

Report to Legislative Assembly on Public Purpose Expenditures January 2009 – December 2010

Final Report

March 31, 2011

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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 ECONorthwest project director for this evaluation and John Boroski was the project manager. Questions regarding the report should be directed to John Boroski at boroski@portland.econw.com or by phone at (503) 222-6060. Whit Perkins 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 territories.¹ As part of SB 1149, these utilities were required to collect a 3 percent charge on their retail electricity sales beginning in March 2002. This public purpose charge (PPC) 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.

Oregon has a 30-year history of using ratepayer funding for conservation and renewable programs prior to SB 1149. Before 2002, utilities administered conservation programs using ratepayer funds. Under SB 1149, programs are still funded by ratepayers (through the public purpose charge) but responsibility for running these programs was transferred to the Energy Trust of Oregon. The administrators of the various programs funded with the public purpose charge are:

- **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 in the service areas of Portland General Electric and PacifiCorp. 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 in individual schools.
- **Oregon Housing and Community Services.** Oregon Housing and Community Services (OHCS) receives and administers public purpose charge funds for two low-income housing programs. Four and one-half percent of the public purpose charge funds are dedicated to low-income housing development projects in the PGE and PacifiCorp service areas; 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 the total PPC funds collected are allocated for the weatherization of dwellings of low-income residents in the PGE and PacifiCorp service areas. 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 August 2010, 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, 2009 – December 31, 2010 period. The far right column of the table lists the level of expenditure for these funds over the same period, and shows that expenditures were similar to disbursements for most programs. As shown at the bottom of the table, PPC expenditures totaled \$181,372,579 across all fund administrators. Administrative costs for agencies receiving the PPC funds totaled \$9,366,512, or 5.2 percent of all expenditures during this period.

PPC Disbursements and Expenditures (1/2009 – 12/2010)

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
Energy Trust of Oregon				
Conservation	\$53,735,385	\$32,645,450	\$86,380,835	\$88,693,436
Renewable Energy	\$15,539,075	\$9,442,232	\$24,981,307	\$31,485,950
Administrative Expenses				\$8,094,130
Education Service Districts	\$9,907,421	\$5,806,085	\$15,713,506	\$19,223,090
ODOE Program Expenses				\$369,991
Administrative Expenses				\$566,265
Oregon Housing and Community Services				
Low-Income Weatherization*	\$11,637,661	\$6,825,519	\$18,463,180	\$16,800,938
Low-Income Housing	\$4,476,024	\$2,625,300	\$7,101,324	\$8,954,878
Administrative Expenses				\$684,098
Evaluation, Training, Technical Assistance				\$221,371
Energy Education				\$1,631,100
Self-Direct Customers**				
Conservation	\$2,220,180	\$617,137	\$2,837,316	\$2,837,316
Renewable Energy	\$1,320,712	\$428,349	\$1,749,060	\$1,749,060
ODOE Program Expenses				\$38,936
Administrative Expenses				\$22,019
Totals	\$98,836,458	\$58,390,071	\$157,226,529	\$181,372,579
Administrative Costs Only				\$9,366,512

* 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 2009 through December 2010. The agencies spent a combined total of \$181,372,579 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 701,782,134 kWh (80 aMW), which is enough to power over 62,000 average-sized homes each year.² When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 2,587,208 million Btu.

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

Summary of PPC Expenditures and Results (1/2009 – 12/2010)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated	aMW	MMBtu
Energy Trust – Conservation	\$94,807,531	418,497,202	47.77	1,428,331
Energy Trust – Renewables*	\$33,465,985	51,950,954	5.93	177,309
Education Service Districts**	\$20,159,346	9,462,128	1.08	95,335
OHCS Low-Income***	\$28,292,385	14,898,099	1.70	50,847
Self-Direct Customers****	\$4,647,332	206,973,751	23.63	706,401
Total Expenditures	\$181,372,579	701,782,134	80.11	2,458,223

* Energy saved includes savings from reduced transmission and distribution losses. Renewable energy savings are 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 territories.³ As part of SB 1149, these utilities were required to collect a 3 percent charge on their retail electricity sales beginning in March 2002. This public purpose charge (PPC) 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 August 2010, ECONorthwest was hired by the Oregon Department of Energy and the Oregon Public Utility Commission (PUC) 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 2009 through December 2010. 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 service areas of PGE and PacifiCorp. The Energy Trust receives 73.8 percent of the available PPC funds (56.7 percent dedicated to conservation programs and 17.1 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 two low-income housing programs. Four

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

and one-half percent of the PPC funds are dedicated to low-income housing development projects in the PGE and PacifiCorp service areas. 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 the total PPC funds collected are allocated for the weatherization of dwellings of low-income residents in the PGE and PacifiCorp service areas. 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 2009 through December 2010 (see Table 2).

Figure 1: PPC Fund Allocation by Administrator and Program (1/2009 – 12/2010)⁴

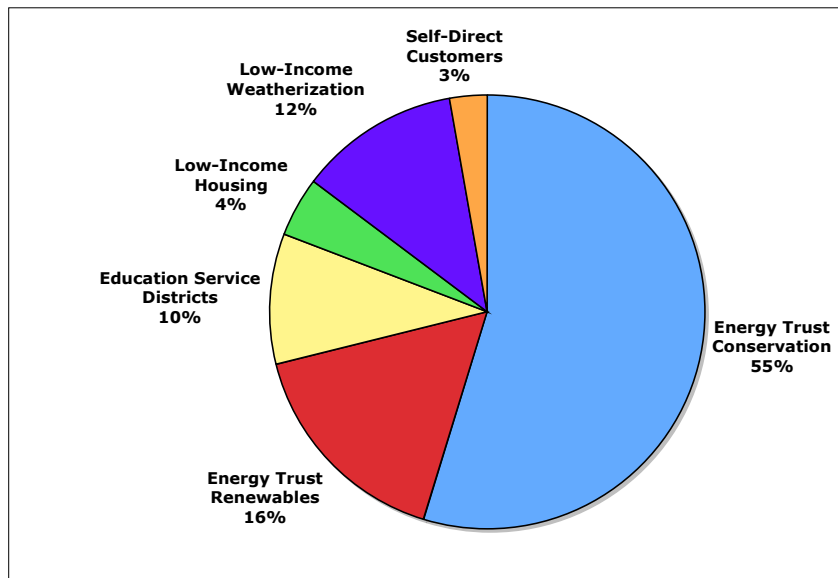


Figure 2 shows the total PPC fund collections for the January 2009 – December 2010 period divided between residential and non-residential ratepayers for each utility.⁵ For both utilities, public purpose funds were collected in the same proportions from the residential and non-residential sectors.

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 2009 thru December 2010. 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

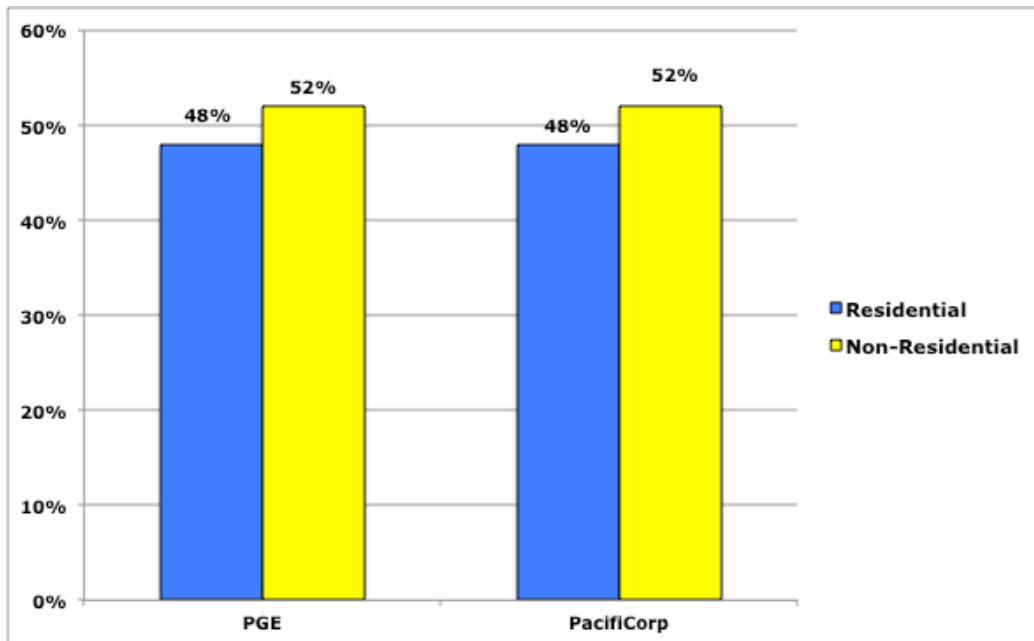
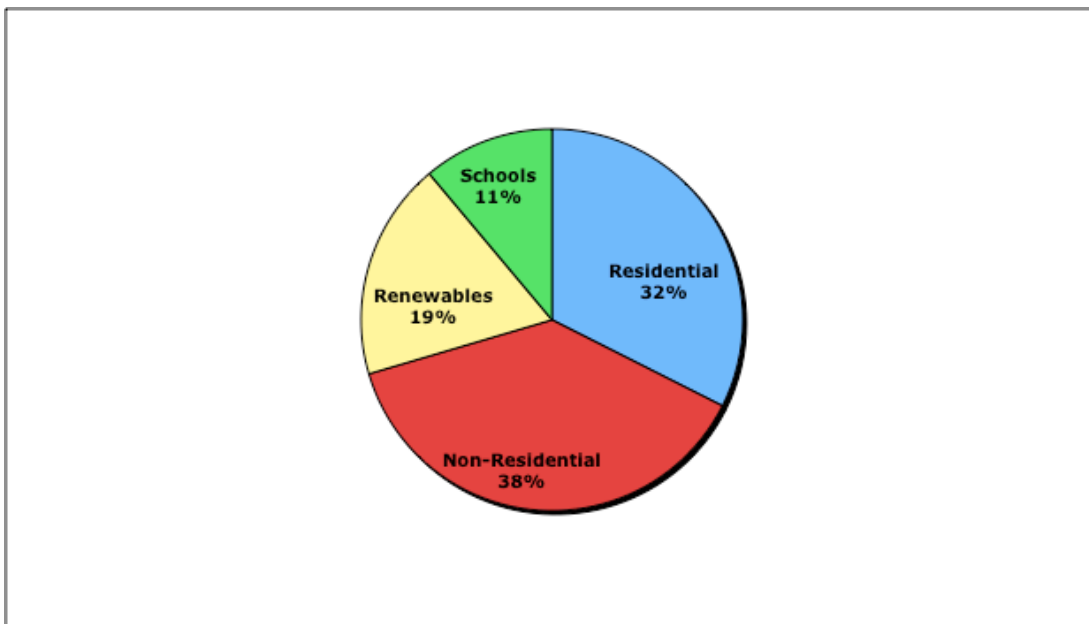


Figure 3 shows how PPC fund expenditures by the various agencies and programs are distributed among sectors. The non-residential sector received 38 percent of expenditures from January 2009 to December 2010. Over the same timeframe, schools received 11 percent of expenditures, 19 percent of expenditures were spent on renewable resource development, and 32 percent of expenditures were spent on programs for residential customers (covered by the OHCS and Energy Trust residential conservation programs).

Figure 3: Distribution of PPC Expenditures



RECEIPT AND EXPENDITURE SUMMARY

This report details public purpose charge expenditures from January 1, 2009 through December 31, 2010. Table 1 shows the total funds collected during this period from both PGE and PacifiCorp. Over this 2-year period, PGE disbursed \$98,836,458 in PPC funds and PacifiCorp disbursed \$58,390,071, for a total of \$157,226,529 allocated for conservation and renewable energy programs across the agencies. The utilities spent a combined total of \$79,398 on administrative expenses to collect and distribute PPC funds to the agencies. This amount includes funds distributed to the Oregon PUC to help administer the program.

Table 1: Total PPC Fund Disbursements (1/2009 – 12/2010)

Source	PPC Disbursements	Administrative Expenses*
PGE	\$98,836,458	\$46,037
PacifiCorp	\$58,390,071	\$33,361
Total	\$157,226,529	\$79,398

*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 2009 – December 2010 period. The far right column of the table lists the level of expenditure for these funds over the same period, and shows that expenditures were similar to disbursements for most programs. As shown at the bottom of the table, PPC expenditures totaled \$157,226,529 across all fund administrators. Administrative costs for agencies receiving the PPC funds totaled \$9,366,512 or 5.2 percent of all expenditures during this period.

Table 2: PPC Disbursements and Expenditures (1/2009 – 12/2010)

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
Energy Trust of Oregon				
Conservation	\$53,735,385	\$32,645,450	\$86,380,835	\$88,693,436
Renewable Energy	\$15,539,075	\$9,442,232	\$24,981,307	\$31,485,950
Administrative Expenses				\$8,094,130
Education Service Districts	\$9,907,421	\$5,806,085	\$15,713,506	\$19,223,090
ODOE Program Expenses				\$369,991
Administrative Expenses				\$566,265
Oregon Housing and Community Services				
Low-Income Weatherization*	\$11,637,661	\$6,825,519	\$18,463,180	\$16,800,938
Low-Income Housing	\$4,476,024	\$2,625,300	\$7,101,324	\$8,954,878
Administrative Expenses				\$684,098
Evaluation, Training, Technical Assistance				\$221,371
Energy Education				\$1,631,100
Self-Direct Customers**				
Conservation	\$2,220,180	\$617,137	\$2,837,316	\$2,837,316
Renewable Energy	\$1,320,712	\$428,349	\$1,749,060	\$1,749,060
ODOE Program Expenses				\$38,936
Administrative Expenses				\$22,019
Totals	\$98,836,458	\$58,390,071	\$157,226,529	\$181,372,579
Administrative Costs Only				\$9,366,512

* 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 2008 for each agency. Unexpended funds from 2008 are listed, in addition to new receipts and expenditures during the January 2009 – December 2010 period.

Table 3: Cumulative PPC Receipts and Expenditures (1/2009 – 12/2010)

Fund Administrator / Program	2008 Carry Forward*	1/2009-12/2010 Receipts	1/2009-12/2010 Expenditures
Energy Trust of Oregon			
Conservation	\$8,930,393	\$86,380,835	\$94,807,531
Renewable Energy	\$38,264,916	\$24,981,307	\$33,465,985
Education Service Districts	\$1,785,042	\$15,713,506	\$20,159,346
Oregon Housing and Community Services**	\$12,080,086	\$25,564,504	\$28,292,385
Self-Direct Customers***	\$0	\$4,586,377	\$4,647,332
Totals	\$61,060,437	\$157,226,529	\$181,372,579

* 2008 carryover amounts calculated by ECONorthwest using data from the *Report to Legislative Assembly on Public Purpose Expenditures for the Period January 1, 2007 – December 31, 2008* (April 30, 2009).

** 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 informational assistance and financial incentives to install efficiency measures and develops projects that generate electricity using 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, 2009 through December 31, 2010. Funds received by Energy Trust during this period totaled \$112,139,513 and expenditures totaled \$128,273,517. Administrative expenses totaled \$8,094,130 and comprised 6.3 percent of total spending by Energy Trust on electric conservation and renewable programs and 7.3 percent of total PPC receipts during this period.⁷

Table 4: Energy Trust Receipt and Expenditure Summary (1/2009 – 12/2010)

Transaction	PGE	PacifiCorp	Total
Total Fund Receipts	\$69,274,460	\$42,865,053	\$112,139,513
Expenditures			
Energy Conservation	\$54,615,383	\$34,078,053	\$88,693,436
Renewable Energy	\$17,986,420	\$13,499,531	\$31,485,950
Administrative Expenses	\$4,875,890	\$3,218,240	\$8,094,130
Total Expenditures	\$77,477,692	\$50,795,824	\$128,273,517

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

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 contracted with the Energy Trust in 2006 and 2007 to deliver three programs in its service territory. In 2008, PGE and Pacific Power began providing 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 2009 – December 2010 period, \$86,380,836 in PPC funds was distributed to Energy Trust for spending on these programs. Conservation expenditures totaled \$94,807,531 during this same period. Administrative costs that could be directly assigned to Energy Trust conservation programs totaled \$6,114,095, or 6.4 percent of total conservation program spending and 7.1 percent of total PPC receipts for conservation programs.

Table 5: Energy Trust Conservation Receipts and Expenditures (1/2009 – 12/2010)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$53,735,385	\$32,645,450	\$86,380,836
Expenditures			
Program Expenditures	\$54,615,383	\$34,078,053	\$88,693,436
Administrative Expenses	\$3,752,460	\$2,361,635	\$6,114,095
Total Expenditures	\$58,367,843	\$36,439,688	\$94,807,531

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, 419,309,632 kWh in energy savings were achieved across all market sectors. The industrial sector accounted for 42.8 percent of these savings with 179,627,214 kWh saved. Commercial sector savings were 133,254,768 kWh (31.8 percent of Energy Trust conservation savings), and residential sector savings were 106,427,649 kWh (25.4 percent).

Production efficiency programs accounted for 98.1 percent of savings in the industrial sector. In the commercial sector, the Building Efficiency Program was the largest contributor and accounted for 72.1 percent of the energy savings achieved in this sector.

Table 6: Energy Trust Conservation Programs Energy Savings By Service Territory (1/2009 – 12/2010)*

Program Name	PGE Savings (kWh)	PacifiCorp Savings (kWh)	Total Savings (kWh)	Average Life of Savings (years)
Residential				
Home Energy Savings	19,243,920	11,013,520	30,257,440	14.4
New Homes & Products	25,460,756	14,831,935	40,292,690	9.5
NEEA (Market Transformation)	20,376,494	15,501,025	35,877,519	8.0
Total Residential	65,081,170	41,346,479	106,427,649	10.7
Commercial				
Building Efficiency	69,930,636	26,189,135	96,119,771	12.4
New Building Efficiency	14,714,474	7,708,391	23,517,599	18.4
NEEA (Market Transformation)	7,761,921	5,855,477	13,617,398	13.5
Total Commercial	92,407,031	39,753,003	133,254,768	14.0
Industrial				
Production Efficiency	95,983,052	80,285,787	176,268,839	8.4
NEEA (Market Transformation)	1,914,273	1,444,102	3,358,375	10.0
Total Industrial	97,897,326	81,729,888	179,627,214	8.4
Total All Programs	255,385,527	162,829,371	419,309,632	11.2

* 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, almost 44,000 ENERGY STAR appliances received rebates, and in the commercial sector, nearly 300 highly efficient new commercial buildings have been developed.

Table 7: Energy Trust Example Efficiency Improvements (1/2009 – 12/2010)

Improvement Type	Number of Projects*	Average Life of Savings (Years)
Commercial projects		
Existing buildings retrofitted	2,146	12.4
Efficient new buildings constructed	294	18.4
Multifamily buildings retrofitted	200	13.8
New multifamily buildings constructed	25	17.2
Solar water heating commercial installations	14	20.0
Industrial projects		
Efficient manufacturing processes, water and wastewater treatment, and agriculture	1,453	8.4
Residential projects		
Efficient new homes constructed	633	25.3
Efficient new manufactured homes purchased	201	32.5
Home energy reviews conducted	7,810	N/A
Single-family homes retrofitted	5,753	15.4
Manufactured homes retrofitted	2,156	7.6
Residential solar water heating installations	109	20.0
ENERGY STAR appliance rebates	43,914	13 to 22**

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

** Dishwashers: 13 years, Clothes Washers: 14 years, Freezers: 20 years, Refrigerators: 22 years

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 (\$24.8 million) followed by the Commercial Building Efficiency Program (\$22.9 million) and Residential Efficient New Homes/Products Program (\$15.2 million). The industrial sector attained the lowest overall levelized energy costs, with an average cost of about 2.0 cents per kWh. The commercial and residential sectors had slightly higher average levelized costs of savings at 2.7 and 3.2 cents per kWh, respectively.

Table 8: Energy Trust Conservation Costs and Levelized Energy Costs (1/2009 – 12/2010)

Program Name	ETO Cost (all electric funders)*	Levelized Cost (dollars/kWh)**
Residential		
Home Energy Savings	\$11,788,239	\$0.036
Efficient New Homes/Products	\$15,225,757	\$0.047
NEEA (Market Transformation)	\$3,532,091	\$0.014
Total Residential	\$30,546,087	\$0.032
Commercial		
Building Efficiency	\$22,907,609	\$0.024
New Building Efficiency	\$12,943,212	\$0.045
NEEA (Market Transformation)	\$2,599,108	\$0.018
Total Commercial	\$38,449,929	\$0.027
Industrial		
Production Efficiency	\$24,830,538	\$0.020
NEEA (Market Transformation)	\$980,974	\$0.036
Total Industrial	\$25,811,512	\$0.020

* 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 energy efficiency incentives paid by Energy Trust were distributed across the geographic regions of Oregon. About 63 percent of all incentives (\$31.8 million) were paid to customers in the Portland area, and 30 percent was divided between the Willamette Valley and southern Oregon. The industrial and residential sectors received similar shares of incentive payments (28 and 31 percent, respectively).

Table 9: Energy Trust Energy Efficiency Incentive Payments by Sector and Region, Thousands of Dollars (1/2009 – 12/2010)

Sector	Central/ East	NW/ Coast	Portland Area	Southern	Willamette Valley	Total
Commercial	\$684	\$339	\$15,775	\$1,475	\$2,639	\$20,912
Industrial	\$1,495	\$7	\$7,040	\$3,072	\$2,583	\$14,197
Residential	\$959	\$198	\$8,944	\$2,595	\$2,796	\$15,493
Total	\$3,139	\$544	\$31,759	\$7,142	\$8,018	\$50,601

MARKET TRANSFORMATION

Actions and Processes

NEEA is funded by electric utilities in Oregon, Washington, Idaho, and Montana, and Energy Trust provides funding on behalf of PGE and PacifiCorp’s ratepayers. 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 Energy Trust but are more focused on long-term market change. The timeline of this report overlaps with the beginning of NEEA’s 2010-2014 Business Plan. Among its new initiatives are programs for ductless heat pumps, consumer electronics, efficient new homes, high efficiency PC power supplies, and building operation performance in existing hospitals and offices.

Table 10 shows the energy savings accomplishments of the programs delivered by NEEA. During the period covered by this report, nearly 53,000,000 kWh in energy savings were achieved across the three market sectors, with the residential sector accounting for 68 percent of the savings.

Table 10: Market Transformation Energy Savings By Program and Utility (1/2009 – 12/2010)*

Program Name	PGE Savings (kWh)	PacifiCorp Savings (kWh)	Total Savings (kWh)	Average Life of Savings (years)
NEEA Residential	20,376,494	15,501,025	35,877,519	8.0
NEEA Commercial	7,761,921	5,855,477	13,617,398	13.5
NEEA Industrial	1,914,273	1,444,102	3,358,375	10.0
Total	30,052,688	22,800,604	52,853,292	9.5

* 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.

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 (EPA) 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 \$7.1 million, with the greatest share (50 percent) spent in the residential sector.

Table 11: Energy Trust Market Transformation Costs (1/2009 – 12/2010)

Program Name	ETO Cost
NEEA Residential	\$2,599,108
NEEA Commercial	\$980,974
NEEA Industrial	\$3,532,091
Total	\$7,112,173

Technology Advancement

NEEA has several technology initiatives underway or under development to fill the gap left by declining regional savings from CFLs. The decline in savings results from (1) assumptions that CFL sales would increase over time had NEEA not run its initiatives, and (2) a decline in CFL sales from their peak in 2008. Currently, NEEA is experiencing success with the implementation

of its ductless heat pump initiative, consumer electronics, and industrial Continuous Energy Improvement initiative.

Through the end of 2010, NEEA’s Ductless Heat Pump (DHP) Program has expanded the market’s capacity to deliver DHP’s and has nearly achieved its goal to increase HVAC contractor participation by 30 percent over 2009. Additionally, NEEA has achieved a 15 percent market share for ENERGY STAR new homes in the Northwest through December 2010 and is working continuously to secure commitments from retailers to participate in the 2010 Consumer Electronics initiative, representing 80 percent of the Northwest television market.

NEEA’s technological advancements in the commercial and industrial segments include efforts to reduce energy use in the hospital and office real estate markets by 10 to 30 percent through its Strategic Energy Management program.

NEEA has several other technologies under investigation and project development. NEEA’s board will consider in December a portfolio of additional initiatives to accelerate regional savings in the next several years.

RENEWABLE ENERGY

Receipts and Expenditures

Table 12 shows the PPC fund receipts and expenditures dedicated to Energy Trust renewable energy programs from January 1, 2009 through December 31, 2010. During this period, \$24,981,307 in PPC funds was allocated to Energy Trust for renewable energy projects, and renewable energy program spending totaled \$33,465,985. Administrative costs related to the renewable energy program totaled \$1,980,035 and comprised 5.9 percent of total renewable energy program spending by Energy Trust and 7.9 percent of the PPC receipts designated for the renewable energy programs.

Table 12: Energy Trust Receipts and Renewable Expenditures (1/2009 – 12/2010)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$15,539,075	\$9,442,232	\$24,981,307
Expenditures			
Program Expenditures	\$17,986,420	\$13,499,531	\$31,485,950
Administrative Expenses	\$1,123,429	\$856,606	\$1,980,035
Total Expenditures	\$19,109,849	\$14,356,136	\$33,465,985

Results

Table 13 lists all the active renewable energy generation projects completed or initiated by Energy Trust from January 2009 through December 2010. The largest amount of renewable energy capacity will be achieved through a 3 MW solar project that resulted from PGE’s request for proposals for renewable energy projects. The project encompasses two 1.5 megawatt ground-mounted, thin film solar installations in Polk County. In addition, a 1.06 MW biomass project capturing methane was installed at a Douglas County landfill.

Upon completion, all of the projects listed will provide a total of 89,700 MWh in renewable energy per year. Projects that are currently operational are providing 51,951 MWh per year. The Solar Electric Program, which provides homeowners and businesses with financial incentives to adopt power applications, has completed 1,677 projects that are now operational.

The Open Solicitation program provides incentives and support for renewable energy projects using commercial technologies, such as hydropower and geothermal electric that are not eligible for incentives through Energy Trust's other renewable energy programs. It also helps provide experience in renewable energy sectors that may in the future merit their own programs.

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 2009 through December 2010. A total of 85 projects were active during the report period: 77 were completed, and 8 are ongoing. Project types ranged from equipment incentives to feasibility studies to grant writing assistance. Thirty-nine projects are located in PacifiCorp's service territory, and 30 are located in PGE's territory (16 projects could be located in either or both territories). The three project types are wind (29 projects), biomass (15 projects), solar (6 projects), and other renewables (35 projects). The total cost for all of these studies and potential projects is \$916,919.

Table 13: Energy Trust Renewable Energy Projects Summary (1/2009 – 12/2010)

Project	# of Projects	Status	Year	County	Estimated Life Years	Generating Capacity (MW)	Annual Energy (MWh/yr)	Project Cost (\$/MWh)	Cost to Energy Trust (\$/MWh)	Market Cost Ratio	Percent of Above Market Cost Ratio	Utility Service Territory
Biomass #1	1	Completed	2009	Linn	20	1.600	12,161	\$650	\$23	3%	5%	PAC
Biomass #2	1	Completed	2009	Douglas	20	1.060	8,480	\$911	\$146	55%	100%	PAC
Biomass #3	1	Contracted	2010	Lane, Marion, Yamhill	20	0.795	6,560	\$2,063	\$278	55%	95%	PGE & PAC
Other Renewable #1	1	Completed	2009	Linn	20	0.511	2,790	\$691	\$170	25%	100%	PAC
Other Renewable #2	3	Completed	2009	Multnomah	20	1.094	1,168	\$6,016	\$909	55%	65%	PGE
Other Renewable #3	6	Completed	2010	Multnomah, Clackamas	20	0.795	2,955	\$4,766	\$790	55%	55%	PGE
Other Renewable #4	1	Completed	2009	Hood River	20	0.340	1,306	\$3,010	\$172	67%	100%	PAC
Other Renewable #5	1	Completed	2010	Klamath	20	0.280	756	\$1,339	\$644	48%	88%	PAC
Other Renewable #6	1	Completed	2009	Deschutes	20	0.017	2,752	\$3,792	\$533	83%	83%	PAC
Other Renewable #7	1	Completed	2009	Deschutes	15	0.010	1,3435	\$1,660	\$251	35%	41%	PAC
Other Renewable #8	1	Completed	2010	Hood River	20	0.120	398	\$9,860	\$251	41%	35%	PAC
Other Renewable #9	1	Completed	2009	Benton	20	0.004	4	\$5,207	\$1,661	41%	35%	PAC
Other Renewable #10	1	Completed	2009	Multnomah	20	0.085	88	\$9,531	\$1,704	100%	100%	PGE
Other Renewable #11	1	Completed	2009	Klamath	20	0.017	35	\$5,297	\$903	83%	83%	PAC
Other Renewable #12	1	Contracted	2010	Wallowa	20	0.011	80	\$1,693	\$314	78%	78%	PAC
Other Renewable #13	1	Contracted	2010	Multnomah	20	0.025	159	\$2,641	\$409	54%	54%	PAC
Other Renewable #14	1	Contracted	2010	Deschutes	20	0.030	127	\$2,182	\$928	75%	75%	PAC
Other Renewable #15	2	Contracted	2009	Clatsop	20	3.000	3,940	\$4,683	\$1,751	84%	84%	PGE
Other Renewable #16	1	Contracted	2010	Clackamas	20	1.760	2,118	\$3,419	\$826	56%	56%	PGE
Other Renewable #17	1	Completed	2009	Marion	15	0.010	29	\$3,419	\$940	28%	28%	PGE
Wind #1	1	Completed	2009	Polk	15	0.002	3	\$10,101	\$3,636	36%	36%	PAC
Wind #2	1	Completed	2009	Hood River	15	0.002	3	\$8,218	\$6,982	83%	83%	PAC
Wind #3	1	Completed	2010	Polk	15	0.002	3	\$6,799	\$3,791	67%	67%	PGE
Wind #4	1	Completed	2009	Multnomah	15	0.010	11	\$30,400	\$5,236	17%	17%	PAC
Wind #5	1	Completed	2009	Marion	15	0.020	26	\$3,921	\$1,361	87%	87%	PGE
Wind #6	1	Completed	2010	Marion	15	0.002	3	\$6,522	\$3,636	56%	56%	PAC
Wind #7	1	Completed	2009	Polk	15	0.002	3	\$6,522	\$3,636	56%	56%	PGE
Wind #8	1	Completed	2010	Yamhill	15	0.010	3	\$6,522	\$3,636	56%	56%	PAC
Wind #9	1	Completed	2010	Yamhill	15	0.010	25	\$3,647	\$1,076	30%	30%	PGE
Wind #10	1	Completed	2009	Polk	15	0.010	22	\$3,768	\$1,241	33%	33%	PGE
Wind #11	1	Completed	2009	Yamhill	15	0.010	22	\$2,574	\$918	36%	36%	PGE
Wind #12	1	Completed	2010	Marion	15	0.020	29	\$3,641	\$1,204	33%	33%	PGE
Wind #13	1	Completed	2010	Jackson	15	0.020	22	\$4,411	\$1,221	35%	35%	PAC
Wind #14	1	Completed	2010	Marion	15	0.020	24	\$4,211	\$1,461	35%	35%	PGE
Wind #15	1	Completed	2010	Polk	15	0.002	3	\$6,522	\$3,636	56%	56%	PAC
Wind #16	1	Completed	2010	Polk	15	0.002	3	\$5,680	\$3,167	67%	67%	PGE
Wind #17	1	Completed	2010	Yamhill	15	0.002	17	\$2,779	\$1,445	67%	67%	PGE
Wind #18	1	Completed	2010	Yamhill	15	0.005	11	\$4,166	\$2,168	87%	87%	PGE
Wind #19	1	Completed	2010	Polk	15	0.010	16	\$6,302	\$1,702	87%	87%	PGE
Wind #20	1	Completed	2010	Marion	15	0.042	53	\$1,698	\$51	3%	3%	PGE
Wind #21	1	Completed	2010	Marion	15	0.250	352	\$2,309	\$653	90%	90%	PGE
Wind #22	1	Contracted	2009	Yamhill	15	0.003	3	\$6,768	\$3,774	67%	67%	PGE
Wind #23	1	Contracted	2010	Multnomah	15	0.003	5	\$9,954	\$2,212	87%	87%	PGE
Wind #24	1	Contracted	2010	Marion	15	0.020	20	\$5,815	\$1,805	87%	87%	PGE
Wind #25	1	Contracted	2010	Marion	15	0.020	18	\$6,417	\$1,992	87%	87%	PGE
Wind #26	1	Contracted	2010	Marion	15	0.020	21	\$5,570	\$1,729	87%	87%	PGE
Wind #27	1	Contracted	2010	Marion	15	0.010	18	\$5,474	\$1,803	67%	67%	PGE
Wind #28	1	Contracted	2010	Marion	15	0.002	4	\$4,939	\$2,754	67%	67%	PGE
Wind #29	1	Contracted	2010	Marion	15	0.005	11	\$5,645	\$2,255	55%	55%	PAC
Wind #30	1	Contracted	2010	Yamhill	15	0.050	85	\$4,247	\$1,238	35%	35%	PAC
Wind #31	1	Contracted	2010	na	20	na	1,399	na	na	na	na	PAC
Solar Electric in PAC	34	Contracted	na	na	na	na	na	na	na	na	na	PAC
Solar Electric in PGE	64	Contracted	na	na	na	na	na	na	na	na	na	PAC
Solar Electric in PAC	768	Operational	na	na	na	na	2,096	\$5,940	\$1,587	na	na	PAC
Solar Electric in PGE	909	Operational	na	na	na	na	8,429	\$6,802	\$1,829	na	na	PGE
Total Operational	1,717	Operational	na	na	na	na	5,088	10,564	897,700	na	na	PGE
Total Contracted	1,834	Contracted	na	na	na	na	15,652	15,652	897,700	na	na	PAC
Total	3,551	Operational/Contracted	na	na	na	na	20,640	26,216	1,794,400	na	na	PAC/PGE

* Costs in this table reflect full incentives committed to projects, not expenditures during this time period. Please reference Table 12 for actual expenditures.
 ** The percent of above-market cost paid does not necessarily reflect the percent of green tags owned by Energy Trust.
 Green tag ownership is determined based on green tag policy, which can be found at <http://www.energytrust.org/library/policies/4.15.000.pdf>

Table 14: Energy Trust Feasibility Studies and Other Projects (1/2009 – 12/2010)

Project*	Status	Project Type	County	Utility Service Territory	Cost to Energy Trust	Energy Trust Share
Biomass # 1	Complete	Feasibility Analysis	Jackson	PAC	\$5,000	50%
Biomass # 2	Complete	Feasibility Analysis	Yamhill	PGE	\$20,000	50%
Biomass # 3	Complete	Feasibility Analysis	Jackson	PAC	\$22,768	20%
Biomass # 4	Complete	Feasibility Analysis	Umatilla	PAC	\$17,500	50%
Biomass # 5	Complete	Feasibility Analysis	Marion	PGE	\$21,400	36%
Biomass # 6	Complete	Feasibility Analysis	Yamhill	PGE	\$25,125	50%
Biomass # 7	Complete	Feasibility Analysis	n/a	PAC & PGE	\$30,000	49%
Biomass # 8	Complete	Feasibility Analysis	Douglas	PAC	\$18,400	50%
Biomass # 9	Complete	Feasibility Analysis	Lane	PAC	\$30,644	50%
Biomass # 10	Complete	Feasibility Analysis	Clackamas	PGE	\$16,403	50%
Biomass # 11	Complete	Feasibility Analysis	Washington	PGE	\$20,566	50%
Biomass # 12	Complete	Feasibility Analysis	Lane	PAC & PGE	\$14,738	50%
Biomass # 13	Complete	Feasibility Analysis	n/a	PAC & PGE	\$137,250	45%
Biomass # 14	Complete	Feasibility Analysis	Clackamas	PGE	\$30,000	50%
Biomass # 15	Complete	Feasibility Analysis	Curry	PAC & PGE	\$15,501	50%
Open Solicitation #1	Complete	Feasibility Analysis	Wallowa	PAC	\$3,200	50%
Open Solicitation #2	Complete	Feasibility Analysis	Deschutes	PAC	\$34,130	43%
Open Solicitation #3	Complete	Feasibility Analysis	Deschutes	PAC	\$30,000	5%
Open Solicitation #4	Complete	Feasibility Analysis	Lane	PAC	\$2,535	100%
Open Solicitation #5	Complete	Feasibility Analysis	Multnomah	PGE	\$8,533	35%
Open Solicitation #6	Complete	Grant Writing Assistance	Klamath	PAC	\$1,250	50%
Open Solicitation #7	Complete	Feasibility Analysis	Lincoln	PAC	\$2,000	100%
Open Solicitation #8	Complete	Feasibility Analysis	Multnomah	PAC	\$22,533	100%
Open Solicitation #9	Complete	Feasibility Analysis	Multnomah	PAC & PGE	\$9,000	100%
Open Solicitation #10	Complete	Feasibility Analysis	Clackamas	PGE	\$2,303	100%
Open Solicitation #11	Complete	Feasibility Analysis	Multnomah	PGE	\$5,000	50%
Open Solicitation #12	Complete	Feasibility Analysis	Deschutes	PAC	\$19,375	50%
Open Solicitation #13	Complete	Feasibility Analysis	n/a	PGE	\$19,775	50%
Open Solicitation #14	Complete	Feasibility Analysis	n/a	PGE	\$20,249	50%
Open Solicitation #15	Complete	Feasibility Analysis	Baker	PAC	\$28,498	27%
Open Solicitation #16	Complete	Feasibility Analysis	Josephine	PAC	\$2,814	100%
Open Solicitation #17	Complete	Feasibility Analysis	Clackamas	PGE	\$650	100%
Open Solicitation #18	Complete	Feasibility Analysis	Wallowa	PAC	\$3,000	50%

Project*	Status	Project Type	County	Utility Service Territory	Cost to Energy Trust	Energy Trust Share
Open Solicitation #19	Complete	Feasibility Analysis	Wallowa	PAC	\$3,000	50%
Open Solicitation #20	Complete	Feasibility Analysis	Josephine	PAC	\$2,500	100%
Open Solicitation #21	Complete	Feasibility Analysis	n/a	PGE	\$4,093	50%
Open Solicitation #22	Complete	Feasibility Analysis	Wallowa	PAC	\$2,500	50%
Open Solicitation #23	Complete	Feasibility Analysis	Multnomah	PAC	\$2,536	100%
Open Solicitation #24	Complete	Feasibility Analysis	Deschutes	PAC	\$20,675	50%
Open Solicitation #25	Complete	Feasibility Analysis	Klamath	PAC	\$14,289	100%
Open Solicitation #26	Complete	Feasibility Analysis	Yamhill	PGE	\$1,095	100%
Open Solicitation #27	Complete	Feasibility Analysis	Washington	PGE	\$2,184	100%
Open Solicitation #28	Complete	Feasibility Analysis	Wallowa	PAC	\$4,250	50%
Open Solicitation #29	Complete	Feasibility Analysis	Multnomah	PAC	\$1,222	100%
Open Solicitation #30	Complete	Feasibility Analysis	n/a	PAC	\$3,000	50%
Open Solicitation #31	Complete	Feasibility Analysis	Wallowa	PAC	\$12,500	50%
Open Solicitation #32	Initiated	Feasibility Analysis	Jefferson	PAC	\$4,160	50%
Open Solicitation #33	Initiated	Feasibility Analysis	Multnomah	PGE	\$12,500	50%
Open Solicitation #34	Initiated	Feasibility Analysis	Jefferson	PAC	\$12,013	50%
Open Solicitation #35	Initiated	Feasibility Analysis	Lake	PAC	\$9,450	50%
Solar #1	Complete	Grant Writing Assistance	Wallowa	PAC	\$2,000	50%
Solar #2	Complete	Grant Writing Assistance	Klamath	PAC	\$800	50%
Solar #3	Complete	Grant Writing Assistance	Josephine	PAC	\$825	50%
Solar #4	Complete	Grant Writing Assistance	Wallowa	PAC	\$1,500	50%
Solar #5	Complete	Grant Writing Assistance	n/a	PGE	\$2,140	43%
Solar #6	Complete	Feasibility Analysis	Coos	PAC	\$6,980	100%
Wind #1	Complete	Grant Writing Assistance	Marion	PGE	\$1,750	70%
Wind #2	Complete	Equipment Incentive	Jackson	PAC	\$500	31%
Wind #3	Complete	Training Reimbursement	n/a	PAC & PGE	\$175	50%
Wind #4	Complete	Feasibility Analysis	Hood River	PAC	\$45,502	53%
Wind #5	Complete	Equipment Incentive	Polk	PGE	\$500	63%
Wind #6	Complete	Training Reimbursement	n/a	PAC & PGE	\$455	50%
Wind #7	Complete	Training Reimbursement	n/a	PAC & PGE	\$650	50%
Wind #8	Complete	Grant Writing Assistance	Linn	PAC	\$1,250	50%
Wind #9	Complete	Equipment Incentive	n/a	PAC & PGE	\$10,549	34%
Wind #10	Complete	Equipment Incentive	Hood River	PAC	\$7,171	40%
Wind #11	Complete	Equipment Incentive	Yamhill	PGE	\$500	100%
Wind #12	Complete	Feasibility Analysis	n/a	PAC	\$28,321	100%

Project*	Status	Project Type	County	Utility Service Territory	Cost to Energy Trust	Energy Trust Share
Wind #13	Complete	Feasibility Analysis	Sherman	PAC & PGE	\$7,000	100%
Wind #14	Complete	Feasibility Analysis	Clackamas	PGE	\$250	50%
Wind #15	Complete	Grant Writing Assistance	Marion	PGE	\$1,250	50%
Wind #16	Complete	Feasibility Analysis	Sherman	PAC & PGE	\$11,866	43%
Wind #17	Complete	Training Reimbursement	n/a	PAC & PGE	\$1,200	48%
Wind #18	Complete	Grant Writing Assistance	Marion	PGE	\$1,250	50%
Wind #19	Complete	Equipment Incentive	Multnomah	PGE	\$1,850	28%
Wind #20	Complete	Equipment Incentive	Yamhill	PGE	\$500	66%
Wind #21	Complete	Grant Writing Assistance	Marion	PGE	\$1,250	50%
Wind #22	Complete	Grant Writing Assistance	Marion	PGE	\$1,750	53%
Wind #23	Complete	Grant Writing Assistance	Marion	PGE	\$1,250	50%
Wind #24	Complete	Feasibility Analysis	Umatilla	PAC & PGE	\$9,561	40%
Wind #25	Complete	Grant Writing Assistance	Marion	PGE	\$1,250	50%
Wind #26	Initiated	Feasibility Analysis	Morrow	PAC & PGE	\$5,427	50%
Wind #27	Initiated	Feasibility Analysis	Marion	PGE	\$500	50%
Wind #28	Initiated	Feasibility Analysis	Curry	PAC & PGE	\$6,009	50%
Wind #29	Initiated	Training Reimbursement	n/a	PAC & PGE	\$1,080	50%
Total ETO cost						\$916,919

* "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, 2009 through December 31, 2010. Funds received by Oregon Housing and Community Services during this period amounted to \$25,564,504 and expenditures totaled \$39,705,976. (Note: this expenditure value includes \$11,413,591 in funds committed to projects that are not yet completed.)

Table 15: OHCS Receipt and Expenditure Summary (1/2009 – 12/2010)

Transaction	PGE	PacifiCorp	Total
Low-Income Weatherization			
Administration	\$581,883	\$341,276	\$923,159
Evaluation, Training, and Technical Assistance	\$581,883	\$341,276	\$923,159
ECHO	\$8,902,811	\$5,221,522	\$14,124,333
Multi-Family Rental Housing	\$1,571,084	\$921,445	\$2,492,529
Total Low-Income Weatherization	\$11,637,661	\$6,825,519	\$18,463,180
Low-Income Housing			
Administration	\$223,801	\$131,265	\$355,066
Program	\$4,252,223	\$2,494,035	\$6,746,258
Total Low-Income Housing	\$4,476,024	\$2,625,300	\$7,101,324
Total Fund Receipts	\$16,113,685	\$9,450,819	\$25,564,504
Expenditures			
Low-Income Weatherization*	\$10,873,892	\$5,927,047	\$16,800,938
Committed but unexpended	\$4,076,214	\$1,472,129	\$5,548,344
Low-Income Housing**			\$8,954,878
Committed but unexpended			\$5,079,521
Administrative Expenses**			\$684,098
Evaluation, Training, Technical Assistance**			\$221,371
Committed but unexpended			\$45,808
Energy Education	\$820,331	\$810,769	\$1,631,100
Committed but unexpended	\$389,052	\$350,867	\$739,919
Total Expenditures (w/o Committed)**	\$11,694,223	\$6,737,816	\$28,292,385
Total Expended and Committed**	\$16,159,489	\$8,560,812	\$39,705,976

*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 (AMI); 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 2009-2011 biennium, \$5,377,819 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 \$5.4 million, 17 projects have been preserved totaling 578 units serving families at or below 30 to 60 percent of the area median income.

Table 16 shows PPC fund receipts and expenditures for the low-income housing program. During the January 2009 – December 2010 period, a total of \$7,101,324 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 \$8,954,878. (An additional \$1,444,390 was expended for projects awarded funding prior to January 2009.) Funds to pay project costs totaling \$5,079,521 were obligated but not spent as of June 30, 2010.

In addition, in the 2007-2009 biennium, OHCS made allocations to six Regional Housing Centers establishing a program to acquire and rehabilitate single-family residences for purchase by low-income households. The final disbursement was completed in the 2009-2011 biennium. The program recycles the initial funds through the sale of the homes and will continue for a period of 10 years. The Trust Fund grants and loans establish residential communities for low-income Oregonians throughout the state. One example is Aspen Park in La Grande, where a 5-bedroom home leveraged \$5.46 for every \$1.00 of Trust Fund expenditures and established housing serving individuals with incomes at or below 30 percent of AMI with services designed for disabled individuals. The home enables residents to work, socialize, and live independently within the same community as their family and friends.

**Table 16: Low-Income Housing Program Receipts and Expenditures
(1/2009 – 12/2010)**

Transaction	Total
Fund Receipts	\$7,101,324
Expenditures	
Committed but unexpended	\$5,079,521
Expenditures	\$8,945,878
Total Expended and Committed	\$14,034,399

Results

Key accomplishments for the low-income housing program during the January 2009 – December 2010 period include the following:

- Fifty seven multi-family housing projects received HDGP awards that were either fully or partially funded with PPC revenue.
- HDGP funds helped twenty three counties in Oregon create affordable housing and support local jobs.
- Projects representing the construction or rehabilitation of 1,825 affordable units; and
- HDGP awards leveraging total project costs of \$279.9 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 (1/2009 – 12/2010)

Accomplishment	Total
Number of Projects	57
Number of Units*	1,825
Population Served (# of housing units)	
Elderly	596
Families**	872
Special Needs (# of housing units)	
Special Needs Groups***	269
Farm Workers	88
Units where household income is between 61 and 80 percent of the area median income	53
Units where household income is between 51 and 60 percent of the area median income	969
Units where household income is between 41 and 50 percent the area median income	582
Units where household income is between 31 and 40 percent the area median income	166
Units where household income is equal or less than 30 percent the area median income	55

* 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. At most this is one unit per project. Therefore, in some cases not all units in a project are targeted for low-income housing. Additionally, Some group homes are counted as one unit but may serve up to six individual low-income residents.
 ** 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 (1/2009 – 12/2010)

County	Number of Projects	Number of Units in County
Benton	1	8
Clackamas	4	163
Clatsop	1	33
Coos	1	42
Deschutes	2	12
Douglas	3	59
Hood River	2	65
Jackson	5	137
Josephine	2	28
Klamath	1	8
Lane	3	52
Lincoln	1	12
Linn	1	30
Malheur	2	41
Marion	2	48
Morrow	3	92
Multnomah	13	680
Polk	1	5
Umatilla	1	86
Union	3	58
Wallowa	1	8
Wasco	1	94
Washington	3	64
23 counties	57 Projects	1,825 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 for 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 \$2,492,529 in PPC funds was allocated to Oregon Housing and Community Services to support weatherization of rental housing projects within the State. Actual project expenditures (including funds committed in the previous biennium) were \$2,338,964 during this period while funds committed to projects totaled an additional \$2,857,767. 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 (1/2009 – 12/2010)**

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$1,571,084	\$921,445	\$2,492,529
Expenditures			
Committed but unexpended	\$2,162,581	\$695,186	\$2,857,767
Expenditures	\$1,443,084	\$895,880	\$2,338,964
Total Expended and Committed	\$3,605,665	\$1,591,066	\$5,196,731

Results

Key accomplishments for the January 2009 – December 2010 period include the following:

- Nineteen housing projects estimated to assist 904 households across Oregon were funded during this period; and
- These 19 projects are expected to produce over 2.1 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 (1/2009 – 12/2010)

Accomplishment	Total
Number of Projects	19
Number of Units	904
Estimated kWh Savings	2,128,386
Population Served (# of housing units)	
Elderly	410
Families	421
Special Needs (# of housing units)	
Special Needs Groups*	25
Farm Workers	48
Units where household income is between 61 and 80 percent of the area median income	16
Units where household income is between 51 and 60 percent of the area median income	540
Units where household income is between 41 and 50 percent of the area median income	194
Units where household income is between 31 and 40 percent of the area median income	80
Units where household income is equal or less than 30 percent of the area median income	74

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

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

Table 21: Low-Income Weatherization Program by County (1/2009 – 12/2010)

County	Number of Projects	Number of Units in County
Clackamas	2	124
Coos	1	46
Deschutes	1	52
Douglas	1	8
Jackson	1	60
Marion	1	40
Multnomah	2	196
Washington	8	362
Clackamas	2	16
8 counties	19 Projects	904 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 from January 1, 2009 to December 31, 2010. During this period, \$14,124,333 in PPC funds was designated for low-income weatherization. Expenditures on completed weatherization projects during the same period totaled \$16,093,075 with an additional \$3,430,495 reserved for projects that had not been completed as of December 31, 2010.

Table 22: Low-Income Weatherization (ECHO) Program Receipts and Expenditures (1/2009 – 12/2010)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$8,902,811	\$5,221,522	\$14,124,333
Expenditures			
Committed but unexpended	\$2,302,685	\$1,127,810	\$3,430,495
Expenditures	\$10,251,139	\$5,841,936	\$16,093,075
Total Expended and Committed	\$12,553,824	\$6,969,746	\$19,523,570

Results

The low-income weatherization accomplishments are summarized in Table 23. Since the beginning of 2009, this program resulted in the weatherization of 4,287 homes with a combined estimated electricity savings of 12,769,713 kWh. These program efforts have directly benefited 6,352 people, a large portion 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 (1/2009 – 12/2010)

Accomplishment	Total
Number of Homes Weatherized	4,287
Annual kWh Savings	12,769,713
Total Population Served	6,352
Special Target Populations Served	
Elderly (>60 years old)	1,269
Children (<6 years old)	880
Handicapped	1,118
Farm Workers	67
Native American	297
Hispanic	1,697
African American	171
Asian	321

4. EDUCATIONAL SERVICE DISTRICTS

OVERVIEW

Each year, 10 percent of PPC funds are allocated to the 16 Educational Service Districts (ESDs) located within PGE and PacifiCorp service territories; statewide, approximately 840 schools (110 districts and 391,000 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, 2009 through December 31, 2010. 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 \$738,720 and comprise 3.6 percent of total expenditures over this period, and 4.7 percent of the PPC allocation to Oregon schools.

Table 24: ESD Receipt and Expenditure Summary (1/2009 – 12/2010)

Transaction	PGE	PacifiCorp	Total
# of ESDs Receiving Funds⁸	4	15	16*
Total Fund Receipts	\$9,907,421	\$5,806,085	\$15,713,506
Expenditures			
Audits	\$271,145	\$541,952	\$813,097
Conservation Measures Installed	\$11,776,489	\$6,633,503	\$18,409,993
ESD and School District Administrative Expenses			\$566,265
ODOE Administrative Expenses			\$172,455
ODOE Program Expenses			\$369,991
Total Expenditures	\$12,047,634	\$7,175,455	\$20,331,801

*3 school districts have overlapping utility coverage

RESULTS

Among the 840 schools that are eligible for PPC funds, 738 (88 percent) have completed audits. A total of 7,480 individual energy efficiency measures have been identified in these audits, and 1,806 (24 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 2009 – December 2010 period. During this time, 162 audits were completed across 34 school districts. The audits identified 452 conservation measures that could be installed cost-effectively. If all of these measures were implemented, they would result in annual electricity savings of 9,875,118 kWh and natural gas savings of 693,598 therms. The measures and associated energy savings translate to \$2,747,843 in potential utility bill savings each year.

⁸ A total of 16 ESDs are eligible to receive PPC funds. Three ESDs are served by both PGE and PacifiCorp.

Table 25: ESD Audit Results (1/2009 – 12/2010)

Audit Accomplishment	PGE	PacifiCorp	Total
# of Audits Completed	100	62	162
# of School Districts	20	14	34
# of Measures Identified*	265	187	452
Simple Payback – Median Years	10	11.5	
Simple Payback – Mean Years	16.3	21	
Simple Payback – Years Range	<1 to 50	3 to 50	< 1 to 50
Potential Savings Identified in Audits			
Electricity Savings (kWh)	2,762,731	7,112,387	9,875,118
Natural Gas Savings (therms)	266,492	427,106	693,598
Other Fuels (gal)	246,583	150,835	397,418
Total Annual Energy Cost Savings (\$)	\$1,004,147	\$1,743,696	\$2,747,843
Total Savings (Btu)	69,535,818,811	154,784,474,471	224,320,293,282
Total Cost of Measures Identified	\$39,405,076	\$35,184,145	\$74,589,221

* ODOE continually reviews the eligibility of measures, which can change over time due to facility changes or changes to estimated savings or costs.

PPC funds are also used to install measures identified through the school audits, and the accomplishments related to actual measure installations are shown in Table 26. During the reporting period, 469 measures identified during audits were installed across 37 school districts. Energy efficiency measures that are most frequently installed include: BAS/DDC systems, efficient ballasts with T8 or T5 lamps, occupancy sensors, programmable thermostats, total lighting retrofits (e.g., T12 to T8 conversions, incandescent to CFL conversions), efficient windows and new LED exit signs.⁹ Common operations and maintenance (O&M) measures include HVAC, domestic hot water and building controls system calibrations. In total, these measures are expected to save 9,462,128 kWh in electricity and 433,633 therms of natural gas annually. Total savings to the schools from the installation of these measures is estimated to be \$1,391,728 each year.

⁹ “BAS” are building automation systems; “DDC” are direct digital controls.

Table 26: ESD Efficiency Measures Installed (1/2009 – 12/2010)

Measure Accomplishment	PGE	PacifiCorp	Total
# of Audit Measures Installed	328	141	469
# of School Districts	18	19	37
Annual Savings			
Electricity Savings (kWh)	4,992,887	4,469,241	9,462,128
Natural Gas Savings (therms)	234,519	199,114	433,633
Other Fuels (gal)	59,081	77,576	136,657
Total Annual Energy Cost Savings (\$)	\$742,488	\$649,240	\$1,391,728
Total Annual Energy Savings (Btu)	48,834,513,307	46,500,800,481	95,335,313,788
Total Cost of Measures Installed	\$11,776,490	\$6,633,503	\$18,409,993

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. Fifty-six 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 2009 through December 2010, self-direct customers in the PacifiCorp service territory claimed \$1,045,485 in credits for conservation and renewable resource projects, and customers in the PGE service territory claimed \$3,540,891. Combined, self-direct customers of both utilities claimed \$2,837,316 in conservation credit and \$1,749,060 in renewable resource credit from January 2009 through December 2010.

RESULTS

Table 27 summarizes self-direct program conservation activity from January 2009 through December 2010. During this period, self-direction sites implemented projects that involved HVAC system improvements, energy control systems, industrial process modifications, lighting changes, variable frequency drives (VFDs), and efficient motors and pumps. PGE customers certified 10 conservation projects (3 in Clackamas County, 3 in Multnomah County, and 4 in Washington County) with a total eligible cost of \$589,148, and PacifiCorp customers certified 4 projects in Benton County with a total eligible cost of \$420,107. The combined effect of these projects is about 5.3 million kWh in energy savings annually, or \$309,996 in annual energy cost savings.

**Table 27: Self-Direct Program Certified Conservation Projects
(1/2009 – 12/2010)**

	PGE	PacifiCorp	Total
Projects Certified	10	4	14
Total Eligible Cost	\$589,148	\$420,107	\$1,009,255
Total Energy Cost Savings (annual)	\$225,955	\$84,041	\$309,996
Total Energy Savings (annual kWh)	3,504,433	1,762,326	5,266,759

Table 28 summarizes self-direct program green tag renewable energy purchases from January 2009 through December 2010. PGE customers purchased over 119,000 green tags valued at over \$1.2 million, and PacifiCorp customers purchased over 82,000 green tags valued at \$584,675. The combined effect of these contracts is over 200 million kWh of renewable energy purchased annually.

The Oregon Department of Energy incurred administrative costs of \$22,019 and program expenses of \$38,936 to process all conservation, renewable energy and green tag projects.

**Table 28: Self-Direct Program Green Tag Purchases
(1/2009 – 12/2010)**

	PGE	PacifiCorp	Total
Sites	26	26	52
Green Tags Purchased	119,153	82,565	201,718
Credits Issued	\$1,226,833	\$584,675	\$1,811,508
Energy Purchased (annual kWh)	119,138,982	82,568,010	201,706,992

6. SUMMARY

Table 29 summarizes the expenditures and results for PPC expenditures from January 2009 through December 2010. The agencies spent a combined total of \$181,372,579 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 701,782,134 kWh (80 aMW), which is enough to power over 62,000 average-sized homes each year.¹⁰ When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 2,458,223 million Btu.

Table 29: Summary of PPC Expenditures and Results (1/2009 – 12/2010)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated	aMW	MMBtu
Energy Trust – Conservation	\$94,807,531	418,497,202	47.77	1,428,331
Energy Trust – Renewables*	\$33,465,985	51,950,954	5.93	177,309
Education Service Districts**	\$20,159,346	9,462,128	1.08	95,335
OHCS Low-Income***	\$28,292,385	14,898,099	1.70	50,847
Self-Direct Customers****	\$4,647,332	206,973,751	23.63	706,401
Total Expenditures	\$181,372,579	701,782,134	80.11	2,458,223

* Energy saved includes savings from reduced transmission and distribution losses. Renewable energy savings are 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).

¹⁰ Calculated using ODOE's estimate that an average megawatt is enough to power 775 homes each year (assuming electric heat).