

Quarter Two 2006 Report to the Oregon Public Utility Commission

April 1, 2006 through June 30, 2006

This Energy Trust quarterly report covers the period April 2006 through June 2006, the second quarter of the year (Q2). The report addresses progress toward 2006 and 2012 energy saving and generation goals and includes corresponding costs. Also included is the number of completed projects this quarter, the amount of incentives paid during the quarter and year-to-date, cost-benefit ratios for the six largest Energy Trust programs, and quarterly activity highlights.

I. QUARTERLY HIGHLIGHTS

I. General

- Energy Trust is on track to achieving its conservative electric energy savings goal of 17.25 aMW and its conservative gas savings goal of 2.65 million annual therms by year end.
- Quarterly activity was most robust in energy efficiency residential sector programs for single and multifamily homes and for appliance rebates, with significant project completion also for efficient new homes and building efficiency.
- Electric efficiency expenditures for the quarter were within 4% of budget. Projects completed during the quarter are expected to save 4.92 average megawatts at an estimated cost of \$1.7 million per average megawatt. This savings represents approximately 29% of the 2006 conservative case electric energy savings target.
- Gas expenditures were down, the product of setting ambitious goals to expend carryover gas revenues from prior years. Projects completed during the quarter are expected to save 492,695 annual therms at a cost of \$3.90 per annual therm. This savings represents approximately 19% of the 2006 conservative case gas savings target.
- Efficiency program reservation systems for new multifamily, commercial and industrial projects were established and are operating well.
- Revenues were up \$1.1M for the quarter, with increases of over \$300k in each of the three utilities. Total expenditures were \$11.0 million, of which \$5.7 million were incentive payments.
- Overall spending rates for the quarter are below budget, with the single largest variance being in renewable energy projects, where master agreement funds are reserved for utility scale projects being negotiated.
- Staff began analyzing three large-scale renewable energy projects under master agreements with PGE and Pacific Power. Negotiations with five other mid-scale renewable projects were also initiated.
- To continue to build the pipeline of future renewable projects, three new biomass feasibility studies were begun and one wind resource assessment was initiated.

2. Residential programs

- Energy Trust rebates helped fund the purchase of 4,214 energy efficient clothes washers, installed in 1,947 homes with electric hot water and 2,267 homes with gas hot water.
- Energy efficient measures such as sealed ducts, insulation, high efficiency space heating equipment and energy efficient windows were installed in 2,419 single-family homes, 2,514 multifamily units, and 41 manufactured homes. Of these, 2,574 homes received electric

efficiency measures and 2,091 received gas efficiency measures, with 309 sites saving both gas and electricity.

- Energy Trust incentives helped fund the construction of 332 efficient new homes, 111 with electricity-saving measures, 44 with gas-saving measures, and 177 with both electricity- and gas-saving measures. Incentives helped purchase 81 electrically heated and 5 gas-heated new efficient manufactured homes.
- Solar water heating systems were installed in 14 homes with electric hot water and 29 homes with gas hot water.

3. Commercial programs

- High efficiency measures such as energy efficient lights and HVAC equipment were installed in 159 commercial buildings, resulting in average incentive payments per site of \$5,257. Of this total, 72 buildings received electric efficiency measures, 17 buildings received gas efficiency measures, and 70 buildings saved both gas and electricity. Solar water heating systems were installed at two commercial sites.
- A total of 19 highly efficient new commercial buildings were completed this quarter, with an average incentive payment per site of \$6,938.

4. Industrial programs

- Electric energy-saving projects were completed at 66 manufacturing firms, with an average incentive payment per site of \$20,912.

5. Renewable energy programs

- Solar electric systems were installed in 36 homes and 6 commercial buildings.
- A 46 kW solar electric system at Stoller Vineyards came on line. The system provides about 40% of the winery's electrical needs. Stoller became the first Oregon winery to be 100% LEED®-certified at the gold level.
- The Solar program hosted two solar seminars in June. Over 200 were in attendance at the Corvallis seminar, setting a new record.
- 39 people attended the June solar electric trade ally training, demonstrating continued growth of interest by electricians and others in adding solar to their business offerings.
- As part of an outreach program for the Open Solicitation program, staff met with seven businesses and communities. Repeated inquiries about small hydro projects have been received with one funding application from an irrigation district.
- Energy Trust committed \$1.7 million to fund the above-market costs of a 1.2 megawatt biomass generator at the Rough and Ready sawmill in Cave Junction, Oregon. Construction will take 12-16 months; payments from Energy Trust will be spread over four years beginning late 2007, when the generator is on line.
- Three new biopower feasibility studies were begun, in addition to three presently underway. Negotiations continue with Warm Springs Forest Products Industries involving a proposed 20 megawatt biomass cogeneration facility. An effort was launched in cooperation with PGE to identify opportunities to boost power production at sewage treatment plants in PGE territory.
- Four community wind projects are being evaluated for possible funding. The current program budget appears sufficient to fund two of these.
- A tall tower anemometer was installed at the Mar-Lu Community Wind project near Arlington, Oregon, and 2 other anemometers were installed through the anemometer loan program.

6. Revenues and expenditures

- \$14.4 million in public purpose funds were received during the quarter, with expenditures at \$11.0 million.
- A total of \$5.7 million in incentives was paid.

7. OPUC performance measures

- Performance against the following 2006 Performance Measures will be reported in the Energy Trust 2006 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 30 cents per therm
Renewable Resources	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 2005 reported in #8 below

8. Benefit-cost ratios for 2005 (year-end data)

Program	Utility system benefit-cost ratio	Societal benefit-cost ratio
1. Efficient Home Products	2.4	3.8
2. Home Energy Savings	2.9	1.3
3. Building Efficiency	3.5	1.5
4. New Building Efficiency	2.5	1.4
5. Production Efficiency	4.1	2.8
6. NW Energy Efficiency Alliance	10.3	5.5

II. TABLES**I. Revenues**

Source	Actual revenues received Q2	Budgeted revenues Q2
Portland General Electric	\$ 7,196,973	\$ 6,832,526
Pacific Power	4,618,024	4,293,405
NW Natural	2,632,609	2,257,561
Total	\$14,447,606	\$13,383,492

2. Expenditures

Type	Actual Expenditures Q2	Budgeted Expenditures Q2
Energy Efficiency programs	\$ 9,750,508	\$11,239,224
Renewable Resources programs	645,955	6,514,074
Administration	573,775	731,826
Total	\$10,970,238	\$18,485,124

3. Incentives Paid

	Energy Efficiency			Renewable Energy		Total
	PGE	Pacific Power	NW Natural	PGE	Pacific Power	
Q1	\$2,364,680	\$1,682,363	\$1,077,337	\$79,167	\$112,425	\$ 5,315,972
Q2	2,211,896	2,244,505	942,537	87,321	210,745	5,697,004
Q3						
Q4						
Total	\$4,576,576	\$3,926,868	\$2,019,874	\$166,488	\$323,170	\$11,012,976

4. Savings and Generation

Electric efficiency savings. In the second quarter of 2006, energy efficiency programs achieved 29% of the 2006 conservative goal of 17.25 average megawatts. Since March 1, 2002, these programs have cumulatively saved 105.4 average megawatts, or 35.1% of Energy Trust's 2012 goal.

Electric Efficiency Savings Q2 2006	PGE aMW	Pacific Power aMW	Total Savings* aMW	Expenses	mil \$ / aMW	Levelized Cost/kWh
Residential	0.84	0.36	1.20	\$2,624,198	\$2.19	01.9¢
Commercial	0.77	0.33	1.10	2,156,230	1.96	01.9¢
Industrial	0.57	2.05	2.62	3,569,967	1.36	01.8¢
Total Energy Efficiency Programs	2.18	2.74	4.92	\$8,350,395	\$1.70	01.8¢

Gas efficiency savings. In the second quarter of 2006, efficiency programs saved 492,695 annual therms of natural gas, representing 19% of the conservative goal 2006 goal of 2.65 million annual therms. Since gas programs began in 2003, cumulative savings of 3.2 million annual therms have been realized, accounting for 16.8% of the 2012 goal.

Gas Efficiency Savings Q2 2006	NWN Therms	Expenses	\$ / Therm	Levelized Cost/Therm
Residential	271,337	\$1,543,284	\$5.69	30.3¢
Commercial	221,358	378,801	\$1.71	14.2¢
Industrial				
Total Energy Efficiency Programs	492,695	\$1,922,085	\$3.90	24.3¢

Renewable energy generation. In the second quarter of 2006, renewable energy generation projects completed account for .09% of the 2006 goal of 32.98 average megawatts.

Actual	PGE aMW	Pacific Power aMW	Total Generation aMW	Q2 2006 Expenses	mil \$ / aMW	Levelized Cost/kWh
Utility Scale				\$ 28,915		
Solar Photovoltaic	0.01	0.02	0.03	466,439	\$15.55	16.3¢
Wind				106,646		
Open Solicitation	0.00	0.00	0.00	30,267		
Biopower				65,491		
Total Renewable Programs	0.01	0.02	0.03	\$697,758	\$23.26	25.4¢

5. Projects completed this quarter

Energy Efficiency Installed Projects	Total Sites	Sites by Measures Installed		
		Electric-only	Gas-only	Both
Residential				
Efficient Home Products appliance rebates	4,214	1,947	0	2,267
Efficient New Home enhancements	156	16	92	48
Efficient New Homes constructed	332	111	44	177
Efficient New Manufactured Homes purchases	86	81	0	5
Home Energy Reviews conducted	1,569	789	79	701
Manufactured Homes refitted	41	39	1	1
Multifamily units retrofitted	2,514	2,096	119	299
Promotional CFLs provided	979	979	0	0
CFL coupons redeemed	66	66	0	0
Residential Solar Hot Water installations	42	13	29	0
State Home Oil Weatherization program CFL packages mailed	174	174	0	0
Single family homes retrofitted	2,419	439	1,971	9
Commercial sites treated				
Building Efficiency sites treated	159	72	17	70
New Building Efficiency sites treated	19	17	2	0
Solar Hot Water Commercial installations	2	0	2	0
Industrial sites treated	66	66	0	0
TOTAL EFFICIENCY	12,838	6,905	2,356	3,577
Renewable Energy Installed Projects				
Utility-scale projects installed	0	0	0	0
Solar Electric residential installations	36	36	0	0
Solar Electric commercial installations	6	6	0	0
Community wind projects installed	0	0	0	0
Biopower projects installed	0	0	0	0
Open Solicitation projects installed	1	1	0	0
TOTAL RENEWABLES	46	46	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 ("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 project