- Performance against the following 2007 Performance Measures will be reported in the Energy Trust 2007 annual report.

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

^{*} On March 27, 2007, the OPUC approved a new Energy Trust performance measure for natural gas savings acquisition, increasing the levelized cost per therm from 30 to 40 cents. This new measure will apply to all gas savings acquired for the calendar year 2007.

8. Benefit-cost ratios for 2006 (year-end data)

Program	Utility system benefit-cost ratio	Societal benefit-cost ratio
1. ENERGY STAR New Homes and Products	2.4	2.0
2. Home Energy Solutions	2.3	1.2
3. Existing Buildings	3.6	1.5
4. New Buildings	5.1	2.5
5. Production Efficiency	2.6	1.3
6. NW Energy Efficiency Alliance	9.0	3.3

II. TABLES

I. Revenues

Source	Actual revenues received Q I	Budgeted revenues Q I
Portland General Electric	\$8,849,309	\$8,076,850
Pacific Power	5,879,969	5,378,742
NW Natural	4,505,101	4,168,607
Cascade Natural Gas	424,654	406,124
Avista	27,800	27,800
Total	\$19,686,833	\$18,058,123

2. Expenditures

Type	Actual Expenditures Q I	Budgeted Expenditures Q I
Energy Efficiency programs	\$6,489,147	\$7,688,047
Renewable Energy programs	889,659	1,393,913
Administration	615,184	798,957
Total	\$7,993,990	\$9,880,917

3. Incentives Paid

	Energy Efficiency					Renewable Energy		Total
	PGE	Pacific Power	NW Natural	Cascade Natural Gas	Avista	PGE	Pacific Power	
Q1	\$712,752	\$808,544	\$548,708	\$32,143	\$6,181	\$390,541	\$182,368	\$2,681,237
Q2								
Q3								
Q4								
Total	\$712,752	\$808,544	\$548,708	\$32,143	\$6,181	\$390,541	\$182,368	\$2,681,237

4. Savings and Generation

Electric efficiency savings. In the first quarter of 2007, energy efficiency programs saved 2.98 average megawatts, representing 9% of the 2007 year-end best case goal of 32.8 average megawatts and 12% of the conservative case goal of 24.6 average megawatts. Since March 1, 2002, these programs have cumulatively saved 126.6 average megawatts, representing 42% of Energy Trust’s 2012 goal*.

* Savings from self-directed efficiency projects also count toward the goal of achieving 300 aMW of savings by 2012. To date, 18.9 aMW of savings have been achieved by industrial customers via self-directed funding. Together, Energy Trust achievements and self-directed savings have achieved 48% of the 2012 goal.

Electric Efficiency Savings Q1 2007	PGE aMW	Pacific Power aMW	Total Savings* aMW	Expenses	mil \$ / aMW	Levelized Cost/kWh
Residential	1.05	0.81	1.86	\$2,360,937	1.26	1.6¢
Commercial	0.16	0.21	0.37	1,398,293	3.74	3.7¢
Industrial	0.49	0.26	0.75	1,575,660	2.09	2.7¢
Total Energy Efficiency programs	1.70	1.28	2.98	\$5,334,890	1.78	2.2¢

Gas efficiency savings. In the first quarter of 2007, efficiency programs saved 210,067 annual therms of natural gas, representing 12% of the conservative goal 2007 goal of 1.8 million annual therms and 9% of the best case goal of 2.4 million annual therms. Since gas programs began in 2003, cumulative savings of 4.6 million annual therms have been realized, accounting for 24% of the current 2012 goal.

Gas Efficiency Savings Q1 2007	NWN Therms	Cascade Natural Gas	Avista	Total Savings Therms	Expenses	\$ / Therm	Levelized Cost/ Therm
Residential	124,334	15,268	1,549	141,151	\$1,398,047	9.90	54.4¢
Commercial	65,574	3,342	0	68,916	286,689	4.16	28.6¢
Industrial	0	0	0	0			
Total Energy Efficiency Programs	189,908	18,610	1,549	210,067	\$1,684,736	8.02	47.0¢

Renewable energy generation. With activity focused on individual solar electric system installations, the 2007 generation target of 114.9 average megawatts (conservative) did not change. Renewable projects under construction in 2007 are expected to generate 40.9 average megawatts, representing an additional 27% of Energy Trust’s 2012 goal.

Actual	PGE aMW	Pacific Power aMW	Total Generation aMW*	Q1 2007 Expenses	mil \$ / aMW	Levelized Cost/kWh
Utility Scale	0.00	0.00	0.00	\$35,789	n/a	n/a
Solar Photovoltaic	0.02	0.02	0.03	525,535	16.15	12.4¢
Wind	0.00	0.00	0.00	81,847	n/a	n/a
Open Solicitation	0.01	0.00	0.01	252,706	44.27	34.3¢
Biopower	0.00	0.00	0.00	78,487	n/a	n/a
Total Renewable Programs	0.02	0.02	0.04	\$974,364	25.48	19.6¢

* Totals may not add due to rounding.

5. Projects completed this quarter

Energy Efficiency Installed Projects	Total Sites	Sites by Measures Installed		
		Electric-only	Gas-only	Both
Residential sites served				
Efficient New Manufactured Homes purchases	34	30	0	4
ENERGY STAR New Homes constructed	173	77	10	86
ENERGY STAR New Homes enhancements	64	5	55	4
ENERGY STAR Products appliance rebates	4,044	1,778	209	2,057
Home Energy Reviews conducted	917	456	64	397
Manufactured Homes refitted	151	145	6	0
Multifamily units retrofitted	442	433	0	9
Promotional CFLs provided	650	650	0	0
Residential Solar Water Heating installations	73	53	20	0
Single family homes retrofitted	1,539	292	1,230	17
State Home Oil Weatherization program CFL packs mailed	226	226	0	0
Commercial sites treated				
Existing Buildings sites treated	130	72	48	10
New Buildings sites treated	28	26	1	1
Solar Water Heating Commercial installations	2	2	0	0
Industrial sites treated	43	43	0	0
TOTAL EFFICIENCY	8,516	4,288	1,643	2,585
Renewable Energy Installed Projects				
Utility Scale projects installed	0	0		
Solar Electric residential installations	37	37		
Solar Electric commercial installations	10	10		
Wind projects installed	0	0		
Biopower projects installed	0	0		
Open Solicitation projects installed	1	1		
TOTAL RENEWABLES	48	48		

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 (“site”), 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.