

Report to Legislative Assembly on Public Purpose Expenditures

January 2007 - June 2008

Final Report

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ECONorthwest

ECONOMICS • FINANCE • PLANNING

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Acknowledgements

This report was prepared by ECONorthwest's Portland office in response to ORS 757.617(1)(a) that requires documentation of Public Purpose Charge (PPC) receipts and expenditures as part of SB 1149. ECONorthwest was selected to conduct this review under a competitive bid administered jointly by the Oregon Department of Energy and the Oregon Public Utility Commission. Dr. Stephen Grover was the project manager for the analysis and questions regarding the report should be directed to him by e-mail at grover@portland.econw.com or by phone at (503) 222-6060. John Boroski and Logan Van Ert of ECONorthwest also assisted with this analysis and report.

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EXECUTIVE SUMMARY

INTRODUCTION

In July 1999, Senate Bill 1149 (SB 1149) was enacted to introduce competition into Oregon's electricity markets within the Portland General Electric (PGE) and PacifiCorp service territories¹. As part of SB 1149, these utilities were required to reserve 3 percent of their retail electricity sales beginning in March 2002. This public purpose charge is used to fund energy conservation and renewable energy programs and to help provide weatherization and other energy assistance to low-income households and public schools in Oregon.

Oregon has a 30-year history of using ratepayer funding for conservation and renewable programs prior to SB 1149. In the prior system, ratepayer funds were used directly by utilities to provide incentives for conservation and renewable technologies. With the current system under SB 1149, programs are still funded by ratepayers (through the public purpose charge) but responsibility for running these programs has been removed from the utilities and given to several different agencies:

- **Energy Trust of Oregon, Inc.** The non-profit Energy Trust began administering funds in March 2002 and seeks to develop and implement programs that promote energy conservation and development of renewable energy resources within Oregon. The Energy Trust receives 73.8 percent of the available public purpose charge funds; 56.7 percent is dedicated to conservation programs and 17.1 percent is dedicated for renewable energy projects.
- **Education Service Districts.** Oregon's Education Service Districts receive 10 percent of public purpose charge funds to improve energy efficiency and purchase renewable energy in individual schools.
- **Oregon Housing and Community Services.** Oregon Housing and Community Services (OHCS) receives and administers public purpose charge funds for low-income housing programs. Four and one-half percent of the public purpose charge funds are dedicated to low-income housing development projects; these projects involve construction of new housing or rehabilitation of existing housing for low-income families through the OHCS Housing Trust Fund. OHCS operates two weatherization programs, and an additional 11.7 percent of total purpose charge funds collected is allocated for low-income weatherization. One program provides home weatherization (for single- and multi-family, owner occupied, and rental housing) and the other provides for weatherization of affordable multi-family rental housing through the OHCS Housing Division.

In addition to projects conducted by these agencies, large commercial and industrial customers can implement their own energy conservation or renewable energy projects. These "self-direct" customers can then deduct the cost of projects from the conservation and renewable resource development portion of their public purpose charge obligation to utilities.

¹ SB 1149, which specifically addresses the public purpose charge, is codified in ORS 757.600, et. seq. ORS 757.612.

In September 2008, ECONorthwest was hired by the Oregon Department of Energy and the Oregon Public Utility Commission to prepare a report to the Oregon Legislature documenting PPC receipts and expenditures in compliance with ORS 757.617(1)(a). Specifically, ECONorthwest

- Documented PPC disbursements to each agency by PGE and PacifiCorp;
- Demonstrated how each agency utilized funds;
- Summarized important project accomplishments; and
- Documented administrative costs using a common cost definition across agencies.

This report does not attempt to evaluate how well the various PPC programs are being implemented, nor have we attempted to independently verify the energy savings accomplishments reported by the PPC fund administrators. These issues are usually addressed through formal program evaluations such as those currently being performed by the Energy Trust of Oregon for its programs.

RECEIPT AND EXPENDITURE SUMMARY

The following table shows PPC fund disbursements to the various administrators and programs for the January 1, 2007 – June 30, 2008 period. The far right column of the table shows the level of expenditure for these funds over the same period, and shows that expenditures were generally equal to disbursements for most programs. As shown at the bottom of the table, PPC expenditures totaled \$101,652,095 across all fund administrators. Administrative costs for agencies administering the PPC funds totaled \$5,702,763, or 5.6 percent of all expenditures during this period.

PPC Disbursements and Expenditures (1/2007 – 6/2008)

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
Energy Trust of Oregon				
Conservation	\$39,464,013	\$24,137,893	\$63,601,906	\$50,143,966
Renewable Energy	\$11,446,555	\$7,282,955	\$18,729,510	\$11,702,220
Administrative Expenses				\$4,765,628
Education Service Districts*	\$7,315,485	\$4,212,579	\$11,528,064	\$9,391,126
ODOE Program Expenses				\$305,587
Administrative Expenses				\$582,760
Oregon Housing and Community Services				
Low-Income Weatherization**	\$8,559,128	\$4,931,972	\$13,491,100	\$13,063,518
Low-Income Housing	\$3,291,972	\$1,896,988	\$5,188,960	\$5,280,924
Administrative Expenses				\$331,789
Evaluation, Training, Technical Assistance				\$829,952
Energy Education				\$1,157,191
Self-Direct Customers***				
Conservation	\$2,087,195	\$650,945	\$2,738,140	\$2,738,140
Renewable Energy	\$1,077,473	\$230,898	\$1,308,371	\$1,308,371
ODOE Program Expenses				\$28,337
Administrative Expenses				\$22,586
Totals	\$73,241,821	\$43,344,230	\$116,586,051	\$101,652,095
Administrative Costs Only				\$5,702,763

* ESD receipts currently exceed disbursements reported by PGE (\$9) and PacifiCorp (\$7).

**Low-Income Weatherization includes the ECHO program and the Low-Income Weatherization Program (for multi-family rental housing).

***The amounts listed for Self-Direct represent public purpose charges retained by the participating sites in lieu of making payments to the utilities, which are then distributed among the other agencies (e.g., Energy Trust).

The following table summarizes the expenditures and results for PPC expenditures from January 2007 through June 2008. The agencies spent a combined total of \$101,652,095 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 961,363,255 kWh (nearly 110 aMW), which is enough to power more than 85,000 average-sized homes each year.² When all fuel types

² Calculated using ODOE's estimate that an average megawatt is enough to power 775 homes each year (assuming electric heat).

are included in addition to electricity, PPC expenditures resulted in annual savings of 3,346,853 million Btu.

Summary of PPC Expenditures and Results (1/2007 – 6/2008)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated	aMW	MMBtu
Energy Trust – Conservation	\$53,936,013	367,962,751	42.00	1,255,857
Energy Trust – Renewables*	\$12,675,801	421,507,068	48.12	1,438,604
Education Service Districts**	\$10,279,473	13,393,370	1.53	111,432
OHCS Low-Income***	\$20,663,374	18,079,929	2.06	61,707
Self-Direct Customers****	\$4,097,434	140,420,137	16.03	479,254
Total Expenditures	\$101,652,095	961,363,255	109.74	3,346,853

* Energy saved includes savings from reduced transmission and distribution losses. Renewable energy savings is from currently operational projects.

** MMBtu includes natural gas, propane and oil savings, in addition to electricity savings.

***Expenditures for the OHCS Low-Income program include expenditures from the Housing Trust Fund, which does not track energy savings for its projects.

****Expenditures listed for Self-Direct represent public purpose charges retained by the participating sites in lieu of making payments to the utilities, which are then distributed among the other agencies (e.g., Energy Trust).

1. PUBLIC PURPOSE CHARGE (PPC) OVERVIEW

INTRODUCTION

In July 1999, Senate Bill 1149 (SB 1149) was enacted to introduce competition into Oregon's electricity markets within the Portland General Electric (PGE) and PacifiCorp service territories³. As part of SB 1149, these utilities were required to reserve 3 percent of their retail electricity sales beginning in March 2002. This public purpose charge is used to fund energy conservation and renewable energy programs and to help provide weatherization and other energy assistance to low-income households and public schools in Oregon.

In April 2006, ECONorthwest was hired by the Oregon Department of Energy and the Oregon Public Utility Commission to prepare a report to the Oregon Legislature documenting PPC receipts and expenditures in compliance with ORS 757.617(1)(a). Specifically, ECONorthwest

- Documented PPC disbursements to each agency by PGE and PacifiCorp;
- Demonstrated how each agency utilized funds;
- Summarized important project accomplishments; and
- Documented administration costs using a common cost definition across PPC administrators.

The remainder of this section provides an overview of the total PPC funds collected and disbursed from January 2007 through June 2008. Additional detail on how each organization utilized funds is provided in subsequent sections.

PPC FUND DISTRIBUTION

The PPC funds are collected and distributed across several organizations for administration of energy conservation and renewable energy programs:

- **Energy Trust of Oregon, Inc.** The non-profit Energy Trust began administering funds in March 2002; the Energy Trust seeks to develop and implement programs that promote energy conservation and development of renewable energy resources within the state. The Energy Trust receives 73 percent of the available PPC funds (56 percent dedicated to conservation programs and 17 percent for renewable energy projects).
- **Education Service Districts.** Oregon's Education Service Districts receive 10 percent of PPC funds to improve energy efficiency in individual schools.
- **Oregon Housing and Community Services.** Oregon Housing and Community Services (OHCS) receives and administers PPC funds for low-income housing programs. Four and one-half percent of the PPC funds are dedicated to low-income housing development

³ SB 1149 is codified in ORS 757.600, et. seq. ORS 757.612 specifically addresses the public purpose charge.

projects; the projects involve construction of new housing or rehabilitation of existing housing for low-income families through the OHCS Housing Trust Fund. OHCS operates two weatherization programs, and an additional 11.7 percent of the total PPC funds collected are allocated for low-income weatherization. One program provides home weatherization (for single- and multi-family, owner occupied, and rental housing) and the other provides for weatherization of affordable multi-family rental housing through the OHCS Housing Division.

In addition to projects conducted by these agencies, large commercial and industrial customers can implement their own energy conservation or renewable energy projects. These “self-direct” customers can then deduct the cost of projects from the conservation and renewable resource development portion of their PPC obligation to utilities.

Figure 1 shows how total PPC funds are allocated across administrators based on the utilities’ PPC fund disbursement data for January 2007 through June 2008 (see Table 2).

Figure 1: PPC Fund Allocation by Administrator and Program (1/2007-6/2008)⁴

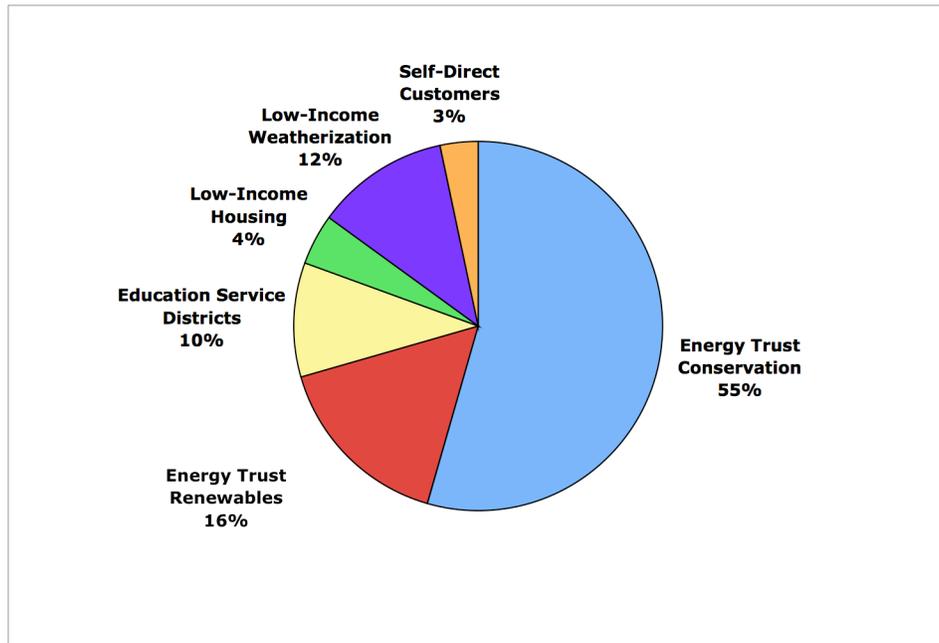


Figure 2 shows the total PPC fund collections for the January 2007 – June 2008 period divided between residential and non-residential ratepayers for each utility.⁵ For both utilities, public purpose funds were collected in similar proportions from the residential and non-residential sectors.

⁴ Note that the graph includes the self-direct expenditures, and consequently the allocation percentages do not coincide with the PPC disbursement information discussed previously, which are based on total PPC funds *collected* by the utilities.

⁵ The sector share was calculated by each utility based on revenues received from January 2007 thru June 2008. Because of the seasonal nature of energy consumption, this distribution will vary depending on the time period.

Figure 2: Sector Contribution of PPC Funds by Utility

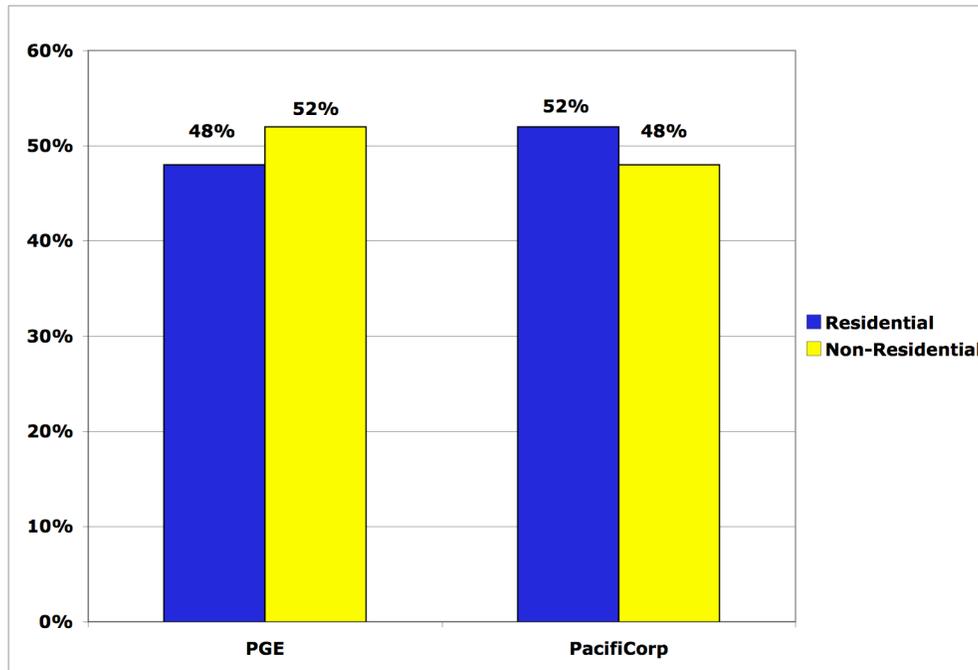
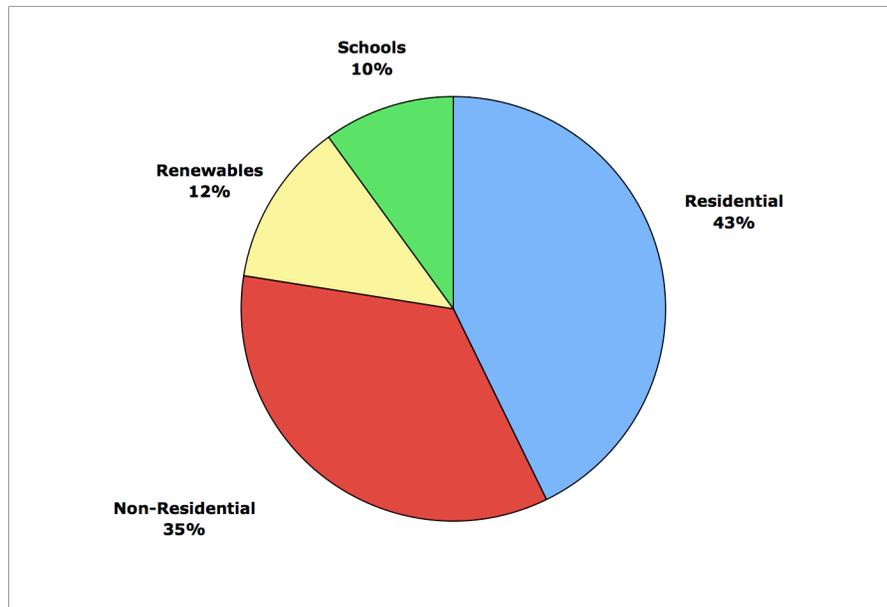


Figure 3 shows how PPC fund expenditures by the various agencies and programs are distributed among sectors. The residential sector (covered by the OHCS and Energy Trust residential conservation programs) received 43 percent of expenditures from January 2007 to June 2008. Over the same timeframe, schools received 10 percent of expenditures, 12 percent of expenditures were spent on renewable resource development, and 35 percent of expenditures were spent on programs for non-residential customers.

Figure 3: Distribution of PPC Expenditures



RECEIPT AND EXPENDITURE SUMMARY

This report details Public Purpose Charge (PPC) expenditures from January 1, 2007 through June 30, 2008. Table 1 shows the total funds collected during this period from both PGE and PacifiCorp. Over this 18-month period, \$73,241,821 in PPC funds was disbursed by PGE and PacifiCorp disbursed \$43,344,230, for a total of \$116,586,051 in PPC funds allocated for conservation and renewable energy programs across agencies. The utilities spent a combined total of \$80,986 on administrative expenses to collect and distribute PPC funds, which includes funds distributed to the Oregon PUC to help administer the program.

Table 1: Total PPC Fund Disbursements (1/2007– 6/2008)

Source	PPC Disbursements	Administrative Expenses*
PGE	\$73,241,821	\$42,423
PacifiCorp	\$43,344,230	\$38,563
Total	\$116,586,051	\$80,986

*Includes fees paid to OPUC to help administer the PPC program.

Table 2 provides additional detail on the disbursement across the various programs for the January 2007 – June 2008 period. The far right column of the table shows the level of expenditure for these funds over the same period, and shows that expenditures were generally equal to disbursements for most programs. As shown at the bottom of the table, PPC expenditures totaled \$101,652,095 across all fund administrators. Administrative costs for agencies administering the PPC funds totaled \$5,702,763, or 5.6 percent of all expenditures during this period.

Table 2: PPC Disbursements and Expenditures (1/2007 – 6/2008)

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
Energy Trust of Oregon				
Conservation	\$39,464,013	\$24,137,893	\$63,601,906	\$50,143,966
Renewable Energy	\$11,446,555	\$7,282,955	\$18,729,510	\$11,702,220
Administrative Expenses				\$4,765,628
Education Service Districts*	\$7,315,485	\$4,212,579	\$11,528,064	\$9,391,126
ODOE Program Expenses				\$305,587
Administrative Expenses				\$582,760
Oregon Housing and Community Services				
Low-Income Weatherization**	\$8,559,128	\$4,931,972	\$13,491,100	\$13,063,518
Low-Income Housing	\$3,291,972	\$1,896,988	\$5,188,960	\$5,280,924
Administrative Expenses				\$331,789
Evaluation, Training, Technical Assistance				\$829,952
Energy Education				\$1,157,191
Self-Direct Customers***				
Conservation	\$2,087,195	\$650,945	\$2,738,140	\$2,738,140
Renewable Energy	\$1,077,473	\$230,898	\$1,308,371	\$1,308,371
ODOE Program Expenses				\$28,337
Administrative Expenses				\$22,586
Totals	\$73,241,821	\$43,344,230	\$116,586,051	\$101,652,095
Administrative Costs Only				\$5,702,763

* ESD receipts currently exceed disbursements reported by PGE (\$9) and PacifiCorp (\$7).

**Low-Income Weatherization includes the ECHO program and the Low-Income Weatherization Program (for multi-family rental housing).

***The amounts listed for Self-Direct represent public purpose charges retained by the participating sites in lieu of making payments to the utilities, which are then distributed among the other agencies (e.g., Energy Trust).

Table 3 shows the timing of PPC receipts and expenditures since 2006 for each agency. Unexpended funds from 2006 are added to receipts from the January 2007 – June 2008 period to show total funds available, and expenditures over this same period are also tabulated.

Table 3: Cumulative PPC Receipts and Expenditures (1/2007-6/2008)

Fund Administrator / Program	2006 Carry Forward*	1/2007-6/2008 Receipts	1/2007-6/2008 Expenditures
Energy Trust of Oregon			
Conservation	\$2,905,297	\$63,601,906	\$53,936,013
Renewable Energy	\$34,706,629	\$18,729,510	\$12,675,801
Education Service Districts	\$4,501,186	\$11,528,064	\$10,279,473
Oregon Housing and Community Services**	\$13,654,062	\$18,680,060	\$20,663,374
Self-Direct Customers***	\$0	\$4,046,511	\$4,097,434
Totals	\$55,767,174	\$116,586,051	\$101,652,095

*2006 carryover amounts calculated by ECONorthwest using data from the prior PPC fund report *Report to Legislative Assembly on Public Purpose Expenditures for the Period January 1, 2005 – December 31, 2006* (July 11, 2007).

**Expenditures for the OHCS Low-Income program include expenditures from the Housing Trust Fund.

*** The amounts listed for Self-Direct represent public purpose charges retained by the participating sites in lieu of making payments to the utilities, which are then distributed among the other agencies (e.g., Energy Trust).

The remaining sections in this report describe how each organization used its allocated funds. For comparison's sake, administrative expenses must be defined consistently across agencies. In this report, we define administrative expenses as

1. Costs that cannot be otherwise associated with a certain program but which support an agency's general operations. These costs may include board or executive director activities, general business management, accounting, general reporting, and oversight;
2. General outreach and communication; and
3. The following direct program support costs:
 - a. Supplies
 - b. Postage and shipping
 - c. Telephone
 - d. Occupancy expenses
 - e. Printing and publications
 - f. Insurance
 - g. Equipment
 - h. Travel
 - i. Meetings, training, and conferences
 - j. Interest expense and bank fees
 - k. Depreciation and amortization
 - l. Dues, licenses, and fees
 - m. Other misc. expenses

The administrative expenses provided for each agency all conform with this definition.

2. ENERGY TRUST OF OREGON, INC.

OVERVIEW

The Oregon PUC designated the Energy Trust of Oregon, Inc. to administer the conservation and renewable resource components of the PPC. The Trust sponsors a suite of programs that target new and existing residential, commercial, and industrial electricity customers in the PGE and PacifiCorp service areas. Through these programs, Energy Trust provides technical and information assistance and financial incentives to install efficiency measures and renewable energy resources. A portion of the funds from Energy Trust is also allocated to the Northwest Energy Efficiency Alliance (NEEA) to support its ongoing energy efficiency market transformation programs.⁶

Table 4 provides a summary of Energy Trust PPC revenues and expenditures from January 1, 2007 through June 30, 2008. This 18-month period includes two winter seasons, when revenues are largest; however, it includes only one fourth quarter, which is when expenditures, savings and generation are highest. Funds received by Energy Trust during this period totaled \$82,331,416 and expenditures totaled \$66,611,814. Administrative expenses totaled \$4,765,628 and comprised 7.2 percent of total spending by Energy Trust on electric conservation and renewable programs and 5.8 percent of total PPC receipts during this period.⁷

Table 4: Energy Trust Receipt and Expenditure Summary (1/2007 – 6/2008)

Transaction	PGE	PacifiCorp	Total
Total Fund Receipts	\$50,910,568	\$31,420,848	\$82,331,416
Expenditures			
Energy Conservation	\$30,519,967	\$19,623,999	\$50,143,966
Renewable Energy	\$9,110,953	\$2,591,267	\$11,702,220
Administrative Expenses	\$3,018,641	\$1,746,987	\$4,765,628
Total Expenditures	\$42,649,561	\$23,962,253	\$66,611,814

Specific detail on Energy Trust conservation and renewable energy program activities is provided below.

⁶ The Energy Trust also administers residential and commercial conservation programs for Northwest Natural Gas Company and Cascade Natural Gas Corporation under the terms of a stipulation with the PUC. Avista Utilities also began contracting with the Energy Trust in 2006 to deliver three programs in its service territory. In 2008, PGE and Pacific Power provided additional energy efficiency funds to Energy Trust pursuant to section 46 of the 2007 Renewable Energy Act.

⁷ Administrative expenses used here and in subsequent tables are defined using the common administrative expense definition discussed in the introduction of this report. Administrative costs allocated to Northwest Natural Gas, Cascade Natural Gas and Avista Utilities are not included.

ENERGY CONSERVATION

Receipts and Expenditures

Table 5 shows Energy Trust fund receipts and expenditures for its conservation programs. During the January 2007 – June 2008 period, \$63,601,906 in PPC funds was distributed to Energy Trust for spending on these programs. Conservation program expenditures totaled \$53,936,013 during this same period. Administrative costs that could be directly assigned to Energy Trust conservation programs totaled \$3,792,047, or 7 percent of total conservation program spending and 6 percent of total PPC receipts for conservation programs.

Table 5: Energy Trust Conservation Receipts and Expenditures (1/2007 – 6/2008)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$39,464,013	\$24,137,893	\$63,601,906
Expenditures			
Program Expenditures	\$30,519,967	\$19,623,999	\$50,143,966
Administrative Expenses	\$2,329,558	\$1,462,489	\$3,792,047
Total Expenditures	\$32,849,525	\$21,086,488	\$53,936,013

Results

Energy Trust conservation activities consisted of the design and delivery of conservation programs targeted to different market sectors with a wide range of energy saving measures. Table 6 shows the accomplishments of the individual programs sponsored by Energy Trust. During the period covered by this report, 367,962,751 kWh in energy savings were achieved across all market sectors. The Industrial sector accounted for 41 percent of these savings with 152,674,196 kWh saved. Residential sector savings were 142,785,162 kWh (39 percent of total Energy Trust Savings), and Commercial sector savings were 72,503,393 kWh (20 percent).

Within the Residential sector, market transformation programs funded through NEEA accounted for the largest share of savings, with 50 percent of energy savings within that sector. In the Commercial sector, the Building Efficiency Program was the largest contributor and accounted for 54 percent of the energy savings achieved in this sector.

Table 6: Energy Trust Conservation Programs Energy Savings By Service Territory (1/2007-6/2008)*

Program Name	PGE Savings (kWh)	PacifiCorp Savings (kWh)	Total Savings (kWh)	Average Life of Savings (years)
Residential				
Home Energy Savings (existing homes including single-family, manufactured and multi-family homes)	12,993,342	8,776,389	22,437,036	22.1
New Homes (includes multi-family and manufactured)	1,071,527	1,533,033	2,604,560	32.2
Efficient Home Products	28,025,557	18,362,035	46,387,592	7.5
NEEA (Market Transformation)	40,672,905	30,683,069	71,355,974	8
Total Residential	82,763,331	59,354,525	142,785,162	10.5
Commercial				
Building Efficiency	23,278,302	15,268,784	39,473,202	10.5
New Building Efficiency	21,364,842	7,861,674	29,614,664	18.7
NEEA (Market Transformation)	1,946,851	1,468,676	3,415,527	15
Total Commercial	46,589,995	24,599,134	72,503,393	14.1
Industrial				
Production Efficiency	87,359,398	48,262,485	137,239,771	10.3
NEEA (Market Transformation)	8,797,623	6,636,803	15,434,425	10
Total Industrial	96,157,021	54,899,288	152,674,196	10.3
Total All Programs	225,510,346	138,852,947	367,962,751	11.1

* Conservation program savings do not include savings from reduced transmission and distribution losses, and therefore do not match savings reported in Energy Trust's Annual Reports.

Table 7 provides additional detail regarding the types of efficiency improvements that are being implemented for the various conservation programs. In the Residential sector, over 25,000 efficient clothes washers were installed, and in the Commercial sector, more than 230 highly efficient new commercial buildings have been developed.

Table 7: Energy Trust Example Efficiency Improvements (1/2007 – 6/2008)

Improvement Type	Number of Projects*	Average Life of Savings (years)
Residential		
Efficient clothes washers	25,752	14
Solar water heating systems	151	20
Efficient New Single Family Homes	2,720	29
Single Family Home Retrofits (duct sealing, insulation, high efficiency heating, efficient windows)	3,163	32
Commercial		
Solar water heating systems	5	16
Existing Buildings Retrofitted	1,259	11
Highly efficient new commercial buildings	234	19
Industrial		
Efficient manufacturing processes, water and wastewater treatment, and agriculture	342	10

*Number of projects is not the same as number of measures. Multiple measures are often installed for individual projects.

Table 8 shows Energy Trust’s cost for each conservation program and the levelized energy costs that have been achieved. The most Energy Trust funds were spent on the Industrial Production Efficiency Program (\$14.2 million) followed by the Residential Efficient New Homes/Products Program (\$12.6 million) and Residential Home Energy Savings Program (\$8.6 million). The lowest overall levelized energy costs were attained in the Industrial sector, with an average cost of 1.2 cents per kWh across the Industrial programs. The Residential and Commercial sectors realized both higher average levelized costs of savings and a wider range of levelized costs compared to the Industrial programs. The Residential sector ranged from 0.3 to 3.3 cents per kWh across programs with an average of 1.8 cents/kWh, while the Commercial sector ranged from 1.9 to 6.1 cents per kWh, averaging 2 cents/kWh.

Table 8: Energy Trust Conservation Costs and Levelized Energy Costs (1/2007 – 6/2008)

Program Name	ETO Cost (all electric funders)*	Levelized Cost (cents/kWh)**
Residential		
Home Energy Savings	\$8,587,851	2.8
Efficient New Homes/Products	\$12,599,898	3.3
NEEA (Market Transformation)	\$1,673,538	0.3
Total Residential	\$22,861,287	1.8
Commercial		
Building Efficiency	\$6,319,362	1.9
New Building Efficiency	\$6,834,219	1.8
NEEA (Market Transformation)	\$2,355,471	6.1
Total Commercial	\$15,509,052	2.0
Industrial		
Production Efficiency	\$14,174,019	1.3
NEEA (Market Transformation)	\$1,391,656	1.1
Total Industrial	\$15,565,675	1.2

*Energy Trust electric funders include PGE and PacifiCorp

**Levelized costs were calculated by Energy Trust and include savings for reduced transmission and distribution losses

Table 9 shows how the electric incentives paid by Energy Trust were distributed across the geographic regions of Oregon. About 54 percent of all incentives (\$13.4 million) were paid to customers in the Portland area, and 39 percent was divided between the Willamette Valley and southern Oregon. The residential sector received the highest share of incentive payments (38 percent).

**Table 9: Energy Trust Electric Incentive Payments by Sector and Region,
Thousands of Dollars (1/2007 – 6/2008)**

Sector	Central/East	NW/Coast	Portland Area	Southern	Willamette Valley	Total
Commercial	\$339	\$60	\$4,628	\$1,057	\$906	\$6,990
Industrial	\$179	\$224	\$3,557	\$1,978	\$2,452	\$8,389
Residential	\$785	\$68	\$5,255	\$1,073	\$2,280	\$9,461
Total	\$1,302	\$352	\$13,440	\$4,108	\$5,638	\$24,840

MARKET TRANSFORMATION

Actions and Processes

NEEA is funded by Energy Trust on behalf of PGE and PacifiCorp’s ratepayers, and by other electric utilities in Oregon, Washington, Idaho, and Montana. NEEA helps promote electric efficiency through market transformation, i.e., change in sales, selection, design, installation, operation, and maintenance practices for homes, equipment, buildings and industrial facilities. NEEA’s programs are closely integrated with those of the Energy Trust but are more focused on long-term market change. Among its initiatives in 2007 were programs for efficient new homes, compact fluorescent lamps, personal computer power supplies, grocery stores, hospitals, food processing facilities, and pulp and paper facilities.

Table 10 shows the energy savings accomplishments of the programs delivered by NEEA. During the period covered by this report, over 90,000,000 kWh in energy savings were achieved across the three market sectors, with the Residential sector accounting for 79 percent of the savings.

Table 10: Market Transformation Energy Savings By Program and Utility (1/2007-6/2008)

Program Name	PGE Savings (kWh)	PacifiCorp Savings (kWh)	Total Savings (kWh)	Average Life of Savings (years)
NEEA Residential	40,672,905	30,683,069	71,355,974	8
NEEA Commercial	1,946,851	1,468,676	3,415,527	15
NEEA Industrial	8,797,623	6,636,803	15,434,425	10
Total	51,417,378	38,788,548	90,205,926	9

Participating Firms and Organizations

Through NEEA, Energy Trust's efforts are coordinated with those of all the electric utilities of the Northwest (for activities beyond the PGE and PacifiCorp Oregon service territories) and the state energy offices and public utility commissions of Oregon, Montana, Idaho and Washington. NEEA also helps coordinate some program efforts with the Federal Government, for example, by negotiating with the US Environmental Protection Agency to create the ENERGY STAR Northwest new home efficiency program. Through the Consortium for Energy Efficiency, Energy Trust and NEEA also coordinate with similar programs nationally.

Table 11 shows Energy Trust's cost for each market transformation program. Total Energy Trust costs for market transformation were \$5.4 million, with the greatest share (43 percent) spent in the Commercial sector.

Table 11: Energy Trust Market Transformation Costs (1/2007 – 6/2008)

Program Name	ETO Cost
NEEA Residential	\$1,673,538
NEEA Commercial	\$2,355,471
NEEA Industrial	\$1,391,656
Total	\$5,420,665

Technology Advancement

NEEA saw particular success in the compact fluorescent bulb market. Due in part to NEEA, utility, and Energy Trust efforts over several years, in 2007 nearly all consumers in the Northwest were aware of CFLs and two-thirds had purchased them. In 2007, Northwest retailers sold more than 18 million ENERGY STAR CFLs.

In 2007, the 80 PLUS (PC power supply) program gained significant momentum when EPA adopted 80 PLUS criteria as part of its new ENERGY STAR specification for desktop and laptop computers—a spec that includes new energy use guidelines for operating, standby and sleep modes. Following this change, more manufacturers jumped on board and by 2008, more than 60 manufacturers offered more than 200 80 PLUS qualified power supply models.

NEEA's primary focus in the commercial and industrial sectors is on working with businesses at the corporate level to develop investment practices that profit from efficiency. To ensure there is a technical capability to follow through on the business plans, NEEA provides technical support to these businesses and their service contractors in daylighting, passive ventilation, integrated building design, building tune-ups, retro-commissioning, efficient motors systems, compressed air, and pumps.

RENEWABLE ENERGY

Receipts and Expenditures

Table 12 shows the PPC fund receipts and expenditures dedicated to Energy Trust renewable energy programs from January 1, 2007 through June 30, 2008. During this period, \$18,729,510 in PPC funds was allocated to Energy Trust for renewable energy projects, and renewable energy program spending totaled \$12,675,801. This does not include \$6,053,709 in funds committed to projects in development, to be paid at a later date. Administrative costs related to the renewable energy program totaled \$973,581 and comprised 7.7 percent of total renewable energy program spending by Energy Trust and 5.2 percent of the PPC receipts designated for the renewable energy programs.

Table 12: Energy Trust Receipts and Renewable Expenditures (1/2007 – 6/2008)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$11,446,555	\$7,282,955	\$18,729,510
Expenditures			
Program Expenditures	\$9,110,953	\$2,591,267	\$11,702,220
Administrative Expenses	\$689,083	\$284,498	\$973,581
Total Expenditures	\$9,800,036	\$2,875,765	\$12,675,801

Results

Table 13 lists all the active renewable energy generation projects completed or initiated by Energy Trust from January 2006 through June 2008.⁸ The largest amount of renewable energy capacity will be achieved through two utility-scale wind farms located in Sherman County and Klickitat County (WA), which will serve Oregon customers. Upon completion, all of the projects listed will provide a total of 710,002 MWh per year in renewable energy, the majority of which will be in PGE's service territory (60 percent). Projects that are currently operational are providing 421,507 MWh in renewable energy per year. In particular, the Solar Electric Program, which provides homeowners and businesses with financial incentives to adopt solar power applications, has completed a large number of projects (over 300 in both service territories) that are now operational.

⁸ Energy Trust board policy requires Energy Trust to take ownership of green tags in proportion to its funding of above-market cost, unless the market value of the green tags indicates a lower proportion. However, project-specific information regarding green tag ownership is not published to respect commitments to program participants' confidentiality. In general, generation projects received state and federal tax credits; some received income from green tags sales; and community wind projects sometimes received USDA grants ranging from \$35,000-50,000. However, pursuant to Energy Trust board policy, project-specific information on non-Energy Trust investments is not published.

Table 14 shows all of the feasibility studies and other development projects that were approved for funding by Energy Trust of Oregon's renewable energy programs from January 2007 through June 2008. A total of 67 projects were active during the report period: 35 were complete, 31 were initiated and 1 was ongoing. Project types ranged from study proposals to detailed feasibility studies to grant writing assistance. Twenty-nine projects are located in PGE's service territory, and 27 are located in PacifiCorp's territory (11 projects could be located in either or both territories.). The most common project types include Biomass (20), Hydro (15) and Wind (14). The total cost for all of these studies and potential projects is \$792,550.

Table 13: Energy Trust Renewable Energy Projects Summary

Project	# of Projects	Status	Year	County	Estimated Life Years	Generating Capacity (MW)	Annual Energy (MWh/yr)	Project Cost (\$/MWh)	Cost to Energy Trust (\$/MWh)*	Percent of Above-Market Cost Paid	Utility Service Territory
Biomass Project #2	1	Construction	--	Multnomah	20	1.7000	12,124.00	\$413	\$30	100%	PGE
Hydro Project #2	1	Construction	--	Linn	20	0.5110	2,791.00	\$558	\$170	73%	PAC
Hydro Project #3	1	Construction	--	Deschutes	20	0.7500	2,752.00	\$3,792	\$62	99%	PAC
Utility Scale Wind Project #2	1	Construction	--	Klickitat	20	94.0000	263,676.00	\$427	\$17	100%	PAC
Wind Project #1	1	Construction	--	Yamhill	15	0.0420	50.00	\$1,800	\$483	100%	PGE
Wind Project #2	1	Construction	--	Yamhill	15	0.0100	15.60	\$4,359	\$1,731	87%	PGE
Wind Project #3	1	Construction	--	Hood River	15	0.0002	2.50	\$10,000	\$3,840	100%	PAC
Wind Project #4	1	Construction	--	Polk	15	0.0050	13.50	\$1,388	\$185	20%	PAC
Large Solar #1	1	Contracted	--	Multnomah	20	0.0900	92.43	\$9,641	\$1,801	100%	PGE
Large Solar #2**	1	Contracted	--	Multnomah	20	0.7470	751.00	\$5,577	\$20	0%	PGE
Large Solar #3	1	Contracted	--	Multnomah	20	3.5000	3,500.00	\$7,261	\$971	90%	PGE
Large Solar #4	1	Contracted	--	Multnomah	20	0.8690	859	\$7,695	\$1,440	75%	PGE
Wind Project #5	1	Contracted	--	Polk	15	0.0100	19.78	\$4,145	\$1,365	87%	PGE
Wind Project #6	1	Contracted	--	Marion	15	0.0100	26.10	\$3,755	\$1,034	87%	PGE
Demonstration Solar Project #2 (Irrigation)	1	Construction	--	Klamath	20	0.0175	10.8	\$17,038	\$3,009	15%	PAC
Biomass Project #1	1	Operational	2008	Josephine	20	1.2000	10,091.52	\$450	\$167	100%	PAC
Hydro Project #1	1	Operational	2008	Clackamas	20	0.0044	25.00	\$2,112	\$955	100%	PGE
Demonstration Solar Project #1 (Building Integrated PV)***	1	Operational	2006	Lincoln	20	0.0250	49.50	\$10,109	\$3,776	79%	PGE
Utility Scale Wind Project #1	1	Operational	2007	Sherman	20	125.4000	409,741.99	\$649	\$15	100%	PGE
Solar Electric in PGE	38	Construction	--	n/a	20	1.1717	1054.912	\$9,100	\$1,660	89%	PGE
Solar Electric in PAC	50	Construction	--	n/a	20	0.6569	757.113	\$7,402	\$1,327	88%	PAC
Solar Electric in PGE	115	Operational	--	n/a	20	0.6881	719.795	\$8,487	\$1,629	85%	PGE
Solar Electric in PAC	196	Operational	--	n/a	20	0.7707	879.261	\$7,011	\$1,416	81%	PAC
Total Operational	315					128.09	421,507.07				
Total Construction and Contracted	103					104.09	288,495.74				
Total	418					232.18	710,002.81				

* Costs in this table reflect full incentives committed to projects, not expenditures during this time period. Please reference Table 12 for actual expenditures.

** Energy Trust did not provide an incentive for this project but is claiming the generation. The project would not have gone forward without assistance from Energy Trust in the form of staff in-kind support.

*** Incentives paid in 2007.

Table 14: Energy Trust Feasibility Studies and Other Projects (1/2007 – 6/2008)

Project*	Status	Project Type	County	Utility Service Territory	Cost to Energy Trust	Energy Trust Share
Biomass #1	Complete	Feasibility Study	Clackamas	PAC	\$4,992	50%
Biomass #10	Complete	Fuel Supply Study	Jackson	PGE	\$23,963	50%
Biomass #11	Complete	Feasibility Study	Columbia	PGE	\$9,450	50%
Biomass #12	Complete	Fuel Supply Study	Multnomah	PGE	\$8,922	50%
Biomass #13	Complete	Feasibility Study	Morrow	PGE or PAC	\$19,500	50%
Biomass #14	Complete	Feasibility Study	Marion	PGE or PAC	\$6,028	50%
Biomass #15	Complete	Feasibility Study	Wasco	PGE or PAC	\$12,465	50%
Biomass #16	Complete	Scoping Study	Washington	PGE or PAC	\$2,723	100%
Biomass #2	Complete	Scoping Study	Douglas	PAC	\$3,000	100%
Biomass #3	Complete	Feasibility Study	Clackamas	PGE	\$2,124	50%
Biomass #4	Complete	Feasibility Study	Washington	PGE	\$21,489	50%
Biomass #5	Complete	Proposal Development	Marion	PGE	\$12,467	50%
Biomass #6	Complete	Scoping Study	Multnomah	PGE	\$2,637	100%
Biomass #7	Complete	Fuel Supply Study	Hood River	PGE	\$35,824	50%
Biomass #8	Complete	Feasibility Study	Clackamas	PGE	\$21,500	50%
Biomass #9	Complete	Feasibility Study	Benton	PGE	\$25,000	50%
Geothermal #1	Complete	Feasibility Study	Lake	PAC	\$15,000	50%
Geothermal #2	Complete	Feasibility Study	Klamath	PAC	\$33,000	100%
Hydro #1	Complete	Feasibility Study	Lake	PAC	\$10,000	66%
Hydro #10	Complete	Feasibility Study	Umatilla	PAC	\$4,000	50%
Hydro #11	Complete	Feasibility Study	Hood River	PAC	\$5,000	50%
Hydro #12	Complete	Scoping Study	Marion	PGE	\$1,200	50%
Hydro #3	Complete	Feasibility Study	Jackson	PAC	\$20,000	50%
Hydro #4	Complete	Feasibility Study	Multnomah	PGE	\$24,946	50%
Wind #1	Complete	Grant Writing Assistance	Sherman	PAC	\$16,513	50%
Wind #10	Complete	Feasibility Study	Sherman	PGE or PAC	\$2,275	50%
Wind #13	Complete	Equipment	Umatilla	PGE or PAC	\$5,137	100%
Wind #14	Complete	Grant Writing Assistance	Umatilla	PGE or PAC	\$960	50%
Wind #2	Complete	Grant Writing Assistance	Sherman	PAC	\$3,960	50%
Wind #3	Complete	Feasibility Study	Hood River	PAC	\$996	50%
Wind #6	Complete	Feasibility Study	Josephine	PGE	\$16,953	50%
Wind #7	Complete	Grant Writing Assistance	Sherman	PGE	\$2,500	50%
Wind #8	Complete	Grant Writing Assistance	Sherman	PGE	\$2,500	50%
Wind #9	Complete	Feasibility Study	Umatilla	PGE or PAC	\$1,365	50%

Project*	Status	Project Type	County	Utility Service Territory	Cost to Energy Trust	Energy Trust Share
Wind/Hydro #1	Complete	Feasibility Study	Clatsop	PAC	\$25,000	50%
Biomass #17	Initiated	Feasibility Study	Coos	PAC	\$30,000	50%
Biomass #18	Initiated	Feasibility Study	Deschutes	PAC	\$29,000	50%
Biomass #19	Initiated	Feasibility Study	Jackson	PAC	\$24,800	50%
Biomass #20	Initiated	Feasibility Study	Wallowa	PAC	\$15,000	50%
Hydro #2	Initiated	Feasibility Study	Hood River	PAC	\$14,304	28%
Hydro #4	Initiated	Scoping Study	Multnomah	PGE	\$6,725	100%
Hydro #5	Initiated	Feasibility Study	Baker	PAC	\$30,000	27%
Hydro #5	Initiated	Scoping Study	Yamhill	PGE	\$7,108	100%
Hydro #6	Initiated	Feasibility Study	Wallowa	PAC	\$12,500	50%
Hydro #6	Initiated	Feasibility Study	Clackamas	PGE	\$5,875	100%
Hydro #7	Initiated	Feasibility Study	Washington	PGE	\$30,000	50%
Hydro #8	Initiated	Feasibility Study	Wallowa	PAC	\$3,000	50%
Hydro #9	Initiated	Feasibility Study	Wallowa	PAC	\$5,000	50%
Other Renewables #1	Initiated	Grant Writing Assistance	Washington	PGE	\$3,000	50%
Other Renewables #10	Initiated	Solar site assessment	Clackamas	PGE	\$800	100%
Other Renewables #12	Initiated	Solar site assessment	Multnomah	PGE	\$2,000	100%
Other Renewables #13	Initiated	Grant Writing Assistance	Jackson	PAC	\$1,750	50%
Other Renewables #14	Initiated	Grant Writing Assistance	Josephine	PAC	\$1,200	50%
Other Renewables #15	Initiated	Grant Writing Assistance	Josephine	PAC	\$1,200	50%
Other Renewables #16	Initiated	Grant Writing Assistance	Jackson	PAC	\$1,200	50%
Other Renewables #18	Initiated	Grant Writing Assistance	Jackson	PAC	\$1,200	50%
Other Renewables #19	Initiated	Grant Writing Assistance	Douglas	PAC	\$1,200	50%
Other Renewables #2	Initiated	Grant Writing Assistance	Clackamas	PGE	\$3,000	50%
Other Renewables #4	Initiated	Grant Writing Assistance	Yamhill	PGE	\$3,000	50%
Other Renewables #5	Initiated	Grant Writing Assistance	Marion	PGE	\$3,000	50%
Other Renewables #6	Initiated	Solar site assessment	Washington	PGE	\$600	100%
Other Renewables #7	Initiated	Grant Writing Assistance	Multnomah	PGE	\$3,000	100%
Other Renewables #9	Initiated	Solar site assessment	Umatilla	PGE	\$750	100%
Wind #10	Initiated	Equipment	Hood River	PGE or PAC	\$4,844	100%
Wind #11	Initiated	Feasibility Study	Multnomah	PGE	\$23,986	50%
Wind #12	Initiated	Feasibility Study	Sherman	PGE or PAC	\$120	50%
Wind - ALP	Ongoing	Numerous Feasibility Studies	n/a	PGE or PAC	\$120,000	100%
Total ETO cost					\$792,550	

* Other renewables refer to open solicitation projects

3. OREGON HOUSING AND COMMUNITY SERVICES

OVERVIEW

Oregon Housing and Community Services (OHCS) receives and administers PPC funds for low-income housing programs. Four and one-half percent of the PPC funds are dedicated to low-income housing development projects, either for construction of new housing or rehabilitation of existing housing for low-income families through the OHCS Housing Trust Fund. OHCS operates two weatherization programs, and an additional 11.7 percent of the total PPC funds collected are allocated for low-income weatherization. One program provides home weatherization (for single- and multi-family, owner occupied, and rental housing) and the other provides for weatherization of affordable multi-family rental housing through the OHCS Housing Division. In either case, housing projects supported by PPC funds for weatherization are required to have a conservation element.

Table 15 provides a summary of the Trust Fund and Weatherization portion of PPC fund receipts and expenditures from January 1, 2007 through June 30, 2008. Funds received by Oregon Housing and Community Services during this period amounted to \$18,680,060 and expenditures totaled \$32,181,197. (Note: this expenditure value includes \$11,517,822 in funds committed to projects that are not yet completed.)

Table 15: OHCS Receipt and Expenditure Summary (1/2007 – 6/2008)

Transaction	PGE	PacifiCorp	Total
Low-Income Weatherization			
Administration	\$427,956	\$246,599	\$674,555
Evaluation, Training, and Technical Assistance	\$427,956	\$246,599	\$674,555
ECHO	\$6,547,733	\$3,772,959	\$10,320,692
Multi-Family Rental Housing	\$1,155,482	\$665,816	\$1,821,298
Total Low-Income Weatherization	\$8,559,128	\$4,931,972	\$13,491,100
Low-Income Housing			
Administration	\$164,599	\$94,849	\$259,448
Program	\$3,127,374	\$1,802,139	\$4,929,512
Total Low-Income Housing	\$3,291,972	\$1,896,988	\$5,188,960
Total Fund Receipts	\$11,851,100	\$6,828,960	\$18,680,060
Expenditures			
Low-Income Weatherization*	\$8,408,459	\$4,655,059	\$13,063,518
Committed but unexpended	\$4,441,731	\$1,468,597	\$5,910,328
Low-Income Housing**			\$5,280,924
Committed but unexpended			\$3,802,245
Administrative Expenses**			\$331,789
Evaluation, Training, Technical Assistance**			\$829,952
Committed but unexpended			\$107,972
Energy Education	\$562,444	\$594,747	\$1,157,191
Committed but unexpended	\$1,207,962	\$489,315	\$1,697,277
Total Expenditures (w/o Committed)**	\$8,970,903	\$5,249,806	\$20,663,374.32
Total Expended and Committed**	\$14,620,596	\$7,207,718	\$32,181,197

*Includes the ECHO program and the Low-Income Weatherization Program (for multi-family rental housing).

** Low-Income Housing, Administrative, and Evaluation Training and Technical Assistance expenditures are not tracked by utility.

Specific detail on the low-income housing program and low-income weatherization activities is provided subsequently.

LOW-INCOME HOUSING

Receipts and Expenditures

The Housing Development Grant Program (HDGP), commonly known as the Housing Trust Fund, was created in 1991 to expand the State’s supply of housing for low and very low-income

families and individuals. The program provides grants and loans to construct new housing or to acquire and/or rehabilitate existing structures. Seventy-five percent of program funds must support households whose gross income is at or below 50 percent of the area median income; the balance of the funds can support households with incomes up to 80 percent of the area median income. The majority of program resources are awarded through a competitive application process that occurs twice annually, once for the spring and once for the fall funding cycle. Funding preference is given to project applicants who provide services appropriate for the targeted tenant population.

During the 2007-2009 biennium, \$1,550,000 of PPC funds were set aside for Housing Preservation of existing HUD properties that are at risk of being sold as market rate properties. Of the \$1.5 million, two projects have been allocated funds with an expected six more housing projects to follow.

Table 16 shows PPC fund receipts and expenditures for the low-income housing program. During the January 2007 – June 2008 period, a total of \$5,188,960 in PPC funds were allocated to Oregon Housing and Community Services to support low-income housing projects throughout the State. Expenditures from PPC revenue for projects developed during this period were \$5,280,924. An additional \$3,729,542 was expended for projects awarded funding prior to January 2007. Funds to pay project costs totaling \$3,802,245 were obligated but not spent as of June 30, 2008. In addition, allocations were made to six Regional Housing Centers to establish a program to acquire and rehabilitate single-family residences for purchase by low-income households. The one-time allocation to the Housing Centers will be recycled through the sale of the homes to continue the program for a period of 10 years.

**Table 16: Low-Income Housing Program Receipts and Expenditures
(1/2007 – 6/2008)**

Transaction	Total
Fund Receipts	\$5,188,960
Expenditures	
Committed but unexpended	\$3,802,245
Expenditures	\$5,280,924
Total Expended and Committed	\$9,083,169

Results

Key accomplishments for the low-income housing program during the January 2007 – June 2008 period include the following:

- Forty-four multi-family housing projects received HDGP awards that were either fully or partially funded with PPC revenue.
- HDGP funds helped twenty counties in Oregon create affordable housing and support local jobs.

- Projects representing the construction or rehabilitation of 904 affordable units; and
- HDGP awards leveraging total project costs of \$116.2 million.

Additional detail on program accomplishments, including the characteristics of the low-income families served is shown in Table 17.

Table 17: Low-Income Housing Accomplishments (1/2007-6/2008)

Accomplishment	Total
Number of Projects	44
Number of Units*	904
Population Served (# of housing units)	
Elderly	121
Families**	484
Special Needs (# of housing units)	
Special Needs Groups***	275
Farm Workers	24
Units where household income is between 61 and 80 percent of the area median income	61
Units where household income is between 51 and 60 percent of the area median income	273
Units where household income is between 41 and 50 percent the area median income	402
Units where household income is between 31 and 40 percent the area median income	108
Units where household income is equal or less than 30 percent the area median income	60

*The total number of units may overstate the number of low-income families served by the program, as some projects have manager's units that do not require fixed rents or income. In some cases not all units in a project are targeted for low-income housing. Some group homes are counted as one unit but may serve up to six individual low-income residents.

** Figure includes six Regional Housing Centers establishing five single-family residences for purchase by low-income families. The original PPC funds provided to a Regional Housing Center will be recycled to continue ongoing program for a period of 10 years.

*** Includes individuals in alcohol and drug recovery programs, ex-offenders, individuals with chronic mental illness, homeless, domestic violence, youth, HIV, and the developmentally disabled.

Table 18 shows how the low-income housing projects were distributed among Oregon's counties.

Table 18: Low-Income Housing Projects by County (1/2007-6/2008)

County	Number of Projects	Number of Units in County
Clackamas	3	76
Clatsop	3	52
Columbia	1	1
Coos	1	33
Curry	1	8
Deschutes	3	151
Douglas	1	5
Grant	2	2
Jackson	1	48
Jefferson	1	24
Lane	6	75
Lincoln	2	34
Linn	2	10
Morrow	1	19
Multnomah	8	222
Polk	1	5
Umatilla	2	86
Union	1	1
Washington	1	48
Yamhill	3	4
20 counties	44 Projects	904 units

LOW-INCOME WEATHERIZATION (MULTI-FAMILY RENTAL HOUSING)

Receipts and Expenditures

The Low-Income Weatherization program is designed to reduce the energy usage and utility costs of lower income tenants residing in affordable rental housing. The program provides grant funding for the construction or rehabilitation of affordable rental housing that is located in PGE or PacifiCorp service territories. Use of these funds requires that at least 50 percent of the units in the project be rented to households whose income is at or below 60 percent of the area median income (adjusted by family size) as defined by HUD. Projects receiving funds must also remain affordable for at least 10 years.

For each dollar invested, the project must demonstrate at least one kilowatt-hour in energy savings in the first year of operation. Program resources may be used for shell measures such as windows, doors, and insulation as well as energy efficient appliances and lighting.

Table 19 shows the PPC fund receipts and expenditures allocated for low-income home weatherization. During this period, a total of \$1,821,298 in PPC funds was allocated to Oregon Housing and Community Services to support weatherization of rental housing projects within the

State. Actual project expenditures were \$651,173 during this period while funds committed to projects totaled an additional \$1,906,347. Expenditures are less than committed funds as housing development projects can take upwards of two years to complete and funds therefore need to be reserved over multiple years.

**Table 19: Low-Income Weatherization (Multi-Family Rental Housing)
Receipts and Expenditures (1/2007 – 6/2008)**

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$1,155,482	\$665,816	\$1,821,298
Expenditures			
Committed but unexpended	\$1,705,776	\$648,866	\$2,354,642
Expenditures	\$1,079,144	\$1,026,143	\$2,105,287
Total Expended and Committed	\$2,784,920	\$1,675,009	\$4,459,929

Results

Key accomplishments for the January 2007 – June 2008 period include the following:

- Thirty-four housing projects estimated to assist 1,410 households across Oregon were funded during this period with a combined total cost of almost \$120 million; and
- These 34 projects are expected to produce more than 2.2 million kWh in electricity savings in the first year of operation.

The low-income weatherization accomplishments are summarized in Table 20.

Table 20: Low-Income Weatherization (Multi-Family Rental Housing) Accomplishments (1/2007 – 6/2008)

Accomplishment	Total
Number of Projects	34
Number of Units*	1,410
Estimated kWh Savings	2,294,226
Population Served (# of housing units)	
Elderly	472
Families	455
Special Needs (# of housing units)	
Special Needs Groups**	369
Farm Workers	114
Units where household income is between 61 and 80 percent of the area median income	150
Units where household income is between 51 and 60 percent of the area median income	322
Units where household income is between 41 and 50 percent of the area median income	442
Units where household income is between 31 and 40 percent of the area median income	272
Units where household income is equal or less than 30 percent of the area median income	43

*The total number of units overstates the number of units actually served by the program: some projects have manager's units that do not require fixed rents or income, and all units at a project location are not necessarily 100 percent affordable. As a result, total units by rent add to less than total units.

**Includes individuals in alcohol and drug recovery programs, ex-offenders, individuals with chronic mental illness, homeless and the developmentally disabled. One homeless project, containing 4 units, actually hosts 45 beds for participants.

Table 21 shows how the low-income weatherization projects were distributed among Oregon's counties.

Table 21: Low-Income Weatherization Program by County (1/2007-6/2008)

County	Number of Projects	Number of Units in County
Benton	2	137
Clackamas	2	75
Clatsop	1	12
Coos	1	28
Curry	1	8
Deschutes	2	99
Douglas	2	29
Jackson	2	88
Jefferson	1	24
Linn	2	60
Marion	3	234
Multnomah	10	435
Umatilla	4	133
Washington	1	48
14 counties	34 Projects	1,410 units

LOW-INCOME WEATHERIZATION (ECHO)

Receipts and Expenditures

A portion of the PPC allocated to Oregon Housing and Community Services goes into the Energy Conservation Helping Oregonians (ECHO) fund and is used for weatherization projects for low-income households.

Oregon Housing and Community Services (OHCS) contracts with local community action agencies (CAAs) to deliver the program. This local network of sub-grantees determines applicant eligibility and delivers services. Qualifying households must apply through the local CAA and are placed on a weatherization waiting list. The waiting period varies with each local agency depending on local need, but households with senior and disabled members and households with children under six years of age are given priority. Once a home is scheduled for weatherization, the applicant is contacted and an energy audit is scheduled. The energy audit determines the appropriate measure to be initiated based on the existing condition of the home and the funds available. Program resources can be used for shell measures that may include:

- Ceiling, wall, and floor insulation
- Energy-related minor home repairs
- Energy conservation education
- Air infiltration reduction
- Furnace repair and replacement
- Heating duct improvements

Completed work is inspected by the local agency to ensure compliance with program standards. For each dollar invested, the project/unit must also demonstrate at least 1 kilowatt-hour in energy savings in the first year of operation.

Table 22 shows the PPC fund receipts and expenditures allocated for low-income home weatherization. During this period, \$10,320,692 in PPC funds was designated for low-income weatherization from January 1, 2007 to June 30, 2008. Expenditures on completed weatherization projects during the same period totaled \$10,958,231 with an additional \$3,555,686 reserved for projects that had not been completed as of June 30, 2008.

Table 22: Low-Income Weatherization (ECHO) Program Receipts and Expenditures (1/2007-6/2008)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$6,547,733	\$3,772,959	\$10,320,692
Expenditures			
Committed but unexpended	\$2,735,955	\$819,731	\$3,555,686
Expenditures	\$7,329,315	\$3,628,916	\$10,958,231
Total Expended and Committed	\$10,065,270	\$4,448,647	\$14,513,917

Results

The low-income weatherization accomplishments are summarized in Table 23. Since the beginning of 2007, this program resulted in the weatherization of 3,947 homes with a combined estimated electricity savings of 15,785,703 kWh. These program efforts have directly benefited 6,706 people, the majority of whom are in demographic groups that tend to include the elderly, disabled individuals, and young children.

**Table 23: Low-Income Weatherization (ECHO) Program Accomplishments
(1/2007-6/2008)**

Accomplishment	Total
Number of Homes Weatherized	3,947
Annual kWh Savings	15,785,703
Total Population Served	6,706
Special Target Populations Served	
Elderly (>60 years old)	1,652
Children (<6 years old)	876
Handicapped	1,181
Farm Workers	68
Native American	255
Hispanic	1,172
African American	114
Asian	60

4. EDUCATIONAL SERVICE DISTRICTS

OVERVIEW

Each year, 10 percent of PPC funds are allocated to the 17 Educational Service Districts (ESDs) located within PGE and PacifiCorp service territories; statewide, 854 schools (112 districts and 421,571 students) are eligible for PPC funding. These funds are used for cost-effective energy conservation projects at individual schools within each ESD and must follow a specific spending directive. First, all schools within a school district must complete an energy audit to identify cost-effective conservation opportunities. After all the schools have completed the audit, PPC funds are used to pay for 100 percent of the installation cost for the energy efficiency measures identified during the audits. Finally, when all of the recommended measures have been installed, any remaining funds may be used to pay for additional energy conservation measures, energy conservation education, and renewable energy projects at schools within the ESD.

The Oregon Department of Energy provides program oversight for the ESD audits and projects to ensure consistency across ESDs and to verify that projects adhere to the guidelines established for this program. Although the Oregon Department of Energy has oversight for this program, the individual ESDs receive their PPC funds directly from the utilities.

RECEIPTS AND EXPENDITURES

Table 24 provides a summary of the ESD portion of PPC fund receipts and expenditures from January 1, 2007 through June 30, 2008. In addition to the normal program administrative expenses defined earlier, this program has additional administrative expenses for each ESD and school district. Total administrative costs for schools, then, equal \$582,760 and comprise 5.7 percent of total expenditures over this period, and 5.1 percent of the PPC allocated to Oregon schools.

Table 24: ESD Receipt and Expenditure Summary (1/2007 – 6/2008)

Transaction	PGE	PacifiCorp	Total
# of ESDs Receiving Funds⁹	5	15	17
Total Fund Receipts	\$7,315,485	\$4,212,579	\$11,528,064
Expenditures			
Audits	\$559,627	\$423,632	\$983,259
Conservation Measures Installed	\$4,273,946	\$4,133,921	\$8,407,867
ESD and School District Administrative Expenses			\$422,598
ODOE Administrative Expenses			\$160,162
ODOE Program Expenses			\$305,587
Total Expenditures	\$4,833,573	\$4,557,573	\$10,279,473

RESULTS

To date, among the 854 schools that are eligible for PPC funds, 708 (83 percent) have completed audits.¹⁰ A total of 6,869 individual energy efficiency measures have been identified in these audits, and 1,129 (16 percent) of the energy efficiency measures have been implemented. To date, there has not been enough PPC funding available for school districts to implement all the measures identified in the energy audits.

Table 25 shows the results of audits completed during the January 2007 – June 2008 period. During this time, 541 audits were completed across 59 school districts. The audits identified 2,065 conservation measures that could be installed cost-effectively. If all of these measures were adopted, they would result in 38,525,457 kWh in electricity savings annually and 1,981,498 therms in savings for natural gas. The energy savings measures identified translate to \$5,218,606 in potential utility bill savings each year if all the measures identified in these audits are adopted.

⁹ A total of 17 ESDs are eligible to receive PPC funds. Three ESD's are served by both PGE and PacifiCorp.

¹⁰ The 2005-2006 report erroneously stated that 825 total schools had been audited through 2006, when in fact only 625 (72 percent) had been audited.

Table 25: ESD Audit Results (1/2007 – 6/2008)

Audit Accomplishment	PGE	PacifiCorp	Total
# of Audits Completed	263	278	541
# of School Districts	37	22	59
# of Measures Identified	1,083	982	2,065
Simple Payback – Median Years	10	9.5	9.77
Simple Payback – Mean Years	12.13	12.55	12.33
Simple Payback – Years Range	0.1-50	0.1-50	0.1-50
Potential Savings Identified in Audits			
Electricity Savings (kWh)	15,767,855	22,757,602	38,525,457
Natural Gas Savings (therms)	766,277	1,215,221	1,981,498
Other Fuels (gal)	266,901	1,327,693	1,594,594
Total Annual Energy Cost Savings (\$)	\$2,033,559	\$3,185,047	\$5,218,606
Total Savings (Btu)	151,474,598,486	260,596,390,455	412,070,988,941
Total Cost of Measures Identified	\$35,086,030	\$44,402,213	\$79,488,243

PPC funds are also used to install the measures identified through the school audits, and the accomplishments related to actual measure installations are shown in Table 26. During the same period, 396 measures identified during audits were installed across 31 school districts. Energy efficiency measures that are most frequently installed include: BAS/DDC systems, efficient ballasts with T8 or T5 lamps, occupancy sensors and dimmers, programmable thermostats, total lighting retrofits (e.g., T12 to T8 conversions, incandescent to CFL conversions) and new LED exit signs.¹¹ Common operations and maintenance (O&M) measures include replacing/repairing steam traps and tuning up boilers by adjusting air-fuel ratios. In total, these measures are expected to save 13,393,370 kWh in electricity and 473,201 therms of natural gas annually. Total savings to the schools from the installation of these measures is estimated to be \$1,345,659 each year.

¹¹ “BAS” are building automation systems; “DDC” are direct digital controls.

Table 26: ESD Efficiency Measures Installed (1/2007 – 6/2008)

Measure Accomplishment	PGE	PacifiCorp	Total
# of Audit Measures Installed	225	171	396
# of School Districts	15	16	31
Annual Savings			
Electricity Savings (kWh)	5,405,422	7,987,948	13,393,370
Natural Gas Savings (therms)	295,041	178,160	473,201
Other Fuels (gal)	97,750	106,476	204,226
Total Annual Energy Cost Savings (\$)	\$708,555	\$637,104	\$1,345,659
Total Annual Energy Savings (Btu)	59,678,750,029	51,752,831,924	111,431,581,953
Total Cost of Measures Installed	\$4,273,946	\$4,133,921	\$8,407,867

5. SELF-DIRECT CUSTOMERS

OVERVIEW

Large commercial and industrial energy customers who fund their own efficiency projects (self-direct customers) can waive a portion of their public purpose charge. The Oregon Department of Energy maintains a database to help these customers individually calculate their monthly PPC responsibility. First, self-direct customers submit notice of efficiency projects to the Department of Energy for approval; projects are certified when completed and certified project amounts are recorded on customers' accounts. These "credits" can then be applied to public purpose charges on customers' utility bills. Self-direct customers who use such credits still qualify for at least 50 percent of Energy Trust incentives for other energy projects at the same site. Forty large energy customers in the PGE and PacifiCorp territories are currently active in the self-direct program or have pending applications.

Note that available project credits can be carried forward month-to-month, so credits claimed do not necessarily equal project expenditures in a given period. From January 2007 through June 2008, self-direct customers in the PacifiCorp service territory claimed \$881,843 in credits for conservation and renewable resource projects, and customers in the PGE service territory claimed \$3,164,668. Combined, self-direct customers of both utilities claimed \$2,738,140 in conservation credit and \$1,308,371 in renewable resource credit from January 2007 through June 2008.

RESULTS

Table 27 summarizes self-direct program conservation activity from January 2007 through June 2008. During this period, self-direction sites implemented projects that involved boiler modifications, HVAC system improvements, industrial process modifications, variable frequency drives (VFDs), and refrigeration and motor improvements. PGE customers certified 8 conservation projects (2 in Clackamas County, 2 in Multnomah County, and 4 in Washington County) with a total eligible cost of \$789,529, and PacifiCorp customers certified 4 projects (3 in Benton County and 1 in Linn County) with a total eligible cost of \$696,380. The combined effect of these projects is about 6.6 million kWh in energy savings annually, or \$356,946 in annual energy cost savings.

**Table 27: Self-Direct Program Certified Conservation Projects
(1/2007 – 6/2008)**

	PGE	PacifiCorp	Total
Projects Certified	8	4	12
Total Eligible Cost	\$789,529	\$696,380	\$1,485,909
Total Energy Cost Savings (annual)	\$271,292	\$85,654	\$356,946
Total Energy Savings (annual kWh)	4,613,925	1,939,182	6,553,107

Table 28 summarizes self-direct program renewable energy projects from January 2007 through June 2008. One PGE customer certified a small photovoltaic project (to power a monitoring station) with a total above market cost of \$5,876. This small project will produce 26 kWh of renewable energy produced annually.

**Table 28: Self-Direct Program Certified Renewable Energy Projects
(1/2007 – 6/2008)**

	PGE	PacifiCorp	Total
Projects Certified	1	0	1
Total Above Market Cost	\$5,876	\$0	\$5,876
Total Energy Produced (annual kWh)	26	0	26

Table 29 summarizes self-direct program green tag renewable energy purchases from January 2007 through June 2008. PGE customers purchased over 107,000 green tags valued at \$1.14 million, and PacifiCorp customers purchased over 26,000 green tags valued at nearly \$200,000. The combined effect of these contracts is nearly 134 million kWh of renewable energy purchased annually. The Oregon Department of Energy incurred administrative costs of \$22,586 and program expenses of \$28,337 to process all conservation, renewable energy, and green tag projects.

**Table 29: Self-Direct Program Green Tag Purchases
(1/2007 – 6/2008)**

	PGE	PacifiCorp	Total
Sites	13	11	24
Green Tags Purchased	107,635	26,232	133,867
Credits Issued	\$1,140,969	\$199,704	\$1,340,673
Energy Purchased (annual kWh)	107,641,004	26,226,000	133,867,004

6. SUMMARY

Table 30 summarizes the expenditures and results for PPC expenditures from January 2007 through June 2008. The agencies spent a combined total of \$101,652,095 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 961,363,255 kWh (nearly 110 aMW), which is enough to power more than 85,000 average-sized homes each year.¹² When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 3,346,853 million Btu.

Table 30: Summary of PPC Expenditures and Results (1/2007 – 6/2008)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated	aMW	MMBtu
Energy Trust – Conservation	\$53,936,013	367,962,751	42.00	1,255,857
Energy Trust – Renewables*	\$12,675,801	421,507,068	48.12	1,438,604
Education Service Districts**	\$10,279,473	13,393,370	1.53	111,432
OHCS Low-Income***	\$20,663,374	18,079,929	2.06	61,707
Self-Direct Customers****	\$4,097,434	140,420,137	16.03	479,254
Total Expenditures	\$101,652,095	961,363,255	109.74	3,346,853

* Energy saved includes savings from reduced transmission and distribution losses. Renewable energy savings is from currently operational projects.

** MMBtu includes natural gas, propane and oil savings, in addition to electricity savings.

***Expenditures for the OHCS Low-Income program include expenditures from the Housing Trust Fund, which does not track energy savings for its projects.

****Expenditures listed for Self-Direct represent public purpose charges retained by the participating sites in lieu of making payments to the utilities, which are then distributed among the other agencies (e.g., Energy Trust)

¹² Calculated using ODOE's estimate that an average megawatt is enough to power 775 homes each year (assuming electric heat).

7. APPENDIX - DESCRIPTIONS OF PROGRAMS AND BENEFITS FROM PPC-FUNDED AGENCIES

ENERGY TRUST OF OREGON, INC.

Oregonians and Energy Trust: Six Years of Making Clean Energy Choices

Since opening its doors in 2002, Energy Trust has designed and launched energy efficiency programs for every sector of the Oregon economy. We serve new and existing residential, commercial and industrial facilities. We provide renewable energy generation programs for solar, wind and biomass resources.

Since 2002 Energy Trust has helped nearly one hundred thousand Oregonians enjoy more energy efficient homes. With Energy Trust rebates 120,000 Oregonians are using high efficiency clothes washers. We have placed 1.9 million compact fluorescent light bulbs. Businesses have retrofitted 5,000 commercial buildings and built 580 high efficiency new buildings. Over 800 industrial and agricultural facilities operate more efficiently. We spurred installation of 1,300 new solar systems, seven biopower projects, three small wind installations and two completed utility scale wind projects.

As of June 2008, Energy Trust's energy efficiency programs, along with savings from self-directed industrial projects, have saved 189 average megawatts of electricity. Our renewable energy program projects, including the Goodnoe Hills wind farm and other projects expected to complete in 2008, account for an additional 110 average megawatts of clean energy.

The 299 average megawatts of combined savings and generation are enough to power 232,000 homes—or about twice as many as in Bend, Corvallis, Medford and Salem combined. We've saved 7.7 million therms of natural gas, enough to heat over 15,000 homes.

Compared to similar organizations nationwide, Energy Trust stands out as one of the top performers. With savings approaching 1% of Pacific Power and Portland General Electric power sales annually, Energy Trust outperformed all program deliverers excepting those with more per capita funding. And with levelized cost of savings well below 2 cents per kilowatt hour, Energy Trust outperformed all but one other program deliverer.

Energy Trust investments in clean energy have created hundreds of jobs and pumped millions of dollars into the Oregon economy. Energy Trust supports the growth of over 800 Oregon businesses that act as Energy Trust trade allies. This activity generated \$35 million in wages and \$7.5 million in new business income and created 850 new jobs in 2007.

Clean energy reduces carbon dioxide emissions and helps Oregon meet its climate goals. Since 2002, projecting through 2008, efficiency savings and renewable generation spearheaded by Energy Trust have reduced Oregon's carbon emissions by 3.2 million tons, equivalent to the carbon produced by 555,000 cars in a year.

Energy Trust is pleased to help Oregonians make wise choices that control energy costs and move our state toward energy independence and carbon neutrality.