

# Report to Legislative Assembly on Public Purpose Expenditures

**ECONorthwest**

ECONOMICS • FINANCE • PLANNING

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## **Acknowledgements**

This report was prepared by ECONorthwest's Portland office for the Oregon Department of Energy and the Oregon Public Utility Commission. Dr. Stephen Grover was the ECONorthwest project manager for the analysis and was the primary author of this report. Questions regarding the report should be directed to him at [grover@portland.econw.com](mailto:grover@portland.econw.com) or by phoning the Portland office at (503) 222-6060. Dr. Grover was assisted in this project by Emily French.

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## EXECUTIVE SUMMARY

### INTRODUCTION

In July 1999, Senate Bill 1149 (SB 1149) was enacted to introduce competition into the Oregon's electricity markets within the Portland General Electric (PGE) and PacifiCorp service territories<sup>1</sup>. As part of SB 1149, these utilities were required to levy a 3 percent fee on 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 Oregon.

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

- **Energy Trust of Oregon, Inc.** The non-profit Energy Trust began administering funds in March 2002; the Energy Trust seeks to develop and implement programs that promote energy conservation and development of renewable energy resources within the State. The Energy Trust receives 73 percent of the available PPC funds (56 percent dedicated to conservation programs and 17 percent for renewable energy projects).
- **Education Service Districts.** Oregon's Education Service Districts receive 10 percent of PPC funds to improve energy efficiency in individual schools.
- **Oregon Housing and Community Services.** Oregon Housing and Community Services (OHCS) receives and administers PPC funds for low-income housing programs. 4.5 percent of the PPC funds are dedicated to low-income housing development projects, either 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 for home weatherization (for single family and multi-family, owner occupied and rental housing) and the other is 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 the utility.

In September 2004, 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;

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<sup>1</sup> SB 1149 is codified in ORS 757.600, et. seq. ORS 757.612 specifically addresses the Public Purpose Charge.

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

## **RECEIPT AND EXPENDITURE SUMMARY**

The following table shows PPC fund disbursements to the various administrators and programs for the January 1, 2003 – June 30, 2004 period. The far right column of the table shows the level of expenditure for these funds over the same period. Expenditures are less than disbursements in most cases; all administrators experience a lag between their receipt and disbursement of project funds, particularly the organizations that administer long-term projects. For a long-term project (such as a utility-scale wind farm), committed funds are not actually spent until the project is completed, a process that may take several years depending on project size and scope. As shown at the bottom of the table, PPC expenditures totaled \$65,319,828 across fund administrators. Administrative costs for agencies administering the PPC funds were \$4,520,070, which is 6.9 percent of total expenditures during this period.

**PPC Disbursements and Expenditures (1/2003 – 6/2004)**

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
<b>Energy Trust of Oregon</b>				
Conservation	\$30,558,100	\$20,452,097	\$51,010,197	\$32,806,266
Renewable Energy	\$9,541,465	\$6,341,041	\$15,882,506	\$6,942,684
Administrative Expenses				\$3,454,398
<b>Education Service Districts</b>	\$5,757,581	\$3,705,493	\$9,463,074	\$4,603,000
ODOE Program Expenses				\$253,947
Administrative Expenses				\$640,569
<b>Oregon Housing and Community Services</b>				
Low-Income Weatherization*	\$6,876,474	\$4,398,166	\$11,274,641	\$7,187,752
Low-Income Housing	\$2,644,798	\$1,691,602	\$4,336,400	\$1,607,362
Administrative Expenses				\$388,690
Evaluation, Training, Technical Assistance				\$177,094
<b>Self-Direct for Large Customers**</b>	<b>\$6,009,468</b>	<b>\$1,248,598</b>	<b>\$7,258,066</b>	<b>\$7,150,657</b>
ODOE Program Expenses				\$70,996
Administrative Expenses				\$36,413
<b>Totals</b>	<b>\$61,387,886</b>	<b>\$37,836,997</b>	<b>\$99,224,884</b>	<b>\$65,319,828</b>
<b>Administrative Costs Only</b>				<b>\$4,520,070</b>

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

\*\* ECONorthwest allocated the Self-Direct administrative costs proportionately across PGE and PacifiCorp based on disbursements.

The table below summarizes the expenditures and results for PPC expenditures from January 2003 through June 2004. The agencies spent a combined total of \$65,319,828 on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 391,153,573 kWh (just under 45 aMW), which is enough to power almost 27,000 average size homes each year.<sup>2</sup> When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 1,357,024 million Btu.

<sup>2</sup> Calculated using the Northwest Power Planning Council's estimate that an average megawatt is enough to power 600 homes each year (assuming electric heat).

## Summary of PPC Expenditures and Results (1/2003 – 6/2004)

Agency / Program	Expenditures	Results		
		kWh Saved or Generated*	aMW	MMBtu
Energy Trust - Conservation	\$35,660,994	193,654,743	22.11	660,944
Energy Trust - Renewables	\$7,542,354	129,823,200	14.82	443,087
Education Service Districts**	\$5,497,516	3,153,811	0.36	32,781
OHCS Low-Income	\$9,360,898	10,600,315	1.21	36,179
Self-Direct for Large Customers	\$7,258,066	53,921,504	6.16	184,034
<b>Total Expenditures</b>	<b>\$65,319,828</b>	<b>391,153,573</b>	<b>44.66</b>	<b>1,357,024</b>

\* Does not include savings from transmission and distribution.

\*\* Does not include savings for natural gas or fuels other than electricity in the \$/kWh value. All fuels included in the \$/MMBtu calculation.

## 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 PGE and PacifiCorp service territories<sup>3</sup>. As part of SB 1149, these utilities were required to levy a 3 percent fee on 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 Oregon.

In September 2004, ECONorthwest was hired by the Oregon Department of Energy and the Oregon Public Utility Commission to prepare a report to the Oregon Legislature documenting PPC receipts and expenditures in compliance with ORS 757.617(1)(a). Specifically ECONorthwest:

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

The remainder of this section provides an overview of the total PPC funds collected and disbursed in 2003 and 2004. Additional detail on how each organization utilized funds is provided in subsequent sections.

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<sup>3</sup> SB 1149 is codified in ORS 757.600, et. seq. ORS 757.612 specifically addresses the Public Purpose Charge.

## PPC FUND DISTRIBUTION

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

- **Energy Trust of Oregon, Inc.** The non-profit Energy Trust began administering funds in March 2002; the Energy Trust seeks to develop and implement programs that promote energy conservation and development of renewable energy resources within the State. The Energy Trust receives 73 percent of the available PPC funds (56 percent dedicated to conservation programs and 17 percent for renewable energy projects).
- **Education Service Districts.** Oregon’s Education Service Districts receive 10 percent of PPC funds to improve energy efficiency in individual schools.
- **Oregon Housing and Community Services.** Oregon Housing and Community Services (OHCS) receives and administers PPC funds for low-income housing programs. 4.5 percent of the PPC funds are dedicated to low-income housing development projects, either 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 for home weatherization (for single family and multi-family, owner occupied and rental housing) and the other is 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 the utility.

Figure 1 shows how the total PPC funds are allocated across administrators based on the utility’s PPC fund disbursement data for January 2003 through June 2004 (see Table 2).

**Figure 1: PPC Fund Allocation by Administrator and Program (1/2003-6/2004)<sup>4</sup>**

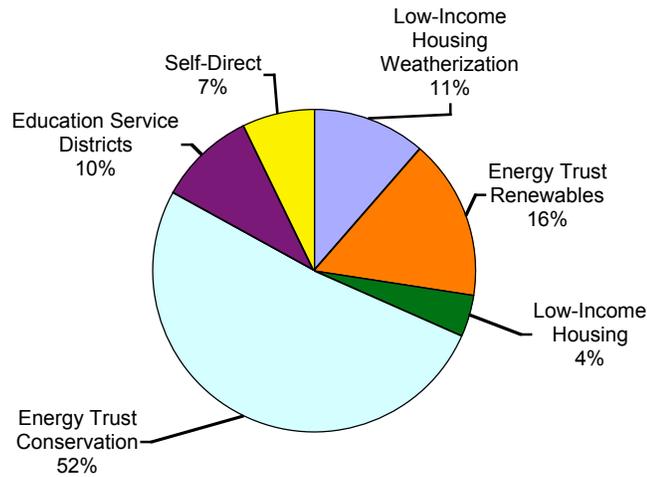
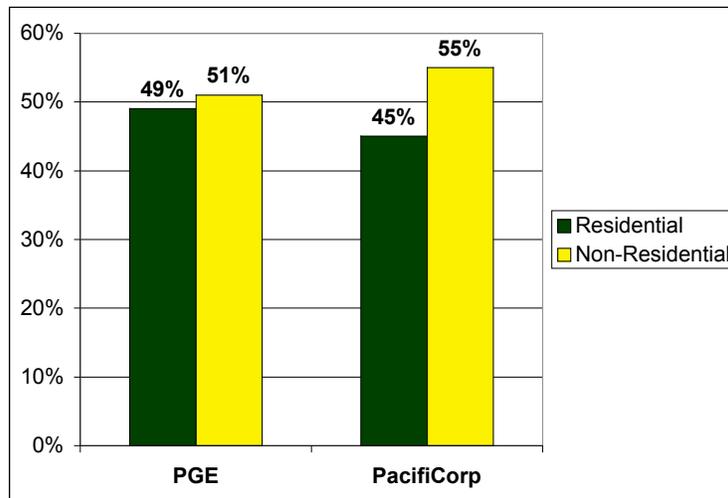


Figure 2 shows the total PPC fund collections for the January 2003 – June 2004 period divided among residential and non-residential ratepayers for each utility.<sup>5</sup> For both utilities, the residential sector contributes just under half of the total PPC funds collected.

**Figure 2: Sector Contribution of PPC Funds by Utility**

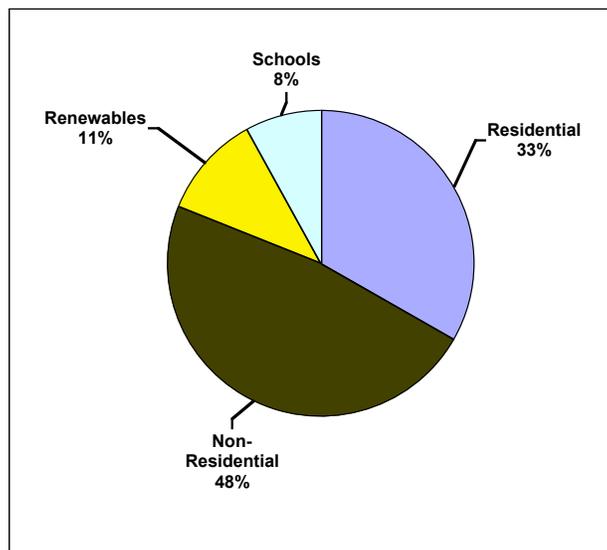


<sup>4</sup> Note that the graph includes the self-direct expenditures, and consequently the allocation percentages do not coincide with the PPC disbursement information discussed above, which are based on total *collected* PPC funds.

<sup>5</sup> The sector share was calculated by each utility based on revenues received from January 2003 thru June 2004. Because of the seasonal nature of energy consumption, this distribution will vary depending on the time period.

Figure 3 shows how PPC fund expenditures by the various agencies and programs are distributed among economic sectors. The residential sector (covered by the OHCS and Energy Trust residential conservation programs) received 33 percent of expenditures from January 2003 to June 2004. This is slightly less than the contribution that the residential sector makes to PPC funds, which ranges from 49 percent for PGE to 45 percent for PacifiCorp. Residential customers benefit indirectly from conservation achieved in the industrial sector and in public schools, however. Over the same timeframe, schools receive 8 percent of expenditures, 11 percent of expenditures were spent on renewable resource development and 48 percent of expenditures were spent on programs for nonresidential programs.

**Figure 3: Distribution of PPC Expenditures**



## RECEIPT AND EXPENDITURE SUMMARY

This report details Public Purpose Charge (PPC) expenditures from January 1, 2003 through June 30, 2004. Table 1 shows the total funds collected during this period from both PGE and PacifiCorp. Over this 18-month period, \$61,387,886 in PPC funds was disbursed by PGE and \$37,836,997 was disbursed by PacifiCorp for a total of \$99,224,884 in PPC funds allocated for conservation and renewable energy programs across agencies. In addition, both utilities and the Oregon PUC spent a combined total of \$85,430 on administrative expenses to collect and distribute PPC funds.

**Table 1: Total PPC Fund Disbursements (1/2003 – 6/2004)**

Source	PPC Disbursements	Administrative Expenses
PGE	\$61,387,886	\$29,954
PacifiCorp	\$37,836,997	\$20,492
Oregon PUC		\$34,984
<b>Total</b>	<b>\$99,224,884</b>	<b>\$85,430</b>

Table 2 provides additional detail on the disbursement across the various programs for the January 2003 – June 2004 period. The far right column of the table shows the level of expenditure for these funds over the same period. Expenditures are less than disbursements in some cases; all agencies experience a lag between their receipt and disbursement of project funds, particularly the agencies that administer long-term projects. For a long-term project (such as a utility-scale wind farm), committed funds are not actually spent until the project is completed, a process that may take several years depending on project size and scope. As shown at the bottom of the table, PPC expenditures totaled \$65,319,828 across fund administrators. Administrative costs for agencies administering the PPC funds were \$4,520,070, which is 6.9 percent of total expenditures during this period.

**Table 2: PPC Disbursements and Expenditures (1/2003 – 6/2004)**

Fund Administrator / Program	Disbursement Source			Expenditure
	PGE	PacifiCorp	Total	Total
<b>Energy Trust of Oregon</b>				
Conservation	\$30,558,100	\$20,452,097	\$51,010,197	\$32,806,266
Renewable Energy	\$9,541,465	\$6,341,041	\$15,882,506	\$6,942,684
Administrative Expenses				\$3,454,398
<b>Education Service Districts</b>	\$5,757,581	\$3,705,493	\$9,463,074	\$4,603,000
ODOE Program Expenses				\$253,947
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<b>Oregon Housing and Community Services</b>				
Low-Income Weatherization*	\$6,876,474	\$4,398,166	\$11,274,641	\$7,187,752
Low-Income Housing	\$2,644,798	\$1,691,602	\$4,336,400	\$1,607,362
Administrative Expenses				\$388,690
Evaluation, Training, Technical Assistance				\$177,094
<b>Self-Direct for Large Customers**</b>	<b>\$6,009,468</b>	<b>\$1,248,598</b>	<b>\$7,258,066</b>	<b>\$7,150,657</b>
ODOE Program Expenses				\$70,996
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<b>Totals</b>	<b>\$61,387,886</b>	<b>\$37,836,997</b>	<b>\$99,224,884</b>	<b>\$65,319,828</b>
<b>Administrative Costs Only</b>				<b>\$4,520,070</b>

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

\*\* ECONorthwest allocated the Self-Direct administrative costs proportionately across PGE and PacifiCorp based on disbursements.

Table 3 shows the timing of PPC receipts and expenditures since 2002 for each agency. Unexpended funds from 2002 are added to receipts from the January 2003 – June 2004 period,

and expenditures over this same period are subtracted to determine the unspent funds as of June 30, 2004. Where available, committed funds for this period are included in the table as expenditures to ensure that the remaining 2004 funds reflect PPC funds yet to be allocated to specific projects.

**Table 3: Cumulative PPC Receipts and Expenditures (1/2003-6/2004)**

<b>Fund Administrator / Program</b>	<b>2002 Carry Forward*</b>	<b>1/2003-6/2004 Receipts</b>	<b>1/2003-6/2004 Expenditures</b>	<b>2004 Remaining</b>
<b>Energy Trust of Oregon</b>				
Conservation	\$4,266,259	\$51,010,197	\$35,660,994	\$19,615,462
Renewable Energy	\$6,662,601	\$15,882,506	\$7,542,354	\$15,002,753
<b>Education Service Districts</b>	\$3,222,625	\$9,463,074	\$5,497,516	\$7,442,130
<b>Oregon Housing and Community Services</b>	\$5,499,892	\$15,611,041	\$9,360,898	\$11,750,035
<b>Self-Direct</b>	\$0	\$7,258,066	\$7,258,066	\$0
<b>Totals</b>	<b>\$19,651,377</b>	<b>\$99,224,884</b>	<b>\$65,319,828</b>	<b>\$53,810,380</b>

\*2002 Carryover amounts calculated by ECONorthwest using data from the prior PPC fund report *Report to Legislative Assembly on Public Purpose Expenditures for the Period March 1 – December 31, 2002* (March 18, 2003). These amounts do not exactly agree with the Energy Trust of Oregon’s 2002 audited financial statements, which were published after the prior Report to the Legislature.

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 the agency’s general operations. These costs may include board or executive director activities, general business management, accounting, general reporting, and oversight;
2. General outreach and communication; and
3. The following direct program support costs:
  - a. Supplies
  - b. Postage and shipping
  - c. Telephone
  - d. Occupancy expenses
  - e. Printing and publications
  - f. Insurance
  - g. Equipment
  - h. Travel
  - i. Meetings, training, and conferences
  - j. Interest expense and bank fees
  - k. Depreciation and amortization
  - l. Dues, licenses, and fees

m. Other misc. expenses

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

## 2. ENERGY TRUST OF OREGON, INC.

### OVERVIEW

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

During 2003, Energy Trust introduced its first long-term programs to serve major markets. Table 4 provides a summary of Energy Trust PPC revenues and expenditures from January 1, 2003 through June 30, 2004. Funds received by Energy Trust during this period totaled \$66,892,703, and expenditures totaled \$43,203,348. Administrative expenses totaled \$3,454,398 and comprised 8.0 percent of total spending by Energy Trust on conservation and renewable programs and 5.2 percent of total PPC receipts during this period.<sup>7</sup>

**Table 4: Energy Trust Receipt and Expenditure Summary (1/2003 – 6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Total Fund Receipts</b>	<b>\$40,099,565</b>	<b>\$26,793,138</b>	<b>\$66,892,703</b>
<b>Expenditures</b>			
Energy Conservation	\$18,221,806	\$14,584,460	\$32,806,266
Renewable Energy	\$1,141,482	\$5,801,202	\$6,942,684
Administrative Expenses	\$1,876,375	\$1,578,023	\$3,454,398
<b>Total Expenditures</b>	<b>\$21,239,663</b>	<b>\$21,963,685</b>	<b>\$43,203,348</b>

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

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<sup>6</sup> The Energy Trust also administers residential and commercial conservation programs for Northwest Natural Gas Company under the terms of a stipulation with the PUC.

<sup>7</sup> Administrative expenses used here and in subsequent tables are defined using the common administrative expense definition discussed in the introduction of this report.

## ENERGY CONSERVATION

### Receipts and Expenditures

Table 5 shows Energy Trust fund receipts and expenditures for its conservation programs. During the January 2003 – June 2004 period, \$51,010,197 in PPC funds were available to Energy Trust for spending on these programs. Conservation program expenditures totaled \$35,660,994 during this same period. Administrative costs that could be directly assigned to Energy Trust conservation programs totaled \$2,854,728, or 8.0 percent of total conservation program spending and 5.6 percent of total PPC receipts for conservation programs.

**Table 5: Energy Trust Conservation Receipts and Expenditures (1/2003 – 6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Fund Receipts</b>	<b>\$30,558,100</b>	<b>\$20,452,097</b>	<b>\$51,010,197</b>
<b>Expenditures</b>			
Program Expenditures	\$18,221,806	\$14,584,460	\$32,806,266
Administrative Expenses	\$1,606,892	\$1,247,836	\$2,854,728
<b>Total Expenditures</b>	<b>\$19,828,698</b>	<b>\$15,832,296</b>	<b>\$35,660,994</b>

### Results

Energy Trust conservation activities consisted of design and delivery of conservation programs targeted for different market sectors and cover a wide range of energy saving measures. Table 6 shows the program accomplishments for individual programs sponsored by the Energy Trust. During the period covered by this report, the programs funded through the Northwest Energy Efficiency Alliance and the utility transition programs accounted for most of the energy savings achieved by the Energy Trust.

**Table 6: Energy Trust Conservation Programs Summary (1/2003-6/2004)**

Program Name	Completed Projects	Savings (aMW)
Home Energy Savings	15,663	2.31
Efficient Home Products	5,134	0.14
Building Efficiency	442	3.19
New Building Efficiency	2	0.02
LED Traffic Signal	3,107*	0.19
Production Efficiency	4	1.71
Solar Water Heating	5	--
NEEA Market Transformation	--	7.69
Utility Transition	--	8.85

\* LED lamps installed

In 2004, Energy Trust also began working with the Oregon Department of Energy on a major project with the Blue Heron Paper Company at its Oregon City plant. This project will modernize and expand Blue Heron's pulp de-inking process and is expected to yield 106 million kWh in electricity savings—almost half of the Energy Trust 2004 energy efficiency savings goal of 276 million kWh. In addition to the funds it receives from Energy Trust, this project is also receiving financial support from the Oregon Department of Energy, Business Energy Tax Credit Partners, and the Climate Trust.

Table 7 provides additional detail on the conservation project achievements for the January 2003 – June 2004 period. During this same period, Energy Trust committed to funding projects that are expected to deliver an additional 18.5 aMW in electricity savings.

**Table 7: Energy Trust Conservation Savings Achievements (1/2003 – 6/2004)**

	PGE		PacifiCorp		Combined		Committed
	KWh	aMW	KWh	aMW	kWh	aMW	aMW
<b>2003</b>	80,511,785	9.2	57,997,232	6.6	138,509,017	15.8	
<b>Q1 2004</b>	13,699,111	1.6	9,549,311	1.1	23,248,422	2.7	
<b>Q2 2004</b>	14,807,425	1.7	17,089,879	2.0	31,897,304	3.6	
<b>Total</b>	<b>109,018,321</b>	<b>12.5</b>	<b>84,636,422</b>	<b>9.7</b>	<b>193,654,743</b>	<b>22.1</b>	<b>18.5</b>

## RENEWABLE ENERGY

### Receipts and Expenditures

Table 8 shows the PPC fund receipts and expenditures dedicated to Energy Trust renewable energy programs from January 1, 2003 through June 30, 2004. During this period, \$15,882,506

in PPC funds was allocated to Energy Trust for renewable energy projects and renewable energy program spending totaled \$7,542,354. Administrative costs related to the renewable energy program totaled \$599,670 and comprised 8.0 percent of total renewable energy program spending by Energy Trust and 3.8 percent of the PPC receipts designated for the renewable energy programs.

**Table 8: Energy Trust Receipts and Renewable Expenditures (1/2003 – 6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Fund Receipts</b>	<b>\$9,541,465</b>	<b>\$6,341,041</b>	<b>\$15,882,506</b>
<b>Expenditures</b>			
Program Expenditures	\$1,141,482	\$5,801,202	\$6,942,684
Administrative Expenses	\$269,483	\$330,187	\$599,670
<b>Total Expenditures</b>	<b>\$1,410,965</b>	<b>\$6,131,389</b>	<b>\$7,542,354</b>

## Results

In 2003, Energy Trust began full-scale implementation of several renewable energy programs; program results are summarized in Table 9. The largest amount of new renewable energy capacity was achieved through the Utility-Scale Renewables program. Projects were acquired through a competitive solicitation process in partnership with PacifiCorp and PGE. The first project, the Combine Hills Wind Farm, came online in late 2003 in PacifiCorp's service territory. The program has committed \$13.75 million to assist PGE and PacifiCorp with more large-scale projects resulting from RFP's issued in 2004. In terms of individual projects, the Solar Electric Program saw the greatest level of participation; the Program is designed to provide homeowners and businesses with financial incentives to adopt solar power applications.

**Table 9: Energy Trust Renewable Energy Programs Summary (1/2003-6/2004)**

<b>Program Name</b>	<b>Completed Projects</b>	<b>Generation (aMW)</b>
Utility-Scale Renewables	1	14.25
Solar Electric	137	0.07
Open Solicitation	6	0.52
Anemometer Loan Program	5	--

Additional information on the Energy Trust renewable energy accomplishments is summarized in Table 10 by utility territory. In addition to 14.824 aMW in completed projects, an additional 0.32 aMW of renewable energy projects had been committed as of June 30, 2004.

**Table 10: Energy Trust Renewable Energy Achievements (1/2003 – 6/2004)**

	aMW Installed			Committed aMW
	PGE	PacifiCorp	Combined aMW	
<b>2003</b>	0.022	14.272	14.294	
<b>Q1 2004</b>	0.003	0.009	0.012	
<b>Q2 2004</b>	0.002	0.516	0.518	0.32
<b>Total</b>	0.027	14.797	14.824	0.32

### **3. OREGON HOUSING AND COMMUNITY SERVICES**

#### **OVERVIEW**

Oregon Housing and Community Services (OHCS) receives and administers PPC funds for low-income housing programs. 4.5 percent of the PPC funds are dedicated to low-income housing development projects, either 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 for home weatherization (for single family and multi-family, owner occupied and rental housing) and the other is 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 11 provides a summary of the housing portion of PPC fund receipts and expenditures from January 1, 2003 through June 30, 2004. Funds received by Oregon Housing and Community Services during this period amounted to \$15,611,040, and expenditures totaled \$13,444,781. (Note: this expenditure value includes \$4,083,883 in funds committed to projects that are not yet completed.)

**Table 11: OHCS Receipt and Expenditure Summary (1/2003 – 6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Low-Income Weatherization</b>	<b>\$6,876,474</b>	<b>\$4,398,115</b>	<b>\$11,274,589</b>
<b>Low-Income Housing</b>	<b>\$2,644,798</b>	<b>\$1,691,654</b>	<b>\$4,336,452</b>
<b>Total Fund Receipts</b>	<b>\$9,521,322</b>	<b>\$6,089,718</b>	<b>\$15,611,040</b>
<b>Expenditures</b>			
Low-Income Weatherization**	\$4,144,187	\$3,043,565	\$7,187,752
Committed but unexpended	\$701,868	\$1,072,691	\$1,774,559
Low-Income Housing			\$1,607,362
Committed but unexpended			\$2,309,324
Administrative Expenses			\$388,690
Evaluation, Training, Technical Assistance			\$177,094
<b>Total Expenditures (w/o Committed)</b>	<b>\$4,144,187</b>	<b>\$3,043,565</b>	<b>\$9,360,898</b>
<b>Total Expended and Committed</b>	<b>\$4,846,055</b>	<b>\$4,116,256</b>	<b>\$13,444,781</b>

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

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

## **LOW-INCOME HOUSING**

### **Receipts and Expenditures**

The Housing Development Grant Program (HDGP), commonly known as the Housing Trust Fund, was created in 1991 to expand the State's supply of housing for low and very low-income families and individuals. The program provides grants and loans to construct new housing or to acquire and/or rehabilitate existing structures. Seventy-five percent of program funds must support households whose gross income is at or below 50 percent of the area median income; the balance of the funds can support households with incomes up to 80 percent 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 resident services appropriate for the targeted tenant population.

Table 12 shows the PPC fund receipts and expenditures for the low-income housing program. During the January 1, 2003 – June 30, 2004 period, a total of \$4,336,452 in PPC funds was allocated to Oregon Housing Community Services to support low-income housing projects throughout the State. Expenditures from PPC revenue for projects developed during this period were \$1,607,362. Funds to pay project costs totaling \$2,309,324 were obligated but not spent as of June 30, 2004.

**Table 12: Low-Income Housing Program Receipts and Expenditures  
(1/2003 – 6/2004)**

<b>Transaction</b>	<b>Total</b>
<b>Fund Receipts*</b>	<b>\$4,336,452</b>
<b>Expenditures</b>	
Committed but unexpended	\$2,309,324
Expenditures	\$1,607,362
<b>Total Expended and Committed</b>	<b>\$3,916,687</b>

\* Fund receipts reported by PacifiCorp to the PUC for the individual low-income programs differ from the utility reported disbursements analyzed for this report by approximately \$52. The total amount received by OHCS is consistent, the discrepancy occurs only with the allocation across the low-income housing and weatherization programs.

## **Results**

Key accomplishments for the low-income housing program during the January 1, 2003 – June 30, 2004 period include the following:

- Fifty-two multi-family housing projects received HDGP awards that were either fully or partially funded with PPC revenue;
- the projects represent the construction or rehabilitation of 954 affordable units; and
- the HDGP awards leveraged total project costs of \$87.7 million.

Additional detail on program accomplishments, including the characteristics of the low-income families served, is shown in Table 13.

**Table 13: Low-Income Housing Accomplishments (9/2003-12/2004)**

<b>Accomplishment</b>	<b>Total</b>
Number of Projects	52
Number of Units*	954
Population Served (# of housing units)	
Elderly	202
Families	457
Special Needs (# of housing units)	
Special Needs Groups**	161
Farm Workers	134
Units where household income is less than 60 percent of the area median income	226
Units where household income is less than 50 percent the area median income	514
Units where household income is less than 40 percent the area median income	88
Units where household income is less than 30 percent the area median income	88

\*The total number of units overstates 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, and all units at a project location are not necessarily 100 reserved for low-income housing.

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

## **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 1 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 14 shows the PPC fund receipts and expenditures allocated for low-income home weatherization. During this period, a total of \$1,522,070 in PPC funds was allocated to the Oregon Housing Community Services to support weatherization of rental housing projects within the State. Commitments in the amount of \$1,202,884 were made to projects during this period. Since housing developments take upwards of two years to complete construction, expenditures on projects during this period were \$762,839.

**Table 14: Low-Income Weatherization (Multi-Family Rental Housing)  
Receipts and Expenditures (1/2003 – 6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Fund Receipts</b>	<b>\$928,324</b>	<b>\$593,746</b>	<b>\$1,522,070</b>
<b>Expenditures</b>			
Committed but unexpended	\$75,164	\$364,881	\$440,045
Expenditures	\$518,148	\$244,691	\$762,839
<b>Total Expended and Committed</b>	<b>\$593,312</b>	<b>\$609,572</b>	<b>\$1,202,884</b>

### **Results**

Key accomplishments for the January 1, 2003 – June 30, 2004 period include the following:

- 21 housing projects estimated to assist 1,011 households across Oregon were funded during this period with a combined total cost of almost \$100 million; and
- these 21 projects are expected to produce more than 1.5 million kWh in electricity savings in the first year of operation.

The low-income weatherization accomplishments are summarized in Table 15.

**Table 15: Low-Income Weatherization (Multi-Family Rental Housing) Accomplishments (1/2003 – 6/2004)**

<b>Accomplishment</b>	<b>Total</b>
<b>Number of Projects</b>	<b>21</b>
<b>Number of Units*</b>	<b>1,011</b>
<b>Estimated kWh Savings</b>	<b>1,517,164</b>
<b>Population Served (# of housing units)</b>	
Elderly	313
Families	569
<b>Special Needs (# of housing units)</b>	
Special Needs Groups**	81
Farm Workers	48
Units where household income is less than 60 percent of the area median income	570
Units where household income is less than 50 percent of the area median income	327
Units where household income is less than 40 percent of the area median income	34
Units where household income is less than 30 percent of the area median income	51

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

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

## **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 subgrantees 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 16 shows the PPC fund receipts and expenditures allocated for low-income home weatherization. During this period, \$8,625,061 in PPC funds was designated for low-income weatherization from January 1, 2003 to June 30, 2004. Expenditures on completed weatherization projects during the same period totaled \$6,424,913 with an additional \$1,334,514 reserved for projects that had not been completed as of June 30, 2004.

**Table 16: Low-Income Weatherization (ECHO) Program Receipts and Expenditures (1/2003-6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Fund Receipts</b>	<b>\$5,260,503</b>	<b>\$3,364,558</b>	<b>\$8,625,061</b>
<b>Expenditures</b>			
Committed but unexpended	\$626,704	\$707,810	\$1,334,514
Expenditures	\$3,626,039	\$2,798,874	\$6,424,913
<b>Total Expended and Committed</b>	<b>\$4,252,743</b>	<b>\$3,506,684</b>	<b>\$7,759,427</b>

## Results

The low-income weatherization accomplishments are summarized in Table 17. Since the beginning of 2003, this program resulted in the weatherization of 2,699 homes with a combined estimated electricity savings of 8,990,307 kWh. These program efforts have directly benefited 6,113 people, the majority of whom are in demographic groups that tend to include low-income households.

**Table 17: Low-Income Weatherization (ECHO) Program Accomplishments (1/2003-6/2004)**

<b>Accomplishment</b>	<b>Total</b>
<b>Number of Homes Weatherized</b>	<b>2,699</b>
<b>Annual kWh Savings</b>	<b>8,990,307</b>
<b>Population Served</b>	
Elderly (>60 years old)	1,238
Children (<6 years old)	854
Handicapped	1,198
Farm Workers	95
Native American	266
Hispanic	1,199
African American	163
Asian	57

## 4. EDUCATIONAL SERVICE DISTRICTS

### OVERVIEW

Each year, 10 percent of PPC funds are allocated to the 17 Educational Service Districts (ESD's) located within PGE and PacifiCorp service territories; statewide, 857 schools (110 districts and 396,980 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 priority. First, all schools within a school district must complete an energy audit to identify cost-effective conservation opportunities. Once 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. Once 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 18 provides a summary of the ESD portion of PPC fund receipts and expenditures from January 1, 2003 through June 30, 2004. In addition to the normal program administrative expenses defined earlier, this program has additional administrative expenses for each ESD and school district. The two administrative cost categories combined total \$640,569 and comprise

11.7 percent of total expenditures over this period and 6.8 percent of the PPC allocated to Oregon schools.

**Table 18: ESD Receipt and Expenditure Summary (1/2003 – 6/2004)**

<b>Transaction</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
# of ESD's Receiving Funds	5	15	20
<b>Total Fund Receipts</b>	<b>\$5,757,581</b>	<b>\$3,705,493</b>	<b>\$9,463,074</b>
<b>Expenditures</b>			
Audits	\$1,018,000	\$630,000	\$1,648,000
Conservation Measures Installed	\$875,000	\$2,080,000	\$2,955,000
ESD and School District Administrative Expenses			\$516,865
ODOE Administrative Expenses			\$123,704
ODOE Program Expenses			\$253,947
<b>Total Expenditures</b>	<b>\$1,893,000</b>	<b>\$2,710,000</b>	<b>\$5,497,516</b>

## RESULTS

Table 19 shows the results of audits completed during the January 2003 – June 2004 period. During this time, 389 audits were completed across 64 school districts. The audits identified 3,477 conservation measures that could be installed cost-effectively. If all of these measures were adopted, they would result in 40,561,508 kWh in electricity savings annually and 3,533,012 in therm savings for natural gas. The energy savings measures identified translate to \$5,844,008 in potential utility bill savings each year if all the measures identified in these audits are adopted.

**Table 19: ESD Audit Results (1/2003 – 6/2004)**

<b>Audit Accomplishment</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
# of Audits Completed	219	170	389
# of School Districts	23	41	64
# of Measures Identified	1,868	1,609	3,477
<b>Potential Savings Identified in Audits</b>			
Electricity Savings (kWh)	22,044,479	18,517,029	40,561,508
Natural Gas Savings (therms)	1,842,819	1,690,193	3,533,012
Other Fuels (gal)	329,947	255,001	584,948
Total Annual Energy Cost Savings (\$)	\$3,217,008	\$2,627,000	\$5,844,008
Total Savings (Btu)	308,568,079,827	267,769,372,577	576,337,452,404
<b>Total Cost of Measures Identified</b>	<b>\$45,800,000</b>	<b>\$29,000,000</b>	<b>\$74,800,000</b>

PPC funds are also used to install the measures identified through the audits at these schools. The accomplishments related to actual measure installations are shown in Table 20. During the same period, 168 measures identified during the audits were installed across 18 school districts. These measures are expected to save 3,153,811 kWh in electricity and 163,524 therms of natural gas annually. Total savings to the schools from the installation of these measures is estimated to be \$305,090 each year.

**Table 20: ESD Efficiency Measures Installed (1/2003 – 6/2004)**

<b>Audit Accomplishment</b>	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b># of Audits Measures Installed</b>	<b>123</b>	<b>45</b>	<b>168</b>
<b># of School Districts</b>	<b>9</b>	<b>9</b>	<b>18</b>
<b>Annual Savings</b>			
Electricity Savings (kWh)	1,026,341	2,127,470	3,153,811
Natural Gas Savings (therms)	74,122	89,402	163,524
Other Fuels (gal)	36,075	2,187	38,262
Total Annual Energy Cost Savings (\$)	\$142,000	\$163,090	\$305,090
Total Annual Energy Savings (Btu)	16,255,382,633	16,525,180,110	32,780,562,743
<b>Total Cost of Measures Installed</b>	<b>\$875,000</b>	<b>\$2,080,000</b>	<b>\$2,955,000</b>

## 5. SELF-DIRECT FOR LARGE 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. As a result, utility bills for these customers do not include a 3 percent charge; rather, these customers use a database maintained by the Oregon Department of Energy to 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" then become available as the customers calculate their own PPC responsibility: the customers enter their bill amount and the computer deducts their available project credit from their PPC responsibility. Customers must then send the remaining balance to their utilities for distribution between the five agencies.

### RESULTS

Table 21 summarizes self-direct program activity from January 2003 through June 2004. As the table demonstrates, PGE serves the majority of self-direct customers: PGE customers certified 29 conservation projects with a total eligible cost of \$5.9 million, and PacifiCorp customers certified 19 projects with a total eligible cost of \$1.2 million. The combined effect of these projects is about 53.9 million kWh in energy savings annually, or \$2.9 million in annual energy cost savings.

**Table 21: Self-Direct Program Certified Conservation Projects  
(1/2003 – 6/2004)**

	<b>PGE</b>	<b>PacifiCorp</b>	<b>Total</b>
<b>Projects Certified</b>	29	19	48
<b>Total Eligible Cost</b>	\$5,920,536	\$1,230,121	\$7,150,657
<b>Total Energy Cost Savings (annual)</b>	\$2,625,487	\$228,980	\$2,854,467
<b>Total Energy Savings (annual kWh)</b>	48,118,420	5,803,084	53,921,504
<b>ODOE Program Expenses</b>	--	--	\$70,996
<b>ODOE Administrative Expenses</b>			\$36,413

## 6. SUMMARY

Table 22 summarizes the expenditures and results for PPC expenditures from January 2003 through June 2004. Across all administrators, a total of \$65,319,828 was spent on programs and projects completed during this period. Annual energy savings and renewable resource generation achieved from projects completed during this time reached 391,153,573 kWh (just under 45 aMW), which is enough to power almost 27,000 average size homes each year.<sup>8</sup> When all fuel types are included in addition to electricity, PPC expenditures resulted in annual savings of 1,357,024 million Btu.

**Table 22: Summary of PPC Expenditures and Results (1/2003 – 6/2004)**

<b>Agency / Program</b>	<b>Expenditures</b>	<b>Results</b>		
		<b>kWh Saved or Generated*</b>	<b>aMW</b>	<b>MMBtu</b>
<b>Energy Trust - Conservation</b>	\$35,660,994	193,654,743	22.11	660,944
<b>Energy Trust - Renewables</b>	\$7,542,354	129,823,200	14.82	443,087
<b>Education Service Districts**</b>	\$5,497,516	3,153,811	0.36	32,781
<b>OHCS Low-Income</b>	\$9,360,898	10,600,315	1.21	36,179
<b>Self-Direct for Large Customers</b>	\$7,258,066	53,921,504	6.16	184,034
<b>Total Expenditures</b>	<b>\$65,319,828</b>	<b>391,153,573</b>	<b>44.66</b>	<b>1,357,024</b>

\* Does not include savings from transmission and distribution.

\*\* Does not include savings for natural gas or fuels other than electricity in the \$/kWh value. All fuels included in the \$/MMBtu calculation.

<sup>8</sup> Calculated using the Northwest Power Planning Council's estimate that an average megawatt is enough to power 600 homes each year (assuming electric heat).