



Report to Legislative Assembly on Public Purpose Expenditures

January 2011 – June 2012

Final Report

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Evergreen Economics
Portland, OR
503.894.8676
EvergreenEcon.com

Prepared For:
Brittany Andrus
Utility Analyst
Public Utility Commission of Oregon
550 Capitol Street Northeast
Salem, OR 97301

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Steve Grover was the Evergreen Economics project director for this analysis, and John Boroski was the project manager. Questions regarding this report should be directed to Mr. Boroski at Boroski@evergreenecon.com. Other Evergreen Economics staff contributing to this report were Brie Freeman and John Cornwell.

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1 Executive Summary

1.1 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.
- **School Districts.** Oregon has 112 school districts within PGE and PacifiCorp service territories. The districts collectively receive 10 percent of public purpose charge funds to improve energy efficiency in individual schools. Prior to June 2011, when HB 2960 was passed, these funds were distributed to 16 Educational Service Districts.
- **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

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

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.

In August 2012, Evergreen Economics 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, Evergreen Economics

- 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.

1.2 Receipt and Expenditure Summary

Table 1 shows PPC fund disbursements to the various administrators and programs for the January 1, 2011 – June 30, 2012 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 \$130,650,717 across all fund administrators. Administrative costs for agencies receiving the PPC funds totaled \$7,116,547, or 5.45 percent of all expenditures during this period.

Table 1: PPC Disbursements and Expenditures (1/2011 – 6/2012)

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
Energy Trust of Oregon				
Conservation	\$43,653,488	\$29,268,316	\$72,921,804	\$63,509,701
Renewable Energy	\$12,474,500	\$8,275,349	\$20,749,849	\$26,943,067
Administrative Expenses				\$6,450,054
School Districts	\$7,843,904	\$5,164,346	\$13,008,250	\$11,565,006
ODOE Program Expenses				\$304,694
Administrative Expenses				\$400,597
Oregon Housing and Community Services				
Low-Income Weatherization*	\$9,155,820	\$6,402,466	\$15,558,286	\$9,625,779
Low-Income Housing	\$3,521,469	\$2,462,563	\$5,984,032	\$7,551,916
Administrative Expenses				\$252,122
Evaluation, Training, Technical Assistance				\$77,967
Energy Education				\$934,665
Self-Direct Customers**				
Conservation	\$1,164,689	\$198,191	\$1,362,880	\$1,362,880
Renewable Energy	\$1,001,350	\$642,072	\$1,643,422	\$1,643,422
ODOE Program Expenses				\$15,073
Administrative Expenses				\$13,774
Totals	\$78,815,220	\$52,413,303	\$131,228,523	\$130,650,717
Administrative Costs Only				\$7,116,547

* 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 2011 through June 2012. The agencies spent a combined total of \$130,650,717 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 550,644,579 kWh (63 aMW), which is enough to power over 48,000 average-sized homes each year.² When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 1,929,480 million Btu.

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

Table 2: Summary of PPC Expenditures and Results (1/2011 – 6/2012)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated	aMW	MMBtu
Energy Trust – Conservation	\$68,316,560	275,939,467	31.50	941,505
Energy Trust – Renewables*	\$28,586,262	25,459,187	2.9	86,678
School Districts**	\$12,270,297	6,479,161	0.74	72,928
OHCS Low-Income***	\$18,442,449	17,916,286	2.05	61,148
Self-Direct Customers****	\$3,035,149	224,850,478	25.67	767,221
Total Expenditures	\$130,650,717	550,644,579	62.86	1,929,480

* Energy saved excludes 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).

2 Public Purpose Charge (PPC) Overview

2.1 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 2012, Evergreen Economics 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, Evergreen Economics

- 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 2011 through June 2012. Additional detail on how each organization utilized funds is provided in subsequent sections.

2.2 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).
- **School Districts.** Oregon has 112 school districts within PGE and PacifiCorp service territories. The districts collectively receive 10 percent of PPC funds to improve energy

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

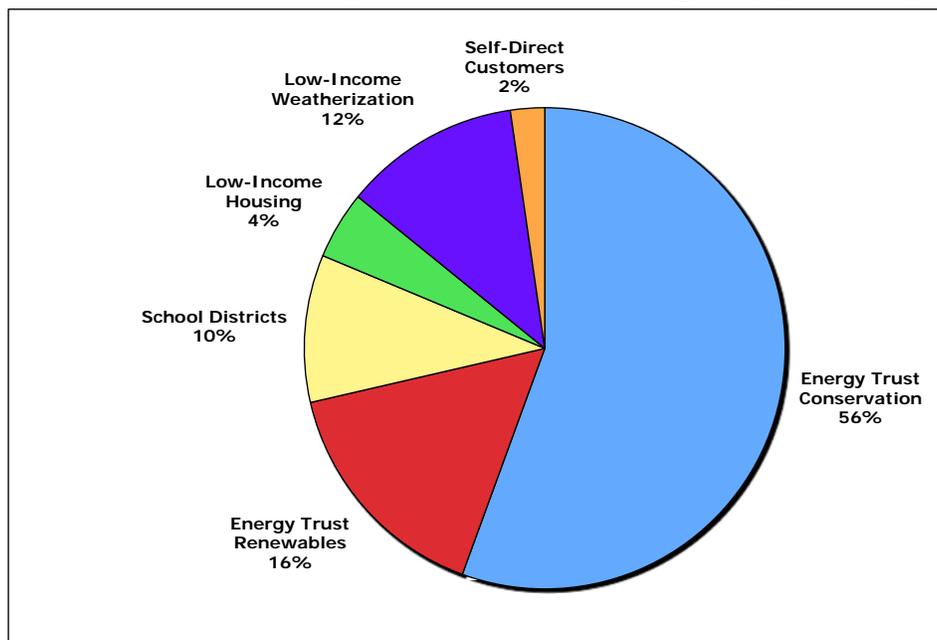
efficiency in individual schools. Prior to June 2011, when HB 2960 was passed, these funds were distributed to 16 Educational Service Districts.

- Oregon Housing and Community Services.** Oregon Housing and Community Services (OHCS) receives and administers PPC funds for two low-income housing programs. Four 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 2011 through June 2012 (see Table 4).

Figure 1: PPC Fund Allocation by Administrator and Program (1/2011 - 6/2012) ⁴



⁴ This graph includes the self-direct expenditures, and thus the allocation percentages do not coincide with the PPC disbursements discussed previously, which are based on total PPC funds *collected* by the utilities.

Figure 2 shows the total PPC fund collections for the January 2011 – June 2012 period divided between residential and non-residential ratepayers for each utility.⁵ For both utilities, public purpose funds were collected in nearly identical proportions from the residential and non-residential sectors.

Figure 2: Sector Contribution of PPC Funds by Utility

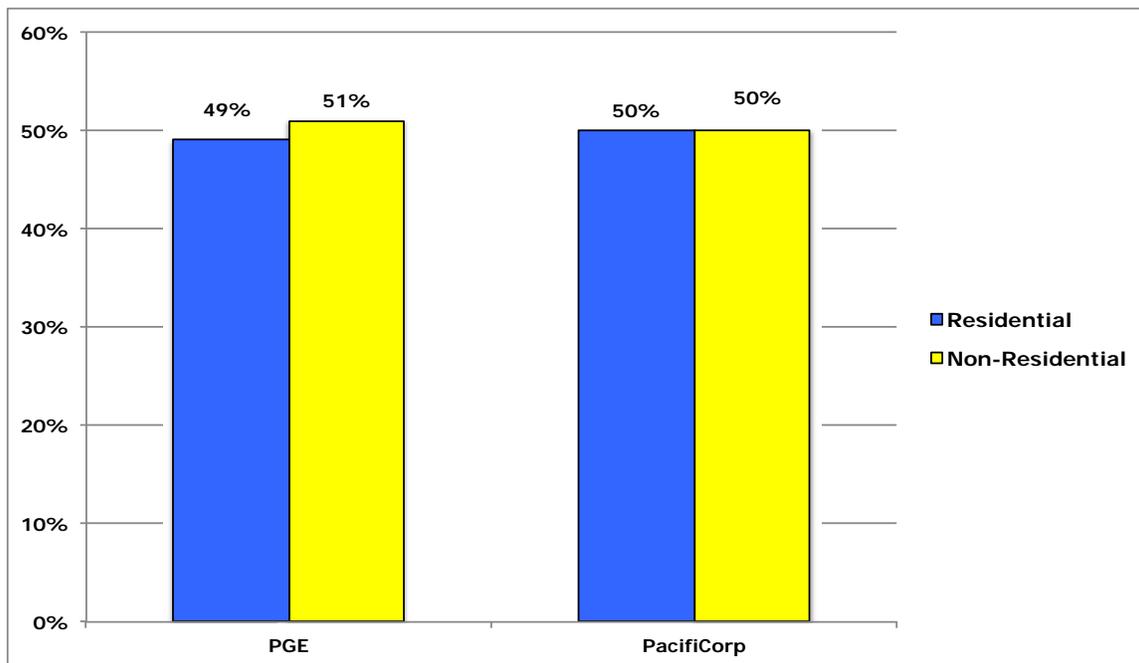
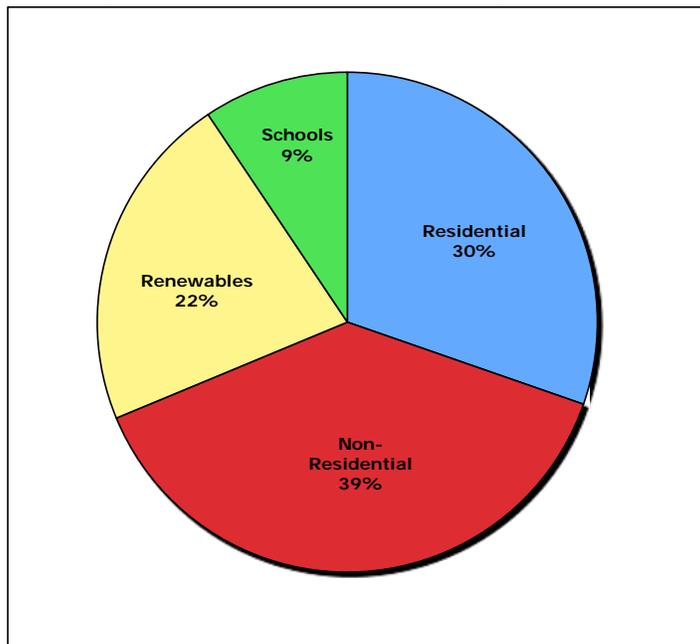


Figure 3 shows how PPC fund expenditures by the various agencies and programs are distributed among sectors. The non-residential sector (excluding schools) received 39 percent of expenditures from January 2011 to June 2012. Over the same timeframe, schools received 9 percent of expenditures, 22 percent of expenditures were spent on renewable resource development, and 30 percent of expenditures were spent on programs for residential customers (covered by the OHCS and Energy Trust residential conservation programs).

⁵ The sector share was calculated by each utility based on revenues received from January 2011 thru June 2012. Because of the seasonal nature of energy consumption, this distribution can vary from month to month.

Figure 3: Distribution of PPC Expenditures



2.3 Receipt and Expenditure Summary

This report details public purpose charge expenditures from January 1, 2011 through June 30, 2012. Table 3 shows the total funds collected during this period from both PGE and PacifiCorp. Over this 18-month period, PGE disbursed \$78,815,220 in PPC funds and PacifiCorp disbursed \$52,413,303, for a total of \$131,228,523 allocated for conservation and renewable energy programs across the agencies. The utilities spent a combined total of \$86,642 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 3: Total PPC Fund Disbursements (1/2011 – 6/2012)

Source	PPC Disbursements	Administrative Expenses*
PGE	\$78,815,220	\$54,856
PacifiCorp	\$52,413,303	\$31,786
Total	\$131,228,523	\$86,642

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

Table 4 provides additional detail on the disbursement across the various programs for the January 2011 – June 2012 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 \$130,650,717 across all fund administrators. Administrative costs for

agencies receiving the PPC funds totaled \$7,116,547 or 5.45 percent of all expenditures during this period.

Table 4: PPC Disbursements and Expenditures (1/2011 – 6/2012)

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
Energy Trust of Oregon				
Conservation	\$43,653,488	\$29,268,316	\$72,921,804	\$63,509,701
Renewable Energy	\$12,474,500	\$8,275,349	\$20,749,849	\$26,943,067
Administrative Expenses				\$6,450,054
School Districts	\$7,843,904	\$5,164,346	\$13,008,250	\$11,565,006
ODOE Program Expenses				\$304,694
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Oregon Housing and Community Services				
Low-Income Weatherization*	\$9,155,820	\$6,402,466	\$15,558,286	\$9,625,779
Low-Income Housing	\$3,521,469	\$2,462,563	\$5,984,032	\$7,551,916
Administrative Expenses				\$252,122
Evaluation, Training, Technical Assistance				\$77,967
Energy Education				\$934,665
Self-Direct Customers**				
Conservation	\$1,164,689	\$198,191	\$1,362,880	\$1,362,880
Renewable Energy	\$1,001,350	\$642,072	\$1,643,422	\$1,643,422
ODOE Program Expenses				\$15,073
Administrative Expenses				\$13,774
Totals	\$78,815,220	\$52,413,303	\$131,228,523	\$130,650,717
Administrative Costs Only				\$7,116,547

* 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 5 shows the timing of PPC receipts and expenditures since 2010 for each agency. Unexpended funds from 2010 are listed, in addition to new receipts and expenditures during the January 2011 – June 2012 period.⁶

⁶ The SB 1149 Schools Program operates on a reimbursement model. School districts pay for eligible projects with other funds such as bonds, and then are reimbursed from their SB1149 funds. Reimbursement could consist of a single payment if a district's SB1149 balance is large enough, or it may include multiple payments as additional PPC funds are disbursed. Total reimbursement is capped at projected total disbursement through the end of 2025. A negative carry forward amount indicates that a portion of the total cost of all installed measures will be reimbursed from future PPC disbursements.

Table 5: Cumulative PPC Receipts and Expenditures (1/2011 - 6/2012)

Fund Administrator / Program	2010 Carry Forward*	1/2011 - 6/2012 Receipts	1/2011 - 6/2012 Expenditures
Energy Trust of Oregon			
Conservation	\$503,697	\$72,921,804	\$68,316,560
Renewable Energy	\$29,780,238	\$20,749,849	\$28,586,262
School Districts	-\$3,351,174	\$13,008,250	\$12,270,297
Oregon Housing and Community Services**	\$9,352,205	\$21,542,318	\$18,442,449
Self-Direct Customers***	\$0	\$3,006,302	\$3,035,149
Totals	\$36,284,966	\$131,228,523	\$130,650,717

* 2010 carryover amounts calculated by Evergreen Economics using data from the *Report to Legislative Assembly on Public Purpose Expenditures for the Period January 1, 2009 - December 31, 2010* (March, 31 2011).

** 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 have been consistently defined 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.

3 Energy Trust of Oregon, Inc.

3.1 Overview

The Oregon PUC designated the Energy Trust of Oregon, Inc. to administer the conservation and renewable resource components of the PPC. Energy 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.⁷

Table 6 provides a summary of Energy Trust PPC revenues and expenditures from January 1, 2011 through June 30, 2012. Funds received by Energy Trust during this period totaled \$93,671,653 and expenditures totaled \$96,902,822. Administrative expenses totaled \$6,450,054 and comprised 6.7 percent of total spending by Energy Trust on electric conservation and renewable programs and 6.8 percent of total PPC receipts during this period.⁸

Table 6: Energy Trust Receipt and Expenditure Summary (1/2011 – 6/2012)

Transaction	PGE	PacifiCorp	Total
Total Fund Receipts	\$56,127,988	\$37,543,665	\$93,671,653
Expenditures			
Energy Conservation	\$38,187,050	\$25,322,651	\$63,509,701
Renewable Energy	\$19,283,285	\$7,659,782	\$26,943,067
Administrative Expenses	\$4,003,437	\$2,446,617	\$6,450,054
Total Expenditures	\$61,473,772	\$35,429,050	\$96,902,822

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

⁷ 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.

⁸ Administrative expenses used here and in subsequent tables are defined using the common administrative expense definition discussed in the previous section of this report (2.3 – Receipt and Expenditure Summary). Administrative costs allocated to Northwest Natural Gas, Cascade Natural Gas and Avista Utilities are not included.

3.2 Energy Conservation

Receipts and Expenditures

Table 7 shows Energy Trust fund receipts and expenditures for its conservation programs. During the January 2011 – June 2012 period, \$72,921,804 in PPC funds was distributed to Energy Trust for spending on these programs. Conservation expenditures totaled \$68,316,560 during this same period. Administrative costs that could be directly assigned to Energy Trust conservation programs totaled \$4,806,859, or 7 percent of total conservation program spending and 7.5 percent of total PPC receipts for conservation programs.

Table 7: Energy Trust Conservation Receipts and Expenditures (1/2011 – 6/2012)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$43,653,488	\$29,268,316	\$72,921,804
Expenditures			
Program Expenditures	\$38,187,050	\$25,322,651	\$63,509,701
Administrative Expenses	\$2,832,584	\$1,974,275	\$4,806,859
Total Expenditures	\$41,019,635	\$27,296,926	\$68,316,560

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 8 shows the accomplishments of the individual programs sponsored by Energy Trust. During the period covered by this report, 275,939,467 kWh in energy savings were achieved across all market sectors. The industrial sector accounted for 37 percent of these savings with 102,287,964 kWh saved. Commercial sector savings were 106,572,581 kWh (39 percent of Energy Trust conservation savings), and residential sector savings were 67,078,923 kWh (24 percent).

Production efficiency programs accounted for 96 percent of savings in the industrial sector. In the commercial sector, the Building Efficiency Program was the largest contributor and accounted for 49 percent of the energy savings achieved in this sector.

Table 8: Energy Trust Conservation Programs Energy Savings By Utility (1/2011 – 6/2012)*

Program Name	PGE Savings (kWh)	PacifiCorp Savings (kWh)	Total Savings (kWh)	Average Life of Savings (years)
Residential				
Home Energy Savings	14,337,547	7,747,310	22,084,857	13.7
New Homes & Products	15,132,869	8,554,591	23,687,460	10.2
NEEA (Market Transformation)	12,144,768	9,161,838	21,306,606	8.0
Total Residential	41,615,184	25,463,739	67,078,923	10.9
Commercial				
Building Efficiency	34,694,519	17,685,704	52,380,223	12.1
New Building Efficiency	10,675,740	31,846,799	42,522,539	14.3
NEEA (Market Transformation)	6,651,794	5,018,026	11,669,820	15.0
Total Commercial	52,022,052	54,550,529	106,572,581	13.1
Industrial				
Production Efficiency	54,503,093	43,324,505	97,827,597	10.2
NEEA (Market Transformation)	2,542,406	1,917,961	4,460,366	10.0
Total Industrial	57,045,498	45,242,465	102,287,964	10.2
Total All Programs	150,682,734	125,256,733	275,939,467	11.6

* Savings from reduced transmission and distribution losses are not counted in this table.

Table 9 provides additional detail regarding the types of efficiency improvements that are being implemented for the various conservation programs. In the residential sector, almost 24,000 ENERGY STAR appliances received rebates, and in the commercial sector, 232 highly efficient new commercial buildings have been developed, along with 361 multifamily buildings retrofitted.

Table 9: Energy Trust Example Efficiency Improvements (1/2011 – 6/2012)

Improvement Type	Number of Projects*	Average Life of Savings (Years)
Commercial projects		
Existing buildings retrofitted	2,047	12.1
Efficient new buildings constructed	232	14.3
Multifamily buildings retrofitted	361	12.1
New multifamily buildings constructed	22	14.9
Solar water heating commercial installations	6	20.0
Industrial projects		
Efficient manufacturing processes, water and wastewater treatment, and agriculture	922	10.2
Residential projects		
Efficient new homes constructed	566	23.8
Efficient new manufactured homes purchased	60	30
Home energy reviews conducted	2,981	N/A
Single-family homes retrofitted	1,224	15.5
Manufactured homes retrofitted	2,079	11.7
Residential solar water heating installations	28	20.0
ENERGY STAR appliance rebates	23,943	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 10 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 (\$19.5 million) followed by the Commercial Building Efficiency Program (\$16.5 million) and Residential Efficient New Homes/Products Program (\$9.4 million). The industrial and commercial sectors attained the lowest overall levelized energy costs, with an average cost of 2.6 cents per kWh. The residential sector had higher average levelized costs at 3.9 cents per kWh.

Table 10: Energy Trust Conservation Costs and Levelized Energy Costs (1/2011 – 6/2012)

Program Name	ETO Cost (all electric funders)*	Levelized Cost (dollars/kWh)**
Residential		
Home Energy Savings	\$8,581,517	\$0.040
Efficient New Homes/Products	\$9,416,715	\$0.051
NEEA (Market Transformation)	\$3,177,003	\$0.023
Total Residential	\$21,175,235	\$0.039
Commercial		
Building Efficiency	\$16,452,142	\$0.036
New Building Efficiency	\$8,185,948	\$0.019
NEEA (Market Transformation)	\$1,950,435	\$0.016
Total Commercial	\$26,588,525	\$0.026
Industrial		
Production Efficiency	\$19,483,558	\$0.026
NEEA (Market Transformation)	\$1,069,244	\$0.031
Total Industrial	\$20,552,802	\$0.026

* ETO Cost includes allocated administrative costs

** Levelized costs were calculated by Energy Trust and do not include savings for reduced transmission and distribution losses

Table 11 shows how the energy efficiency incentives paid by Energy Trust were distributed across the geographic regions of Oregon. About 62 percent of all incentives (\$21.8 million) were paid to customers in the Portland area, and 29 percent was divided between the Willamette Valley and southern Oregon. The commercial sector received the largest share of incentive payments at 43 percent.

Table 11: Energy Trust Energy Efficiency Incentive Payments by Sector and Region, Thousands of Dollars (1/2011 – 6/2012)

Sector	Central/ East	NW/ Coast	Portland Area	Southern	Willamette Valley	Total
Commercial	\$1,202	\$99	\$10,620	\$1,154	\$1,920	\$14,996
Industrial	\$1,060	\$109	\$6,834	\$2,101	\$2,217	\$12,321
Residential	\$531	\$98	\$4,361	\$1,615	\$1,277	\$7,882
Total	\$2,793	\$306	\$21,815	\$4,871	\$5,415	\$35,199

3.3 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. Among its new initiatives are programs for heat pump water heaters, luminaire-level lighting controls, efficient consumer electronics (including TVs), strategic energy management in small/medium industrial sites and commercial properties, existing building renewal, and a new marketing platform for Northwest ENERGYSTAR Homes.

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 Northwest ENERGY STAR new home efficiency program. Through the Consortium for Energy Efficiency, Energy Trust and NEEA also coordinate with similar programs nationally.

Table 12 shows Energy Trust's cost for each market transformation program. Total Energy Trust costs for market transformation were \$6.2 million, with the greatest share (50 percent) spent in the residential sector.

Table 12: Energy Trust Market Transformation Costs (1/2011 - 6/2012)

Program Name	ETO Cost
NEEA Commercial	\$1,950,435
NEEA Industrial	\$1,069,244
NEEA Residential	\$3,177,003
Total	\$6,196,682

Table 13 shows the energy savings accomplishments of the programs delivered by NEEA. During the period covered by this report, over 37,000,000 kWh in energy savings were achieved across the three market sectors, with the residential sector accounting for 57 percent of the savings.

Table 13: Market Transformation Energy Savings By Program and Utility (1/2011 –6/2012)*

Program Name	PGE Savings (kWh)	PacifiCorp Savings (kWh)	Total Savings (kWh)	Average Life of Savings (years)
NEEA Residential	12,144,768	9,161,838	21,306,606	8.0
NEEA Commercial	6,651,794	5,018,026	11,669,820	15.0
NEEA Industrial	2,542,406	1,917,961	4,460,366	10.0
Total	21,338,967	16,097,825	37,436,792	10.4

* Savings from reduced transmission and distribution losses are not counted in this table.

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 continues to experience success with its Northwest Ductless Heat Pump (DHP) initiative, working with efficiency program providers such as the Energy Trust to install over 4,800 DHPs in the Northwest through a network of over 500 participating HVAC contractors in 2011 (while achieving a 90 percent customer satisfaction rate).⁹

NEEA is also maintaining efforts to drive the acceptance and availability of several new efficiency technologies through its Emerging Technology Initiative. NEEA was able to develop and release an updated Northern Climate Specification for Heat Pump Water Heaters (HPWH) and a list of qualifying products in 2011, which will help drive high-quality products to the market while also giving consumers and utilities expanded HPWH options. Additionally, NEEA will continue work on emerging technology initiatives for solid-state streetlights with controls, luminaire-level lighting controls, building operator certification expansion, and agricultural irrigation.¹⁰

NEEA has also been successful with its small/medium industrial Strategic Energy Management (SEM) initiative, which was able to identify 0.5 aMW in savings potential from operational changes by working with a network of technical experts from existing manufacturing expansion partnerships (MEPs).

⁹ Ninety percent of surveyed participants had their overall expectations met (from NEEAs 2011 DHP Market Progress Evaluation Report).

¹⁰ NEEA 2011 Annual Report.

3.4 Renewable Energy

Receipts and Expenditures

Table 14 shows the PPC fund receipts and expenditures dedicated to Energy Trust renewable energy programs from January 1, 2011 through June 30, 2012. During this period, \$20,749,849 in PPC funds was allocated to Energy Trust for renewable energy projects, and renewable energy program spending totaled \$28,586,262. Administrative costs related to the renewable energy program totaled \$1,643,195 and comprised 5.7 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 14: Energy Trust Receipts and Renewable Expenditures (1/2011 - 6/2012)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	\$12,474,500	\$8,275,349	\$20,749,849
Expenditures			
Program Expenditures	\$19,283,285	\$7,659,782	\$26,943,067
Administrative Expenses	\$1,170,853	\$472,342	\$1,643,195
Total Expenditures	\$20,454,138	\$8,132,124	\$28,586,262

Results

Table 15 lists all the active renewable energy generation projects completed or initiated by Energy Trust from January 2011 through June 2012. 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 solar installations in Yamhill County. In addition, a 1.6 MW anaerobic digester will be installed in Lane County, a 1.5 MW geothermal project will be installed at a public institution in Klamath County, and a 1.1 MW hydroelectric plant was installed at an irrigation district facility.

Upon completion, all of the projects listed will provide a total of 83,487 MWh in renewable energy per year. Projects that are currently operational are providing 25,459 MWh per year. The Solar Electric Program, which provides homeowners and businesses with financial incentives to adopt power applications, has completed 1,997 projects that are now operational.

In 2012, Energy Trust's "Open Solicitation" program was renamed "Other Renewables." The Other Renewables 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 solar, wind, or biomass renewable energy programs. It also helps provide experience in renewable energy sectors that may in the future merit their own programs.

Table 16 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 2011 through June 2012. A total of 66 projects were active during the report

period: 54 were completed, and 12 are ongoing. Project types ranged from proposal development to feasibility studies to grant writing assistance to wind monitoring equipment to monitoring equipment. Forty projects are located in PacifiCorp's service territory, and 20 are located in PGE's territory (4 projects could be located in either or both territories). The three project types are wind (19 projects), biomass (7 projects), solar (4 projects), and other renewables (36 projects). The total cost for all of these studies and potential projects is \$643,482.



Table 15: Energy Trust Renewable Energy Projects Summary (1/2011 - 6/2012)

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 #1	1	Completed	2012	Marion	15	0.190	1,403	\$ 1,362	\$ 315	52%	PAC
Biomass #2	1	Contracted	2011	Jackson	20	0.750	5,115	\$ 653	\$ 93	51%	PAC
Biomass #3	1	Contracted	2011	Umatilla	25	0.195	1,468	\$ 2,673	\$ 325	24%	PAC
Biomass #4	1	Contracted	2011	Wallowa	20	0.100	732	\$ 1,813	\$ 101	55%	PAC
Biomass #5	1	Contracted	2011	Lane	20	1.600	12,614	\$ 748	\$ 168	56%	PGE
Biomass #6	1	Contracted	2011	Marion	15	0.500	3,922	\$ 946	\$ 270	69%	PGE
Biomass #7	1	Contracted	2011	Lane	15	0.500	3,816	\$ 972	\$ 278	69%	PAC
Biomass #8	1	Contracted	2012	Tillamook	15	0.750	6,042	\$ 851	\$ 175	65%	PAC
Other Renewables #1	1	Completed	2011	Yamhill	20	1.660	1,865	\$ 5,445	\$ 1,026	84%	PGE
Other Renewables #2	1	Completed	2011	Yamhill	20	1.180	1,333	\$ 5,441	\$ 1,025	84%	PGE
Other Renewables #3	1	Completed	2012	Wallowa	20	0.011	76	\$ 1,746	\$ 330	78%	PAC
Other Renewables #4	1	Completed	2012	Klamath	20	1.100	3,495	\$ 802	\$ 70	84%	PAC
Other Renewables #5	1	Contracted	2011	Deschutes	20	0.700	3,100	\$ 720	\$ 323	69%	PAC
Other Renewables #6	1	Contracted	2012	Multnomah	20	0.010	60	\$ 1,282	\$ 199	90%	PGE
Other Renewables #7	1	Contracted	2012	Klamath	20	1.500	7,646	\$ 1,653	\$ 203	95%	PAC
Other Renewables #8	1	Contracted	2012	Jefferson	20	0.300	822	\$ 1,360	\$ 547	81%	PAC
Wind #1	1	Completed	2011	Marion	15	0.020	21	\$ 5,603	\$ 1,715	42%	PGE
Wind #2	1	Completed	2011	Marion	15	0.020	19	\$ 6,184	\$ 1,893	42%	PGE
Wind #3	1	Completed	2011	Marion	15	0.020	21	\$ 5,367	\$ 1,643	42%	PGE
Wind #4	1	Completed	2011	Marion	15	0.015	26	\$ 2,814	\$ 1,619	67%	PGE
Wind #5	1	Completed	2011	Marion	15	0.005	6	\$ 8,884	\$ 3,683	52%	PAC
Wind #6	1	Completed	2011	Yamhill	15	0.050	59	\$ 6,007	\$ 1,607	39%	PGE
Wind #7	1	Completed	2011	Multnomah	15	0.003	5	\$ 9,591	\$ 2,131	28%	PGE
Wind #8	1	Completed	2011	Marion	15	0.010	12	\$ 7,305	\$ 2,634	41%	PGE
Wind #9	1	Completed	2011	Marion	20	0.225	352	\$ 2,309	\$ 653	65%	PGE
Wind #10	1	Completed	2011	Polk	15	0.005	3	\$ 11,347	\$ 6,327	45%	PAC
Wind #11	1	Completed	2011	Marion	15	0.020	19	\$ 6,115	\$ 2,253	51%	PGE
Wind #12	1	Completed	2011	Clackamas	15	0.020	18	\$ 6,524	\$ 2,404	51%	PGE
Wind #13	1	Completed	2012	Marion	15	0.020	22	\$ 5,382	\$ 1,983	51%	PGE
Wind #14	1	Contracted	2011	Yamhill	15	0.020	21	\$ 5,178	\$ 1,689	41%	PGE
Wind #15	1	Contracted	2012	Polk	15	0.007	4	\$ 18,154	\$ 10,122	67%	PAC
Solar #1	1	Contracted	2011	Lake	25	5.000	11,059	\$ 2,222	\$ 497	90%	PGE
Solar #2	1	Completed	2012	Marion	20	1.750	2,060	\$ 5,330	\$ 934	56%	PGE
Solar Electric In PAC	51	Contracted	n/a	n/a	20	0.321	390	\$ 4,806	\$ 767	n/a	PAC
Solar Electric In PGE	157	Contracted	n/a	n/a	20	1.155	1,216	\$ 5,376	\$ 1,243	n/a	PGE
Solar Electric In PAC	700	Completed	n/a	n/a	20	4.581	5,561	\$ 5,334	\$ 1,037	n/a	PAC
Solar Electric In PGE	1,297	Completed	n/a	n/a	20	8.647	9,082	\$ 6,523	\$ 1,423	n/a	PGE
Total Completed	2016					19.55	25,459				
Total Contracted	222					13.41	58,027				
Total	2238					33	83,487				

* 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 16: Energy Trust Feasibility Studies and Other Projects (1/2011 - 6/2012)

Project	Status	Project Type	County	Utility	Energy Trust Cost	Energy Trust Share
Biopower #1	Complete	Feasibility Analysis	Washington	PGE	\$11,627	50%
Biopower #2	Complete	Feasibility Analysis	Douglas	PAC	\$5,596	50%
Biopower #3	Complete	Feasibility Analysis	Grant	PAC & PGE	\$6,404	50%
Biopower #4	Complete	Feasibility Analysis	Clackamas	PAC	\$20,000	50%
Biopower #5	Complete	Feasibility Analysis	Douglas	PAC	\$5,500	50%
Biopower #6	Complete	Feasibility Analysis	Coos	PAC	\$4,063	50%
Biopower #7	Complete	Feasibility Analysis	Jackson	PAC	\$26,233	50%
Other Renewables #1	Complete	Feasibility Analysis	Multnomah	PGE	\$3,587	50%
Other Renewables #2	Complete	Grant Writing Assistance	Wallowa	PAC	\$1,500	50%
Other Renewables #3	Complete	Feasibility Analysis	Umatilla	PAC	\$2,500	50%
Other Renewables #4	Complete	Feasibility Analysis	Wallowa	PAC	\$12,500	50%
Other Renewables #5	Complete	Feasibility Analysis	Deschutes	PAC	\$20,000	48%
Other Renewables #6	Complete	Grant Writing Assistance	Deschutes	PAC	\$3,519	50%
Other Renewables #7	Complete	Feasibility Analysis	Wallowa	PAC	\$9,000	50%
Other Renewables #8	Complete	Feasibility Analysis	Clatsop	PAC	\$15,000	24%
Other Renewables #9	Complete	Feasibility Analysis	Klamath	PAC	\$15,000	17%
Other Renewables #10	Complete	Grant Writing Assistance	Jefferson	PAC	\$3,450	50%
Other Renewables #11	Complete	Feasibility Analysis	Multnomah	PGE	\$14,000	50%
Other Renewables #12	Complete	Feasibility Analysis	Lake	PAC	\$9,450	50%
Other Renewables #13	Complete	Feasibility Analysis	Jackson	PAC	\$1,250	50%
Other Renewables #14	Complete	Feasibility Analysis	Klamath	PAC	\$40,000	44%
Other Renewables #15	Complete	Feasibility Analysis	Deschutes	PAC	\$3,539	50%
Other Renewables #16	Complete	Feasibility Analysis	Lake	PAC	\$16,167	50%
Other Renewables #17	Complete	Feasibility Analysis	Deschutes	PAC	\$23,241	50%
Other Renewables #18	Complete	Feasibility Analysis	Deschutes	PAC	\$19,983	50%
Other Renewables #19	Complete	Feasibility Analysis	Jackson	PAC	\$5,733	50%
Other Renewables #20	Complete	Feasibility Analysis	Deschutes	PAC	\$873	50%
Other Renewables #21	Complete	Feasibility Analysis	Marion	PAC	\$33,606	50%
Other Renewables #22	Complete	Feasibility Analysis	Hood River	PGE	\$29,811	50%
Other Renewables #23	Complete	Feasibility Analysis	Klamath	PAC	\$50,000	51%
Other Renewables #24	Complete	Feasibility Analysis	Wallowa	PAC	\$3,900	100%
Other Renewables #25	Complete	Feasibility Analysis	Douglas	PAC	\$2,950	50%
Other Renewables #26	Complete	Feasibility Analysis	Wallowa	PAC	\$665	50%
Other Renewables #27	Initiated	Feasibility Analysis	Multnomah	PGE	\$3,114	50%
Other Renewables #28	Initiated	Feasibility Analysis	Klamath	PAC	\$1,500	50%
Other Renewables #29	Initiated	Feasibility Analysis	Jefferson	PAC	\$22,250	50%
Other Renewables #30	Initiated	Feasibility Analysis	Jefferson	PAC	\$21,931	50%
Other Renewables #31	Initiated	Feasibility Analysis	Deschutes	PAC	\$36,461	50%
Other Renewables #32	Initiated	Feasibility Analysis	Deschutes	PAC	\$1,127	50%
Other Renewables #33	Initiated	Feasibility Analysis	Marion	PAC	\$1,251	50%
Other Renewables #34	Initiated	Feasibility Analysis	Hood River	PGE	\$10,189	14%
Other Renewables #35	Initiated	Feasibility Analysis	Wallowa	PAC	\$10,740	50%
Other Renewables #36	Initiated	Feasibility Analysis	Lake	PAC	\$39,351	38%
Solar #1	Complete	Grant Writing Assistance	Benton	PAC	\$3,500	35%
Solar #2	Complete	Grant Writing Assistance	Washington	PGE	\$800	50%
Solar #3	Complete	Grant Writing Assistance	Klamath	PAC	\$1,000	50%
Solar #4	Complete	Grant Writing Assistance	Klamath	PAC	\$1,000	50%
Wind #1	Complete	Feasibility Study	Morrow	PGE & PAC	\$29,852	50%
Wind #2	Complete	Proposal Development	Morrow	PGE & PAC	\$2,812	50%
Wind #3	Complete	Feasibility Analysis	Yamhill	PGE	\$10,000	35%
Wind #4	Complete	Feasibility Analysis	Morrow	PAC & PGE	\$5,800	50%
Wind #5	Complete	Proposal Development	Morrow	PAC & PGE	\$1,263	50%
Wind #6	Complete	Wind Monitoring Equipment	Marion	PGE	\$500	72%
Wind #7	Complete	Wind Monitoring Equipment	Marion	PGE	\$2,814	100%
Wind #8	Complete	Wind Monitoring Equipment	Multnomah	PGE	\$500	25%
Wind #9	Complete	Wind Monitoring Equipment	Marion	PGE	\$500	100%
Wind #10	Complete	Wind Monitoring Equipment	Marion	PAC	\$500	100%
Wind #11	Complete	Grant Writing Assistance	Clackamas	PGE	\$2,000	50%
Wind #12	Complete	Monitoring Equipment	Clackamas	PGE	\$1,175	50%
Wind #13	Complete	Grant Writing Assistance	Marion	PGE	\$2,000	50%
Wind #14	Complete	Monitoring Equipment	Marion	PGE	\$1,161	50%
Wind #15	Complete	Grant Writing Assistance	Marion	PGE	\$2,000	50%
Wind #16	Complete	Monitoring Equipment	Marion	PGE	\$1,098	50%
Wind #17	Complete	Monitoring Equipment	Marion	PGE	\$400	100%
Wind #18	Initiated	Feasibility Analysis	Morrow	PAC & PGE	\$3,750	50%
Wind #19	Initiated	Monitoring Equipment	Yamhill	PGE	\$500	61%

4 Oregon Housing and Community Services

4.1 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. In either case, housing projects supported by PPC funds for weatherization are required to have a conservation element.

Table 17 provides a summary of the Trust Fund and Weatherization portion of PPC fund receipts and expenditures from January 1, 2011 through June 30, 2012. Funds received by Oregon Housing and Community Services during this period amounted to \$21,542,318 and expenditures including commitments totaled \$30,231,491.

Table 17: OHCS Receipt and Expenditure Summary (1/2011 – 6/2012)

Transaction	PGE	PacifiCorp	Total
Low-Income Weatherization			
Administration	457,791	320,123	777,914
Evaluation, Training, and Technical Assistance	457,791	320,123	777,914
ECHO	7,004,202	4,897,887	11,902,089
Multi-Family Rental Housing	1,236,036	864,333	2,100,369
Total Low-Income Weatherization	9,155,820	6,402,466	15,558,286
Low-Income Housing			
Administration	176,073	123,128	299,201
Program	3,345,396	2,339,435	5,684,831
Total Low-Income Housing	3,521,469	2,462,563	5,984,032
Total Fund Receipts	12,677,289	8,865,029	21,542,318
Expenditures			
Low-Income Weatherization*	6,389,847	3,235,932	9,625,779
Committed but unexpended	5,746,414	2,741,356	8,487,770
Low-Income Housing**			7,551,916
Committed but unexpended			1,922,123
Administrative Expenses**			252,122
Evaluation, Training, Technical Assistance**			77,967
Committed but unexpended			116,892
Energy Education	475,670	458,995	934,665
Committed but unexpended	652,768	609,489	1,262,257
Total Expenditures (w/o Committed)**	6,865,517	3,694,927	18,442,449
Total Expended and Committed**	13,264,699	7,045,772	30,231,491

*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.

4.2 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.

Table 18 shows PPC fund receipts and expenditures for the low-income housing program. During the January 2011 – June 2012 period, a total of \$5,984,032 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 \$7,551,916. Funds to pay project costs totaling \$1,922,123 obligated but not spent as of June 30, 2012.

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 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.

**Table 18: Low-Income Housing Program Receipts and Expenditures
(1/2011 – 6/2012)**

Transaction	Total
Fund Receipts	\$5,984,032
Expenditures	
Committed but unexpended	\$1,922,123
Expenditures	\$7,551,916
Total Expended and Committed	\$9,474,039

Results

Key accomplishments for the low-income housing program during the January 2010 – June 2012 period include the following:

- Thirty-two multi-family housing projects received HDGP awards that were either fully or partially funded with PPC revenue.

- HDGP funds helped 23 counties in Oregon create affordable housing and support local jobs.
- Projects representing the construction or rehabilitation of 688 affordable units; and
- HDGP awards leveraging total project costs of \$112 million.

Additional detail on program accomplishments, including the characteristics of the low-income families served is shown in Table 19.

Table 19: Low-Income Housing Accomplishments (1/2011 – 6/2012)

Accomplishment	Total
Number of Projects	32
Number of Units*	688
Population Served (# of housing units)	
Elderly	140
Families**	361
Special Needs (# of housing units)	
Special Needs Groups***	354
Farm Workers	41
Units where household income is between 61 and 80 percent of the area median income	0
Units where household income is between 51 and 60 percent of the area median income	268
Units where household income is between 41 and 50 percent the area median income	291
Units where household income is between 31 and 40 percent the area median income	86
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 20 shows how the low-income housing projects were distributed among Oregon's counties.

Table 20: Low-Income Housing Projects by County (1/2011 – 6/2012)

County	Number of Projects	Number of Units in County
Baker	1	10
Clatsop	1	9
Deschutes	1	26
Douglas	4	57
Jackson	4	25
Klamath	1	37
Lane	3	39
Lincoln	1	34
Multnomah	7	241
Polk	2	24
Umatilla	1	24
Washington	5	161
Yamhill	1	1
13 counties	32 Projects	688 units

4.3 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 21 shows the PPC fund receipts and expenditures allocated for low-income home weatherization. During this period, a total of \$2,100,369 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 \$2,508,427 during this period while funds committed to projects totaled an additional \$1,487,351. Expenditures can be 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 21: Low-Income Weatherization (Multi-Family Rental Housing)
Receipts and Expenditures (1/2011 – 6/2012)**

Transaction	PGE	PacifiCorp	Total
Fund Receipts	1,236,036	864,333	2,100,369
Expenditures			
Committed but unexpended	1,280,551	206,800	1,487,351
Expenditures*	1,858,576	649,851	2,508,427
Total Expended and Committed	3,139,127	856,651	3,995,778

*Includes expenditures for all projects regardless of funding year.

Results

Key accomplishments for the January 2011 – June 2012 period include the following:

- Seven housing projects estimated to assist 395 households across Oregon were funded during this period with a combined total cost of over \$136 million; and
- These seven projects are expected to produce over 890,000 kWh in electricity savings in the first year of operation.

The low-income weatherization accomplishments are summarized in Table 22.

**Table 22: Low-Income Weatherization (Multi-Family Rental Housing) Accomplishments
(1/2011 – 6/2012)**

Accomplishment	Total
Number of Projects	7
Number of Units	395
Estimated kWh Savings	891,023
Population Served (# of housing units)	
Elderly	21
Families	115
Special Needs (# of housing units)	
Special Needs Groups*	228
Farm Workers	50
Units where household income is between 61 and 80 percent of the area median income	0
Units where household income is between 51 and 60 percent of the area median income	89
Units where household income is between 41 and 50 percent of the area median income	266
Units where household income is between 31 and 40 percent of the area median income	36
Units where household income is equal or less than 30 percent of the area median income	3

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

Table 23 shows how the low-income weatherization projects were distributed among Oregon's counties.

Table 23: Low-Income Weatherization Program by County (1/2011 – 6/2012)

County	Number of Projects	Number of Units in County
Marion	2	50
Multnomah	2	228
Washington	3	117
3 counties	7 Projects	395 Units

4.4 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 24 shows the PPC fund receipts and expenditures allocated for low-income home weatherization from January 1, 2011 to June 30, 2012. During this period, \$11,902,089 in PPC funds was designated for low-income weatherization. Expenditures on completed weatherization projects during the same period totaled \$7,117,352.

Table 24: Low-Income Weatherization (ECHO) Program Receipts and Expenditures (1/2011 - 6/2012)

Transaction	PGE	PacifiCorp	Total
Fund Receipts	7,004,202	4,897,887	11,902,089
Expenditures			
Committed but unexpended	4,465,863	2,534,556	7,000,419
Expenditures	4,531,271	2,586,081	7,117,352
Total Expended and Committed	8,997,134	5,120,637	14,117,771

Results

The low-income weatherization accomplishments are summarized in Table 25. Since the beginning of 2011, this program resulted in the weatherization of 2,731 homes with a combined estimated electricity savings of 17,025,263 kWh. These program efforts have directly benefited 5,361 people, a large portion of whom are in demographic groups that tend to include the elderly, disabled individuals and young children.

Table 25: Low-Income Weatherization (ECHO) Program Accomplishments (1/2011 - 6/2012)

Accomplishment	Total
Number of Homes Weatherized	2,731
Annual kWh Savings	17,025,263
Total Population Served	5,361
Special Target Populations Served	
Elderly (>60 years old)	971
Children (<6 years old)	412
Handicapped	667
Farm Workers	24
Native American	158
Hispanic	1,319
African American	173
Asian	84

5 School Districts

5.1 Overview

Before HB 2960 was signed into law in June 2011, 10 percent of PPC funds were allocated to 16 Educational Service Districts (ESDs) located within PGE and PacifiCorp service territories. Since June 23, 2011, PPC funds have been distributed directly to the 112 school districts located within the utilities' service territories, and 835 schools (with 393,000 students) are eligible for PPC funding. Any remaining balances held by the ESDs were transferred to the school districts. Since this biennial report covers the period from January 2011 to June 30, 2012, the utility receipt figures include funds distributed to ESDs and school districts.

These funds are used for cost-effective energy conservation projects at individual schools within each school district 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 up to 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 school district.

The Oregon Department of Energy provides program oversight for the school district audits and projects to ensure consistency across school districts 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 school districts receive their PPC funds directly from the utilities.

5.2 Receipts and Expenditures

Table 26 provides a summary of the ESD and school districts portion of PPC fund receipts and expenditures from January 1, 2011 through June 30, 2012. In addition to the normal program administrative expenses defined earlier, this program had additional administrative expenses for each ESD and school district until HB 2960 was enacted in June 2011. Total administrative costs for schools, then, equal \$400,597 and comprise 3.3 percent of total expenditures over this period, and 3.1 percent of the PPC allocation to Oregon schools.

Table 26: ESD/School Districts Receipt and Expenditure Summary (1/2011 – 6/2012)

Transaction	PGE	PacifiCorp	Total
# of ESDs Receiving Funds¹¹	4	15	16*
ESD receipts (1/2011 - 6/2011)	\$2,545,617	\$1,657,459	\$4,203,076
# of School Districts receiving funds	42	73	112**
School District receipts (7/2011 - 6/2012)	\$5,298,287	\$3,506,887	\$8,805,174
Total Fund Receipts	\$7,843,904	\$5,164,346	\$13,008,250
Expenditures			
Audits	\$478,039	\$324,784	\$802,824
Conservation Measures Installed	\$7,537,081	\$2,788,361	\$10,325,442
Commissioning Costs (after measures installed)	\$436,740	\$0	\$436,740
ESD and School District Administrative Expenses ^{***}			\$241,078
ODOE Administrative Expenses			\$159,520
ODOE Program Expenses			\$304,694
Total Expenditures	\$8,451,861	\$3,113,146	\$12,270,297

* 3 ESDs have overlapping utility coverage.

** 3 school districts have overlapping utility coverage.

*** ESD administrative expenses only cover the period from January 2011 to June 2011.

5.3 Results

Among the 835 schools that are eligible for PPC funds, 748 (90 percent) have completed audits. A total of 5,677 individual energy efficiency measures have been identified in these audits, and 2,148 (38 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 27 shows the results of audits completed during the January 2011 – June 2012 period. During this time, 200 audits were completed across 45 school districts. The audits identified 696 conservation measures that could be installed cost-effectively. If all of these measures were implemented, they would result in annual electricity savings of 8,457,345 kWh and natural gas savings of 755,911 therms. The measures and associated energy savings translate to \$2,059,576 in potential utility bill savings each year.

¹¹ A total of 16 ESDs were eligible to receive PPC funds. Three ESDs are served by both PGE and PacifiCorp.

Table 27: ESD/School Districts Audit Results (1/2011 – 6/2012)

Audit Accomplishment	PGE	PacifiCorp	Total
# of Audits Completed	98	102	200
# of School Districts	22	24	45
# of Measures Identified*	378	318	696
Simple Payback – Median Years	11.9	11.0	
Simple Payback – Mean Years	15.4	15.0	
Simple Payback – Years Range	< 1 to 50	< 1 to 50	< 1 to 50
Potential Savings Identified in Audits			
Electricity Savings (kWh)	4,718,510	3,738,835	8,457,345
Natural Gas Savings (therms)	272,279	483,632	755,911
Other Fuels (gal)	72,673	161,149	233,822
Total Annual Energy Cost Savings (\$)	\$776,147	\$1,283,430	\$2,059,576
Total Savings (Btu)	52,242,901,430	84,405,313,255	136,648,214,685
Total Cost of Measures Identified	\$10,662,505	\$18,907,984	\$29,570,489

* 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 28. During the reporting period, 342 measures identified during audits were installed across 27 school districts. Energy efficiency measures that are most frequently installed include: BAS/DDC systems, occupancy sensors, programmable thermostats, lighting retrofits (e.g., T12 to T8 conversions), and building envelope measures (e.g. insulation). Common operations and maintenance (O&M) measures include calibrations for HVAC, domestic hot water and building control systems. In total, these measures are expected to save 6,479,161 kWh in electricity and 354,088 therms of natural gas annually. Total savings to the schools from the installation of these measures is estimated to be \$1,052,662 each year. Districts achieve these savings by leveraging the PPC funds shown below to acquire or extend other funds: state energy tax credits, federal grants, and general fund dollars (for the non-energy efficiency portion of projects or when PPC funds have been exhausted).

Table 28: ESD/School Districts Efficiency Measures Installed (1/2011 – 6/2012)

Measure Accomplishment	PGE	PacifiCorp	Total
# of Audit Measures Installed	225	117	342
# of School Districts	12	16	27
Annual Savings			
Electricity Savings (kWh)	5,679,230	799,931	6,479,161
Natural Gas Savings (therms)	176,228	177,860	354,088
Other Fuels (gal)	53,431	46,429	99,860
Total Annual Energy Cost Savings (\$)	\$734,428	\$318,233	\$1,052,662
Total Annual Energy Savings (Btu)	45,456,066,414	27,471,993,955	72,928,060,369
Total PPC Cost of Measures Installed	\$7,537,081	\$2,788,361	\$10,325,442
Commissioning Costs	\$436,740	\$0	\$436,740

6 Self-Direct Customers

6.1 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. Sixty-five 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 2011 through June 2012, self-direct customers in the PacifiCorp service territory claimed \$840,263 in credits for conservation and renewable resource projects, and customers in the PGE service territory claimed \$2,166,039. Combined, self-direct customers of both utilities claimed \$1,362,880 in conservation credit and \$1,643,422 in renewable resource credit from January 2011 through June 2012.

6.2 Results

Table 29 summarizes self-direct program conservation activity from January 2011 through June 2012. During this period, self-direction sites implemented projects that involved HVAC system improvements, lighting changes and variable frequency drives (VFDs). PGE customers certified eight conservation projects (five in Multnomah County, and one each in Clackamas, Washington and Marion counties,) with a total eligible cost of \$713,071, and PacifiCorp customers certified one project in Marion County with a total eligible cost of \$7,660. The combined effect of these projects is about 2 million kWh in energy savings annually, or \$126,109 in annual energy cost savings.

**Table 29: Self-Direct Program Certified Conservation Projects
(1/2011 – 6/2012)**

	PGE	PacifiCorp	Total
Projects Certified	8	1	9
Total Eligible Cost	\$713,071	\$7,660	\$720,731
Total Energy Cost Savings (annual)	\$124,733	\$1,376	\$126,109
Total Energy Savings (annual kWh)	1,962,824	19,650	1,982,474



Table 30 summarizes self-direct program green tag renewable energy purchases from January 2011 through June 2012. PGE customers purchased over 133,000 green tags valued at over \$1.1 million, and PacifiCorp customers purchased over 89,000 green tags valued at \$695,378. The combined effect of these contracts is over 220 million kWh of renewable energy purchased annually.

The Oregon Department of Energy incurred administrative costs of \$13,774 and program expenses of \$15,073 to process all conservation, renewable energy and green tag projects.

**Table 30: Self-Direct Program Green Tag Purchases
(1/2011 – 6/2012)**

	PGE	PacifiCorp	Total
Sites	27	29	56
Green Tags Purchased	133,770	89,096	222,866
Credits Issued	\$1,148,823	\$695,378	\$1,844,201
Energy Purchased (annual kWh)	133,760,016	89,107,988	222,868,004

7 Summary

Table 31 summarizes the expenditures and results for PPC expenditures from January 2011 through June 2012. The agencies spent a combined total of \$130,650,717 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 550,644,579 kWh (63 aMW), which is enough to power over 48,000 average-sized homes each year.¹² When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 1,929,480 million Btu.

Table 31: Summary of PPC Expenditures and Results (1/2011 – 6/2012)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated	aMW	MMBtu
Energy Trust – Conservation	\$68,316,560	275,939,467	31.50	941,505
Energy Trust – Renewables*	\$28,586,262	25,459,187	2.91	86,870
School Districts**	\$12,270,297	6,479,161	0.74	72,928
OHCS Low-Income***	\$18,442,449	17,916,286	2.05	61,133
Self-Direct Customers****	\$3,035,149	224,850,478	25.67	767,221
Total Expenditures	\$130,650,717	550,644,579	62.86	1,929,480

* Energy saved excludes 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).

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

Appendix A: Updates to Previous Report

In this section we present updates to the previous PPC spending report, *Report to Legislative Assembly on Public Purpose Expenditures January 2009 – December 2010 (March 31, 2011)*.

1. Educational Service Districts (ESDs) – ODOE Administrative Costs

ODOE administrative expenses of \$172,455 were correctly reported in Table 24 but were not reflected in the Executive Summary or Table 2, which summarize program expenses across all the agencies.

2. Educational Service Districts - Commissioning Costs

Costs to commission newly installed projects have not been reported in previous PPC reports, and are presented in the following table by reporting biennium. Current commissioning costs for schools are included in Table 28 of this report.

Table 32: Schools Commissioning Costs in Prior Reporting Cycles

Utility	1/2003 – 12/2004	1/2005 – 12/2006	1/2007 – 12/2008	1/2009 – 12/2010	Total
PacifiCorp	\$21,665	\$92,090	\$0	\$0	\$113,755
PGE	\$36,882	\$134,968	\$120,238	\$112,078	\$404,166
Total	\$58,547	\$227,058	\$120,238	\$112,078	\$517,921

The 2010 Carry Forward Balance for schools in Table 5 of this report reflects these previously unreported commissioning costs.

The following table shows how the aforementioned revisions to the Schools data affect various summary totals in the previous report.

Table 33: Changes to PPC Report, January 2009 – December 2010

Item	Reported	Revised
ESD Administrative Expenses	\$566,265	\$738,720*
ESD Commissioning Expenses	\$0	\$112,078
Total ESD Expenditures	\$20,331,801	\$20,443,879
ESD Percent Spent on Admin.	3.6%	3.6%
Total Agencies Expenditures	\$181,372,579	\$181,657,112
Total Administrative Costs Only	\$9,366,512	\$9,538,967
Percent Spent on Admin.	5.2%	5.3%

*This amount is correctly reflected in Section 4 of the previous report (\$566,265 + \$172,455), and was only omitted in the summary tables.

3. Housing – ECHO Projects and Target Populations Served

Table 32 in the previous report did not include ECHO weatherization projects completed in Multnomah County and Lane County. The following table shows the updated projects information when these two counties are included.

Table 34: Low-Income Weatherization (ECHO) Program Accomplishments, January 2009 – December 2010

Accomplishment	Reported Total	Revised Total
Number of Homes Weatherized	4,287	4,656
Annual kWh Savings	12,769,713	20,407,079
Total Population Served	6,352	6,933
Special Target Populations Served		
Elderly (>60 years old)	1,269	1,643
Children (<6 years old)	880	1,065
Handicapped	1,118	1,251
Farm Workers	67	69
Native American	297	303
Hispanic	1,697	1,589
African American	171	360
Asian	321	353